

APPENDIX I

ANALYTICAL CHEMISTRY REPORTS

Shallow Water Habitat
Bioaccumulation Survey
San Diego Bay
(SWHB)

April-May, 2014

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July 03, 2014

Jeremy Burns
AMEC
9177 Aky Park Ct.
San Diego, CA 92123-

Project Name: TO69 SD Bay Bioaccum
Physis Project ID: 1404008-001

Dear Jeremy,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/8/2014. A total of 7 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Conventionals
Total Suspended Solids by SM 2540 D
Elements
Total & Dissolved Mercury by EPA 245.7
Subcontract
Total Organic Carbon by SM 5310 B
Dissolved Organic Carbon by SM 5310 B

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
Extension 202
714-335-5918 cell
mistymercier@physislabs.com

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
*	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified recovery and/or RPD acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore MS recovery and/or RPD acceptance limits do not apply
SL	analyte results for R1 and/or R2 were lower than 10 times the MDL, therefore RPD acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore MS recovery and/or RPD were outside the specified acceptance limits
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

PHYSICS

PANALYTICAL

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



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CA ELAP #2769

Conventionals

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27360-R1	SWHB-FB Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	ND	0.5	0.5	mg/L	
						Sampled: 07-May-14 9:30 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27361-R1	SWHB-EB Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	ND	0.5	0.5	mg/L	
						Sampled: 07-May-14 9:45 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27362-R1	SWHB-21 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	5.6	0.5	0.5	mg/L	
						Sampled: 07-May-14 10:50 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27363-R1	SWHB-15 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	18.2	0.5	0.5	mg/L	
						Sampled: 07-May-14 15:00 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27364-R1	SWHB-01 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	6.9	0.5	0.5	mg/L	
						Sampled: 08-May-14 8:40 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27365-R1	SWHB-22 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	6.1	0.5	0.5	mg/L	
						Sampled: 08-May-14 12:30 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14
Sample ID: 27366-R1	SWHB-26 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17012				
Total Suspended Solids	NA	6	0.5	0.5	mg/L	
						Sampled: 08-May-14 15:15 Prepared: 14-May-14
						Received: 08-May-14 Analyzed: 14-May-14



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Elements

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27360-R1	SWHB-FB	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 07-May-14 9:30		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	ND	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27361-R1	SWHB-EB	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 07-May-14 9:45		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	ND	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27362-R1	SWHB-21	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 07-May-14 10:50		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	ND	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27363-R1	SWHB-15	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 07-May-14 15:00		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	0.02	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27364-R1	SWHB-01	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 08-May-14 8:40		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	0.01	0.01	0.02	µg/L	J
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27365-R1	SWHB-22	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 08-May-14 12:30		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	ND	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27366-R1	SWHB-26	Matrix: Liquid				
	Method: EPA 245.7	Batch ID: E-6070				
				Sampled: 08-May-14 15:15		Received: 08-May-14
				Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	0.02	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	

QUALITY CONTROL

REPORT

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Conventional

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
Total Suspended Solids		Method: SM 2540 D		Fraction: NA		Prepared: 14-May-14		Analyzed: 14-May-14		
27359-B1	QAQC Procedural Blank	C-17012	ND	0.5	0.5	mg/L				



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Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE	
		LIMITS									
Sample ID: 27359-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L						
Mercury (Hg)	Total	ND	0.01	0.02	µg/L						
Sample ID: 27359-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120%	PASS	
Sample ID: 27359-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120%	PASS	0 30 PASS
Sample ID: 27360-MS1		SWHB-FB			Matrix: Liquid		Sampled: 07-May-14 9:30		Received: 08-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	0.1	0.01	0.02	µg/L	0.1	0	100	80 - 120%	PASS	
Sample ID: 27360-MS2		SWHB-FB			Matrix: Liquid		Sampled: 07-May-14 9:30		Received: 08-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	0.1	0.01	0.02	µg/L	0.1	0	100	80 - 120%	PASS	0 30 PASS
Sample ID: 27360-R2		SWHB-FB			Matrix: Liquid		Sampled: 07-May-14 9:30		Received: 08-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L						0 30 PASS
Mercury (Hg)	Total	ND	0.01	0.02	µg/L						0 30 PASS

SUBCONTRACT

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



Associated Laboratories

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Client: PHYSIS Environmental Laboratories, Inc.
Address: 1904 E. Wright Circle
Anaheim, CA 92806

Lab Request: 340465
Report Date: 05/20/2014
Date Received: 05/09/2014
Client ID: 13622

Attn: Misty Mercier

Comments: #1404008-001

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
340465-001	SWHB-15
340465-002	SWHB-21
340465-003	SWHB-EB
340465-004	SWHB-FB
340465-005	SWHB-01
340465-006	SWHB-22
340465-007	SWHB-26

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/07/2014 15:00 Site:
 Sample #: 340465-001 Client Sample #: SWHB-15 Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	1.94	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	1.9	1	0.1	1	mg/L	05/09/14	trinh	

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/07/2014 10:50 Site:
 Sample #: 340465-002 Client Sample #: SWHB-21 Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	1.39	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	1.6	1	0.1	1	mg/L	05/09/14	trinh	

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/07/2014 09:45 Site:
 Sample #: 340465-003 Client Sample #: SWHB-EB Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	ND	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	ND	1	0.1	1	mg/L	05/09/14	trinh	

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/07/2014 09:30 Site:
 Sample #: 340465-004 Client Sample #: SWHB-FB Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	ND	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	ND	1	0.1	1	mg/L	05/09/14	trinh	

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/08/2014 08:40 Site:
 Sample #: 340465-005 Client Sample #: SWHB-01 Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	1.38	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	1.7	1	0.1	1	mg/L	05/09/14	trinh	

Matrix: Water Client: PHYSIS Environmental Laboratories, Inc. Collector: Client
 Sampled: 05/08/2014 12:30 Site:
 Sample #: 340465-006 Client Sample #: SWHB-22 Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B	Prep Method: Method QCBatchID: QC1146426							
Dissolved Organic Carbon	1.67	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	1.8	1	0.1	1	mg/L	05/09/14	trinh	



Matrix: Water	Client: PHYSIS Environmental Laboratories, Inc.	Collector: Client
Sampled: 05/08/2014 15:15	Site:	
Sample #: 340465-007	Client Sample #: SWHB-26	Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B								QCBatchID: QC1146426
Prep Method: Method								
Dissolved Organic Carbon	1.66	1	0.1	1	mg/L	05/09/14	trinh	
Total Organic Carbon (TOC)	2.2	1	0.1	1	mg/L	05/09/14	trinh	



QCBatchID: QC1146426	Analyst: trinh	Method: SM 5310B
Matrix: Water	Analyzed: 05/13/2014	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1146426MB1				
Total Organic Carbon (TOC)	ND	mg/L	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1146426LCS1											
Total Organic Carbon (TOC)	10		10.4		mg/L	104			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

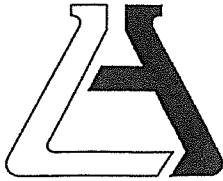
Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1146426MS1, QC1146426MSD1												
Total Organic Carbon (TOC)	1.9	20	20	20.3	20.0	mg/L	92	91	1.5	80-120	20	Source: 340465-001



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
BQ1	No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible.
BQ2	No valid test replicates.
BQ3	Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
Q1	Analyte Calibration Verification exceeds criteria and the result was reported with qualifier.
Q2	Analyte calibration was not verified and the result was estimated and reported with qualifier.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier.
Q4	Analyte result out of calibration range and was reported with qualifier
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
TIC	Tentatively Identified Compounds





ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: Physis, E.L. Project: 1464003-002
 Date Received: 05/09/14 Sampler's Name: Yes No
 Sample temperature: _____
 Sample(s) received in cooler: Yes No (Skip Section 2)
 Shipping Information: _____

Section 2
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temperature: 6°C

(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If Yes – were they intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was there headspace in VOA vials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
 Explanations/Comments

Section 5
 Was Project Manager notified of discrepancies: Y / N N/A
 Project Manager's response: _____

Completed By: M. Gilbert Date: 05/09/14

CHAIN OF CUSTODY

SEND TO: Associated Labs
340465

COMPANY NAME: **Physis Environmental Laboratories, Inc.** EMAIL: **sc@physislabs.com** PROJECT NAME / NUMBER: **14-04003-002** COG PAGE: **1** of **1**

PROJECT MANAGER: **Misty Mercier** FAX: **714 602-5321** PO #: **14-04003** PHYSIS SOS #: **14-04003** TYPE OF ICE USED: WET BLUE DRY

COMPANY ADDRESS: **1904 E. Wright Circle
Anaheim, CA 92806** PHONE: **714 602-5320** office **714 335-5918** cell

TURNAROUND TIME: STANDARD RUSH business days

REPORT FORMAT: PDF/EDD SWAMP EDD other

SPECIAL INSTRUCTIONS: **please report down the MDL**

REQUESTED ANALYSES: FEDEX UPS USPS Client Physis other

PHYSIS MATRIX CODES

SW = seawater FW = freshwater RW = rainwater
 WW = wastewater DW = drinking water
 S = sediment I = tissue E = extract O = other (specify)

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE		physis matrix code	# of bottles	DOC	TOC
		date	time				
1	SW HB-15	5/7/14	15:00	W	2	X	
2	SW HB-21	5/7/14	10:50	W	2	X	
3	SW HB-EB	5/7/14	09:45	W	2	X	
4	SW HB-EB	5/7/14	09:30	W	2	X	
5	SW HB-01	5/8/14	08:40	W	2	X	
6	SW HB-22	5/8/14	12:30	W	2	X	
7	SW HB-26	5/8/14	15:15	W	2	X	
8							
9							
10							

RELINQUISHED BY: **Adam Idell** (signature) company: **Physis** date & time: **5/9/14 09:13**

RECEIVED BY: **M. Eckert** (signature) company: **Associated Labs** date & time: **05/09/14 09:13**



PHYSIS ENVIRONMENTAL LABORATORIES, INC.

CHAIN OF CUSTODY

SEND TO: Associated Labs

COMPANY NAME

Physis Environmental Laboratories, Inc.

EMAIL

sc@physislabs.com

PROJECT MANAGER

Misty Mercier

FAX

714 602-5321

PROJECT NAME / NUMBER

14-04003-002

COC PAGE

1 of 1

COMPANY ADDRESS

1904 E. Wright Circle
Anaheim, CA 92806

PHONE

714 602-5320
714 335-5918

PO #

1404003

TYPE OFFICE USED

WET BLUE DRY

SHIPPED VIA

FEDEX UPS USPS
 Client Physis other

SAMPLED BY

M. Eckert

REQUESTED ANALYSES

TURNAROUND TIME

STANDARD

RUSH

BUSINESS DAYS

REPORT FORMAT

PDF/EDD

SWAMP EDD

OTHER

PLEASE REPORT DOWN THE MDL

PHYSIS MATRIX CODES

SW = seawater FW = freshwater RW = rainwater

WW = wastewater DW = drinking water

S = sediment I = tissue E = extract O = other (specify)

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE date	SAMPLE time	physis matrix code	# of bottles	DOC	TOC											
1	SW HR-15	5/7/14	15:00	W	2	X	X											
2	SW HR-21	5/7/14	10:50	W	2	X	X											
3	SW HR-EB	5/7/14	09:45	W	2	X	X											
4	SW HR-EB	5/7/14	09:30	W	2	X	X											
5	SW HR-01	5/8/14	08:40	W	2	X	X											
6	SW HR-22	5/8/14	12:30	W	2	X	X											
7	SW HR-26	5/8/14	15:15	W	2	X	X											
8																		
9																		
10																		

RELINQUISHED BY

print

Adam Ebell

signature

company

Physis

RECEIVED BY

print

M. Eckert

signature

company

Associated Labs

date & time

05/09/14

Danielle Roberts

From: Rich Hanken [RichHanken@physislabs.com]
Sent: Friday, May 09, 2014 10:50 AM
To: Danielle Roberts
Cc: sample logistics
Subject: 1404003-002 DOC & TOC
Attachments: 1404003-002 Subcontract COC - Rev.pdf

Hello Danielle,

Please analyze all of these samples for both TOC and the DOC.

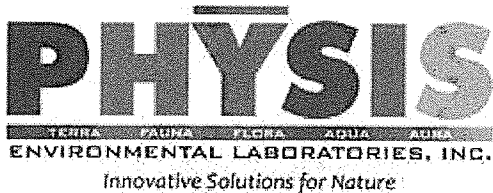
I revised the subcontract COC to put the X's in the column for the TOC.

Please let us know if you have any questions.

Thank you,

Rich

Richard G. Hanken
Business Manager - Project Integrator
(714) 602-5320 ext. 212
Richhanken@physislabs.com



1904 E. Wright Circle
Anaheim, CA 92806
(714) 602-5320 main
(714) 602-5321 fax
www.physislabs.com

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QuynhGiao Le

From: Rich Hanken [RichHanken@physislabs.com]
Sent: Tuesday, May 13, 2014 5:46 PM
To: QuynhGiao Le
Cc: Danielle Roberts
Subject: FW: 1404003-002 DOC & TOC
Attachments: 1404003-002 Subcontract COC - Rev.pdf

Hello Quynh,

I am sorry about this inconvenience but we noticed that we had logged in these samples under the wrong project ID's.

Can you revise these two project ID's for me?

Original Project ID	Sent On	Please change to Project ID
1404003-002	5/9/14	1404008-001
1404003-003	5/10/14	1404008-002

LR #
340465

Please let me know if you have any questions.

Thank you,

Rich

Richard G. Hanken
Business Manager - Project Integrator
(714) 602-5320 ext. 212
Richhanken@physislabs.com

CONFIDENTIALITY: This message is intended exclusively for the individual/entity to which it is addressed and may contain information that is proprietary, privileged, confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy, or disseminate this message or any part of it. If you have received this email message in error, please immediately notify the sender by return email and delete all copies of this message. Thank you.

From: Rich Hanken
Sent: Friday, May 09, 2014 10:50 AM
To: Danielle Roberts
Cc: sample logistics
Subject: 1404003-002 DOC & TOC

Hello Danielle,

Please analyze all of these samples for both TOC and the DOC.

I revised the subcontract COC to put the X's in the column for the TOC.

Please let us know if you have any questions.

Thank you,

Rich

PHYSIS

**CHAIN OF
CUSTODY**

TERRA ENVIRONMENTAL LABORATORIES, INC. AURA

Innovative Solutions for Nature

1404003-002
 1404008-001
 RGL

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-FB	5/7/14	0930 1830	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-FB	↓	↓	TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-FB			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-FB			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: CS

Relinquished By: [Signature]

Date/Time: 5/6/14 1830

Received By: [Signature]

Date/Time: 5/6/14 18:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

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AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
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To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-EB	5/7/14	0945 1830	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-EB			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-EB			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-EB			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: CS

Relinquished By: [Signature] Date/Time: 5/8/14 1830

Received By: [Signature]

Date/Time: 5/8/14 18:30

Relinquished By: _____ Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

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To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-21	5/7/14	1050	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-21			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-21			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-21			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: JS

Relinquished By: [Signature]

Date/Time: 5/8/14 1830

Received By: [Signature]

Date/Time: 5/8/14 18:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

1404003-002

Analysis Request and Chain of Custody
City of San Diego
San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-15	5/7/14	1500	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-15	↓	↓	TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-15			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-15			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: CS

Relinquished By: [Signature]

Date/Time: 5/7/14 18:30

Received By: [Signature]

Date/Time: 5/8/14 18:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
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To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-01	5/8/14	0840	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-01			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-01			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-01			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: JS

Relinquished By: [Signature] Date/Time: 5/8/14 1830

Received By: [Signature] Date/Time: 5/8/14 18:30

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
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To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-22	5/8/14	1230	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-22			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-22			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-22			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: CS

Relinquished By: [Signature]

Date/Time: 5/8/14 1230

Received By: [Signature]

Date/Time: 5/8/14 12:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-26	5/8/14	1515	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-26			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-26			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-26			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: JS

Relinquished By: _____

Date/Time: 5/8/14 1830

Received By: [Signature]

Date/Time: 5/8/14 18:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____



July 03, 2014

Jeremy Burns
AMEC
9177 Aky Park Ct.
San Diego, CA 92123-

Project Name: San Diego Bay Zooplankton Bioaccumulation Study
Physis Project ID: 1404008-002

Dear Jeremy,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/9/2014. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Conventionals
Total Suspended Solids by SM 2540 D
Elements
Total & Dissolved Mercury by EPA 245.7
Subcontract
Total Organic Carbon by SM 5310 B
Dissolved Organic Carbon by SM 5310 B

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
Extension 202
714-335-5918 cell
mistymercier@physislabs.com

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
*	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified recovery and/or RPD acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore MS recovery and/or RPD acceptance limits do not apply
SL	analyte results for R1 and/or R2 were lower than 10 times the MDL, therefore RPD acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore MS recovery and/or RPD were outside the specified acceptance limits
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

PHYSICS

PANALYTICAL

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



1904 E. Wright Circle, Anaheim CA 92806

main: (714) 602-5320

fax: (714) 602-5321

www.physislabs.com

info@physislabs.com

CA ELAP #2769

Conventional

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27411-R1	SWHB-06 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17014				
Total Suspended Solids	NA	4.4	0.5	0.5	mg/L	
						Sampled: 09-May-14 15:50 Prepared: 16-May-14
						Received: 09-May-14 Analyzed: 16-May-14
Sample ID: 27412-R1	SWHB-40 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17014				
Total Suspended Solids	NA	5.7	0.5	0.5	mg/L	
						Sampled: 09-May-14 12:35 Prepared: 16-May-14
						Received: 09-May-14 Analyzed: 16-May-14



1904 E. Wright Circle, Anaheim CA 92806

main: (714) 602-5320

fax: (714) 602-5321

www.physislabs.com

info@physislabs.com

CA ELAP #2769

Elements

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27411-R1		SWHB-06	Matrix: Liquid	Sampled: 09-May-14 15:50		Received: 09-May-14
		Method: EPA 245.7	Batch ID: E-6070	Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	0.01	0.01	0.02	µg/L	J
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27412-R1		SWHB-40	Matrix: Liquid	Sampled: 09-May-14 12:35		Received: 09-May-14
		Method: EPA 245.7	Batch ID: E-6070	Prepared: 18-Jun-14		Analyzed: 18-Jun-14
Mercury (Hg)	Total	0.01	0.01	0.02	µg/L	J
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	

QUALITY CONTROL

REPORT

TERRA F... AQUA AUR...
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature



1904 E. Wright Circle, Anaheim CA 92806

main: (714) 602-5320

fax: (714) 602-5321

www.physislabs.com

info@physislabs.com

CA ELAP #2769

Conventionals

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
-----------	----------	--------	-----	----	-------	-------------	---------------	------------	-------------	---------

Total Suspended Solids		Method: SM 2540 D			Fraction: NA		Prepared: 16-May-14		Analyzed: 16-May-14	
27410-B1	QAQC Procedural Blank	C-17014	ND	0.5	0.5	mg/L				



1904 E. Wright Circle, Anaheim CA 92806

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CA ELAP #2769

Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
							LIMITS		LIMITS	
Sample ID: 27410-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L					
Mercury (Hg)	Total	ND	0.01	0.02	µg/L					
Sample ID: 27410-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120% PASS	
Sample ID: 27410-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120% PASS	0 30 PASS
Sample ID: 27411-MS1		SWHB-06			Matrix: Liquid		Sampled: 09-May-14 15:50		Received: 09-May-14	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Dissolved	0.11	0.01	0.02	µg/L	0.1	0	110	80 - 120% PASS	
Sample ID: 27411-MS2		SWHB-06			Matrix: Liquid		Sampled: 09-May-14 15:50		Received: 09-May-14	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Dissolved	0.12	0.01	0.02	µg/L	0.1	0	120	80 - 120% PASS	9 30 PASS
Sample ID: 27411-R2		SWHB-06			Matrix: Liquid		Sampled: 09-May-14 15:50		Received: 09-May-14	
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L					0 30 PASS
Mercury (Hg)	Total	0.01	0.01	0.02	µg/L					0 30 PASS J

SUBCONTRACT

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: PHYSIS Environmental Laboratories, Inc.
Address: 1904 E. Wright Circle
Anaheim, CA 92806

Lab Request: 340530
Report Date: 05/20/2014
Date Received: 05/10/2014
Client ID: 13622

Attn: Misty Mercier

Comments: #1404008-002

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
340530-001	SWHB-40
340530-002	SWHB-06

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

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TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Water **Client:** PHYSIS Environmental Laboratories, Inc. **Collector:** Client
Sampled: 05/09/2014 12:35 **Site:**
Sample #: 340530-001 **Client Sample #:** SWHB-40 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B Prep Method: Method								QCBatchID: QC1146462
Dissolved Organic Carbon	1.46	1	0.1	1	mg/L	05/13/14	trinh	
Total Organic Carbon (TOC)	1.5	1	0.1	1	mg/L	05/13/14	trinh	

Matrix: Water **Client:** PHYSIS Environmental Laboratories, Inc. **Collector:** Client
Sampled: 05/09/2014 15:50 **Site:**
Sample #: 340530-002 **Client Sample #:** SWHB-06 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B Prep Method: Method								QCBatchID: QC1146462
Dissolved Organic Carbon	1.26	1	0.1	1	mg/L	05/13/14	trinh	
Total Organic Carbon (TOC)	1.4	1	0.1	1	mg/L	05/13/14	trinh	



QCBatchID: QC1146462	Analyst: trinh	Method: SM 5310B
Matrix: Water	Analyzed: 05/13/2014	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	MDL	RDL	Notes
QC1146462MB1					
Total Organic Carbon (TOC)	ND	mg/L	0.1	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1146462LCS1											
Total Organic Carbon (TOC)	10		10.5		mg/L	105			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1146462MS1, QC1146462MSD1												Source: 340514-001
Total Organic Carbon (TOC)	ND	20	20	21.2	23.6	mg/L	106	118	10.7	80-120	20	



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
BQ1	No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible.
BQ2	No valid test replicates.
BQ3	Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
Q1	Analyte Calibration Verification exceeds criteria and the result was reported with qualifier.
Q2	Analyte calibration was not verified and the result was estimated and reported with qualifier.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier.
Q4	Analyte result out of calibration range and was reported with qualifier
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
TIC	Tentatively Identified Compounds





ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: PHYSIS ENVIRO- Project: 1404003-003
 Date Received: 5/10/14 Sampler's Name: Yes NO
 Sample temperature: _____
 Sample(s) received in cooler: Yes No (Skip Section 2)
 Shipping Information: _____

Section 2
 Was the cooler packed with: Ice Ice Packs Bubble Wrap Styrofoam
 Paper None Other _____
 Cooler Temperature: 3°C

(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤10 Deg. C or arrival on ice)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?		<input checked="" type="checkbox"/>	
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?	<input checked="" type="checkbox"/>		
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?	<input checked="" type="checkbox"/>		
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
 Explanations/Comments

Section 5
 Was Project Manager notified of discrepancies: Y / N N/A
 Project Manager's response: _____

Completed By: [Signature] Date: 5/10/14



CHAIN of CUSTODY

SEND TO: Associated Labs
340530

COMPANY NAME: Physis Environmental Laboratories, Inc. EMAIL: sc@physislabs.com PROJECT NAME / NUMBER: 140A003-003 COC PAGE: 1 of 1

PROJECT MANAGER: Misty Mercier FAX: 714 602-5321 PO# 140A003-003 PHYSIS SOS# 1404003 TYPE OF ICE USED: WET BLUE DRY

COMPANY ADDRESS: 1904 E. Wright Circle Anaheim, CA 92806 PHONE: 714 602-5320 office 714 335-5918 cell SHIPPED VIA: FEDEX UPS USPS

TURNDOWN TIME: STANDARD RUSH business days Client Physis other

REPORT FORMAT: PDF/EDD SWAMP EDD other REQUESTED ANALYSES

SPECIAL INSTRUCTIONS: please report down the MDL

PHYSIS MATRIX CODES: SW = seawater FW = freshwater RW = rainwater WW = wastewater DW = drinking water S = sediment T = tissue E = extract O = other (specify)

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE date	SAMPLE time	physis matrix code	# of bottles	RECEIVED BY	company	date & time
1 SWHB-40	GRAB	5/9/14	1235	W	2	X		
2 SWHB-010	GRAB	5/9/14	1550	W	2	X		
3								
4								
5								
6								
7								
8								
9								
10								

RELINQUISHED BY: Chelsea Crawford signature: Chelsea Crawford company: Physis date & time: 5/10/14 10:30AM RECEIVED BY: [Signature] company: Associated Labs date & time: 5/10/14 1036

QuynhGiao Le

From: Rich Hanken [RichHanken@physislabs.com]
Sent: Tuesday, May 13, 2014 5:46 PM
To: QuynhGiao Le
Cc: Danielle Roberts
Subject: FW: 1404003-002 DOC & TOC
Attachments: 1404003-002 Subcontract COC - Rev.pdf

Hello Quynh,

I am sorry about this inconvenience but we noticed that we had logged in these samples under the wrong project ID's.

Can you revise these two project ID's for me?

Original Project ID	Sent On	Please change to Project ID
1404003-002	5/9/14	1404008-001
1404003-003	5/10/14	1404008-002

340530

Please let me know if you have any questions.

Thank you,

Rich

Richard G. Hanken
Business Manager - Project Integrator
(714) 602-5320 ext. 212
Richhanken@physislabs.com

CONFIDENTIALITY: This message is intended exclusively for the individual/entity to which it is addressed and may contain information that is proprietary, privileged, confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy, or disseminate this message or any part of it. If you have received this email message in error, please immediately notify the sender by return email and delete all copies of this message. Thank you.

From: Rich Hanken
Sent: Friday, May 09, 2014 10:50 AM
To: Danielle Roberts
Cc: sample logistics
Subject: 1404003-002 DOC & TOC

Hello Danielle,

Please analyze all of these samples for both TOC and the DOC.

I revised the subcontract COC to put the X's in the column for the TOC.

Please let us know if you have any questions.

Thank you,

Rich

PHYSIS

**CHAIN OF
CUSTODY**

TERRA ENVIRONMENTAL LABORATORIES, INC. AURA

Innovative Solutions for Nature

1404008-002

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-06	5/9/14	1550	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-06			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-06			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-06			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: CS

Relinquished By: [Signature]

Date/Time: 5/9/14 1910

Received By: [Signature]

Date/Time: 5/9/14 1910

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-40	5/9/14	1235	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-40			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-40			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-40			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: JS
 Relinquished By: [Signature] Date/Time: 5/9/14 1910 Received By: [Signature] Date/Time: 5/9/14 1910
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____



July 03, 2014

Jeremy Burns
AMEC
9177 Aky Park Ct.
San Diego, CA 92123-

Project Name: TO70 Plankton & Water
Physis Project ID: 1404008-003

Dear Jeremy,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/14/2014. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Conventionals
Total Suspended Solids by SM 2540 D
Elements
Total & Dissolved Mercury by EPA 245.7
Subcontract
Total Organic Carbon by SM 5310 B
Dissolved Organic Carbon by SM 5310 B

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
Extension 202
714-335-5918 cell
mistymercier@physislabs.com

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
*	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified recovery and/or RPD acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore MS recovery and/or RPD acceptance limits do not apply
SL	analyte results for R1 and/or R2 were lower than 10 times the MDL, therefore RPD acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore MS recovery and/or RPD were outside the specified acceptance limits
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

PHYSICS

PANALYTICAL

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



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www.physislabs.com

info@physislabs.com

CA ELAP #2769

Conventional

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27570-R1	SWHB-30 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17015				
Total Suspended Solids	NA	2.2	0.5	0.5	mg/L	
						Sampled: 12-May-14 8:00 Prepared: 19-May-14
						Received: 14-May-14 Analyzed: 19-May-14
Sample ID: 27571-R1	SWHB-27 Method: SM 2540 D	Matrix: Liquid Batch ID: C-17015				
Total Suspended Solids	NA	3.8	0.5	0.5	mg/L	
						Sampled: 12-May-14 10:55 Prepared: 19-May-14
						Received: 14-May-14 Analyzed: 19-May-14



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CA ELAP #2769

Elements

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 27570-R1		SWHB-30	Matrix: Liquid	Sampled: 12-May-14 8:00	Received: 14-May-14	
Method: EPA 245.7		Batch ID: E-6070	Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Total	ND	0.01	0.02	µg/L	
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	
Sample ID: 27571-R1		SWHB-27	Matrix: Liquid	Sampled: 12-May-14 10:55	Received: 14-May-14	
Method: EPA 245.7		Batch ID: E-6070	Prepared: 18-Jun-14		Analyzed: 18-Jun-14	
Mercury (Hg)	Total	0.01	0.01	0.02	µg/L	J
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L	

QUALITY CONTROL

REPORT

TERRA F... AQUA AUR...
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature



1904 E. Wright Circle, Anaheim CA 92806

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CA ELAP #2769

Conventional

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
Total Suspended Solids		Method: SM 2540 D		Fraction: NA		Prepared: 19-May-14		Analyzed: 19-May-14		
27569-B1	QAQC Procedural Blank	C-17015	ND	0.5	0.5	mg/L				



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CA ELAP #2769

Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
							LIMITS	LIMITS		
Sample ID: 27569-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:	Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L					
Mercury (Hg)	Total	ND	0.01	0.02	µg/L					
Sample ID: 27569-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:	Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120% PASS	
Sample ID: 27569-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:	Received:		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Total	0.09	0.01	0.02	µg/L	0.1	0	90	80 - 120% PASS	0 30 PASS
Sample ID: 27570-MS1		SWHB-30			Matrix: Liquid		Sampled: 12-May-14 8:00	Received: 14-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	0.11	0.01	0.02	µg/L	0.1	0	110	80 - 120% PASS	
Sample ID: 27570-MS2		SWHB-30			Matrix: Liquid		Sampled: 12-May-14 8:00	Received: 14-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	0.11	0.01	0.02	µg/L	0.1	0	110	80 - 120% PASS	0 30 PASS
Sample ID: 27570-R2		SWHB-30			Matrix: Liquid		Sampled: 12-May-14 8:00	Received: 14-May-14		
		Method: EPA 245.7			Batch ID: E-6070		Prepared: 18-Jun-14	Analyzed: 18-Jun-14		
Mercury (Hg)	Dissolved	ND	0.01	0.02	µg/L					0 30 PASS
Mercury (Hg)	Total	ND	0.01	0.02	µg/L					0 30 PASS

SUBCONTRACT

REPORT

TERRA ENVIRONMENTAL LABORATORIES, INC. AURORA

Innovative Solutions for Nature



Associated Laboratories

806 N. Batavia - Orange, CA 92868
Tel (714)771-6900 Fax (714)538-1209
www.associatedlabs.com
Info@associatedlabs.com



Client: PHYSIS Environmental Laboratories, Inc.
Address: 1904 E. Wright Circle
Anaheim, CA 92806

Lab Request: 340673
Report Date: 05/28/2014
Date Received: 05/14/2014
Client ID: 13622

Attn: Misty Mercier

Comments: #1404008-003

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods. Methods accredited by NELAC are indicated on the report. This cover letter is an integral part of the final report.

<u>Sample #</u>	<u>Client Sample ID</u>
340673-001	SWHB-30
340673-002	SWHB-27

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Nina Prasad
President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 45 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

Matrix: Water **Client:** PHYSIS Environmental Laboratories, Inc. **Collector:** Client
Sampled: 05/12/2014 08:00 **Site:**
Sample #: 340673-001 **Client Sample #:** SWHB-30 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B Prep Method: Method								QCBatchID: QC1146481
Dissolved Organic Carbon	1.05	1	0.1	1	mg/L	05/15/14	trinh	
Total Organic Carbon (TOC)	1.1	1	0.1	1	mg/L	05/15/14	trinh	

Matrix: Water **Client:** PHYSIS Environmental Laboratories, Inc. **Collector:** Client
Sampled: 05/12/2014 10:55 **Site:**
Sample #: 340673-002 **Client Sample #:** SWHB-27 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: SM 5310B Prep Method: Method								QCBatchID: QC1146481
Dissolved Organic Carbon	1.22	1	0.1	1	mg/L	05/15/14	trinh	
Total Organic Carbon (TOC)	1.3	1	0.1	1	mg/L	05/15/14	trinh	



QCBatchID: QC1146481	Analyst: trinh	Method: SM 5310B
Matrix: Water	Analyzed: 05/15/2014	Instrument: CHEM (group)

Blank Summary

Analyte	Blank Result	Units	RDL	Notes
QC1146481MB1				
Total Organic Carbon (TOC)	ND	mg/L	1	

Lab Control Spike/ Lab Control Spike Duplicate Summary

Analyte	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
	LCS	LCSD	LCS	LCSD		LCS	LCSD	RPD	%Rec	RPD	
QC1146481LCS1											
Total Organic Carbon (TOC)	10		10.3		mg/L	103			80-120		

Matrix Spike/Matrix Spike Duplicate Summary

Analyte	Sample Amount	Spike Amount		Spike Result		Units	Recoveries			Limits		Notes
		MS	MSD	MS	MSD		MS	MSD	RPD	%Rec	RPD	
QC1146481MS1, QC1146481MSD1												
Total Organic Carbon (TOC)	1.1	20	20	20.0	23.9	mg/L	95	114	17.8	80-120	20	Source: 340673-001



Notes and Definitions

B	Analyte was present in an associated method blank. Associated sample data was reported with qualifier.
BQ1	No valid test replicates. Result may be greater. Best result was reported with qualifier. Sample toxicity possible.
BQ2	No valid test replicates.
BQ3	Minimum DO is less than 1.0 mg/L. Result may be greater and reported with qualifier.
C	Laboratory Contamination.
D	The sample duplicate RPD was not within control limits, the sample data was reported without further clarification.
DF	Dilution Factor
DW	Sample result is calculated on a dry weigh basis
J	Reported value is estimated
L	The laboratory control sample (LCS) or laboratory control sample duplicate (LCSD) was out of control limits. Associated sample data was reported with qualifier.
M	The matrix spike (MS) or matrix spike duplicate (MSD) was not within control limits due to matrix interference. The associated LCS and/or LCSD was within control limits and the sample data was reported without further clarification.
MDL	Method Detection Limit
NC	The analyte concentration in the sample exceeded the spike level by a factor of four or greater, spike recovery and limits do not apply.
ND	Analyte was not detected or was less than the detection limit.
P	Sample was received without proper preservation according to EPA guidelines.
Q1	Analyte Calibration Verification exceeds criteria and the result was reported with qualifier.
Q2	Analyte calibration was not verified and the result was estimated and reported with qualifier.
Q3	Analyte initial calibration was not available or exceeds criteria. The result was estimated and reported with qualifier.
Q4	Analyte result out of calibration range and was reported with qualifier
RDL	Reporting Detection Limit
S	The surrogate recovery was out of control limits due to matrix interference. The associated method blank surrogate recovery was within control limits and the sample data was reported without further clarification.
T	Sample was extracted/analyzed past the holding time.
T2	Sample was analyzed ASAP but received and analyzed past the 15 minute holding time.
TIC	Tentatively Identified Compounds





ASSOCIATED LABORATORIES

806 North Batavia – Orange, California 92868 – 714-771-6900

FAX 714-538-1209

SAMPLE ACCEPTANCE CHECKLIST

Section 1
 Client: PHYSIS ENVIRO - Project: 1404008-003
 Date Received: 5/14/14 Sampler's Name: Yes No
 Sample temperature: _____
 Sample(s) received in cooler: Yes No (Skip Section 2)
 Shipping Information: _____

Section 2
 Was the cooler packed with: Ice _____ Ice Packs _____ Bubble Wrap _____ Styrofoam
 _____ Paper _____ None _____ Other _____
 Cooler Temperature: 30C

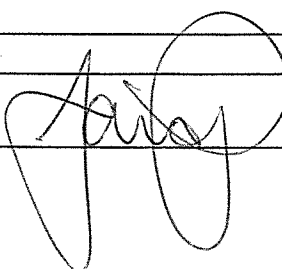
(Acceptance range is 0 to 6 Deg. C. or arrival on ice; For Microbiology sample ≤ 10 Deg. C or arrival on ice)

Section 3	YES	NO	N/A
Was a COC received?	<input checked="" type="checkbox"/>		
Is it properly completed? (IDs, sampling date and time, signature, test)	<input checked="" type="checkbox"/>		
Were custody seals present?		<input checked="" type="checkbox"/>	
If Yes – were they intact?			<input checked="" type="checkbox"/>
Were all samples sealed in plastic bags?		<input checked="" type="checkbox"/>	
Did all samples arrive intact? If no, indicate below.	<input checked="" type="checkbox"/>		
Did all bottle labels agree with COC? (ID, dates and times)	<input checked="" type="checkbox"/>		
Were correct containers used for the tests required?	<input checked="" type="checkbox"/>		
Was a sufficient amount of sample sent for tests indicated?	<input checked="" type="checkbox"/>		
Was there headspace in VOA vials?			<input checked="" type="checkbox"/>
Were the containers labeled with correct preservatives?			<input checked="" type="checkbox"/>
Was total residual chlorine measured (Fish Bioassay samples only)? *			<input checked="" type="checkbox"/>

*: If the answer is no, please inform Fish Bioassay Dept. immediately.

Section 4
 Explanations/Comments

Section 5
 Was Project Manager notified of discrepancies: Y / N N/A
 Project Manager's response: _____

Completed By:  Date: 5/14/14



CHAIN OF CUSTODY

340673

SEND TO: Associated Labs

COMPANY NAME

Physis Environmental Laboratories, Inc.

EMAIL

sc@physislabs.com

PROJECT NAME / NUMBER

1404008-003

COC PAGE 1 of 1

PROJECT MANAGER

Misty Mercier

FAX

714 602-5321

PO #

1404008

PHYSIS SOS #

1404008

TYPE OF ICE USED

WET BLUE DRY

COMPANY ADDRESS

1904 E. Wright Circle
Anaheim, CA 92806

PHONE

714 602-5320
714 335-5918

SAMPLED BY

SHIPPED VIA

FEDEX UPS USPS
 Client Physis other

TURNDOWN TIME

STANDARD

RUSH

business days

REPORT FORMAT

PDF/EDD

SWAMP EDD

other

SPECIAL INSTRUCTIONS

please report down the MDL

REQUESTED ANALYSES

PHYSIS MATRIX CODES

SW = seawater FW = freshwater RW = rainwater
WW = wastewater DW = drinking water

S = sediment T = tissue E = extract O = other (specify)

TOC
DOC

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE date	SAMPLE time	physis matrix code	# of bottles														
1	SWHB-30	5/12/14	8:00	SW	2	X	X												
2	SWHB-27	5/12/14	10:55	SW	2	X	X												
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

RELINQUISHED BY

print

Adam Idell

signature

company

Physis

date & time

5/14/15

RECEIVED BY

print

ZAIN PARDIA

signature

company

Associated Labs

date & time

5/14/15

PHYSIS

**CHAIN OF
CUSTODY**

TERRA ENVIRONMENTAL LABORATORIES, INC. AURA

Innovative Solutions for Nature

Analysis Request and Chain of Custody
City of San Diego
 San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-30	5/12/14	0800	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-30			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-30			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-30			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: BLS

Relinquished By: [Signature] Date/Time: _____

Received By: [Signature] Date/Time: 5/14/14

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 12:06

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Zooplankton Bioaccumulation Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-27	5/12/14	1055	DOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C)	1
SWHB-27			TOC (EPA 415.3)	Grab	250 mL Amber Glass	Cold (4°C) + H2SO4	1
SWHB-27			Total & Dissolved Mercury (EPA 245.7)	Grab	250 mL HDPE	Cold (4°C)	1
SWHB-27			TSS (SM 2540D)	Grab	1000 mL HDPE	Cold (4°C)	1

Comments:

Sampler's Initials: BCS

Relinquished By: [Signature]

Date/Time: _____

Received By: [Signature]

Date/Time: 5/14/14

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: 12:00



June 22, 2015

Ken Schiff
 Southern California Coastal Water Research Project
 3535 Harbor Blvd., Suite 110
 Costa Mesa, CA 92626-1437

Project Name: San Diego Bay SWHB Study
 Physis Project ID: 1504003-001

Dear Ken,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 4/27/2015. A total of 30 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Conventionals
Percent Solids by SM 2540 B
Ammonia as N by SM 4500-NH3 D
Elements
Trace Metals by EPA 6020
Trace Mercury by EPA 245.7
Total Phosphorus by EPA 6020
Organics
Toxaphene w/ OCPs by EPA 8270D-NCI
Synthetic Pyrethroid Pesticides by EPA 8270D-NCI
Polynuclear Aromatic Hydrocarbons by EPA 8270D
PBDE Congeners by EPA 8270D-NCI
Organochlorine Pesticides & PCB Congeners by EPA 8270D
Fipronil & Degradates by EPA 8270D-NCI
Subcontract
Total Organic Carbon by SM 5310 B
Total Nitrogen by SM 4500-N
Particle Size Distribution by SM 2560 D

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.



Regards,

Rich Gossett
Extension 201
310-420-4964 cell
richgossett@physislabs.com

PROJECT SAMPLE LIST

Southern California Coastal Water Research Project
 San Diego Bay SWHB Study

PHYSIS Project ID: 1504003-001
 Total Samples: 30

PHYSIS ID	Sample ID	Description	Date	Time	Matrix
31521	SWHB-01		4/16/2014	15:48	Sediment
31522	SWHB-02		4/9/2014	12:07	Sediment
31523	SWHB-40		4/16/2014	12:24	Sediment
31524	SWHB-07		4/9/2014	9:50	Sediment
31525	SWHB-08		4/9/2014	10:32	Sediment
31526	SWHB-09		4/9/2014	12:38	Sediment
31527	SWHB-10		4/9/2014	13:05	Sediment
31528	SWHB-11		4/8/2014	9:14	Sediment
31529	SWHB-12		4/8/2014	13:36	Sediment
31530	SWHB-13		4/9/2014	8:41	Sediment
31531	SWHB-14		4/8/2014	11:49	Sediment
31532	SWHB-15		4/15/2014	9:02	Sediment
31533	SWHB-16		4/8/2014	13:01	Sediment
31534	SWHB-41		4/9/2014	17:56	Sediment
31535	SWHB-18		4/8/2014	9:53	Sediment
31536	SWHB-19		4/8/2014	10:26	Sediment
31537	SWHB-20		4/8/2014	14:55	Sediment
31538	SWHB-21		4/15/2014	17:34	Sediment
31539	SWHB-22		4/15/2014	14:13	Sediment
31540	SWHB-23		4/8/2014	11:05	Sediment
31541	SWHB-24		4/8/2014	16:22	Sediment
31542	SWHB-25		4/8/2014	15:37	Sediment
31543	SWHB-26		4/17/2014	12:56	Sediment
31544	SWHB-27		4/18/2014	14:42	Sediment
31545	SWHB-28		4/17/2014	16:12	Sediment
31546	SWHB-53		4/18/2014	13:29	Sediment
31547	SWHB-30		4/18/2014	8:30	Sediment
31548	SWHB-33		4/9/2014	15:30	Sediment
31549	SWHB-36		4/9/2014	17:01	Sediment
31550	SWHB-06		4/17/2014	8:35	Sediment

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

ELEMENTS

1. Aluminum (Al), Antimony (Sb), and Iron (Fe) were above the specified acceptance limits in one or more of the CRMs as a result of a more rigorous digestion employed by Physis, which causes a higher yield for some lithogenous elements. These values are in agreement with past internal results for CRM ERA 540.

CHLORINATED PESTICIDES

2. Methoxychlor exhibited a positive interference in all four blank spikes and three out of four matrix spikes. The initial calibration verification was acceptable but the continuing calibration verifications all tended towards high recoveries. We have concluded that something in the matrix is causing problems with the injector resulting in higher than expected results. Since all the samples were ND for this compound this issue does not significantly affect the sample results.

POLYNUCLEAR AROMATIC HYDROCARBONS

3. d10-Acenaphthene was below the specified acceptance limits in one sample (31535-R2). This compound is somewhat volatile and sometimes can be lost during sample concentration.
4. Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene were below the acceptance range for accuracy in 31519-CRM1. These compounds are volatile and can be lost during sample processing and can fail the limits specified in the QAPP because they are the same limits applied to all PAHs in the CRM. The acceptance range of these compounds should be changed to laboratory-based limits.

POLYBROMINATED DIPHENYL ETHERS

5. PBDE209 recovery was below the acceptance range for accuracy in samples 31516-BS1, 31516-BS2, 31519-CRM1, 31520-CRM1, 31535-MS2, and 31536-MS1. This PBDE congener is susceptible to loss during analysis which is most likely due to matrix contamination of the GC injector and column. PBDE2090 was detectable in several samples and therefore these results may be biased low.

ORGANICS TUNE: Physis uses the software supplied with its Agilent GCMS systems to tune its instruments. Moreover, with today's technology software algorithms provided by the instrument manufacturer provide a more stable system across a wider mass range than manual tuning to achieve specific tuning targets such as DFTPP. The following quote is from EPA Method 8270D Section 11.3.1.

“The analyst is always free to choose criteria that are tighter than those included in this method or to use other documented criteria provided they are used consistently throughout the initial calibration, calibration verification, and sample analyses.”

The key here is that the instrument is tuned and that those tune settings are used for the subsequent analysis of the calibration curve, calibration verification, and samples. Moreover, another key reason for tuning to specific criteria is to insure that the GCMS is generating spectra that match the spectra in the NIST Library for confirming the identification of the target analyte. Physis can provide library search results for our calibration standards indicating a very high match quality with the NIST library spectra.

Performance-Based Chemistry-

The chemistry results provided in this report are derived from “performance-based” chemistry rather than the use of specific EPA published laboratory methods. This does not eliminate our responsibility to use Good Laboratory Practices. It does allow for incorporation of improvements in technology or the use of laboratory preferences for techniques that improve the efficiency and sensitivity of the laboratory and maintain or enhance the quality of the data.

“The Environmental Protection Agency (EPA) is actively working to implement the President’s program for reinventing government and reforming regulatory policy. As part of this program, EPA has been working at breaking down barriers to using new monitoring techniques. One barrier is the requirement to use specific measurement methods or technologies in complying with some of the Agency’s regulations. EPA’s Environmental Monitoring Management Council (EMMC), members of the regulated community, and Congress agree that EPA needs to change the way it specifies monitoring requirements in regulations and permits. There is broad acceptance for Agency-wide use of a nonprescriptive performance-based measurement system (PBMS)”. PBMS conveys "what" needs to be accomplished, but not prescriptively "how" to do it. EPA defines PBMS as a set of processes wherein the data needs, mandates, or limitations of a program or project are specified, and serve as criteria for selecting appropriate methods to meet those needs in a cost-effective manner. The criteria may be published in regulations, technical guidance documents, permits, work plans, or enforcement orders. Under a performance-based approach, EPA would specify:

- Questions to be answered by monitoring.
- Decisions to be supported by the data.
- Level of uncertainty acceptable for making decisions.
- Documentation to be generated to support this approach in the RCRA monitoring program.

(Taken from OSWER PBMS Implementation Plan, October 9, 1998, A Cooperative Effort Among: OSW, OERR, OUST, TIO, FFROL and CEPPO).”

The US EPA has included references to being “performance-based” in many of their newer methods. The use of performance-based methods is even more critical for programs like this study in order to allow the laboratory to adapt methods that optimize the goal of the project in terms of achieving ultra-low sensitivity and analysis of new chemicals of concern. I would also like to quote US EPA Method 8270-

“In addition, SW-846 methods, with the exception of required method use for the analysis of method-defined parameters, are intended to be guidance methods which contain general information on how to perform an analytical procedure or technique which a laboratory can use as a basic starting point for generating its own detailed Standard Operating Procedure (SOP), either for its own general use or for a specific project application.”

Performance-based chemistry was first used for NOAA’s National Status and Trends Program in the early 1980’s which is now operated under the US EPA as the National Coastal Condition Assessment Program (NCCA). The NS&T program included 3 large well-established laboratories for the analysis of samples from each of 3 regions of the United States. It was concluded at the beginning of this program that a significant improvement in the quality and comparability of the results would be achieved by allowing the participating laboratories to optimize their own individual methods. The key to this approach and any subsequent performance-based chemistry programs is the successful inclusion of an interlaboratory comparison as well as the clear detailed specification of data quality objectives (DQOs) for the project. All the Bight Survey projects from 1994 to 2013 have been performance-based and each of the surveys included interlaboratory comparisons as a key component for ensuring high quality data that is comparable between laboratories over time.

The one area that has not evolved along with the advent of performance-based chemistry is the data validation process. Today’s data validation process still relies upon collecting and evaluating laboratory analytical information and comparing it to the details of a specific EPA analytical method such as EPA 8270 for GCMS analysis or EPA 6020 for ICPMS analysis. This can occur even when the requirement in the method is out-dated and based on old technology. Data validation procedures need to be adapted to performance-based chemistry allowing for any individual laboratory to use or not use any method or any part of a method they choose as long as they can demonstrate their ability to successfully pass interlaboratory comparisons, performance evaluation samples, and meet the data quality objectives of the project QA Plan.

EPA Method Modifications-

With reference to performance-based methods, the following information is provided as a basis of comparison between the Physis methods used for this study and the associated EPA Method. Its

purpose is solely to provide information and is not intended to highlight errors. Physis has successfully participated in several interlaboratory comparison studies including the Bight 13 Project demonstrating the viability of our analytical process. Physis has included the QAQC data in this report necessary to show that the results comply with the project QA Plan and indicate acceptable accuracy and precision.

1. Internal Laboratory QAQC Frequency for GCMS Analyses- Physis uses GC columns that are longer and narrower and the GC oven is programmed at a very slow rate of 2.5°C per minute both of which are not typically used by most laboratories. The purpose for this is to maximize separation of the 100's to 1000's of compounds present in environmental samples reducing co-elution with interfering compounds, reducing background noise, and enhancing the accuracy of quantitation. At the same time this process extends the run-time for each sample to ca. 90 minutes as compared to the 15-30 minutes with typical conditions. At 90 minutes per run, the maximum number of runs for any 12-hour period is 8. Each batch of samples typically includes the DFTPP tune solution and the initial calibration verification of from 1 to 4 solutions (Depending on the target parameters) for a total of 2-5 runs leaving an opening for 3-6 samples before having to redo the QA samples if the 12-hour constraint is applied. At this rate it's not economically viable to follow the 12-hour rule and complete the analyses of the samples.

Since the 12-hour criteria was established when the state-of-the-art was GCs equipped with packed columns and GCMS systems were not anywhere near as stable as the electronics of today. Physis does follow the criteria's intent by analyzing the calibration verification standards at the beginning, middle, and end of each batch of no more than 20 samples rather than every 12 hours.

2. Calibration and Quantitation- Physis bases its calibration curve on the mass of each compound rather than concentration. Using the internal standard method of quantitation, use of mass rather than concentration eliminates the extract or digestate volume term from the formula used to calculate concentrations in the samples. Therefore there is no need to measure the precise volume of the extract or digestate. For GCMS analysis, extract volumes can be quite low and small volume changes will be reflected in increased variation of the internal standard response from sample to sample due to differences in the extract volume and not due to the instability of the GCMS. Through long-term experience, Physis chemists are trained to take into consideration this change in volume when evaluating whether a change in the internal standard response is caused by a change in the GCMS sensitivity or extract volume.

The “recovery” of the Internal Standard and its variability is reported in Form VII SV-1 for reporting IS peak areas. For the sample IS compared to the ICV/CCV IS peak area, this form has a wide acceptance range at 50-200% which is considerably larger than the variation in the nominal estimate made of our extract volumes. Therefore significant deviations from expected IS responses are clearly obvious to the analyst and would require corrective action and re-analysis. The difficulty is the fact that Form VII SV-1 does not accommodate volumes and therefore does not allow for evaluation of the sample IS as it compares to the ICV/CCV on an even basis.

3. Negative Chemical Ionization- Some target analytes are analyzed using the GCMS in the Negative Chemical Ionization Mode (NCI). This results in non-standard mass spectra that cannot be compared to the EI spectra in the NIST library.
4. Aroclor PCBs- Physis analyzes PCBs using a congener-based calibration standard composed of 52 or more different congeners representing ca. 75-80% of the PCBs discharged into the environment. Physis uses the results from the congener analysis to estimate Aroclor concentrations. To do this, Physis determines the Aroclor mixture present in the sample, sums the results for the congeners present in that Aroclor mixture then corrects the result to account for the missing mass based on a previous comparison of an Aroclor calibration standard to the congener mixture. Physis does not perform blank or matrix spikes using Aroclor mixtures since PCB spiking is done via the congener solution. Aroclor-based quantitation is inherently inaccurate and imprecise and results based on our process are as accurate if not more accurate than the Aroclor-based process since the quantitation is based on individual peaks rather than summing peaks.
5. Pyrethroid/Fipronil Surrogates- Physis spikes all samples with a surrogate solution containing TCMX, PCB030, PCB112, and PCB198 for the Chlorinated Pesticides, Congener PCBs, Pyrethroids, and Fipronils; d8-Naphthalene, d10-Acenaphthene, d10-Phenanthrene, d12-Chrysene, and d12-Perylene for the PAHs; and FBDE-3002, FBDE-5004, and FBDE-8001 for the PBDEs. Since Pyrethroids and Fipronils are quantified using NCI, only the PCB112 and PCB198 surrogates are used as surrogates for these compounds.

Sample Preservation - According to the Standard Operating Procedure for Sample Logistics, sediment and tissue samples were placed in a freezer maintained at $-20 \pm 4^{\circ}\text{C}$ until preserved or processed.

PHYSIS

ANALYTICAL

REPORT

TERRA AURA

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CA ELAP #2769

Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1 SWHB-01 Matrix: Sediment Sampled: 16-Apr-14 15:48 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 28-May-15						
(PCB030)	NA	53			% Recovery	H
(PCB112)	NA	75			% Recovery	H
(PCB198)	NA	102			% Recovery	H
(TCMX)	NA	51			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31522-R1 SWHB-02 Matrix: Sediment Sampled: 09-Apr-14 12:07 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 28-May-15						
(PCB030)	NA	73			% Recovery	H
(PCB112)	NA	87			% Recovery	H
(PCB198)	NA	107			% Recovery	H
(TCMX)	NA	74			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31523-R1 SWHB-40 Matrix: Sediment Sampled: 16-Apr-14 12:24 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 28-May-15						
(PCB030)	NA	69			% Recovery	H
(PCB112)	NA	82			% Recovery	H
(PCB198)	NA	109			% Recovery	H
(TCMX)	NA	71			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31524-R1 SWHB-07 Matrix: Sediment Sampled: 09-Apr-14 9:50 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 28-May-15						
(PCB030)	NA	71			% Recovery	H
(PCB112)	NA	87			% Recovery	H
(PCB198)	NA	110			% Recovery	H
(TCMX)	NA	68			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31525-R1 SWHB-08 Matrix: Sediment Sampled: 09-Apr-14 10:32 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	78			% Recovery	H
(PCB112)	NA	82			% Recovery	H
(PCB198)	NA	83			% Recovery	H
(TCMX)	NA	82			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31526-R1 SWHB-09 Matrix: Sediment Sampled: 09-Apr-14 12:38 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	72			% Recovery	H
(PCB112)	NA	76			% Recovery	H
(PCB198)	NA	105			% Recovery	H
(TCMX)	NA	77			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31527-R1		Matrix: Sediment		Sampled: 09-Apr-14 13:05		Received: 27-Apr-15
Method: EPA 8270D		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 29-May-15
(PCB030)	NA	76			% Recovery	H
(PCB112)	NA	83			% Recovery	H
(PCB198)	NA	96			% Recovery	H
(TCMX)	NA	78			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 24-May-15
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31528-R1 SWHB-11 Matrix: Sediment Sampled: 08-Apr-14 9:14 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	77			% Recovery	H
(PCB112)	NA	84			% Recovery	H
(PCB198)	NA	94			% Recovery	H
(TCMX)	NA	79			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	1.72	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31529-R1 SWHB-12 Matrix: Sediment Sampled: 08-Apr-14 13:36 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	77			% Recovery	H
(PCB112)	NA	84			% Recovery	H
(PCB198)	NA	95			% Recovery	H
(TCMX)	NA	78			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31530-R1 SWHB-13 Matrix: Sediment Sampled: 09-Apr-14 8:41 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	70			% Recovery	H
(PCB112)	NA	81			% Recovery	H
(PCB198)	NA	100			% Recovery	H
(TCMX)	NA	79			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31531-R1 SWHB-14 Matrix: Sediment Sampled: 08-Apr-14 11:49 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	72			% Recovery	H
(PCB112)	NA	81			% Recovery	H
(PCB198)	NA	92			% Recovery	H
(TCMX)	NA	78			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31532-R1 SWHB-15 Matrix: Sediment Sampled: 15-Apr-14 9:02 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	64			% Recovery	H
(PCB112)	NA	74			% Recovery	H
(PCB198)	NA	83			% Recovery	H
(TCMX)	NA	74			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	0.31	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.62	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31533-R1 SWHB-16 Matrix: Sediment Sampled: 08-Apr-14 13:01 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	74			% Recovery	H
(PCB112)	NA	83			% Recovery	H
(PCB198)	NA	96			% Recovery	H
(TCMX)	NA	82			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.3	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31534-R1 SWHB-41 Matrix: Sediment Sampled: 09-Apr-14 17:56 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 29-May-15						
(PCB030)	NA	63			% Recovery	H
(PCB112)	NA	71			% Recovery	H
(PCB198)	NA	78			% Recovery	H
(TCMX)	NA	70			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31535-R1 SWHB-18 Matrix: Sediment Sampled: 08-Apr-14 9:53 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 30-May-15						
(PCB030)	NA	70			% Recovery	H
(PCB112)	NA	71			% Recovery	H
(PCB198)	NA	93			% Recovery	H
(TCMX)	NA	77			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31536-R1 SWHB-19 Matrix: Sediment Sampled: 08-Apr-14 10:26 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	58			% Recovery	H
(PCB112)	NA	67			% Recovery	H
(PCB198)	NA	79			% Recovery	H
(TCMX)	NA	62			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31537-R1 SWHB-20 Matrix: Sediment Sampled: 08-Apr-14 14:55 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	71			% Recovery	H
(PCB112)	NA	79			% Recovery	H
(PCB198)	NA	97			% Recovery	H
(TCMX)	NA	69			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31538-R1 SWHB-21 Matrix: Sediment Sampled: 15-Apr-14 17:34 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	61			% Recovery	H
(PCB112)	NA	69			% Recovery	H
(PCB198)	NA	99			% Recovery	H
(TCMX)	NA	72			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.11	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31539-R1 SWHB-22 Matrix: Sediment Sampled: 15-Apr-14 14:13 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	68			% Recovery	H
(PCB112)	NA	72			% Recovery	H
(PCB198)	NA	83			% Recovery	H
(TCMX)	NA	70			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31540-R1 SWHB-23 Matrix: Sediment Sampled: 08-Apr-14 11:05 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	79			% Recovery	H
(PCB112)	NA	92			% Recovery	H
(PCB198)	NA	102			% Recovery	H
(TCMX)	NA	74			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.25	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31541-R1 SWHB-24 Matrix: Sediment Sampled: 08-Apr-14 16:22 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	63			% Recovery	H
(PCB112)	NA	69			% Recovery	H
(PCB198)	NA	76			% Recovery	H
(TCMX)	NA	65			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31542-R1 SWHB-25 Matrix: Sediment Sampled: 08-Apr-14 15:37 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(PCB030)	NA	56			% Recovery	H
(PCB112)	NA	69			% Recovery	H
(PCB198)	NA	83			% Recovery	H
(TCMX)	NA	60			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31543-R1 SWHB-26 Matrix: Sediment Sampled: 17-Apr-14 12:56 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	59			% Recovery	H
(PCB112)	NA	77			% Recovery	H
(PCB198)	NA	103			% Recovery	H
(TCMX)	NA	63			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31544-R1 SWHB-27 Matrix: Sediment Sampled: 18-Apr-14 14:42 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	64			% Recovery	H
(PCB112)	NA	86			% Recovery	H
(PCB198)	NA	99			% Recovery	H
(TCMX)	NA	71			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.26	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31545-R1 SWHB-28 Matrix: Sediment Sampled: 17-Apr-14 16:12 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	74			% Recovery	H
(PCB112)	NA	90			% Recovery	H
(PCB198)	NA	95			% Recovery	H
(TCMX)	NA	76			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.2	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.41	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	0.55	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	0.13	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.25	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31546-R1 SWHB-53 Matrix: Sediment Sampled: 18-Apr-14 13:29 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	68			% Recovery	H
(PCB112)	NA	84			% Recovery	H
(PCB198)	NA	98			% Recovery	H
(TCMX)	NA	67			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.22	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31547-R1 SWHB-30 Matrix: Sediment Sampled: 18-Apr-14 8:30 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	59			% Recovery	H
(PCB112)	NA	75			% Recovery	H
(PCB198)	NA	104			% Recovery	H
(TCMX)	NA	61			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31548-R1 SWHB-33 Matrix: Sediment Sampled: 09-Apr-14 15:30 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	63			% Recovery	H
(PCB112)	NA	70			% Recovery	H
(PCB198)	NA	79			% Recovery	H
(TCMX)	NA	63			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.08	0.05	0.1	ng/dry g	J,H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31549-R1 SWHB-36 Matrix: Sediment Sampled: 09-Apr-14 17:01 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	78			% Recovery	H
(PCB112)	NA	96			% Recovery	H
(PCB198)	NA	102			% Recovery	H
(TCMX)	NA	79			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	0.39	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.14	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	0.22	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31550-R1 SWHB-06 Matrix: Sediment Sampled: 17-Apr-14 8:35 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 02-Jun-15						
(PCB030)	NA	57			% Recovery	H
(PCB112)	NA	75			% Recovery	H
(PCB198)	NA	109			% Recovery	H
(TCMX)	NA	67			% Recovery	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Aldrin	NA	ND	0.05	0.1	ng/dry g	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g	H
Mirex	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Toxaphene	NA	ND	0.1	0.2	ng/dry g	H



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Conventionals

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1						
	SWHB-01	Matrix: Sediment			Sampled: 16-Apr-14 15:48	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	3.3	0.02	0.03	mg/dry kg	H
Sample ID: 31522-R1						
	SWHB-02	Matrix: Sediment			Sampled: 09-Apr-14 12:07	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	0.97	0.02	0.03	mg/dry kg	H
Sample ID: 31523-R1						
	SWHB-40	Matrix: Sediment			Sampled: 16-Apr-14 12:24	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	2.08	0.02	0.03	mg/dry kg	H
Sample ID: 31524-R1						
	SWHB-07	Matrix: Sediment			Sampled: 09-Apr-14 9:50	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	4.11	0.02	0.03	mg/dry kg	H
Sample ID: 31525-R1						
	SWHB-08	Matrix: Sediment			Sampled: 09-Apr-14 10:32	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	2.45	0.02	0.03	mg/dry kg	H
Sample ID: 31526-R1						
	SWHB-09	Matrix: Sediment			Sampled: 09-Apr-14 12:38	Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18078			Prepared: 14-May-15	Analyzed: 15-May-15
Ammonia as N	NA	1	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081			Prepared: 13-May-15	Analyzed: 13-May-15



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Conventionals

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Percent Solids	NA	73.9	0.1	0.1	% Dry Weight	H
Sample ID: 31527-R1	SWHB-10	Matrix: Sediment	Sampled: 09-Apr-14 13:05		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	2.02	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081	Prepared: 13-May-15		Analyzed: 13-May-15	
Percent Solids	NA	60.2	0.1	0.1	% Dry Weight	H
Sample ID: 31528-R1	SWHB-11	Matrix: Sediment	Sampled: 08-Apr-14 9:14		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	1.87	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081	Prepared: 13-May-15		Analyzed: 13-May-15	
Percent Solids	NA	56.5	0.1	0.1	% Dry Weight	H
Sample ID: 31529-R1	SWHB-12	Matrix: Sediment	Sampled: 08-Apr-14 13:36		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	2.88	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081	Prepared: 13-May-15		Analyzed: 13-May-15	
Percent Solids	NA	54.7	0.1	0.1	% Dry Weight	H
Sample ID: 31530-R1	SWHB-13	Matrix: Sediment	Sampled: 09-Apr-14 8:41		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	4.55	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081	Prepared: 13-May-15		Analyzed: 13-May-15	
Percent Solids	NA	52.7	0.1	0.1	% Dry Weight	H
Sample ID: 31531-R1	SWHB-14	Matrix: Sediment	Sampled: 08-Apr-14 11:49		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	2.36	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22081	Prepared: 13-May-15		Analyzed: 13-May-15	
Percent Solids	NA	58.3	0.1	0.1	% Dry Weight	H
Sample ID: 31532-R1	SWHB-15	Matrix: Sediment	Sampled: 15-Apr-14 9:02		Received: 27-Apr-15	
	Method: SM 4500-NH3 D	Batch ID: C-18078	Prepared: 14-May-15		Analyzed: 15-May-15	
Ammonia as N	NA	1.45	0.02	0.03	mg/dry kg	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: SM 2540 B Batch ID: C-22081 Prepared: 13-May-15 Analyzed: 13-May-15						
Percent Solids	NA	57.7	0.1	0.1	% Dry Weight	H
Sample ID: 31533-R1	SWHB-16	Matrix: Sediment	Sampled: 08-Apr-14 13:01		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						
Ammonia as N	NA	2.1	0.02	0.03	mg/dry kg	H
Method: SM 2540 B Batch ID: C-22081 Prepared: 13-May-15 Analyzed: 13-May-15						
Percent Solids	NA	57.7	0.1	0.1	% Dry Weight	H
Sample ID: 31534-R1	SWHB-41	Matrix: Sediment	Sampled: 09-Apr-14 17:56		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						
Ammonia as N	NA	3.26	0.02	0.03	mg/dry kg	H
Method: SM 2540 B Batch ID: C-22081 Prepared: 13-May-15 Analyzed: 13-May-15						
Percent Solids	NA	49.3	0.1	0.1	% Dry Weight	H
Sample ID: 31535-R1	SWHB-18	Matrix: Sediment	Sampled: 08-Apr-14 9:53		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						
Ammonia as N	NA	2.43	0.02	0.03	mg/dry kg	H
Method: SM 2540 B Batch ID: C-22081 Prepared: 13-May-15 Analyzed: 13-May-15						
Percent Solids	NA	50.1	0.1	0.1	% Dry Weight	H
Sample ID: 31536-R1	SWHB-19	Matrix: Sediment	Sampled: 08-Apr-14 10:26		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						
Ammonia as N	NA	2.55	0.02	0.03	mg/dry kg	H
Method: SM 2540 B Batch ID: C-22082 Prepared: 14-May-15 Analyzed: 14-May-15						
Percent Solids	NA	42.5	0.1	0.1	% Dry Weight	H
Sample ID: 31537-R1	SWHB-20	Matrix: Sediment	Sampled: 08-Apr-14 14:55		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						
Ammonia as N	NA	2.57	0.02	0.03	mg/dry kg	H
Method: SM 2540 B Batch ID: C-22082 Prepared: 14-May-15 Analyzed: 14-May-15						
Percent Solids	NA	57.8	0.1	0.1	% Dry Weight	H
Sample ID: 31538-R1	SWHB-21	Matrix: Sediment	Sampled: 15-Apr-14 17:34		Received: 27-Apr-15	
Method: SM 4500-NH3 D Batch ID: C-18079 Prepared: 14-May-15 Analyzed: 18-May-15						



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Ammonia as N	NA	0.73	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	72.9	0.1	0.1	% Dry Weight	H
Sample ID: 31539-R1	SWHB-22	Matrix: Sediment		Sampled: 15-Apr-14 14:13		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 18-May-15
Ammonia as N	NA	3.16	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	59	0.1	0.1	% Dry Weight	H
Sample ID: 31540-R1	SWHB-23	Matrix: Sediment		Sampled: 08-Apr-14 11:05		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 18-May-15
Ammonia as N	NA	2.05	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	59.7	0.1	0.1	% Dry Weight	H
Sample ID: 31541-R1	SWHB-24	Matrix: Sediment		Sampled: 08-Apr-14 16:22		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 18-May-15
Ammonia as N	NA	7.03	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	49.5	0.1	0.1	% Dry Weight	H
Sample ID: 31542-R1	SWHB-25	Matrix: Sediment		Sampled: 08-Apr-14 15:37		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	4.62	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	54	0.1	0.1	% Dry Weight	H
Sample ID: 31543-R1	SWHB-26	Matrix: Sediment		Sampled: 17-Apr-14 12:56		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	1.17	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	66.3	0.1	0.1	% Dry Weight	H
Sample ID: 31544-R1	SWHB-27	Matrix: Sediment		Sampled: 18-Apr-14 14:42		Received: 27-Apr-15



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Conventionals

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	1.22	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	69.7	0.1	0.1	% Dry Weight	H
Sample ID: 31545-R1	SWHB-28	Matrix: Sediment		Sampled: 17-Apr-14 16:12		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	2.65	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	69.6	0.1	0.1	% Dry Weight	H
Sample ID: 31546-R1	SWHB-53	Matrix: Sediment		Sampled: 18-Apr-14 13:29		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	0.67	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	76.9	0.1	0.1	% Dry Weight	H
Sample ID: 31547-R1	SWHB-30	Matrix: Sediment		Sampled: 18-Apr-14 8:30		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	3.29	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	74.6	0.1	0.1	% Dry Weight	H
Sample ID: 31548-R1	SWHB-33	Matrix: Sediment		Sampled: 09-Apr-14 15:30		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	2.16	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	41.9	0.1	0.1	% Dry Weight	H
Sample ID: 31549-R1	SWHB-36	Matrix: Sediment		Sampled: 09-Apr-14 17:01		Received: 27-Apr-15
	Method: SM 4500-NH3 D	Batch ID: C-18079		Prepared: 14-May-15		Analyzed: 19-May-15
Ammonia as N	NA	1.68	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082		Prepared: 14-May-15		Analyzed: 14-May-15
Percent Solids	NA	73.6	0.1	0.1	% Dry Weight	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31550-R1	SWHB-06	Matrix: Sediment			Sampled: 17-Apr-14 8:35	Received: 27-Apr-15
	Method: SM 4500-NH ₃ D	Batch ID: C-18079			Prepared: 14-May-15	Analyzed: 19-May-15
Ammonia as N	NA	0.79	0.02	0.03	mg/dry kg	H
	Method: SM 2540 B	Batch ID: C-22082			Prepared: 14-May-15	Analyzed: 14-May-15
Percent Solids	NA	62.1	0.1	0.1	% Dry Weight	H



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Elements

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1		Matrix: Sediment		Sampled: 16-Apr-14 15:48		Received: 27-Apr-15
	SWHB-01	Batch ID: E-6125		Prepared: 26-May-15		Analyzed: 26-May-15
	Method: EPA 245.7					
Mercury (Hg)	NA	0.3195	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15
Aluminum (Al)	NA	24729	1	5	µg/dry g	H
Antimony (Sb)	NA	0.255	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	7.009	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	52.596	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.456	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.1787	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	42.6901	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	76.6768	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	23863.1	1	5	µg/dry g	H
Lead (Pb)	NA	28.4226	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	10.57	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.211	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.63	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	440.646	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	156.654	0.025	0.05	µg/dry g	H
Sample ID: 31522-R1		Matrix: Sediment		Sampled: 09-Apr-14 12:07		Received: 27-Apr-15
	SWHB-02	Batch ID: E-6125		Prepared: 26-May-15		Analyzed: 26-May-15
	Method: EPA 245.7					
Mercury (Hg)	NA	0.042	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15
Aluminum (Al)	NA	5642.5	1	5	µg/dry g	H
Antimony (Sb)	NA	0.107	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	2.025	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	11.891	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.087	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0592	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	8.0639	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	15.4493	0.0025	0.005	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Iron (Fe)	NA	5034.3	1	5	µg/dry g	H
Lead (Pb)	NA	7.0674	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	2.06	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.056	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.16	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	130.123	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	36.776	0.025	0.05	µg/dry g	H

Sample ID: 31523-R1

SWHB-40

Matrix: Sediment

Sampled: 16-Apr-14 12:24

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.2124	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15
Aluminum (Al)	NA	25130.8	1	5	µg/dry g	H
Antimony (Sb)	NA	0.216	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	5.969	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	59.834	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.418	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.1829	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	36.1963	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	61.1135	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	23279.1	1	5	µg/dry g	H
Lead (Pb)	NA	19.4153	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	10.01	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.191	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.57	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	371.266	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	142.609	0.025	0.05	µg/dry g	H

Sample ID: 31524-R1

SWHB-07

Matrix: Sediment

Sampled: 09-Apr-14 9:50

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.3357	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15
Aluminum (Al)	NA	44364.4	1	5	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Antimony (Sb)	NA	0.284	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	10.453	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	89.104	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.753	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.433	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	62.8447	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	120.2856	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	39000.4	1	5	µg/dry g	H
Lead (Pb)	NA	32.4633	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	16.93	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.312	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	1.03	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	583.96	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	267.859	0.025	0.05	µg/dry g	H

Sample ID: 31525-R1

SWHB-08

Matrix: Sediment

Sampled: 09-Apr-14 10:32

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.3452	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8079	Prepared: 14-May-15		Analyzed: 19-May-15
Aluminum (Al)	NA	44119.8	1	5	µg/dry g	H
Antimony (Sb)	NA	0.313	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	8.928	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	104.241	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.729	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2618	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	63.5363	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	131.2779	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	41537.4	1	5	µg/dry g	H
Lead (Pb)	NA	33.0108	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	17.26	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.314	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.97	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	588.805	0.016	0.05	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Zinc (Zn)	NA	239.816	0.025	0.05	µg/dry g	H
Sample ID: 31526-R1 SWHB-09 Matrix: Sediment Sampled: 09-Apr-14 12:38 Received: 27-Apr-15 Method: EPA 245.7 Batch ID: E-6125 Prepared: 26-May-15 Analyzed: 26-May-15						
Mercury (Hg)	NA	0.0867	1E-05	0.00002	µg/dry g	H
Method: EPA 6020 Batch ID: E-8079 Prepared: 14-May-15 Analyzed: 19-May-15						
Aluminum (Al)	NA	5019	1	5	µg/dry g	H
Antimony (Sb)	NA	0.112	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	2.336	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	9.675	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.079	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0565	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	9.5518	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	16.8166	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	4393.8	1	5	µg/dry g	H
Lead (Pb)	NA	7.1189	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	1.85	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.063	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.22	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	137.244	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	47.42	0.025	0.05	µg/dry g	H
Sample ID: 31527-R1 SWHB-10 Matrix: Sediment Sampled: 09-Apr-14 13:05 Received: 27-Apr-15 Method: EPA 245.7 Batch ID: E-6125 Prepared: 26-May-15 Analyzed: 26-May-15						
Mercury (Hg)	NA	0.1884	1E-05	0.00002	µg/dry g	H
Method: EPA 6020 Batch ID: E-8079 Prepared: 14-May-15 Analyzed: 19-May-15						
Aluminum (Al)	NA	16171.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.185	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	4.131	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	33.78	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.257	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.121	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	25.2667	0.0025	0.005	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Copper (Cu)	NA	50.666	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	14000	1	5	µg/dry g	H
Lead (Pb)	NA	17.0375	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	6.25	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.142	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.43	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	280.84	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	89.5	0.025	0.05	µg/dry g	H

Sample ID: 31528-R1

SWHB-11

Matrix: Sediment

Sampled: 08-Apr-14 9:14

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.061	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079	Prepared: 14-May-15	Analyzed: 19-May-15		
Aluminum (Al)	NA	26634.3	1	5	µg/dry g	H
Antimony (Sb)	NA	0.213	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	6.509	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	59.064	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.448	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2639	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	25.1587	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	26.1449	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	24846.7	1	5	µg/dry g	H
Lead (Pb)	NA	9.7285	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	9.33	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.169	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.21	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	472.334	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	99.14	0.025	0.05	µg/dry g	H

Sample ID: 31529-R1

SWHB-12

Matrix: Sediment

Sampled: 08-Apr-14 13:36

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0713	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8079	Prepared: 14-May-15	Analyzed: 19-May-15		



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Aluminum (Al)	NA	29600.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.242	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	6.116	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	57.909	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.49	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.3172	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	27.8704	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	35.9368	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	24867.4	1	5	µg/dry g	H
Lead (Pb)	NA	10.9846	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	9.57	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.208	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.28	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	360.571	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	121.334	0.025	0.05	µg/dry g	H

Sample ID: 31530-R1

SWHB-13

Matrix: Sediment

Sampled: 09-Apr-14 8:41

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1431	1E-05	0.00002	µg/dry g	H
		Method: EPA 6020	Batch ID: E-8079	Prepared: 14-May-15	Analyzed: 19-May-15	
Aluminum (Al)	NA	21155.9	1	5	µg/dry g	H
Antimony (Sb)	NA	0.211	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	5.67	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	36.869	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.318	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2183	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	27.7215	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	49.8484	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	17699.4	1	5	µg/dry g	H
Lead (Pb)	NA	14.4549	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	7.69	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.176	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.4	0.01	0.02	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Total Phosphorus	NA	306.613	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	130.74	0.025	0.05	µg/dry g	H

Sample ID: 31531-R1

SWHB-14

Matrix: Sediment

Sampled: 08-Apr-14 11:49

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0994	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	29612.6	1	5	µg/dry g	H
Antimony (Sb)	NA	0.224	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	7.738	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	68.25	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.534	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2716	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	30.1467	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	38.6354	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	28943.9	1	5	µg/dry g	H
Lead (Pb)	NA	12.7523	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	10.19	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.229	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.22	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	464.543	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	137.915	0.025	0.05	µg/dry g	H

Sample ID: 31532-R1

SWHB-15

Matrix: Sediment

Sampled: 15-Apr-14 9:02

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0828	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	31656.3	1	5	µg/dry g	H
Antimony (Sb)	NA	0.217	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	7.443	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	62.74	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.541	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.3011	0.0025	0.005	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chromium (Cr)	NA	30.3696	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	36.5715	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	28523.4	1	5	µg/dry g	H
Lead (Pb)	NA	12.1242	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	11.37	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.256	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.23	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	403.429	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	118.031	0.025	0.05	µg/dry g	H

Sample ID: 31533-R1

SWHB-16

Matrix: Sediment

Sampled: 08-Apr-14 13:01

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1039	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	28141.8	1	5	µg/dry g	H
Antimony (Sb)	NA	0.21	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	8.01	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	70.586	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.504	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.3483	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	31.3195	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	44.0689	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	29504	1	5	µg/dry g	H
Lead (Pb)	NA	13.4125	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	11	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.214	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.3	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	471.664	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	150.369	0.025	0.05	µg/dry g	H

Sample ID: 31534-R1

SWHB-41

Matrix: Sediment

Sampled: 09-Apr-14 17:56

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1634	1E-05	0.00002	µg/dry g	H
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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 6020		Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	32753.5	1	5	µg/dry g	H
Antimony (Sb)	NA	0.267	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	8.764	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	65.493	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.564	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.1985	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	41.4143	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	70.7831	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	31673.4	1	5	µg/dry g	H
Lead (Pb)	NA	19.4939	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	12.29	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.218	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.55	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	525.787	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	198.668	0.025	0.05	µg/dry g	H

Sample ID: 31535-R1

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 245.7		Batch ID: E-6126		Prepared: 26-May-15		Analyzed: 26-May-15
Mercury (Hg)	NA	0.0953	1E-05	0.00002	µg/dry g	H

Method: EPA 6020		Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	31252.1	1	5	µg/dry g	H
Antimony (Sb)	NA	0.233	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	9.546	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	62.645	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.604	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2461	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	34.992	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	42.4212	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	29871.2	1	5	µg/dry g	H
Lead (Pb)	NA	14.5323	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	12.8	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.269	0.025	0.05	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Silver (Ag)	NA	0.29	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	493.948	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	137.384	0.025	0.05	µg/dry g	H

Sample ID: 31536-R1

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1099	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	31551.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.24	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	9.46	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	74.55	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.666	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.308	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	37.2224	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	50.044	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	35553.7	1	5	µg/dry g	H
Lead (Pb)	NA	16.1035	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	13.06	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.312	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.35	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	580.508	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	159.701	0.025	0.05	µg/dry g	H

Sample ID: 31537-R1

SWHB-20

Matrix: Sediment

Sampled: 08-Apr-14 14:55

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1056	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	27596	1	5	µg/dry g	H
Antimony (Sb)	NA	0.214	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	7.737	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	62.739	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.455	0.025	0.05	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Cadmium (Cd)	NA	0.2664	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	31.7746	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	53.4924	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	27607.1	1	5	µg/dry g	H
Lead (Pb)	NA	14.0048	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	10.43	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.219	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.36	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	446.903	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	154.647	0.025	0.05	µg/dry g	H

Sample ID: 31538-R1

SWHB-21

Method: EPA 245.7

Matrix: Sediment

Batch ID: E-6126

Sampled: 15-Apr-14 17:34

Prepared: 26-May-15

Received: 27-Apr-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0622	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8080	Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	5361.7	1	5	µg/dry g	H
Antimony (Sb)	NA	0.066	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	3.064	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	14.439	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.098	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0949	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	8.796	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	14.7147	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	5988.1	1	5	µg/dry g	H
Lead (Pb)	NA	4.6592	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	2.47	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.089	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	160.184	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	53.042	0.025	0.05	µg/dry g	H

Sample ID: 31539-R1

SWHB-22

Method: EPA 245.7

Matrix: Sediment

Batch ID: E-6126

Sampled: 15-Apr-14 14:13

Prepared: 26-May-15

Received: 27-Apr-15

Analyzed: 26-May-15



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Mercury (Hg)	NA	0.1175	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	28725.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.208	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	8.386	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	75.256	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.466	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2715	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	33.5335	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	49.5849	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	29345	1	5	µg/dry g	H
Lead (Pb)	NA	14.4931	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	10.94	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.224	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.36	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	438.364	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	168.044	0.025	0.05	µg/dry g	H

Sample ID: 31540-R1

SWHB-23

Matrix: Sediment

Sampled: 08-Apr-14 11:05

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0541	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15
Aluminum (Al)	NA	23373.9	1	5	µg/dry g	H
Antimony (Sb)	NA	0.177	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	6.474	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	57.19	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.383	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2627	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	22.8306	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	24.4454	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	22915.4	1	5	µg/dry g	H
Lead (Pb)	NA	8.012	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	7.87	0.01	0.02	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Selenium (Se)	NA	0.183	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	337.542	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	94.732	0.025	0.05	µg/dry g	H

Sample ID: 31541-R1

SWHB-24

Matrix: Sediment

Sampled: 08-Apr-14 16:22

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1129	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	30129.1	1	5	µg/dry g	H
Antimony (Sb)	NA	0.253	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	5.912	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	57.255	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.532	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.2043	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	37.9841	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	73.5	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	26177.4	1	5	µg/dry g	H
Lead (Pb)	NA	18.3434	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	11.16	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.323	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.37	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	375.416	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	162.525	0.025	0.05	µg/dry g	H

Sample ID: 31542-R1

SWHB-25

Matrix: Sediment

Sampled: 08-Apr-14 15:37

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1918	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	29319.7	1	5	µg/dry g	H
Antimony (Sb)	NA	0.209	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	7.286	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	56.762	0.025	0.05	µg/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Beryllium (Be)	NA	0.534	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.1881	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	38.7075	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	60.0737	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	26194.4	1	5	µg/dry g	H
Lead (Pb)	NA	17.8235	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	11.09	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.213	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.46	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	467.715	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	181.626	0.025	0.05	µg/dry g	H

Sample ID: 31543-R1

SWHB-26

Matrix: Sediment

Sampled: 17-Apr-14 12:56

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1214	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	12938.5	1	5	µg/dry g	H
Antimony (Sb)	NA	0.137	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	3.765	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	39.438	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.223	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.1578	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	19.8842	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	33.811	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	12105	1	5	µg/dry g	H
Lead (Pb)	NA	11.8065	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	5.12	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.131	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.3	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	260.487	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	79.516	0.025	0.05	µg/dry g	H

Sample ID: 31544-R1

SWHB-27

Matrix: Sediment

Sampled: 18-Apr-14 14:42

Received: 27-Apr-15



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 245.7		Batch ID: E-6127		Prepared: 26-May-15		Analyzed: 26-May-15
Mercury (Hg)	NA	0.0836	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	9143.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.125	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	3.181	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	29.861	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.148	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0798	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	15.9477	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	24.9161	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	9723.2	1	5	µg/dry g	H
Lead (Pb)	NA	10.6763	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	3.71	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.09	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.19	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	225.429	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	57.53	0.025	0.05	µg/dry g	H

Sample ID: 31545-R1

SWHB-28

Matrix: Sediment

Sampled: 17-Apr-14 16:12

Received: 27-Apr-15

Method: EPA 245.7		Batch ID: E-6127		Prepared: 26-May-15		Analyzed: 26-May-15
Mercury (Hg)	NA	0.0862	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	11642.5	1	5	µg/dry g	H
Antimony (Sb)	NA	0.211	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	3.753	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	29.962	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.208	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0768	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	16.2952	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	28.14	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	11187.6	1	5	µg/dry g	H
Lead (Pb)	NA	11.6087	0.0025	0.005	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Nickel (Ni)	NA	4.37	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.112	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.17	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	209.613	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	54.706	0.025	0.05	µg/dry g	H

Sample ID: 31546-R1

SWHB-53

Matrix: Sediment

Sampled: 18-Apr-14 13:29

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.034	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	8686.9	1	5	µg/dry g	H
Antimony (Sb)	NA	0.093	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	2.117	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	24.962	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.137	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0326	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	14.6344	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	24.9327	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	9830.1	1	5	µg/dry g	H
Lead (Pb)	NA	6.6166	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	3.41	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.08	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.09	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	234.697	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	43.736	0.025	0.05	µg/dry g	H

Sample ID: 31547-R1

SWHB-30

Matrix: Sediment

Sampled: 18-Apr-14 8:30

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0041	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	3688.3	1	5	µg/dry g	H
Antimony (Sb)	NA	0.061	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	1.602	0.025	0.05	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Barium (Ba)	NA	17.245	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.058	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0228	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	5.326	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	1.9741	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	4012	1	5	µg/dry g	H
Lead (Pb)	NA	1.168	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	1.35	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.049	0.025	0.05	µg/dry g	J,H
Silver (Ag)	NA	0.03	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	256.423	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	10.762	0.025	0.05	µg/dry g	H

Sample ID: 31548-R1

SWHB-33

Matrix: Sediment

Sampled: 09-Apr-14 15:30

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.4055	1E-05	0.00002	µg/dry g	H
	Method: EPA 6020		Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	48082.3	1	5	µg/dry g	H
Antimony (Sb)	NA	0.288	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	10.566	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	104.844	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.814	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.217	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	70.2226	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	103.7362	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	41704.9	1	5	µg/dry g	H
Lead (Pb)	NA	37.8075	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	17.33	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.325	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.87	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	628.917	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	223.766	0.025	0.05	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31549-R1						
SWHB-36		Matrix: Sediment		Sampled: 09-Apr-14 17:01		Received: 27-Apr-15
Method: EPA 245.7		Batch ID: E-6127		Prepared: 26-May-15		Analyzed: 26-May-15
Mercury (Hg)	NA	0.0304	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	5263.2	1	5	µg/dry g	H
Antimony (Sb)	NA	0.092	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	1.448	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	14.709	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.088	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0407	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	7.3478	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	13.3684	0.0025	0.005	µg/dry g	H
Iron (Fe)	NA	4667.9	1	5	µg/dry g	H
Lead (Pb)	NA	6.2902	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	1.9	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.047	0.025	0.05	µg/dry g	J,H
Silver (Ag)	NA	0.09	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	157.494	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	28.759	0.025	0.05	µg/dry g	H
Sample ID: 31550-R1						
SWHB-06		Matrix: Sediment		Sampled: 17-Apr-14 8:35		Received: 27-Apr-15
Method: EPA 245.7		Batch ID: E-6127		Prepared: 26-May-15		Analyzed: 26-May-15
Mercury (Hg)	NA	0.0591	1E-05	0.00002	µg/dry g	H
Method: EPA 6020		Batch ID: E-8081		Prepared: 15-May-15		Analyzed: 26-May-15
Aluminum (Al)	NA	7067.8	1	5	µg/dry g	H
Antimony (Sb)	NA	0.139	0.025	0.05	µg/dry g	H
Arsenic (As)	NA	2.468	0.025	0.05	µg/dry g	H
Barium (Ba)	NA	14.397	0.025	0.05	µg/dry g	H
Beryllium (Be)	NA	0.116	0.025	0.05	µg/dry g	H
Cadmium (Cd)	NA	0.0387	0.0025	0.005	µg/dry g	H
Chromium (Cr)	NA	12.5913	0.0025	0.005	µg/dry g	H
Copper (Cu)	NA	15.2503	0.0025	0.005	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Iron (Fe)	NA	6286.4	1	5	µg/dry g	H
Lead (Pb)	NA	8.5878	0.0025	0.005	µg/dry g	H
Nickel (Ni)	NA	2.4	0.01	0.02	µg/dry g	H
Selenium (Se)	NA	0.082	0.025	0.05	µg/dry g	H
Silver (Ag)	NA	0.12	0.01	0.02	µg/dry g	H
Total Phosphorus	NA	203.051	0.016	0.05	µg/dry g	H
Zinc (Zn)	NA	49.967	0.025	0.05	µg/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1	SWHB-01	Matrix: Sediment		Sampled: 16-Apr-14 15:48		Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 28-May-15
PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.33	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.44	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.32	0.05	0.1	ng/dry g	H
PCB101	NA	0.48	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	0.18	0.05	0.1	ng/dry g	H
PCB118	NA	0.64	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.85	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.52	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.89	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.65	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.37	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31522-R1

SWHB-02

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 12:07

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.32	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.13	0.05	0.1	ng/dry g	H
PCB101	NA	0.21	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.19	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.2	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.34	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.27	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31523-R1

SWHB-40

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 16-Apr-14 12:24

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.75	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.24	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.19	0.05	0.1	ng/dry g	H
PCB101	NA	0.31	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.53	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB149	NA	0.32	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.84	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.48	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.57	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31524-R1

SWHB-07

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 9:50

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.33	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.43	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.38	0.05	0.1	ng/dry g	H
PCB101	NA	0.36	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.41	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.5	0.05	0.1	ng/dry g	H
PCB151	NA	0.34	0.05	0.1	ng/dry g	H
PCB153	NA	1.57	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.5	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	0.43	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.39	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31525-R1

SWHB-08

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 10:32

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.6	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.22	0.05	0.1	ng/dry g	H
PCB095	NA	0.38	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.53	0.05	0.1	ng/dry g	H
PCB101	NA	0.86	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.36	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.92	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.99	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	1.57	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.6	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.65	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.72	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31526-R1

SWHB-09

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 12:38

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	0.21	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB052	NA	0.28	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.25	0.05	0.1	ng/dry g	H
PCB095	NA	0.23	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.16	0.05	0.1	ng/dry g	H
PCB101	NA	0.29	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.17	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.16	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.43	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.21	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.36	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.08	0.05	0.1	ng/dry g	J,H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31527-R1

SWHB-10

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 13:05

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.67	0.05	0.1	ng/dry g	H
PCB095	NA	0.66	0.05	0.1	ng/dry g	H
PCB097	NA	0.23	0.05	0.1	ng/dry g	H
PCB099	NA	0.63	0.05	0.1	ng/dry g	H
PCB101	NA	0.64	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.46	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.64	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1.46	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.83	0.05	0.1	ng/dry g	H
PCB151	NA	0.2	0.05	0.1	ng/dry g	H
PCB153	NA	1.69	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	0.22	0.05	0.1	ng/dry g	H
PCB177	NA	0.28	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB180	NA	0.7	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.59	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31528-R1

SWHB-11

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:14

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	0.34	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.44	0.05	0.1	ng/dry g	H
PCB095	NA	0.22	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.37	0.05	0.1	ng/dry g	H
PCB101	NA	0.45	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.32	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.4	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.59	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.43	0.05	0.1	ng/dry g	H
PCB151	NA	0.13	0.05	0.1	ng/dry g	H
PCB153	NA	1.24	0.05	0.1	ng/dry g	H
PCB156	NA	0.52	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.35	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.26	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31529-R1

SWHB-12

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 13:36

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.25	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.22	0.05	0.1	ng/dry g	H
PCB095	NA	0.11	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.13	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.22	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.15	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.51	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.15	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.31	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.24	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.2	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31530-R1

SWHB-13

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 8:41

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.43	0.05	0.1	ng/dry g	H
PCB095	NA	0.19	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.31	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.14	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.77	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.14	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.88	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.19	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.3	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31531-R1

SWHB-14

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 11:49

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.26	0.05	0.1	ng/dry g	H
PCB095	NA	0.07	0.05	0.1	ng/dry g	J,H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.12	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.16	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	ND	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.25	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.2	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31532-R1

SWHB-15

Matrix: Sediment

Sampled: 15-Apr-14 9:02

Received: 27-Apr-15



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 29-May-15
PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.13	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.24	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.28	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.17	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.22	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.16	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.43	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.18	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31533-R1

SWHB-16

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 13:01

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.15	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.29	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB138	NA	0.49	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.17	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.36	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.23	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31534-R1

SWHB-41

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 17:56

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 29-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.15	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.21	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	0.17	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.27	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.43	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.18	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.58	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31535-R1

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 30-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.13	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB031	NA	0.15	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.24	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	ND	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.24	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.19	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31536-R1

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.16	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	0.65	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.45	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.77	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	0.37	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31537-R1

SWHB-20

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 14:55

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.06	0.05	0.1	ng/dry g	J,H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.14	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	0.2	0.05	0.1	ng/dry g	H
PCB077	NA	0.21	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.35	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.2	0.05	0.1	ng/dry g	H
PCB101	NA	0.45	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.34	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.31	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.27	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.9	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	0.24	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.7	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB174	NA	0.17	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.33	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31538-R1

SWHB-21

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 15-Apr-14 17:34

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	0.32	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.26	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.09	0.05	0.1	ng/dry g	J,H
PCB070	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.43	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.13	0.05	0.1	ng/dry g	H
PCB114	NA	0.11	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.08	0.05	0.1	ng/dry g	J,H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.24	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.12	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	0.3	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31539-R1

SWHB-22

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 15-Apr-14 14:13

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.17	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	0.42	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	0.18	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB087	NA	0.18	0.05	0.1	ng/dry g	H
PCB095	NA	0.5	0.05	0.1	ng/dry g	H
PCB097	NA	0.76	0.05	0.1	ng/dry g	H
PCB099	NA	0.43	0.05	0.1	ng/dry g	H
PCB101	NA	0.59	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.43	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.48	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	0.23	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1.6	0.05	0.1	ng/dry g	H
PCB141	NA	0.26	0.05	0.1	ng/dry g	H
PCB149	NA	0.68	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	1.3	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.58	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.4	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.52	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.3	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB194	NA	0.35	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31540-R1

SWHB-23

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 11:05

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.19	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.26	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.23	0.05	0.1	ng/dry g	H
PCB070	NA	0.2	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	0.2	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB099	NA	0.34	0.05	0.1	ng/dry g	H
PCB101	NA	0.26	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.14	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.48	0.05	0.1	ng/dry g	H
PCB141	NA	0.36	0.05	0.1	ng/dry g	H
PCB149	NA	0.29	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.35	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.5	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.14	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31541-R1

SWHB-24

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 16:22

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.11	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.47	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.16	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	0.26	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.21	0.05	0.1	ng/dry g	H
PCB097	NA	0.74	0.05	0.1	ng/dry g	H
PCB099	NA	0.26	0.05	0.1	ng/dry g	H
PCB101	NA	0.35	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB110	NA	0.23	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.28	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	0.67	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.49	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.16	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.87	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.33	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	0.1	0.05	0.1	ng/dry g	H
PCB180	NA	0.5	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.19	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	0.1	0.1	0.2	ng/dry g	J,H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB209	NA	ND	0.05	0.1	ng/dry g	H
Sample ID: 31542-R1 SWHB-25 Matrix: Sediment Sampled: 08-Apr-14 15:37 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	0.43	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.23	0.05	0.1	ng/dry g	H
PCB070	NA	0.19	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.31	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.57	0.05	0.1	ng/dry g	H
PCB101	NA	0.52	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.26	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.26	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.86	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.3	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.73	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.34	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31543-R1

SWHB-26

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 17-Apr-14 12:56

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.25	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.21	0.05	0.1	ng/dry g	H
PCB070	NA	0.2	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB095	NA	0.14	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.45	0.05	0.1	ng/dry g	H
PCB101	NA	0.43	0.05	0.1	ng/dry g	H
PCB105	NA	0.32	0.05	0.1	ng/dry g	H
PCB110	NA	0.32	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.43	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1.09	0.05	0.1	ng/dry g	H
PCB141	NA	0.34	0.05	0.1	ng/dry g	H
PCB149	NA	0.34	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.77	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.4	0.05	0.1	ng/dry g	H
PCB167	NA	0.23	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.4	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	0.19	0.05	0.1	ng/dry g	H
PCB180	NA	0.25	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	0.35	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31544-R1

SWHB-27

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 18-Apr-14 14:42

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.57	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.15	0.05	0.1	ng/dry g	H
PCB070	NA	0.25	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.12	0.05	0.1	ng/dry g	H
PCB095	NA	0.63	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.38	0.05	0.1	ng/dry g	H
PCB101	NA	0.81	0.05	0.1	ng/dry g	H
PCB105	NA	0.43	0.05	0.1	ng/dry g	H
PCB110	NA	0.93	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	1.29	0.05	0.1	ng/dry g	H
PCB119	NA	0.21	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	0.38	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1.89	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.79	0.05	0.1	ng/dry g	H
PCB151	NA	0.22	0.05	0.1	ng/dry g	H
PCB153	NA	1.39	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	0.17	0.05	0.1	ng/dry g	H
PCB158	NA	0.43	0.05	0.1	ng/dry g	H
PCB167	NA	0.15	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.5	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.37	0.05	0.1	ng/dry g	H
PCB174	NA	0.29	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.65	0.05	0.1	ng/dry g	H
PCB183	NA	0.15	0.05	0.1	ng/dry g	H
PCB187	NA	0.66	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	0.9	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	0.2	0.1	0.2	ng/dry g	H
PCB201	NA	3.23	0.05	0.1	ng/dry g	H
PCB203	NA	1.99	0.05	0.1	ng/dry g	H
PCB206	NA	12.11	0.05	0.1	ng/dry g	H
PCB209	NA	4.24	0.05	0.1	ng/dry g	H

Sample ID: 31545-R1

SWHB-28

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 17-Apr-14 16:12

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	0.62	0.05	0.1	ng/dry g	H
PCB052	NA	0.38	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.15	0.05	0.1	ng/dry g	H
PCB070	NA	0.2	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.45	0.05	0.1	ng/dry g	H
PCB095	NA	0.33	0.05	0.1	ng/dry g	H
PCB097	NA	0.52	0.05	0.1	ng/dry g	H
PCB099	NA	0.52	0.05	0.1	ng/dry g	H
PCB101	NA	0.41	0.05	0.1	ng/dry g	H
PCB105	NA	0.35	0.05	0.1	ng/dry g	H
PCB110	NA	0.39	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.6	0.05	0.1	ng/dry g	H
PCB119	NA	0.2	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	0.48	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.98	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	0.76	0.05	0.1	ng/dry g	H
PCB151	NA	0.2	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB153	NA	1.39	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.38	0.05	0.1	ng/dry g	H
PCB174	NA	0.3	0.05	0.1	ng/dry g	H
PCB177	NA	0.22	0.05	0.1	ng/dry g	H
PCB180	NA	0.58	0.05	0.1	ng/dry g	H
PCB183	NA	0.11	0.05	0.1	ng/dry g	H
PCB187	NA	0.37	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	0.62	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	0.54	0.05	0.1	ng/dry g	H

Sample ID: 31546-R1

SWHB-53

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 18-Apr-14 13:29

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB033	NA	0.17	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.14	0.05	0.1	ng/dry g	H
PCB070	NA	0.19	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.24	0.05	0.1	ng/dry g	H
PCB095	NA	0.18	0.05	0.1	ng/dry g	H
PCB097	NA	0.34	0.05	0.1	ng/dry g	H
PCB099	NA	0.22	0.05	0.1	ng/dry g	H
PCB101	NA	0.27	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.28	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.2	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	0.22	0.05	0.1	ng/dry g	H
PCB128	NA	0.12	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.6	0.05	0.1	ng/dry g	H
PCB141	NA	0.32	0.05	0.1	ng/dry g	H
PCB149	NA	0.1	0.05	0.1	ng/dry g	H
PCB151	NA	0.15	0.05	0.1	ng/dry g	H
PCB153	NA	0.36	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB158	NA	0.31	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.2	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	0.19	0.05	0.1	ng/dry g	H
PCB180	NA	0.34	0.05	0.1	ng/dry g	H
PCB183	NA	0.1	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31547-R1

SWHB-30

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 18-Apr-14 8:30

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.17	0.05	0.1	ng/dry g	H
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	ND	0.05	0.1	ng/dry g	H
PCB141	NA	ND	0.05	0.1	ng/dry g	H
PCB149	NA	ND	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.08	0.05	0.1	ng/dry g	J,H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.12	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.21	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31548-R1

SWHB-33

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 09-Apr-14 15:30

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.57	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB066	NA	0.36	0.05	0.1	ng/dry g	H
PCB070	NA	0.27	0.05	0.1	ng/dry g	H
PCB074	NA	0.34	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.45	0.05	0.1	ng/dry g	H
PCB095	NA	0.7	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.73	0.05	0.1	ng/dry g	H
PCB101	NA	1.65	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.89	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	1.34	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	2.08	0.05	0.1	ng/dry g	H
PCB141	NA	0.13	0.05	0.1	ng/dry g	H
PCB149	NA	1.32	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	1.77	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.63	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.71	0.05	0.1	ng/dry g	H
PCB174	NA	0.45	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	1.07	0.05	0.1	ng/dry g	H
PCB183	NA	0.2	0.05	0.1	ng/dry g	H
PCB187	NA	0.69	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31549-R1

SWHB-36

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 09-Apr-14 17:01

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	0.29	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	0.34	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	0.34	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.3	0.05	0.1	ng/dry g	H
PCB070	NA	0.16	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.34	0.05	0.1	ng/dry g	H
PCB095	NA	0.29	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.44	0.05	0.1	ng/dry g	H
PCB101	NA	0.55	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.43	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.37	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	1.04	0.05	0.1	ng/dry g	H
PCB141	NA	0.39	0.05	0.1	ng/dry g	H
PCB149	NA	0.28	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.38	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	0.14	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	0.28	0.05	0.1	ng/dry g	H
PCB174	NA	0.1	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.24	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31550-R1

SWHB-06

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 17-Apr-14 8:35

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 02-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g	H
PCB005	NA	ND	0.05	0.1	ng/dry g	H
PCB008	NA	ND	0.05	0.1	ng/dry g	H
PCB015	NA	ND	0.05	0.1	ng/dry g	H
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB027	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB029	NA	ND	0.05	0.1	ng/dry g	H
PCB031	NA	ND	0.05	0.1	ng/dry g	H
PCB033	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB056(060)	NA	ND	0.1	0.2	ng/dry g	H
PCB066	NA	0.09	0.05	0.1	ng/dry g	J,H
PCB070	NA	0.16	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	0.3	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB095	NA	ND	0.05	0.1	ng/dry g	H
PCB097	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	0.13	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	0.06	0.05	0.1	ng/dry g	J,H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	0.13	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB137	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	0.54	0.05	0.1	ng/dry g	H
PCB141	NA	0.35	0.05	0.1	ng/dry g	H
PCB149	NA	0.08	0.05	0.1	ng/dry g	J,H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	0.31	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	0.13	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB174	NA	0.11	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	0.23	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB195	NA	ND	0.05	0.1	ng/dry g	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB203	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H
PCB209	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1 SWHB-01 Matrix: Sediment Sampled: 16-Apr-14 15:48 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 04-Jun-15						
(DFPBDE)	NA	113			% Recovery	H
(FTBDE)	NA	71			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.19	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.71	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.41	0.05	0.1	ng/dry g	H
Sample ID: 31522-R1 SWHB-02 Matrix: Sediment Sampled: 09-Apr-14 12:07 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 04-Jun-15						
(DFPBDE)	NA	102			% Recovery	H
(FTBDE)	NA	88			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.06	0.05	0.1	ng/dry g	J,H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.4	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE100	NA	0.08	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.08	0.05	0.1	ng/dry g	J,H

Sample ID: 31523-R1

SWHB-40

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 16-Apr-14 12:24

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	107			% Recovery	H
(FTBDE)	NA	76			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.64	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.18	0.05	0.1	ng/dry g	H

Sample ID: 31524-R1

SWHB-07

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 9:50

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	83			% Recovery	H
(FTBDE)	NA	75			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.17	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.93	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.17	0.05	0.1	ng/dry g	H
PBDE100	NA	0.1	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.11	0.05	0.1	ng/dry g	H

Sample ID: 31525-R1

SWHB-08

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 10:32

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	83			% Recovery	H
(FTBDE)	NA	76			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.15	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	1.14	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.18	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
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PBDE209	NA	0.25	0.05	0.1	ng/dry g	H
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Sample ID: 31526-R1

SWHB-09

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 12:38

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	103			% Recovery	H
(FTBDE)	NA	62			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.15	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.51	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.12	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.27	0.05	0.1	ng/dry g	H

Sample ID: 31527-R1

SWHB-10

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 13:05

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	102			% Recovery	H
(FTBDE)	NA	77			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.1	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.67	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE099	NA	0.18	0.05	0.1	ng/dry g	H
PBDE100	NA	0.09	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	1.44	0.05	0.1	ng/dry g	H

Sample ID: 31528-R1

SWHB-11

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:14

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	107			% Recovery	H
(FTBDE)	NA	90			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.22	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.7	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.25	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31529-R1

SWHB-12

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 13:36

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	86			% Recovery	H
(FTBDE)	NA	71			% Recovery	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.14	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.8	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31530-R1

SWHB-13

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 8:41

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	91			% Recovery	H
(FTBDE)	NA	62			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.13	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.74	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.1	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31531-R1

SWHB-14

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 11:49

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	87			% Recovery	H
(FTBDE)	NA	73			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.13	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.63	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.1	0.05	0.1	ng/dry g	H
PBDE100	NA	0.05	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31532-R1

SWHB-15

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 15-Apr-14 9:02

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	80			% Recovery	H
(FTBDE)	NA	64			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.08	0.05	0.1	ng/dry g	J,H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.69	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.07	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31533-R1

SWHB-16

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 13:01

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	87			% Recovery	H
(FTBDE)	NA	74			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.16	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	0.42	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31534-R1

SWHB-41

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 17:56

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	79			% Recovery	H
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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(FTBDE)	NA	62			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.19	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.08	0.05	0.1	ng/dry g	J,H
PBDE100	NA	0.06	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31535-R1

SWHB-18

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 04-Jun-15

(DFPBDE)	NA	82			% Recovery	H
(FTBDE)	NA	64			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.13	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.13	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31536-R1

SWHB-19

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	81			% Recovery	H
(FTBDE)	NA	64			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.24	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.3	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	0.16	0.05	0.1	ng/dry g	H
PBDE153	NA	0.13	0.05	0.1	ng/dry g	H
PBDE154	NA	0.07	0.05	0.1	ng/dry g	J,H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31537-R1

SWHB-20

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 14:55

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	71			% Recovery	H
(FTBDE)	NA	78			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.11	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.12	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.05	0.05	0.1	ng/dry g	J,H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31538-R1

SWHB-21

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 15-Apr-14 17:34

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	85			% Recovery	H
(FTBDE)	NA	61			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.05	0.05	0.1	ng/dry g	J,H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.12	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31539-R1

SWHB-22

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 15-Apr-14 14:13

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(DFPBDE)	NA	88			% Recovery	H
(FTBDE)	NA	75			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.22	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31540-R1

SWHB-23

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 11:05

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	101			% Recovery	H
(FTBDE)	NA	86			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31541-R1

SWHB-24

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 16:22

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	84			% Recovery	H
(FTBDE)	NA	72			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31542-R1

SWHB-25

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 15:37

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	87			% Recovery	H
(FTBDE)	NA	79			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.26	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.58	0.05	0.1	ng/dry g	H

Sample ID: 31543-R1

SWHB-26

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 17-Apr-14 12:56

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	97			% Recovery	H
(FTBDE)	NA	69			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31544-R1

SWHB-27

Matrix: Sediment

Sampled: 18-Apr-14 14:42

Received: 27-Apr-15



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D-NCI		Batch ID: O-7102		Prepared: 14-May-15		Analyzed: 05-Jun-15
(DFPBDE)	NA	103			% Recovery	H
(FTBDE)	NA	95			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.09	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31545-R1

SWHB-28

Matrix: Sediment

Sampled: 17-Apr-14 16:12

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	113			% Recovery	H
(FTBDE)	NA	79			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31546-R1

SWHB-53

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 18-Apr-14 13:29

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	102			% Recovery	H
(FTBDE)	NA	78			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.06	0.05	0.1	ng/dry g	J,H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.12	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31547-R1

SWHB-30

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 18-Apr-14 8:30

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	91			% Recovery	H
(FTBDE)	NA	74			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.07	0.05	0.1	ng/dry g	J,H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.11	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31548-R1

SWHB-33

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 09-Apr-14 15:30

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	87			% Recovery	H
(FTBDE)	NA	65			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.19	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.16	0.05	0.1	ng/dry g	H
PBDE100	NA	0.07	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	0.11	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31549-R1 SWHB-36 Matrix: Sediment Sampled: 09-Apr-14 17:01 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 05-Jun-15						
(DFPBDE)	NA	81			% Recovery	H
(FTBDE)	NA	98			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.1	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H
Sample ID: 31550-R1 SWHB-06 Matrix: Sediment Sampled: 17-Apr-14 8:35 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 05-Jun-15						
(DFPBDE)	NA	99			% Recovery	H
(FTBDE)	NA	67			% Recovery	H
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.08	0.05	0.1	ng/dry g	J,H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE100	NA	0.06	0.05	0.1	ng/dry g	J,H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1	SWHB-01	Matrix: Sediment			Sampled: 16-Apr-14 15:48	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7100			Prepared: 12-May-15	Analyzed: 28-May-15
(d10-Acenaphthene)	NA	38			% Recovery	H,3
(d10-Phenanthrene)	NA	71			% Recovery	H
(d12-Chrysene)	NA	96			% Recovery	H
(d8-Naphthalene)	NA	34			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.2	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	3.8	1	5	ng/dry g	J,H
Anthracene	NA	4.3	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	10.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	24	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	26.8	1	5	ng/dry g	H
Benzo[e]pyrene	NA	17.2	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	17.3	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	9.9	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	11.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	6.1	1	5	ng/dry g	H
Dibenzothiophene	NA	1.1	1	5	ng/dry g	J,H
Fluoranthene	NA	11.8	1	5	ng/dry g	H
Fluorene	NA	ND	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	24.8	1	5	ng/dry g	H
Naphthalene	NA	1.5	1	5	ng/dry g	J,H
Perylene	NA	5.1	1	5	ng/dry g	H
Phenanthrene	NA	6.6	1	5	ng/dry g	H
Pyrene	NA	16.6	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31522-R1	SWHB-02	Matrix: Sediment			Sampled: 09-Apr-14 12:07	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7100			Prepared: 12-May-15	Analyzed: 28-May-15
(d10-Acenaphthene)	NA	56			% Recovery	H
(d10-Phenanthrene)	NA	60			% Recovery	H
(d12-Chrysene)	NA	96			% Recovery	H
(d8-Naphthalene)	NA	47			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.1	1	5	ng/dry g	J,H
Anthracene	NA	1.5	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	1.8	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	5.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	7.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	4.3	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	4.6	1	5	ng/dry g	J,H
Benzo[k]fluoranthene	NA	2.4	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	2.6	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	1.7	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	3.5	1	5	ng/dry g	J,H
Fluorene	NA	ND	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	6.2	1	5	ng/dry g	H
Naphthalene	NA	ND	1	5	ng/dry g	H
Perylene	NA	1.4	1	5	ng/dry g	J,H
Phenanthrene	NA	3.3	1	5	ng/dry g	J,H
Pyrene	NA	4.4	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31523-R1	SWHB-40	Matrix: Sediment			Sampled: 16-Apr-14 12:24	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7100			Prepared: 12-May-15	Analyzed: 28-May-15
(d10-Acenaphthene)	NA	50			% Recovery	H
(d10-Phenanthrene)	NA	52			% Recovery	H
(d12-Chrysene)	NA	97			% Recovery	H
(d8-Naphthalene)	NA	41			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.4	1	5	ng/dry g	J,H
Anthracene	NA	2.1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.8	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	12.1	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	12.1	1	5	ng/dry g	H
Benzo[e]pyrene	NA	8.3	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	9.7	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	4.3	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	5.6	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	2.8	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.1	1	5	ng/dry g	J,H
Fluoranthene	NA	9.5	1	5	ng/dry g	H
Fluorene	NA	1.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	13.1	1	5	ng/dry g	H
Naphthalene	NA	1.5	1	5	ng/dry g	J,H
Perylene	NA	2.7	1	5	ng/dry g	J,H
Phenanthrene	NA	6.1	1	5	ng/dry g	H
Pyrene	NA	9.3	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31524-R1	SWHB-07	Matrix: Sediment	Sampled: 09-Apr-14 9:50		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 28-May-15	
(d10-Acenaphthene)	NA	51			% Recovery	H
(d10-Phenanthrene)	NA	78			% Recovery	H
(d12-Chrysene)	NA	101			% Recovery	H
(d8-Naphthalene)	NA	40			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
Acenaphthene	NA	1.1	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.7	1	5	ng/dry g	J,H
Anthracene	NA	2.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	8.3	1	5	ng/dry g	H
Benzo[a]pyrene	NA	14.7	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	16.1	1	5	ng/dry g	H
Benzo[e]pyrene	NA	11.5	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	12.1	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	6.6	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	14.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	3.6	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.5	1	5	ng/dry g	J,H
Fluoranthene	NA	12.6	1	5	ng/dry g	H
Fluorene	NA	1.9	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	15.1	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	4.2	1	5	ng/dry g	J,H
Phenanthrene	NA	10.6	1	5	ng/dry g	H
Pyrene	NA	13.9	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31525-R1	SWHB-08	Matrix: Sediment	Sampled: 09-Apr-14 10:32		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	53			% Recovery	H
(d10-Phenanthrene)	NA	52			% Recovery	H
(d12-Chrysene)	NA	65			% Recovery	H
(d8-Naphthalene)	NA	49			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.1	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
Acenaphthene	NA	1.7	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.6	1	5	ng/dry g	J,H
Anthracene	NA	4	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	7.4	1	5	ng/dry g	H
Benzo[a]pyrene	NA	14.4	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	20	1	5	ng/dry g	H
Benzo[e]pyrene	NA	13.6	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	17	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	7.6	1	5	ng/dry g	H
Biphenyl	NA	1.5	1	5	ng/dry g	J,H
Chrysene	NA	10.8	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	5.5	1	5	ng/dry g	H
Dibenzothiophene	NA	1.6	1	5	ng/dry g	J,H
Fluoranthene	NA	12.7	1	5	ng/dry g	H
Fluorene	NA	2.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	23.3	1	5	ng/dry g	H
Naphthalene	NA	2.5	1	5	ng/dry g	J,H
Perylene	NA	3.5	1	5	ng/dry g	J,H
Phenanthrene	NA	8.7	1	5	ng/dry g	H
Pyrene	NA	16.9	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31526-R1	SWHB-09	Matrix: Sediment	Sampled: 09-Apr-14 12:38		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	72			% Recovery	H
(d10-Phenanthrene)	NA	69			% Recovery	H
(d12-Chrysene)	NA	99			% Recovery	H
(d8-Naphthalene)	NA	70			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.5	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.1	1	5	ng/dry g	J,H
Anthracene	NA	1.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	2.3	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	3.3	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	4.6	1	5	ng/dry g	J,H
Benzo[e]pyrene	NA	3.9	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	4.5	1	5	ng/dry g	J,H
Benzo[k]fluoranthene	NA	2.6	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	3	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	1.8	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1	1	5	ng/dry g	J,H
Fluoranthene	NA	9	1	5	ng/dry g	H
Fluorene	NA	ND	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	5.8	1	5	ng/dry g	H
Naphthalene	NA	ND	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	9.5	1	5	ng/dry g	H
Pyrene	NA	6.4	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31527-R1	SWHB-10	Matrix: Sediment	Sampled: 09-Apr-14 13:05		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	52			% Recovery	H
(d10-Phenanthrene)	NA	57			% Recovery	H
(d12-Chrysene)	NA	72			% Recovery	H
(d8-Naphthalene)	NA	53			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.4	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.3	1	5	ng/dry g	J,H
Acenaphthene	NA	1.4	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.9	1	5	ng/dry g	J,H
Anthracene	NA	5.3	1	5	ng/dry g	H
Benz[a]anthracene	NA	15.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	27.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	28.6	1	5	ng/dry g	H
Benzo[e]pyrene	NA	20.2	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	21.1	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	12	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	15.8	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	5.8	1	5	ng/dry g	H
Dibenzothiophene	NA	1.2	1	5	ng/dry g	J,H
Fluoranthene	NA	21.7	1	5	ng/dry g	H
Fluorene	NA	1.7	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	28.2	1	5	ng/dry g	H
Naphthalene	NA	1.8	1	5	ng/dry g	J,H
Perylene	NA	6.4	1	5	ng/dry g	H
Phenanthrene	NA	8.3	1	5	ng/dry g	H
Pyrene	NA	23.6	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31528-R1	SWHB-11	Matrix: Sediment	Sampled: 08-Apr-14 9:14		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	55			% Recovery	H
(d10-Phenanthrene)	NA	58			% Recovery	H
(d12-Chrysene)	NA	71			% Recovery	H
(d8-Naphthalene)	NA	51			% Recovery	H
1-Methylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	3.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthene	NA	2.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.4	1	5	ng/dry g	J,H
Anthracene	NA	6.3	1	5	ng/dry g	H
Benz[a]anthracene	NA	30.9	1	5	ng/dry g	H
Benzo[a]pyrene	NA	36.7	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	33.1	1	5	ng/dry g	H
Benzo[e]pyrene	NA	24.6	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	24	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	15.1	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	31.1	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	8.2	1	5	ng/dry g	H
Dibenzothiophene	NA	2.3	1	5	ng/dry g	J,H
Fluoranthene	NA	54.9	1	5	ng/dry g	H
Fluorene	NA	2.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	35	1	5	ng/dry g	H
Naphthalene	NA	1.4	1	5	ng/dry g	J,H
Perylene	NA	8.5	1	5	ng/dry g	H
Phenanthrene	NA	28.3	1	5	ng/dry g	H
Pyrene	NA	57.3	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31529-R1		Matrix: Sediment		Sampled: 08-Apr-14 13:36		Received: 27-Apr-15
	SWHB-12	Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 29-May-15
	Method: EPA 8270D					
(d10-Acenaphthene)	NA	50			% Recovery	H
(d10-Phenanthrene)	NA	76			% Recovery	H
(d12-Chrysene)	NA	60			% Recovery	H
(d8-Naphthalene)	NA	43			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.1	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	6.1	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	5.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	4.7	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.2	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	4.2	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	2.4	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.3	1	5	ng/dry g	J,H
Fluoranthene	NA	8.1	1	5	ng/dry g	H
Fluorene	NA	1.7	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	6.8	1	5	ng/dry g	H
Naphthalene	NA	1.1	1	5	ng/dry g	J,H
Perylene	NA	1.9	1	5	ng/dry g	J,H
Phenanthrene	NA	6.5	1	5	ng/dry g	H
Pyrene	NA	10.2	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31530-R1	SWHB-13	Matrix: Sediment	Sampled: 09-Apr-14 8:41		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	52			% Recovery	H
(d10-Phenanthrene)	NA	76			% Recovery	H
(d12-Chrysene)	NA	63			% Recovery	H
(d8-Naphthalene)	NA	48			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.2	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1	1	5	ng/dry g	J,H
Anthracene	NA	1.6	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	6.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	6.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	5.3	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	7.8	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.6	1	5	ng/dry g	J,H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	4.3	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	2.9	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.2	1	5	ng/dry g	J,H
Fluoranthene	NA	7	1	5	ng/dry g	H
Fluorene	NA	1.4	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	9.7	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	1.5	1	5	ng/dry g	J,H
Phenanthrene	NA	6.3	1	5	ng/dry g	H
Pyrene	NA	7.9	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31531-R1	SWHB-14	Matrix: Sediment			Sampled: 08-Apr-14 11:49	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7100			Prepared: 12-May-15	Analyzed: 29-May-15
(d10-Acenaphthene)	NA	50			% Recovery	H
(d10-Phenanthrene)	NA	69			% Recovery	H
(d12-Chrysene)	NA	66			% Recovery	H
(d8-Naphthalene)	NA	49			% Recovery	H
1-Methylnaphthalene	NA	1.2	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.1	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.6	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1.2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	2.9	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	7.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	6.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	5.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	8.7	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.8	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	4.6	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	2.4	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	7.2	1	5	ng/dry g	H
Fluorene	NA	2.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	9.3	1	5	ng/dry g	H
Naphthalene	NA	1.3	1	5	ng/dry g	J,H
Perylene	NA	1.6	1	5	ng/dry g	J,H
Phenanthrene	NA	6.2	1	5	ng/dry g	H
Pyrene	NA	9.7	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31532-R1	SWHB-15	Matrix: Sediment	Sampled: 15-Apr-14 9:02		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	51			% Recovery	H
(d10-Phenanthrene)	NA	52			% Recovery	H
(d12-Chrysene)	NA	60			% Recovery	H
(d8-Naphthalene)	NA	53			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.4	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.3	1	5	ng/dry g	J,H
Anthracene	NA	1.5	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.3	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	8.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	7.5	1	5	ng/dry g	H
Benzo[e]pyrene	NA	7.4	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	10.1	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	3.7	1	5	ng/dry g	J,H
Biphenyl	NA	1.2	1	5	ng/dry g	J,H
Chrysene	NA	6.1	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	1.9	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.2	1	5	ng/dry g	J,H
Fluoranthene	NA	11.7	1	5	ng/dry g	H
Fluorene	NA	1.7	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	11.4	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	2	1	5	ng/dry g	J,H
Phenanthrene	NA	8.3	1	5	ng/dry g	H
Pyrene	NA	14.1	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31533-R1	SWHB-16	Matrix: Sediment	Sampled: 08-Apr-14 13:01		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	59			% Recovery	H
(d10-Phenanthrene)	NA	56			% Recovery	H
(d12-Chrysene)	NA	58			% Recovery	H
(d8-Naphthalene)	NA	59			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
Acenaphthene	NA	1	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.1	1	5	ng/dry g	J,H
Anthracene	NA	1.4	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.1	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	6.9	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	6	1	5	ng/dry g	H
Benzo[e]pyrene	NA	5.9	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	9	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.3	1	5	ng/dry g	J,H
Biphenyl	NA	1	1	5	ng/dry g	J,H
Chrysene	NA	4.7	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	1.4	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1	1	5	ng/dry g	J,H
Fluoranthene	NA	8.2	1	5	ng/dry g	H
Fluorene	NA	1.3	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	9.1	1	5	ng/dry g	H
Naphthalene	NA	1.8	1	5	ng/dry g	J,H
Perylene	NA	1.7	1	5	ng/dry g	J,H
Phenanthrene	NA	6.1	1	5	ng/dry g	H
Pyrene	NA	10.3	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31534-R1	SWHB-41	Matrix: Sediment	Sampled: 09-Apr-14 17:56		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7100	Prepared: 12-May-15		Analyzed: 29-May-15	
(d10-Acenaphthene)	NA	43			% Recovery	H,3
(d10-Phenanthrene)	NA	74			% Recovery	H
(d12-Chrysene)	NA	58			% Recovery	H
(d8-Naphthalene)	NA	49			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.5	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
Acenaphthene	NA	1.6	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.6	1	5	ng/dry g	J,H
Anthracene	NA	2.2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	5.1	1	5	ng/dry g	H
Benzo[a]pyrene	NA	8.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	8.9	1	5	ng/dry g	H
Benzo[e]pyrene	NA	7	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	9.8	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	3.4	1	5	ng/dry g	J,H
Biphenyl	NA	1.5	1	5	ng/dry g	J,H
Chrysene	NA	6.6	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	3.1	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.3	1	5	ng/dry g	J,H
Fluoranthene	NA	12.7	1	5	ng/dry g	H
Fluorene	NA	2.5	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	11.6	1	5	ng/dry g	H
Naphthalene	NA	2.4	1	5	ng/dry g	J,H
Perylene	NA	1.9	1	5	ng/dry g	J,H
Phenanthrene	NA	9.4	1	5	ng/dry g	H
Pyrene	NA	12.5	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31535-R1 SWHB-18 Matrix: Sediment Sampled: 08-Apr-14 9:53 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 30-May-15						
(d10-Acenaphthene)	NA	56			% Recovery	H
(d10-Phenanthrene)	NA	53			% Recovery	H
(d12-Chrysene)	NA	59			% Recovery	H
(d8-Naphthalene)	NA	58			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.5	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	ND	1	5	ng/dry g	H
Benz[a]anthracene	NA	2.1	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	3.4	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	3.4	1	5	ng/dry g	J,H
Benzo[e]pyrene	NA	3.2	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	6.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.1	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	3.8	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	1.8	1	5	ng/dry g	J,H
Dibenzothiophene	NA	1.4	1	5	ng/dry g	J,H
Fluoranthene	NA	6.9	1	5	ng/dry g	H
Fluorene	NA	1.5	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	7.5	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	8.1	1	5	ng/dry g	H
Pyrene	NA	7.7	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31536-R1 SWHB-19 Matrix: Sediment Sampled: 08-Apr-14 10:26 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(d10-Acenaphthene)	NA	52			% Recovery	H
(d10-Phenanthrene)	NA	80			% Recovery	H
(d12-Chrysene)	NA	58			% Recovery	H
(d8-Naphthalene)	NA	38			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	2.1	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.7	1	5	ng/dry g	J,H
Anthracene	NA	1.7	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.9	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	12	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	10.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	9	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	15.9	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	4.6	1	5	ng/dry g	J,H
Biphenyl	NA	1.5	1	5	ng/dry g	J,H
Chrysene	NA	7.5	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	4.3	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	11.4	1	5	ng/dry g	H
Fluorene	NA	2.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	20.6	1	5	ng/dry g	H
Naphthalene	NA	2.2	1	5	ng/dry g	J,H
Perylene	NA	2.9	1	5	ng/dry g	J,H
Phenanthrene	NA	8.9	1	5	ng/dry g	H
Pyrene	NA	13.8	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31537-R1	SWHB-20	Matrix: Sediment	Sampled: 08-Apr-14 14:55		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7102	Prepared: 14-May-15		Analyzed: 01-Jun-15	
(d10-Acenaphthene)	NA	62			% Recovery	H
(d10-Phenanthrene)	NA	57			% Recovery	H
(d12-Chrysene)	NA	74			% Recovery	H
(d8-Naphthalene)	NA	47			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.8	1	5	ng/dry g	J,H
Anthracene	NA	2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.9	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	10.8	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	10.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	8.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	13.5	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	4.5	1	5	ng/dry g	J,H
Biphenyl	NA	1.3	1	5	ng/dry g	J,H
Chrysene	NA	6.6	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	2.9	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	10.8	1	5	ng/dry g	H
Fluorene	NA	2.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	17.1	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	2.9	1	5	ng/dry g	J,H
Phenanthrene	NA	7.1	1	5	ng/dry g	H
Pyrene	NA	11.8	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31538-R1	SWHB-21	Matrix: Sediment				
	Method: EPA 8270D	Batch ID: O-7102			Sampled: 15-Apr-14 17:34	Received: 27-Apr-15
					Prepared: 14-May-15	Analyzed: 01-Jun-15
(d10-Acenaphthene)	NA	58			% Recovery	H
(d10-Phenanthrene)	NA	75			% Recovery	H
(d12-Chrysene)	NA	80			% Recovery	H
(d8-Naphthalene)	NA	50			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	1.6	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	1.9	1	5	ng/dry g	J,H
Benzo[e]pyrene	NA	1.4	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	1	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	1.2	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	2.3	1	5	ng/dry g	J,H
Fluorene	NA	1.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	4.1	1	5	ng/dry g	J,H
Naphthalene	NA	ND	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	4.6	1	5	ng/dry g	J,H
Pyrene	NA	2.5	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31539-R1	SWHB-22	Matrix: Sediment				
	Method: EPA 8270D	Batch ID: O-7102			Sampled: 15-Apr-14 14:13	Received: 27-Apr-15
					Prepared: 14-May-15	Analyzed: 01-Jun-15
(d10-Acenaphthene)	NA	59			% Recovery	H
(d10-Phenanthrene)	NA	51			% Recovery	H
(d12-Chrysene)	NA	67			% Recovery	H
(d8-Naphthalene)	NA	53			% Recovery	H
1-Methylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	2.7	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.2	1	5	ng/dry g	J,H
Anthracene	NA	2.7	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	5.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	12.1	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	11.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	9.4	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	15.5	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	5.4	1	5	ng/dry g	H
Biphenyl	NA	1.2	1	5	ng/dry g	J,H
Chrysene	NA	8.3	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	3.8	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	13.9	1	5	ng/dry g	H
Fluorene	NA	2.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	18.3	1	5	ng/dry g	H
Naphthalene	NA	2.1	1	5	ng/dry g	J,H
Perylene	NA	2.9	1	5	ng/dry g	J,H
Phenanthrene	NA	12.8	1	5	ng/dry g	H
Pyrene	NA	18.3	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31540-R1 SWHB-23 Matrix: Sediment Sampled: 08-Apr-14 11:05 Received: 27-Apr-15 Method: EPA 8270D Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 01-Jun-15						
(d10-Acenaphthene)	NA	63			% Recovery	H
(d10-Phenanthrene)	NA	73			% Recovery	H
(d12-Chrysene)	NA	96			% Recovery	H
(d8-Naphthalene)	NA	42			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	2.2	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
Acenaphthene	NA	1.3	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.2	1	5	ng/dry g	J,H
Anthracene	NA	2.6	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	8.8	1	5	ng/dry g	H
Benzo[a]pyrene	NA	18.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	14.1	1	5	ng/dry g	H
Benzo[e]pyrene	NA	12.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	18.5	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	6.5	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	10.3	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	4	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	18.7	1	5	ng/dry g	H
Fluorene	NA	1.9	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	23.1	1	5	ng/dry g	H
Naphthalene	NA	1.3	1	5	ng/dry g	J,H
Perylene	NA	4.3	1	5	ng/dry g	J,H
Phenanthrene	NA	8.6	1	5	ng/dry g	H
Pyrene	NA	23	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31541-R1	SWHB-24	Matrix: Sediment	Sampled: 08-Apr-14 16:22		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7102	Prepared: 14-May-15		Analyzed: 01-Jun-15	
(d10-Acenaphthene)	NA	50			% Recovery	H
(d10-Phenanthrene)	NA	72			% Recovery	H
(d12-Chrysene)	NA	62			% Recovery	H
(d8-Naphthalene)	NA	41			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.5	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	4.5	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.3	1	5	ng/dry g	J,H
Anthracene	NA	3	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	6.7	1	5	ng/dry g	H
Benzo[a]pyrene	NA	15.7	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	14.8	1	5	ng/dry g	H
Benzo[e]pyrene	NA	11.8	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	18.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	7.6	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	9.4	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	4.8	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	12.7	1	5	ng/dry g	H
Fluorene	NA	2	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	24.7	1	5	ng/dry g	H
Naphthalene	NA	1.9	1	5	ng/dry g	J,H
Perylene	NA	4	1	5	ng/dry g	J,H
Phenanthrene	NA	7.5	1	5	ng/dry g	H
Pyrene	NA	15	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31542-R1	SWHB-25	Matrix: Sediment	Sampled: 08-Apr-14 15:37		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7102	Prepared: 14-May-15		Analyzed: 01-Jun-15	
(d10-Acenaphthene)	NA	55			% Recovery	H
(d10-Phenanthrene)	NA	51			% Recovery	H
(d12-Chrysene)	NA	75			% Recovery	H
(d8-Naphthalene)	NA	40			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	2.8	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	5.1	1	5	ng/dry g	H
2-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
Acenaphthene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.9	1	5	ng/dry g	J,H
Anthracene	NA	2.6	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	5.7	1	5	ng/dry g	H
Benzo[a]pyrene	NA	14.2	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	13.3	1	5	ng/dry g	H
Benzo[e]pyrene	NA	11	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	16.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	5.6	1	5	ng/dry g	H
Biphenyl	NA	1.3	1	5	ng/dry g	J,H
Chrysene	NA	7.8	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	4.4	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	11.5	1	5	ng/dry g	H
Fluorene	NA	2.2	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	20.7	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	3.1	1	5	ng/dry g	J,H
Phenanthrene	NA	8.4	1	5	ng/dry g	H
Pyrene	NA	13.4	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31543-R1	SWHB-26	Matrix: Sediment			Sampled: 17-Apr-14 12:56	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7102			Prepared: 14-May-15	Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	48			% Recovery	H,3
(d10-Phenanthrene)	NA	67			% Recovery	H
(d12-Chrysene)	NA	84			% Recovery	H
(d8-Naphthalene)	NA	40			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1.4	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.2	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	3	1	5	ng/dry g	J,H
Anthracene	NA	3.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	15	1	5	ng/dry g	H
Benzo[a]pyrene	NA	29.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	26.9	1	5	ng/dry g	H
Benzo[e]pyrene	NA	19.3	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	23.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	14.6	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	17.4	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	7.7	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	14.1	1	5	ng/dry g	H
Fluorene	NA	1.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	33.8	1	5	ng/dry g	H
Naphthalene	NA	1.3	1	5	ng/dry g	J,H
Perylene	NA	6.3	1	5	ng/dry g	H
Phenanthrene	NA	7.4	1	5	ng/dry g	H
Pyrene	NA	17.4	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31544-R1	SWHB-27	Matrix: Sediment				
	Method: EPA 8270D	Batch ID: O-7102			Sampled: 18-Apr-14 14:42	Received: 27-Apr-15
					Prepared: 14-May-15	Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	57			% Recovery	H
(d10-Phenanthrene)	NA	52			% Recovery	H
(d12-Chrysene)	NA	96			% Recovery	H
(d8-Naphthalene)	NA	49			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	4	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
Acenaphthene	NA	1.5	1	5	ng/dry g	J,H
Acenaphthylene	NA	17	1	5	ng/dry g	H
Anthracene	NA	37.8	1	5	ng/dry g	H
Benz[a]anthracene	NA	104.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	265.8	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	773.7	1	5	ng/dry g	H
Benzo[e]pyrene	NA	387	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	116.3	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	191.3	1	5	ng/dry g	H
Biphenyl	NA	1.8	1	5	ng/dry g	J,H
Chrysene	NA	202.3	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	88.2	1	5	ng/dry g	H
Dibenzothiophene	NA	1.9	1	5	ng/dry g	J,H
Fluoranthene	NA	84.6	1	5	ng/dry g	H
Fluorene	NA	5.6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	193.8	1	5	ng/dry g	H
Naphthalene	NA	1.7	1	5	ng/dry g	J,H
Perylene	NA	40.5	1	5	ng/dry g	H
Phenanthrene	NA	18.3	1	5	ng/dry g	H
Pyrene	NA	64.1	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31545-R1	SWHB-28	Matrix: Sediment			Sampled: 17-Apr-14 16:12	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7102			Prepared: 14-May-15	Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	65			% Recovery	H
(d10-Phenanthrene)	NA	65			% Recovery	H
(d12-Chrysene)	NA	95			% Recovery	H
(d8-Naphthalene)	NA	55			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	2	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.3	1	5	ng/dry g	J,H
Acenaphthene	NA	1.3	1	5	ng/dry g	J,H
Acenaphthylene	NA	3.5	1	5	ng/dry g	J,H
Anthracene	NA	6.7	1	5	ng/dry g	H
Benz[a]anthracene	NA	12.4	1	5	ng/dry g	H
Benzo[a]pyrene	NA	20.4	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	24.3	1	5	ng/dry g	H
Benzo[e]pyrene	NA	15.8	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	18.7	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	11.8	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	27.4	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	7.2	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	17.4	1	5	ng/dry g	H
Fluorene	NA	2	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	27.4	1	5	ng/dry g	H
Naphthalene	NA	1.6	1	5	ng/dry g	J,H
Perylene	NA	4.9	1	5	ng/dry g	J,H
Phenanthrene	NA	11.9	1	5	ng/dry g	H
Pyrene	NA	18.9	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31546-R1	SWHB-53	Matrix: Sediment				
	Method: EPA 8270D	Batch ID: O-7102			Sampled: 18-Apr-14 13:29 Prepared: 14-May-15	Received: 27-Apr-15 Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	61			% Recovery	H
(d10-Phenanthrene)	NA	59			% Recovery	H
(d12-Chrysene)	NA	92			% Recovery	H
(d8-Naphthalene)	NA	51			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	1	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1.3	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.2	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	6	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	7.6	1	5	ng/dry g	H
Benzo[e]pyrene	NA	4.6	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	5.9	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	3.5	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	4.9	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	2.3	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	5.3	1	5	ng/dry g	H
Fluorene	NA	1.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	9	1	5	ng/dry g	H
Naphthalene	NA	ND	1	5	ng/dry g	H
Perylene	NA	1.3	1	5	ng/dry g	J,H
Phenanthrene	NA	4.3	1	5	ng/dry g	J,H
Pyrene	NA	5.8	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31547-R1	SWHB-30 Method: EPA 8270D	Matrix: Sediment Batch ID: O-7102			Sampled: 18-Apr-14 8:30 Prepared: 14-May-15	Received: 27-Apr-15 Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	59			% Recovery	H
(d10-Phenanthrene)	NA	61			% Recovery	H
(d12-Chrysene)	NA	103			% Recovery	H
(d8-Naphthalene)	NA	43			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	ND	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	1	1	5	ng/dry g	J,H
Fluorene	NA	1.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	ND	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	3.7	1	5	ng/dry g	J,H
Pyrene	NA	1.1	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31548-R1	SWHB-33	Matrix: Sediment			Sampled: 09-Apr-14 15:30	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7102			Prepared: 14-May-15	Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	50			% Recovery	H
(d10-Phenanthrene)	NA	73			% Recovery	H
(d12-Chrysene)	NA	72			% Recovery	H
(d8-Naphthalene)	NA	42			% Recovery	H
1-Methylnaphthalene	NA	1.3	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	3.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	2.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	2.7	1	5	ng/dry g	J,H
Acenaphthene	NA	2.4	1	5	ng/dry g	J,H
Acenaphthylene	NA	7.3	1	5	ng/dry g	H
Anthracene	NA	7.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	23.3	1	5	ng/dry g	H
Benzo[a]pyrene	NA	50.7	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	46	1	5	ng/dry g	H
Benzo[e]pyrene	NA	34.6	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	49.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	19.6	1	5	ng/dry g	H
Biphenyl	NA	1.8	1	5	ng/dry g	J,H
Chrysene	NA	27.5	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	12	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	29.8	1	5	ng/dry g	H
Fluorene	NA	2.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	64.2	1	5	ng/dry g	H
Naphthalene	NA	3.9	1	5	ng/dry g	J,H
Perylene	NA	10.9	1	5	ng/dry g	H
Phenanthrene	NA	15.2	1	5	ng/dry g	H
Pyrene	NA	42.3	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31549-R1	SWHB-36	Matrix: Sediment	Sampled: 09-Apr-14 17:01		Received: 27-Apr-15	
	Method: EPA 8270D	Batch ID: O-7102	Prepared: 14-May-15		Analyzed: 02-Jun-15	
(d10-Acenaphthene)	NA	70			% Recovery	H
(d10-Phenanthrene)	NA	71			% Recovery	H
(d12-Chrysene)	NA	89			% Recovery	H
(d8-Naphthalene)	NA	53			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	6.3	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	1.3	1	5	ng/dry g	J,H
Acenaphthene	NA	1.1	1	5	ng/dry g	J,H
Acenaphthylene	NA	7.4	1	5	ng/dry g	H
Anthracene	NA	5.8	1	5	ng/dry g	H
Benz[a]anthracene	NA	29.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	32.1	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	29.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	21.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	23.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	14.9	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	33.1	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	7.4	1	5	ng/dry g	H
Dibenzothiophene	NA	4.1	1	5	ng/dry g	J,H
Fluoranthene	NA	76.7	1	5	ng/dry g	H
Fluorene	NA	4.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	34.4	1	5	ng/dry g	H
Naphthalene	NA	1.9	1	5	ng/dry g	J,H
Perylene	NA	6.6	1	5	ng/dry g	H
Phenanthrene	NA	46.7	1	5	ng/dry g	H
Pyrene	NA	71.1	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31550-R1	SWHB-06	Matrix: Sediment			Sampled: 17-Apr-14 8:35	Received: 27-Apr-15
	Method: EPA 8270D	Batch ID: O-7102			Prepared: 14-May-15	Analyzed: 02-Jun-15
(d10-Acenaphthene)	NA	54			% Recovery	H
(d10-Phenanthrene)	NA	69			% Recovery	H
(d12-Chrysene)	NA	88			% Recovery	H
(d8-Naphthalene)	NA	52			% Recovery	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.2	1	5	ng/dry g	J,H
Anthracene	NA	1.4	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	2.6	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	4.6	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	4.3	1	5	ng/dry g	J,H
Benzo[e]pyrene	NA	3.6	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	5.7	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	2.7	1	5	ng/dry g	J,H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	3.8	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	1.2	1	5	ng/dry g	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	4.7	1	5	ng/dry g	J,H
Fluorene	NA	1.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	7.9	1	5	ng/dry g	H
Naphthalene	NA	1.1	1	5	ng/dry g	J,H
Perylene	NA	1	1	5	ng/dry g	J,H
Phenanthrene	NA	4.1	1	5	ng/dry g	J,H
Pyrene	NA	5.2	1	5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31521-R1 SWHB-01 Matrix: Sediment Sampled: 16-Apr-14 15:48 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31522-R1 SWHB-02 Matrix: Sediment Sampled: 09-Apr-14 12:07 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31523-R1 SWHB-40 Matrix: Sediment Sampled: 16-Apr-14 12:24 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31524-R1 SWHB-07 Matrix: Sediment Sampled: 09-Apr-14 9:50 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31525-R1 SWHB-08 Matrix: Sediment Sampled: 09-Apr-14 10:32 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31526-R1 SWHB-09 Matrix: Sediment Sampled: 09-Apr-14 12:38 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31527-R1 SWHB-10 Matrix: Sediment Sampled: 09-Apr-14 13:05 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31528-R1 SWHB-11 Matrix: Sediment Sampled: 08-Apr-14 9:14 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31529-R1 SWHB-12 Matrix: Sediment Sampled: 08-Apr-14 13:36 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31530-R1 SWHB-13 Matrix: Sediment Sampled: 09-Apr-14 8:41 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31531-R1 SWHB-14 Matrix: Sediment Sampled: 08-Apr-14 11:49 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31532-R1 SWHB-15 Matrix: Sediment Sampled: 15-Apr-14 9:02 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
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Sample ID: 31533-R1

SWHB-16

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 13:01

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 24-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H

Sample ID: 31534-R1

SWHB-41

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7100

Sampled: 09-Apr-14 17:56

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 24-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31535-R1 SWHB-18 Matrix: Sediment Sampled: 08-Apr-14 9:53 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7100 Prepared: 12-May-15 Analyzed: 24-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31536-R1 SWHB-19 Matrix: Sediment Sampled: 08-Apr-14 10:26 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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Pyrethroids

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31537-R1 SWHB-20 Matrix: Sediment Sampled: 08-Apr-14 14:55 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31538-R1 SWHB-21 Matrix: Sediment Sampled: 15-Apr-14 17:34 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31539-R1 SWHB-22 Matrix: Sediment Sampled: 15-Apr-14 14:13 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31540-R1 SWHB-23 Matrix: Sediment Sampled: 08-Apr-14 11:05 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 27-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
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Sample ID: 31541-R1

SWHB-24

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 16:22

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 27-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H

Sample ID: 31542-R1

SWHB-25

Method: EPA 8270D-NCI

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 15:37

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 27-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31543-R1 SWHB-26 Matrix: Sediment Sampled: 17-Apr-14 12:56 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31544-R1 SWHB-27 Matrix: Sediment Sampled: 18-Apr-14 14:42 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31545-R1 SWHB-28 Matrix: Sediment Sampled: 17-Apr-14 16:12 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31546-R1 SWHB-53 Matrix: Sediment Sampled: 18-Apr-14 13:29 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31547-R1 SWHB-30 Matrix: Sediment Sampled: 18-Apr-14 8:30 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31548-R1 SWHB-33 Matrix: Sediment Sampled: 09-Apr-14 15:30 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31549-R1 SWHB-36 Matrix: Sediment Sampled: 09-Apr-14 17:01 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	1.85	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H
Sample ID: 31550-R1 SWHB-06 Matrix: Sediment Sampled: 17-Apr-14 8:35 Received: 27-Apr-15 Method: EPA 8270D-NCI Batch ID: O-7102 Prepared: 14-May-15 Analyzed: 28-May-15						
Allethrin	NA	ND	0.25	0.5	ng/dry g	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g	H

PHYSICS

QUALITY CONTROL REPORT

TERRA FUSION AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature



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CA ELAP #2769

Conventionals

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Ammonia as N		Method: SM 4500-NH ₃ D		Fraction: NA		Prepared: 14-May-15			Analyzed: 15-May-15				
31515-B1	QAQC Procedural Blank	C-18078	ND	0.02	0.03	mg/dry kg							
31515-BS1	QAQC Procedural Blank	C-18078	4.19	0.02	0.03	mg/dry kg	3.93	0	107	70 - 130%	PASS		
31515-BS2	QAQC Procedural Blank	C-18078	4.21	0.02	0.03	mg/dry kg	3.93	0	107	70 - 130%	PASS		
31523-MS1	SWHB-40	C-18078	6.41	0.02	0.03	mg/dry kg	4.43	2.02	99	70 - 130%	PASS		
31523-MS2	SWHB-40	C-18078	6.93	0.02	0.03	mg/dry kg	4.58	2.02	107	70 - 130%	PASS		
31523-R2	SWHB-40	C-18078	1.95	0.02	0.03	mg/dry kg				8	30	PASS	
31516-B1	QAQC Procedural Blank	C-18079	ND	0.02	0.03	mg/dry kg				6	30	PASS	H
31516-BS1	QAQC Procedural Blank	C-18079	3.95	0.02	0.03	mg/dry kg	3.9	0	101	70 - 130%	PASS		
31516-BS2	QAQC Procedural Blank	C-18079	3.85	0.02	0.03	mg/dry kg	3.9	0	99	70 - 130%	PASS		
31550-MS1	SWHB-06	C-18079	4.44	0.02	0.03	mg/dry kg	3.6	0.78	102	70 - 130%	PASS		
31550-MS2	SWHB-06	C-18079	4.69	0.02	0.03	mg/dry kg	3.59	0.78	109	70 - 130%	PASS		
31550-R2	SWHB-06	C-18079	0.76	0.02	0.03	mg/dry kg				7	30	PASS	
										4	30	PASS	H

Percent Solids		Method: SM 2540 B		Fraction: NA		Prepared: 13-May-15			Analyzed: 13-May-15				
31516-B1	QAQC Procedural Blank	C-22081	ND	0.1	0.1	% Dry Weight							
31521-R2	SWHB-01	C-22081	53.7	0.1	0.1	% Dry Weight				0	30	PASS	H
31515-B1	QAQC Procedural Blank	C-22082	ND	0.1	0.1	% Dry Weight							
31536-R2	SWHB-19	C-22082	42.5	0.1	0.1	% Dry Weight				0	30	PASS	H



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CA ELAP #2769

Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31515-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(PCB030)	NA	94			% Recovery	100		94 50 - 150%	PASS	
(PCB112)	NA	103			% Recovery	100		103 50 - 150%	PASS	
(PCB198)	NA	104			% Recovery	100		104 50 - 150%	PASS	
(TCMX)	NA	94			% Recovery	100		94 50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Aldrin	NA	ND	0.05	0.1	ng/dry g					
BHC-alpha	NA	ND	0.05	0.1	ng/dry g					
BHC-beta	NA	ND	0.05	0.1	ng/dry g					
BHC-delta	NA	ND	0.05	0.1	ng/dry g					
BHC-gamma	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Dieldrin	NA	ND	0.05	0.1	ng/dry g					
Heptachlor	NA	ND	0.05	0.1	ng/dry g					
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g					
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g					
Methoxychlor	NA	ND	0.05	0.1	ng/dry g					
Mirex	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 23-May-15

Toxaphene	NA	ND	0.1	0.2	ng/dry g					
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31515-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(PCB030)	NA	98			% Recovery	100	0	98	50 - 150%	PASS	
(PCB112)	NA	105			% Recovery	100	0	105	50 - 150%	PASS	
(PCB198)	NA	113			% Recovery	100	0	113	50 - 150%	PASS	
(TCMX)	NA	99			% Recovery	100	0	99	50 - 150%	PASS	
2,4'-DDD	NA	511.9	0.05	0.1	ng/dry g	500	0	102	50 - 150%	PASS	
2,4'-DDE	NA	484.31	0.05	0.1	ng/dry g	500	0	97	50 - 150%	PASS	
2,4'-DDT	NA	556.56	0.05	0.1	ng/dry g	500	0	111	50 - 150%	PASS	
4,4'-DDD	NA	551.11	0.05	0.1	ng/dry g	500	0	110	50 - 150%	PASS	
4,4'-DDE	NA	481.12	0.05	0.1	ng/dry g	500	0	96	50 - 150%	PASS	
4,4'-DDMU	NA	482.95	0.05	0.1	ng/dry g	500	0	97	50 - 150%	PASS	
4,4'-DDT	NA	653.2	0.05	0.1	ng/dry g	500	0	131	50 - 150%	PASS	
Aldrin	NA	501.35	0.05	0.1	ng/dry g	500	0	100	50 - 150%	PASS	
BHC-alpha	NA	490.7	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	
BHC-beta	NA	575.65	0.05	0.1	ng/dry g	500	0	115	50 - 150%	PASS	
BHC-delta	NA	493.42	0.05	0.1	ng/dry g	500	0	99	50 - 150%	PASS	
BHC-gamma	NA	466.89	0.05	0.1	ng/dry g	500	0	93	50 - 150%	PASS	
Chlordane-alpha	NA	454.62	0.05	0.1	ng/dry g	500	0	91	50 - 150%	PASS	
Chlordane-gamma	NA	481.73	0.05	0.1	ng/dry g	500	0	96	50 - 150%	PASS	
cis-Nonachlor	NA	446.41	0.05	0.1	ng/dry g	500	0	89	50 - 150%	PASS	
Dieldrin	NA	491.92	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	
Heptachlor	NA	542.3	0.05	0.1	ng/dry g	500	0	108	50 - 150%	PASS	
Heptachlor epoxide	NA	501.31	0.05	0.1	ng/dry g	500	0	100	50 - 150%	PASS	
Hexachlorobenzene	NA	433.14	0.05	0.1	ng/dry g	500	0	87	50 - 150%	PASS	
Methoxychlor	NA	844.18	0.05	0.1	ng/dry g	500	0	169	50 - 150%	FAIL	2
Mirex	NA	490.1	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	
Oxychlordane	NA	488.73	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	
trans-Nonachlor	NA	468.36	0.05	0.1	ng/dry g	500	0	94	50 - 150%	PASS	

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 23-May-15

Toxaphene	NA	6184.5	0.1	0.2	ng/dry g	5000	0	124	50 - 150%	PASS	
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
Sample ID: 31515-BS2		QAQC Procedural Blank			Matrix: DI Water			Sampled:			Received:	
		Method: EPA 8270D			Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 28-May-15	
(PCB030)	NA	87			% Recovery	100	0	87	50 - 150% PASS	12	30	PASS
(PCB112)	NA	100			% Recovery	100	0	100	50 - 150% PASS	5	30	PASS
(PCB198)	NA	110			% Recovery	100	0	110	50 - 150% PASS	3	30	PASS
(TCMX)	NA	82			% Recovery	100	0	82	50 - 150% PASS	19	30	PASS
2,4'-DDD	NA	492.52	0.05	0.1	ng/dry g	500	0	99	50 - 150% PASS	3	30	PASS
2,4'-DDE	NA	454.53	0.05	0.1	ng/dry g	500	0	91	50 - 150% PASS	6	30	PASS
2,4'-DDT	NA	535.37	0.05	0.1	ng/dry g	500	0	107	50 - 150% PASS	4	30	PASS
4,4'-DDD	NA	556	0.05	0.1	ng/dry g	500	0	111	50 - 150% PASS	1	30	PASS
4,4'-DDE	NA	460.36	0.05	0.1	ng/dry g	500	0	92	50 - 150% PASS	4	30	PASS
4,4'-DDMU	NA	463.46	0.05	0.1	ng/dry g	500	0	93	50 - 150% PASS	4	30	PASS
4,4'-DDT	NA	665.47	0.05	0.1	ng/dry g	500	0	133	50 - 150% PASS	2	30	PASS
Aldrin	NA	458.33	0.05	0.1	ng/dry g	500	0	92	50 - 150% PASS	8	30	PASS
BHC-alpha	NA	416.69	0.05	0.1	ng/dry g	500	0	83	50 - 150% PASS	17	30	PASS
BHC-beta	NA	526.14	0.05	0.1	ng/dry g	500	0	105	50 - 150% PASS	9	30	PASS
BHC-delta	NA	476.31	0.05	0.1	ng/dry g	500	0	95	50 - 150% PASS	4	30	PASS
BHC-gamma	NA	418.31	0.05	0.1	ng/dry g	500	0	84	50 - 150% PASS	10	30	PASS
Chlordane-alpha	NA	439.78	0.05	0.1	ng/dry g	500	0	88	50 - 150% PASS	3	30	PASS
Chlordane-gamma	NA	448.79	0.05	0.1	ng/dry g	500	0	90	50 - 150% PASS	6	30	PASS
cis-Nonachlor	NA	431.77	0.05	0.1	ng/dry g	500	0	86	50 - 150% PASS	3	30	PASS
Dieldrin	NA	481.75	0.05	0.1	ng/dry g	500	0	96	50 - 150% PASS	2	30	PASS
Heptachlor	NA	570.18	0.05	0.1	ng/dry g	500	0	114	50 - 150% PASS	5	30	PASS
Heptachlor epoxide	NA	467.41	0.05	0.1	ng/dry g	500	0	93	50 - 150% PASS	7	30	PASS
Hexachlorobenzene	NA	364.92	0.05	0.1	ng/dry g	500	0	73	50 - 150% PASS	18	30	PASS
Methoxychlor	NA	880.66	0.05	0.1	ng/dry g	500	0	176	50 - 150% FAIL	4	30	PASS 2
Mirex	NA	464.81	0.05	0.1	ng/dry g	500	0	93	50 - 150% PASS	5	30	PASS
Oxychlordane	NA	462.33	0.05	0.1	ng/dry g	500	0	92	50 - 150% PASS	6	30	PASS
trans-Nonachlor	NA	442.41	0.05	0.1	ng/dry g	500	0	88	50 - 150% PASS	7	30	PASS
		Method: EPA 8270D-NCI			Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 23-May-15	
Toxaphene	NA	6278.9	0.1	0.2	ng/dry g	5000	0	126	50 - 150% PASS	2	30	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31516-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(PCB030)	NA	88			% Recovery	100		88 50 - 150%	PASS	
(PCB112)	NA	95			% Recovery	100		95 50 - 150%	PASS	
(PCB198)	NA	104			% Recovery	100		104 50 - 150%	PASS	
(TCMX)	NA	89			% Recovery	100		89 50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Aldrin	NA	ND	0.05	0.1	ng/dry g					
BHC-alpha	NA	ND	0.05	0.1	ng/dry g					
BHC-beta	NA	ND	0.05	0.1	ng/dry g					
BHC-delta	NA	ND	0.05	0.1	ng/dry g					
BHC-gamma	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Dieldrin	NA	ND	0.05	0.1	ng/dry g					
Heptachlor	NA	ND	0.05	0.1	ng/dry g					
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g					
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g					
Methoxychlor	NA	ND	0.05	0.1	ng/dry g					
Mirex	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Toxaphene	NA	ND	0.1	0.2	ng/dry g					
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31516-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(PCB030)	NA	90			% Recovery	100	0	90	50 - 150%	PASS	
(PCB112)	NA	95			% Recovery	100	0	95	50 - 150%	PASS	
(PCB198)	NA	111			% Recovery	100	0	111	50 - 150%	PASS	
(TCMX)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	
2,4'-DDD	NA	489.96	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	
2,4'-DDE	NA	443.7	0.05	0.1	ng/dry g	500	0	89	50 - 150%	PASS	
2,4'-DDT	NA	516.38	0.05	0.1	ng/dry g	500	0	103	50 - 150%	PASS	
4,4'-DDD	NA	557.64	0.05	0.1	ng/dry g	500	0	112	50 - 150%	PASS	
4,4'-DDE	NA	442.45	0.05	0.1	ng/dry g	500	0	88	50 - 150%	PASS	
4,4'-DDMU	NA	478.07	0.05	0.1	ng/dry g	500	0	96	50 - 150%	PASS	
4,4'-DDT	NA	660.92	0.05	0.1	ng/dry g	500	0	132	50 - 150%	PASS	
Aldrin	NA	447.45	0.05	0.1	ng/dry g	500	0	89	50 - 150%	PASS	
BHC-alpha	NA	432.79	0.05	0.1	ng/dry g	500	0	87	50 - 150%	PASS	
BHC-beta	NA	550.08	0.05	0.1	ng/dry g	500	0	110	50 - 150%	PASS	
BHC-delta	NA	470.89	0.05	0.1	ng/dry g	500	0	94	50 - 150%	PASS	
BHC-gamma	NA	380.6	0.05	0.1	ng/dry g	500	0	76	50 - 150%	PASS	
Chlordane-alpha	NA	434.5	0.05	0.1	ng/dry g	500	0	87	50 - 150%	PASS	
Chlordane-gamma	NA	455.96	0.05	0.1	ng/dry g	500	0	91	50 - 150%	PASS	
cis-Nonachlor	NA	419.9	0.05	0.1	ng/dry g	500	0	84	50 - 150%	PASS	
Dieldrin	NA	426.47	0.05	0.1	ng/dry g	500	0	85	50 - 150%	PASS	
Heptachlor	NA	570.09	0.05	0.1	ng/dry g	500	0	114	50 - 150%	PASS	
Heptachlor epoxide	NA	480.4	0.05	0.1	ng/dry g	500	0	96	50 - 150%	PASS	
Hexachlorobenzene	NA	385.21	0.05	0.1	ng/dry g	500	0	77	50 - 150%	PASS	
Methoxychlor	NA	881.3	0.05	0.1	ng/dry g	500	0	176	50 - 150%	FAIL	2
Mirex	NA	451.88	0.05	0.1	ng/dry g	500	0	90	50 - 150%	PASS	
Oxychlordane	NA	442.46	0.05	0.1	ng/dry g	500	0	88	50 - 150%	PASS	
trans-Nonachlor	NA	437.9	0.05	0.1	ng/dry g	500	0	88	50 - 150%	PASS	

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Toxaphene	NA	6370.3	0.1	0.2	ng/dry g	5000	0	127	50 - 150%	PASS	
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31516-BS2	QAQC Procedural Blank				Matrix: DI Water			Sampled:			Received:			
	Method: EPA 8270D				Batch ID: O-7102			Prepared: 14-May-15			Analyzed: 31-May-15			
(PCB030)	NA	73			% Recovery	100	0	73	50 - 150%	PASS	21	30	PASS	
(PCB112)	NA	85			% Recovery	100	0	85	50 - 150%	PASS	11	30	PASS	
(PCB198)	NA	103			% Recovery	100	0	103	50 - 150%	PASS	7	30	PASS	
(TCMX)	NA	70			% Recovery	100	0	70	50 - 150%	PASS	11	30	PASS	
2,4'-DDD	NA	463.42	0.05	0.1	ng/dry g	500	0	93	50 - 150%	PASS	5	30	PASS	
2,4'-DDE	NA	416.78	0.05	0.1	ng/dry g	500	0	83	50 - 150%	PASS	7	30	PASS	
2,4'-DDT	NA	487.81	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	5	30	PASS	
4,4'-DDD	NA	538.69	0.05	0.1	ng/dry g	500	0	108	50 - 150%	PASS	4	30	PASS	
4,4'-DDE	NA	406.79	0.05	0.1	ng/dry g	500	0	81	50 - 150%	PASS	8	30	PASS	
4,4'-DDMU	NA	443.03	0.05	0.1	ng/dry g	500	0	89	50 - 150%	PASS	8	30	PASS	
4,4'-DDT	NA	649.5	0.05	0.1	ng/dry g	500	0	130	50 - 150%	PASS	2	30	PASS	
Aldrin	NA	378.31	0.05	0.1	ng/dry g	500	0	76	50 - 150%	PASS	16	30	PASS	
BHC-alpha	NA	348.99	0.05	0.1	ng/dry g	500	0	70	50 - 150%	PASS	22	30	PASS	
BHC-beta	NA	488.03	0.05	0.1	ng/dry g	500	0	98	50 - 150%	PASS	12	30	PASS	
BHC-delta	NA	417.16	0.05	0.1	ng/dry g	500	0	83	50 - 150%	PASS	12	30	PASS	
BHC-gamma	NA	354.33	0.05	0.1	ng/dry g	500	0	71	50 - 150%	PASS	7	30	PASS	
Chlordane-alpha	NA	399.87	0.05	0.1	ng/dry g	500	0	80	50 - 150%	PASS	8	30	PASS	
Chlordane-gamma	NA	404.6	0.05	0.1	ng/dry g	500	0	81	50 - 150%	PASS	12	30	PASS	
cis-Nonachlor	NA	395.77	0.05	0.1	ng/dry g	500	0	79	50 - 150%	PASS	6	30	PASS	
Dieldrin	NA	377.83	0.05	0.1	ng/dry g	500	0	76	50 - 150%	PASS	11	30	PASS	
Heptachlor	NA	466.58	0.05	0.1	ng/dry g	500	0	93	50 - 150%	PASS	20	30	PASS	
Heptachlor epoxide	NA	445.05	0.05	0.1	ng/dry g	500	0	89	50 - 150%	PASS	8	30	PASS	
Hexachlorobenzene	NA	305.86	0.05	0.1	ng/dry g	500	0	61	50 - 150%	PASS	23	30	PASS	
Methoxychlor	NA	884.06	0.05	0.1	ng/dry g	500	0	177	50 - 150%	FAIL	1	30	PASS	2
Mirex	NA	427.22	0.05	0.1	ng/dry g	500	0	85	50 - 150%	PASS	6	30	PASS	
Oxychlordane	NA	388.42	0.05	0.1	ng/dry g	500	0	78	50 - 150%	PASS	12	30	PASS	
trans-Nonachlor	NA	396.36	0.05	0.1	ng/dry g	500	0	79	50 - 150%	PASS	11	30	PASS	
	Method: EPA 8270D-NCI				Batch ID: O-7102			Prepared: 14-May-15			Analyzed: 27-May-15			
Toxaphene	NA	5978.9	0.1	0.2	ng/dry g	5000	0	120	50 - 150%	PASS	6	30	PASS	



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CA ELAP #2769

Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31519-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(PCB030)	NA	69			% Recovery	100		69	60 - 140%	PASS
(PCB112)	NA	90			% Recovery	100		90	60 - 140%	PASS
(PCB198)	NA	72			% Recovery	100		72	60 - 140%	PASS
(TCMX)	NA	62			% Recovery	100		62	60 - 140%	PASS
2,4'-DDD	NA	31.59	0.05	0.1	ng/dry g	38		83	60 - 140%	PASS
2,4'-DDE	NA	20.67	0.05	0.1	ng/dry g	19		109	60 - 140%	PASS
4,4'-DDD	NA	100.19	0.05	0.1	ng/dry g	108		93	60 - 140%	PASS
4,4'-DDE	NA	99.14	0.05	0.1	ng/dry g	86		115	60 - 140%	PASS
4,4'-DDT	NA	123.65	0.05	0.1	ng/dry g	170		73	60 - 140%	PASS
Chlordane-alpha	NA	18.43	0.05	0.1	ng/dry g	16.5		112	60 - 140%	PASS
Chlordane-gamma	NA	22.41	0.05	0.1	ng/dry g	19		118	60 - 140%	PASS
cis-Nonachlor	NA	4.82	0.05	0.1	ng/dry g	3.7		130	60 - 140%	PASS
Hexachlorobenzene	NA	5.05	0.05	0.1	ng/dry g	6		84	60 - 140%	PASS
trans-Nonachlor	NA	10.03	0.05	0.1	ng/dry g	8.2		122	60 - 140%	PASS

Sample ID: 31520-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 01-Jun-15

(PCB030)	NA	81			% Recovery	100		81	60 - 140%	PASS
(PCB112)	NA	90			% Recovery	100		90	60 - 140%	PASS
(PCB198)	NA	59			% Recovery	100		59	60 - 140%	PASS
(TCMX)	NA	74			% Recovery	100		74	60 - 140%	PASS
2,4'-DDD	NA	33.45	0.05	0.1	ng/dry g	38		88	60 - 140%	PASS
2,4'-DDE	NA	21.72	0.05	0.1	ng/dry g	19		114	60 - 140%	PASS
4,4'-DDD	NA	101.42	0.05	0.1	ng/dry g	108		94	60 - 140%	PASS
4,4'-DDE	NA	96.49	0.05	0.1	ng/dry g	86		112	60 - 140%	PASS
4,4'-DDT	NA	119.81	0.05	0.1	ng/dry g	170		70	60 - 140%	PASS
Chlordane-alpha	NA	18.08	0.05	0.1	ng/dry g	16.5		110	60 - 140%	PASS
Chlordane-gamma	NA	19.41	0.05	0.1	ng/dry g	19		102	60 - 140%	PASS
cis-Nonachlor	NA	5.03	0.05	0.1	ng/dry g	3.7		136	60 - 140%	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Hexachlorobenzene	NA	4.89	0.05	0.1	ng/dry g	6		81	60 - 140%	PASS		
trans-Nonachlor	NA	10.39	0.05	0.1	ng/dry g	8.2		127	60 - 140%	PASS		

Sample ID: 31535-MS1

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

(PCB030)	NA	84			% Recovery	100	0	84	50 - 150%	PASS	
(PCB112)	NA	94			% Recovery	100	0	94	50 - 150%	PASS	
(PCB198)	NA	107			% Recovery	100	0	107	50 - 150%	PASS	
(TCMX)	NA	84			% Recovery	100	0	84	50 - 150%	PASS	
2,4'-DDD	NA	81.65	0.05	0.1	ng/dry g	82.75	0	99	50 - 150%	PASS	
2,4'-DDE	NA	72.37	0.05	0.1	ng/dry g	82.75	0	87	50 - 150%	PASS	
2,4'-DDT	NA	88.9	0.05	0.1	ng/dry g	82.75	0	107	50 - 150%	PASS	
4,4'-DDD	NA	91.86	0.05	0.1	ng/dry g	82.75	0	111	50 - 150%	PASS	
4,4'-DDE	NA	72.39	0.05	0.1	ng/dry g	82.75	0	87	50 - 150%	PASS	
4,4'-DDMU	NA	73.58	0.05	0.1	ng/dry g	82.75	0	89	50 - 150%	PASS	
4,4'-DDT	NA	120.39	0.05	0.1	ng/dry g	82.75	0	145	50 - 150%	PASS	
Aldrin	NA	72.68	0.05	0.1	ng/dry g	82.75	0	88	50 - 150%	PASS	
BHC-alpha	NA	70.19	0.05	0.1	ng/dry g	82.75	0	85	50 - 150%	PASS	
BHC-beta	NA	87.34	0.05	0.1	ng/dry g	82.75	0	106	50 - 150%	PASS	
BHC-delta	NA	80.96	0.05	0.1	ng/dry g	82.75	0	98	50 - 150%	PASS	
BHC-gamma	NA	69.7	0.05	0.1	ng/dry g	82.75	0	84	50 - 150%	PASS	
Chlordane-alpha	NA	69.56	0.05	0.1	ng/dry g	82.75	0	84	50 - 150%	PASS	
Chlordane-gamma	NA	73.65	0.05	0.1	ng/dry g	82.75	0	89	50 - 150%	PASS	
cis-Nonachlor	NA	67.32	0.05	0.1	ng/dry g	82.75	0	81	50 - 150%	PASS	
Dieldrin	NA	64.97	0.05	0.1	ng/dry g	82.75	0	79	50 - 150%	PASS	
Heptachlor	NA	96.28	0.05	0.1	ng/dry g	82.75	0	116	50 - 150%	PASS	
Heptachlor epoxide	NA	77	0.05	0.1	ng/dry g	82.75	0	93	50 - 150%	PASS	
Hexachlorobenzene	NA	59.86	0.05	0.1	ng/dry g	82.75	0	72	50 - 150%	PASS	
Methoxychlor	NA	159.12	0.05	0.1	ng/dry g	82.75	0	192	50 - 150%	FAIL	2
Mirex	NA	73.7	0.05	0.1	ng/dry g	82.75	0	89	50 - 150%	PASS	
Oxychlordane	NA	81.57	0.05	0.1	ng/dry g	82.75	0	99	50 - 150%	PASS	
trans-Nonachlor	NA	70.02	0.05	0.1	ng/dry g	82.75	0	85	50 - 150%	PASS	



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE		
		Method: EPA 8270D-NCI		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 23-May-15						
Toxaphene	NA	922.7	0.1	0.2	ng/dry g	827.5	0	112	50 - 150%	PASS				
Sample ID: 31535-MS2		SWHB-18		Matrix: Sediment		Sampled: 08-Apr-14 9:53		Received: 27-Apr-15						
		Method: EPA 8270D		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 28-May-15						
(PCB030)	NA	89			% Recovery	100	0	89	50 - 150%	PASS	6	30	PASS	
(PCB112)	NA	99			% Recovery	100	0	99	50 - 150%	PASS	5	30	PASS	
(PCB198)	NA	121			% Recovery	100	0	121	50 - 150%	PASS	12	30	PASS	
(TCMX)	NA	90			% Recovery	100	0	90	50 - 150%	PASS	7	30	PASS	
2,4'-DDD	NA	88.32	0.05	0.1	ng/dry g	87.45	0	101	50 - 150%	PASS	2	30	PASS	
2,4'-DDE	NA	79.22	0.05	0.1	ng/dry g	87.45	0	91	50 - 150%	PASS	4	30	PASS	
2,4'-DDT	NA	97.03	0.05	0.1	ng/dry g	87.45	0	111	50 - 150%	PASS	4	30	PASS	
4,4'-DDD	NA	103.13	0.05	0.1	ng/dry g	87.45	0	118	50 - 150%	PASS	6	30	PASS	
4,4'-DDE	NA	80.75	0.05	0.1	ng/dry g	87.45	0	92	50 - 150%	PASS	6	30	PASS	
4,4'-DDMU	NA	77.14	0.05	0.1	ng/dry g	87.45	0	88	50 - 150%	PASS	1	30	PASS	
4,4'-DDT	NA	131.09	0.05	0.1	ng/dry g	87.45	0	150	50 - 150%	PASS	3	30	PASS	
Aldrin	NA	80.19	0.05	0.1	ng/dry g	87.45	0	92	50 - 150%	PASS	4	30	PASS	
BHC-alpha	NA	77.63	0.05	0.1	ng/dry g	87.45	0	89	50 - 150%	PASS	5	30	PASS	
BHC-beta	NA	97.11	0.05	0.1	ng/dry g	87.45	0	111	50 - 150%	PASS	5	30	PASS	
BHC-delta	NA	83.63	0.05	0.1	ng/dry g	87.45	0	96	50 - 150%	PASS	2	30	PASS	
BHC-gamma	NA	76.22	0.05	0.1	ng/dry g	87.45	0	87	50 - 150%	PASS	4	30	PASS	
Chlordane-alpha	NA	77.28	0.05	0.1	ng/dry g	87.45	0	88	50 - 150%	PASS	5	30	PASS	
Chlordane-gamma	NA	79.93	0.05	0.1	ng/dry g	87.45	0	91	50 - 150%	PASS	2	30	PASS	
cis-Nonachlor	NA	73.38	0.05	0.1	ng/dry g	87.45	0	84	50 - 150%	PASS	4	30	PASS	
Dieldrin	NA	74.96	0.05	0.1	ng/dry g	87.45	0	86	50 - 150%	PASS	8	30	PASS	
Heptachlor	NA	107.76	0.05	0.1	ng/dry g	87.45	0	123	50 - 150%	PASS	6	30	PASS	
Heptachlor epoxide	NA	84.26	0.05	0.1	ng/dry g	87.45	0	96	50 - 150%	PASS	3	30	PASS	
Hexachlorobenzene	NA	67.29	0.05	0.1	ng/dry g	87.45	0	77	50 - 150%	PASS	7	30	PASS	
Methoxychlor	NA	177.65	0.05	0.1	ng/dry g	87.45	0	203	50 - 150%	FAIL	6	30	PASS	2
Mirex	NA	80.41	0.05	0.1	ng/dry g	87.45	0	92	50 - 150%	PASS	3	30	PASS	
Oxychlordane	NA	81.45	0.05	0.1	ng/dry g	87.45	0	93	50 - 150%	PASS	6	30	PASS	
trans-Nonachlor	NA	75.05	0.05	0.1	ng/dry g	87.45	0	86	50 - 150%	PASS	1	30	PASS	



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	

		Method: EPA 8270D-NCI			Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 24-May-15		
Toxaphene	NA	974.9	0.1	0.2	ng/dry g	874.5	0	111	50 - 150%	PASS	1	30	PASS

Sample ID: 31535-R2

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 30-May-15

(PCB030)	NA	64			% Recovery	100		64	50 - 150%	PASS	9	30	PASS	H
(PCB112)	NA	71			% Recovery	100		71	50 - 150%	PASS	0	30	PASS	H
(PCB198)	NA	85			% Recovery	100		85	50 - 150%	PASS	9	30	PASS	H
(TCMX)	NA	69			% Recovery	100		69	50 - 150%	PASS	11	30	PASS	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Aldrin	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Mirex	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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		Method: EPA 8270D-NCI			Batch ID: O-7100			Prepared: 12-May-15		Analyzed: 24-May-15	
Toxaphene	NA	ND	0.1	0.2	ng/dry g				0 30	PASS	H

Sample ID: 31536-MS1

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(PCB030)	NA	91			% Recovery	100	0	91	50 - 150%	PASS	
(PCB112)	NA	94			% Recovery	100	0	94	50 - 150%	PASS	
(PCB198)	NA	106			% Recovery	100	0	106	50 - 150%	PASS	
(TCMX)	NA	85			% Recovery	100	0	85	50 - 150%	PASS	
2,4'-DDD	NA	115.04	0.05	0.1	ng/dry g	112.55	0	102	50 - 150%	PASS	
2,4'-DDE	NA	101.2	0.05	0.1	ng/dry g	112.55	0	90	50 - 150%	PASS	
2,4'-DDT	NA	110.37	0.05	0.1	ng/dry g	112.55	0	98	50 - 150%	PASS	
4,4'-DDD	NA	130.5	0.05	0.1	ng/dry g	112.55	0	116	50 - 150%	PASS	
4,4'-DDE	NA	100.64	0.05	0.1	ng/dry g	112.55	0	89	50 - 150%	PASS	
4,4'-DDMU	NA	108.64	0.05	0.1	ng/dry g	112.55	0	97	50 - 150%	PASS	
4,4'-DDT	NA	136.15	0.05	0.1	ng/dry g	112.55	0	121	50 - 150%	PASS	
Aldrin	NA	88.58	0.05	0.1	ng/dry g	112.55	0	79	50 - 150%	PASS	
BHC-alpha	NA	94.46	0.05	0.1	ng/dry g	112.55	0	84	50 - 150%	PASS	
BHC-beta	NA	116.56	0.05	0.1	ng/dry g	112.55	0	104	50 - 150%	PASS	
BHC-delta	NA	103.64	0.05	0.1	ng/dry g	112.55	0	92	50 - 150%	PASS	
BHC-gamma	NA	90.73	0.05	0.1	ng/dry g	112.55	0	81	50 - 150%	PASS	
Chlordane-alpha	NA	96.97	0.05	0.1	ng/dry g	112.55	0	86	50 - 150%	PASS	
Chlordane-gamma	NA	101.68	0.05	0.1	ng/dry g	112.55	0	90	50 - 150%	PASS	
cis-Nonachlor	NA	95.02	0.05	0.1	ng/dry g	112.55	0	84	50 - 150%	PASS	
Dieldrin	NA	103.84	0.05	0.1	ng/dry g	112.55	0	92	50 - 150%	PASS	
Heptachlor	NA	127.1	0.05	0.1	ng/dry g	112.55	0	113	50 - 150%	PASS	
Heptachlor epoxide	NA	114.66	0.05	0.1	ng/dry g	112.55	0	102	50 - 150%	PASS	
Hexachlorobenzene	NA	87.54	0.05	0.1	ng/dry g	112.55	0	78	50 - 150%	PASS	
Methoxychlor	NA	192.65	0.05	0.1	ng/dry g	112.55	0	171	50 - 150%	FAIL	2
Mirex	NA	99.6	0.05	0.1	ng/dry g	112.55	0	88	50 - 150%	PASS	
Oxychlordane	NA	104.69	0.05	0.1	ng/dry g	112.55	0	93	50 - 150%	PASS	
trans-Nonachlor	NA	97.74	0.05	0.1	ng/dry g	112.55	0	87	50 - 150%	PASS	



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
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		Method: EPA 8270D-NCI			Batch ID: O-7102			Prepared: 14-May-15			Analyzed: 27-May-15		
Toxaphene	NA	1400	0.1	0.2	ng/dry g	1125.5	0	124	50 - 150%	PASS			

Sample ID: 31536-MS2

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 01-Jun-15

(PCB030)	NA	92			% Recovery	100	0	92	50 - 150%	PASS	1	30	PASS
(PCB112)	NA	90			% Recovery	100	0	90	50 - 150%	PASS	4	30	PASS
(PCB198)	NA	101			% Recovery	100	0	101	50 - 150%	PASS	5	30	PASS
(TCMX)	NA	88			% Recovery	100	0	88	50 - 150%	PASS	3	30	PASS
2,4'-DDD	NA	251.42	0.05	0.1	ng/dry g	252.4	0	100	50 - 150%	PASS	2	30	PASS
2,4'-DDE	NA	216.13	0.05	0.1	ng/dry g	252.4	0	86	50 - 150%	PASS	5	30	PASS
2,4'-DDT	NA	214.58	0.05	0.1	ng/dry g	252.4	0	85	50 - 150%	PASS	14	30	PASS
4,4'-DDD	NA	291.71	0.05	0.1	ng/dry g	252.4	0	116	50 - 150%	PASS	0	30	PASS
4,4'-DDE	NA	217.29	0.05	0.1	ng/dry g	252.4	0	86	50 - 150%	PASS	3	30	PASS
4,4'-DDMU	NA	115.71	0.05	0.1	ng/dry g	126.2	0	92	50 - 150%	PASS	5	30	PASS
4,4'-DDT	NA	261.07	0.05	0.1	ng/dry g	252.4	0	103	50 - 150%	PASS	16	30	PASS
Aldrin	NA	213.67	0.05	0.1	ng/dry g	252.4	0	85	50 - 150%	PASS	7	30	PASS
BHC-alpha	NA	231.18	0.05	0.1	ng/dry g	252.4	0	92	50 - 150%	PASS	9	30	PASS
BHC-beta	NA	262.46	0.05	0.1	ng/dry g	252.4	0	104	50 - 150%	PASS	0	30	PASS
BHC-delta	NA	255.76	0.05	0.1	ng/dry g	252.4	0	101	50 - 150%	PASS	9	30	PASS
BHC-gamma	NA	214.41	0.05	0.1	ng/dry g	252.4	0	85	50 - 150%	PASS	5	30	PASS
Chlordane-alpha	NA	207.17	0.05	0.1	ng/dry g	252.4	0	82	50 - 150%	PASS	5	30	PASS
Chlordane-gamma	NA	219.59	0.05	0.1	ng/dry g	252.4	0	87	50 - 150%	PASS	3	30	PASS
cis-Nonachlor	NA	199.32	0.05	0.1	ng/dry g	252.4	0	79	50 - 150%	PASS	6	30	PASS
Dieldrin	NA	200.95	0.05	0.1	ng/dry g	252.4	0	80	50 - 150%	PASS	14	30	PASS
Heptachlor	NA	279.74	0.05	0.1	ng/dry g	252.4	0	111	50 - 150%	PASS	2	30	PASS
Heptachlor epoxide	NA	258.96	0.05	0.1	ng/dry g	252.4	0	103	50 - 150%	PASS	1	30	PASS
Hexachlorobenzene	NA	202.87	0.05	0.1	ng/dry g	252.4	0	80	50 - 150%	PASS	3	30	PASS
Methoxychlor	NA	292.16	0.05	0.1	ng/dry g	252.4	0	116	50 - 150%	PASS	38	30	FAIL
Mirex	NA	204.67	0.05	0.1	ng/dry g	252.4	0	81	50 - 150%	PASS	8	30	PASS
Oxychlordane	NA	227.07	0.05	0.1	ng/dry g	252.4	0	90	50 - 150%	PASS	3	30	PASS
trans-Nonachlor	NA	210.52	0.05	0.1	ng/dry g	252.4	0	83	50 - 150%	PASS	5	30	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
		Method: EPA 8270D-NCI		Batch ID: O-7102		Prepared: 14-May-15		Analyzed: 27-May-15		
Toxaphene	NA	1653	0.1	0.2	ng/dry g	1262	0	131 50 - 150% PASS	5 30 PASS	
Sample ID: 31536-R2		SWHB-19		Matrix: Sediment		Sampled: 08-Apr-14 10:26		Received: 27-Apr-15		
		Method: EPA 8270D		Batch ID: O-7102		Prepared: 14-May-15		Analyzed: 01-Jun-15		
(PCB030)	NA	64			% Recovery	100	64	50 - 150% PASS	10 30 PASS	H
(PCB112)	NA	64			% Recovery	100	64	50 - 150% PASS	5 30 PASS	H
(PCB198)	NA	77			% Recovery	100	77	50 - 150% PASS	3 30 PASS	H
(TCMX)	NA	68			% Recovery	100	68	50 - 150% PASS	9 30 PASS	H
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Aldrin	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
BHC-alpha	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
BHC-beta	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
BHC-delta	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
BHC-gamma	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Dieldrin	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Heptachlor	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Heptachlor epoxide	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Hexachlorobenzene	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Methoxychlor	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Mirex	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g				0 30 PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
		Method: EPA 8270D-NCI			Batch ID: O-7102			Prepared: 14-May-15		Analyzed: 27-May-15		
Toxaphene	NA	ND	0.1	0.2	ng/dry g			0	30	PASS	H	



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Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31515-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:			Received:	
		Method: EPA 245.7			Batch ID: E-6125		Prepared: 26-May-15			Analyzed: 26-May-15	
Mercury (Hg)	NA	ND	1E-05	0.00002	µg/dry g						
		Method: EPA 6020			Batch ID: E-8079		Prepared: 14-May-15			Analyzed: 19-May-15	
Aluminum (Al)	NA	ND	1	5	µg/dry g						
Antimony (Sb)	NA	ND	0.025	0.05	µg/dry g						
Arsenic (As)	NA	ND	0.025	0.05	µg/dry g						
Barium (Ba)	NA	ND	0.025	0.05	µg/dry g						
Beryllium (Be)	NA	ND	0.025	0.05	µg/dry g						
Cadmium (Cd)	NA	ND	0.0025	0.005	µg/dry g						
Chromium (Cr)	NA	ND	0.0025	0.005	µg/dry g						
Copper (Cu)	NA	ND	0.0025	0.005	µg/dry g						
Iron (Fe)	NA	ND	1	5	µg/dry g						
Lead (Pb)	NA	ND	0.0025	0.005	µg/dry g						
Nickel (Ni)	NA	ND	0.01	0.02	µg/dry g						
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g						
Silver (Ag)	NA	ND	0.01	0.02	µg/dry g						
Total Phosphorus	NA	ND	0.016	0.05	µg/dry g						
Zinc (Zn)	NA	ND	0.025	0.05	µg/dry g						

Sample ID: 31515-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:			Received:	
		Method: EPA 245.7			Batch ID: E-6125		Prepared: 26-May-15			Analyzed: 26-May-15	
Mercury (Hg)	NA	1070	1E-05	0.00002	µg/dry g	1000	0	107	80 - 120%	PASS	
		Method: EPA 6020			Batch ID: E-8079		Prepared: 14-May-15			Analyzed: 19-May-15	
Aluminum (Al)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS	
Antimony (Sb)	NA	2.012	0.025	0.05	µg/dry g	2	0	101	80 - 120%	PASS	
Arsenic (As)	NA	2.094	0.025	0.05	µg/dry g	2	0	105	80 - 120%	PASS	
Barium (Ba)	NA	1.976	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS	
Beryllium (Be)	NA	2.076	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS	
Cadmium (Cd)	NA	2.0497	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS	
Chromium (Cr)	NA	1.9523	0.0025	0.005	µg/dry g	2	0	98	80 - 120%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Copper (Cu)	NA	1.9982	0.0025	0.005	µg/dry g	2	0	100	80 - 120%	PASS		
Iron (Fe)	NA	2	1	5	µg/dry g	2	0	100	80 - 120%	PASS		
Lead (Pb)	NA	2.0265	0.0025	0.005	µg/dry g	2	0	101	80 - 120%	PASS		
Nickel (Ni)	NA	1.98	0.01	0.02	µg/dry g	2	0	99	80 - 120%	PASS		
Selenium (Se)	NA	1.96	0.025	0.05	µg/dry g	2	0	98	80 - 120%	PASS		
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	0.2	0	90	80 - 120%	PASS		
Total Phosphorus	NA	48.11	0.016	0.05	µg/dry g	50	0	96	70 - 130%	PASS		
Zinc (Zn)	NA	2.121	0.025	0.05	µg/dry g	2	0	106	80 - 120%	PASS		

Sample ID: 31515-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	1070	1E-05	0.00002	µg/dry g	1000	0	107	80 - 120%	PASS	0	30	PASS
		Method: EPA 6020				Batch ID: E-8079		Prepared: 14-May-15				Analyzed: 19-May-15	
Aluminum (Al)	NA	2.2	1	5	µg/dry g	2	0	110	80 - 120%	PASS	5	30	PASS
Antimony (Sb)	NA	2.007	0.025	0.05	µg/dry g	2	0	100	80 - 120%	PASS	1	30	PASS
Arsenic (As)	NA	2.073	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS	1	30	PASS
Barium (Ba)	NA	1.972	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS	0	30	PASS
Beryllium (Be)	NA	2.092	0.025	0.05	µg/dry g	2	0	105	80 - 120%	PASS	1	30	PASS
Cadmium (Cd)	NA	2.0507	0.0025	0.005	µg/dry g	2	0	103	80 - 120%	PASS	1	30	PASS
Chromium (Cr)	NA	1.9534	0.0025	0.005	µg/dry g	2	0	98	80 - 120%	PASS	0	30	PASS
Copper (Cu)	NA	2.0022	0.0025	0.005	µg/dry g	2	0	100	80 - 120%	PASS	0	30	PASS
Iron (Fe)	NA	2	1	5	µg/dry g	2	0	100	80 - 120%	PASS	0	30	PASS
Lead (Pb)	NA	2.0335	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS	1	30	PASS
Nickel (Ni)	NA	1.98	0.01	0.02	µg/dry g	2	0	99	80 - 120%	PASS	0	30	PASS
Selenium (Se)	NA	1.974	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS	1	30	PASS
Silver (Ag)	NA	0.19	0.01	0.02	µg/dry g	0.2	0	95	80 - 120%	PASS	5	30	PASS
Total Phosphorus	NA	48.501	0.016	0.05	µg/dry g	50	0	97	70 - 130%	PASS	1	30	PASS
Zinc (Zn)	NA	2.126	0.025	0.05	µg/dry g	2	0	106	80 - 120%	PASS	0	30	PASS

Sample ID: 31516-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	ND	1E-05	0.00002	µg/dry g								
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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Method: EPA 6020

Batch ID: E-8080

Prepared: 15-May-15

Analyzed: 21-May-15

Aluminum (Al)	NA	ND	1	5	µg/dry g					
Antimony (Sb)	NA	ND	0.025	0.05	µg/dry g					
Arsenic (As)	NA	ND	0.025	0.05	µg/dry g					
Barium (Ba)	NA	ND	0.025	0.05	µg/dry g					
Beryllium (Be)	NA	ND	0.025	0.05	µg/dry g					
Cadmium (Cd)	NA	ND	0.0025	0.005	µg/dry g					
Chromium (Cr)	NA	ND	0.0025	0.005	µg/dry g					
Copper (Cu)	NA	ND	0.0025	0.005	µg/dry g					
Iron (Fe)	NA	ND	1	5	µg/dry g					
Lead (Pb)	NA	ND	0.0025	0.005	µg/dry g					
Nickel (Ni)	NA	ND	0.01	0.02	µg/dry g					
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g					
Silver (Ag)	NA	ND	0.01	0.02	µg/dry g					
Total Phosphorus	NA	ND	0.016	0.05	µg/dry g					
Zinc (Zn)	NA	ND	0.025	0.05	µg/dry g					

Sample ID: 31516-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	997	1E-05	0.00002	µg/dry g	1000	0	100	80 - 120%	PASS
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Method: EPA 6020

Batch ID: E-8080

Prepared: 15-May-15

Analyzed: 21-May-15

Aluminum (Al)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS
Antimony (Sb)	NA	2.078	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS
Arsenic (As)	NA	2.114	0.025	0.05	µg/dry g	2	0	106	80 - 120%	PASS
Barium (Ba)	NA	2.093	0.025	0.05	µg/dry g	2	0	105	80 - 120%	PASS
Beryllium (Be)	NA	1.988	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS
Cadmium (Cd)	NA	2.1222	0.0025	0.005	µg/dry g	2	0	106	80 - 120%	PASS
Chromium (Cr)	NA	2.019	0.0025	0.005	µg/dry g	2	0	101	80 - 120%	PASS
Copper (Cu)	NA	2.0409	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS
Iron (Fe)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS
Lead (Pb)	NA	2.0598	0.0025	0.005	µg/dry g	2	0	103	80 - 120%	PASS
Nickel (Ni)	NA	2.02	0.01	0.02	µg/dry g	2	0	101	80 - 120%	PASS



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Selenium (Se)	NA	1.975	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS		
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	0.2	0	90	80 - 120%	PASS		
Total Phosphorus	NA	47.954	0.016	0.05	µg/dry g	50	0	96	70 - 130%	PASS		
Zinc (Zn)	NA	2.186	0.025	0.05	µg/dry g	2	0	109	80 - 120%	PASS		

Sample ID: 31516-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	1030	1E-05	0.00002	µg/dry g	1000	0	103	80 - 120%	PASS	3	30	PASS
		Method: EPA 6020				Batch ID: E-8080		Prepared: 15-May-15				Analyzed: 21-May-15	
Aluminum (Al)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS	0	30	PASS
Antimony (Sb)	NA	2.071	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS	0	30	PASS
Arsenic (As)	NA	2.092	0.025	0.05	µg/dry g	2	0	105	80 - 120%	PASS	1	30	PASS
Barium (Ba)	NA	2.075	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS	1	30	PASS
Beryllium (Be)	NA	1.989	0.025	0.05	µg/dry g	2	0	99	80 - 120%	PASS	0	30	PASS
Cadmium (Cd)	NA	2.1218	0.0025	0.005	µg/dry g	2	0	106	80 - 120%	PASS	0	30	PASS
Chromium (Cr)	NA	2.0002	0.0025	0.005	µg/dry g	2	0	100	80 - 120%	PASS	1	30	PASS
Copper (Cu)	NA	2.0204	0.0025	0.005	µg/dry g	2	0	101	80 - 120%	PASS	1	30	PASS
Iron (Fe)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS	0	30	PASS
Lead (Pb)	NA	2.0714	0.0025	0.005	µg/dry g	2	0	104	80 - 120%	PASS	1	30	PASS
Nickel (Ni)	NA	1.99	0.01	0.02	µg/dry g	2	0	100	80 - 120%	PASS	1	30	PASS
Selenium (Se)	NA	2.011	0.025	0.05	µg/dry g	2	0	101	80 - 120%	PASS	2	30	PASS
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	0.2	0	90	80 - 120%	PASS	0	30	PASS
Total Phosphorus	NA	47.178	0.016	0.05	µg/dry g	50	0	94	70 - 130%	PASS	2	30	PASS
Zinc (Zn)	NA	2.185	0.025	0.05	µg/dry g	2	0	109	80 - 120%	PASS	0	30	PASS

Sample ID: 31517-CRM1

QAQC CRM - ERA 540

Matrix: Sediment

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	8.3641	1E-05	0.00002	µg/dry g	9.25		90	80 - 120%	PASS			
		Method: EPA 6020				Batch ID: E-8079		Prepared: 14-May-15				Analyzed: 19-May-15	
Aluminum (Al)	NA	15105.5	1	5	µg/dry g	9060		167	80 - 120%	FAIL			1
Antimony (Sb)	NA	176.295	0.025	0.05	µg/dry g	106		166	80 - 120%	FAIL			1
Arsenic (As)	NA	186.635	0.025	0.05	µg/dry g	182		103	80 - 120%	PASS			



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Beryllium (Be)	NA	99.605	0.025	0.05	µg/dry g	98.3		101	80 - 120%	PASS		
Cadmium (Cd)	NA	58.6431	0.0025	0.005	µg/dry g	60.4		97	80 - 120%	PASS		
Chromium (Cr)	NA	130.1717	0.0025	0.005	µg/dry g	125		104	80 - 120%	PASS		
Copper (Cu)	NA	75.4207	0.0025	0.005	µg/dry g	80.1		94	80 - 120%	PASS		
Iron (Fe)	NA	17571.9	1	5	µg/dry g	12900		136	80 - 120%	FAIL		1
Lead (Pb)	NA	123.2085	0.0025	0.005	µg/dry g	136		91	80 - 120%	PASS		
Nickel (Ni)	NA	124.01	0.01	0.02	µg/dry g	128		97	80 - 120%	PASS		
Selenium (Se)	NA	85.347	0.025	0.05	µg/dry g	85.9		99	80 - 120%	PASS		
Silver (Ag)	NA	64.48	0.01	0.02	µg/dry g	61.3		105	80 - 120%	PASS		
Zinc (Zn)	NA	204.008	0.025	0.05	µg/dry g	204		100	80 - 120%	PASS		

Sample ID: 31518-CRM1

QAQC CRM - ERA 540

Matrix: Sediment

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	8.0724	1E-05	0.00002	µg/dry g	9.25		87	80 - 120%	PASS		
		Method: EPA 6020				Batch ID: E-8080		Prepared: 15-May-15		Analyzed: 21-May-15		
Aluminum (Al)	NA	17250.4	1	5	µg/dry g	9060		190	80 - 120%	FAIL		1
Antimony (Sb)	NA	183.54	0.025	0.05	µg/dry g	106		173	80 - 120%	FAIL		1
Arsenic (As)	NA	187.1	0.025	0.05	µg/dry g	182		103	80 - 120%	PASS		
Beryllium (Be)	NA	95.015	0.025	0.05	µg/dry g	98.3		97	80 - 120%	PASS		
Cadmium (Cd)	NA	59.6953	0.0025	0.005	µg/dry g	60.4		99	80 - 120%	PASS		
Chromium (Cr)	NA	139.7209	0.0025	0.005	µg/dry g	125		112	80 - 120%	PASS		
Copper (Cu)	NA	75.5784	0.0025	0.005	µg/dry g	80.1		94	80 - 120%	PASS		
Iron (Fe)	NA	19137.8	1	5	µg/dry g	12900		148	80 - 120%	FAIL		1
Lead (Pb)	NA	131.8262	0.0025	0.005	µg/dry g	136		97	80 - 120%	PASS		
Nickel (Ni)	NA	124.8	0.01	0.02	µg/dry g	128		98	80 - 120%	PASS		
Selenium (Se)	NA	83.392	0.025	0.05	µg/dry g	85.9		97	80 - 120%	PASS		
Silver (Ag)	NA	64.7	0.01	0.02	µg/dry g	61.3		106	80 - 120%	PASS		
Zinc (Zn)	NA	206.623	0.025	0.05	µg/dry g	204		101	80 - 120%	PASS		

Sample ID: 31521-MS1

SWHB-01

Matrix: Sediment

Sampled: 16-Apr-14 15:48

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.66827	1E-05	0.00002	µg/dry g	0.2931	0.31655	120	70 - 130%	PASS		
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Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
		LIMITS				LIMITS				
		Method: EPA 6020		Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15		
Aluminum (Al)	NA	27978	1	5	µg/dry g	2344	26260.3	73	70 - 130%	PASS
Antimony (Sb)	NA	57.121	0.025	0.05	µg/dry g	58.616	0.254	97	70 - 130%	PASS
Arsenic (As)	NA	69.803	0.025	0.05	µg/dry g	58.616	6.928	107	70 - 130%	PASS
Barium (Ba)	NA	108.176	0.025	0.05	µg/dry g	58.616	53.582	93	70 - 130%	PASS
Beryllium (Be)	NA	66.287	0.025	0.05	µg/dry g	58.616	0.458	112	70 - 130%	PASS
Cadmium (Cd)	NA	58.9453	0.0025	0.005	µg/dry g	58.616	0.1759	100	70 - 130%	PASS
Chromium (Cr)	NA	102.9978	0.0025	0.005	µg/dry g	58.616	42.7345	103	70 - 130%	PASS
Copper (Cu)	NA	131.4386	0.0025	0.005	µg/dry g	58.616	74.4861	97	70 - 130%	PASS
Iron (Fe)	NA	26605.4	1	5	µg/dry g	2344	23966.7	113	70 - 130%	PASS
Lead (Pb)	NA	82.0749	0.0025	0.005	µg/dry g	58.616	27.8779	92	70 - 130%	PASS
Nickel (Ni)	NA	68.91	0.01	0.02	µg/dry g	58.62	10.56	100	70 - 130%	PASS
Selenium (Se)	NA	61.407	0.025	0.05	µg/dry g	58.616	0.202	104	70 - 130%	PASS
Silver (Ag)	NA	6252.68	0.01	0.02	µg/dry g	5861.6	0.67	107	70 - 130%	PASS
Total Phosphorus	NA	1920.974	0.016	0.05	µg/dry g	1465.4	434.507	101	70 - 130%	PASS
Zinc (Zn)	NA	211.017	0.025	0.05	µg/dry g	58.616	153.437	98	70 - 130%	PASS

Sample ID: 31521-MS2

SWHB-01

Matrix: Sediment

Sampled: 16-Apr-14 15:48

Received: 27-Apr-15

		Method: EPA 245.7		Batch ID: E-6125		Prepared: 26-May-15		Analyzed: 26-May-15						
Mercury (Hg)	NA	0.66827	1E-05	0.00002	µg/dry g	0.2931	0.31655	120	70 - 130%	PASS	0	30	PASS	
		Method: EPA 6020		Batch ID: E-8079		Prepared: 14-May-15		Analyzed: 19-May-15						
Aluminum (Al)	NA	28490.2	1	5	µg/dry g	2344	26260.3	95	70 - 130%	PASS	26	30	PASS	
Antimony (Sb)	NA	57.289	0.025	0.05	µg/dry g	58.616	0.254	97	70 - 130%	PASS	0	30	PASS	
Arsenic (As)	NA	71.006	0.025	0.05	µg/dry g	58.616	6.928	109	70 - 130%	PASS	2	30	PASS	
Barium (Ba)	NA	107.327	0.025	0.05	µg/dry g	58.616	53.582	92	70 - 130%	PASS	1	30	PASS	
Beryllium (Be)	NA	65.799	0.025	0.05	µg/dry g	58.616	0.458	111	70 - 130%	PASS	1	30	PASS	
Cadmium (Cd)	NA	58.8885	0.0025	0.005	µg/dry g	58.616	0.1759	100	70 - 130%	PASS	0	30	PASS	
Chromium (Cr)	NA	103.0777	0.0025	0.005	µg/dry g	58.616	42.7345	103	70 - 130%	PASS	0	30	PASS	
Copper (Cu)	NA	131.2251	0.0025	0.005	µg/dry g	58.616	74.4861	97	70 - 130%	PASS	0	30	PASS	
Iron (Fe)	NA	27038.6	1	5	µg/dry g	2344	23966.7	131	70 - 130%	FAIL	15	30	PASS	SH
Lead (Pb)	NA	81.9339	0.0025	0.005	µg/dry g	58.616	27.8779	92	70 - 130%	PASS	0	30	PASS	
Nickel (Ni)	NA	69.27	0.01	0.02	µg/dry g	58.62	10.56	100	70 - 130%	PASS	0	30	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
Selenium (Se)	NA	61.859	0.025	0.05	µg/dry g	58.616	0.202	105	70 - 130%	PASS	1	30	PASS
Silver (Ag)	NA	6.17	0.01	0.02	µg/dry g	5.86	0.67	94	70 - 130%	PASS	13	30	PASS
Total Phosphorus	NA	1896.904	0.016	0.05	µg/dry g	1465.4	434.507	100	70 - 130%	PASS	1	30	PASS
Zinc (Zn)	NA	210.64	0.025	0.05	µg/dry g	58.616	153.437	98	70 - 130%	PASS	0	30	PASS

Sample ID: 31521-R2

SWHB-01

Matrix: Sediment

Sampled: 16-Apr-14 15:48

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6125

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.3136	1E-05	0.00002	µg/dry g						2	30	PASS	H
		Method: EPA 6020				Batch ID: E-8079		Prepared: 14-May-15				Analyzed: 19-May-15		
Aluminum (Al)	NA	27791.7	1	5	µg/dry g						12	30	PASS	H
Antimony (Sb)	NA	0.253	0.025	0.05	µg/dry g						1	30	PASS	H
Arsenic (As)	NA	6.846	0.025	0.05	µg/dry g						2	30	PASS	H
Barium (Ba)	NA	54.569	0.025	0.05	µg/dry g						4	30	PASS	H
Beryllium (Be)	NA	0.46	0.025	0.05	µg/dry g						1	30	PASS	H
Cadmium (Cd)	NA	0.1731	0.0025	0.005	µg/dry g						3	30	PASS	H
Chromium (Cr)	NA	42.7789	0.0025	0.005	µg/dry g						0	30	PASS	H
Copper (Cu)	NA	72.2954	0.0025	0.005	µg/dry g						6	30	PASS	H
Iron (Fe)	NA	24070.3	1	5	µg/dry g						1	30	PASS	H
Lead (Pb)	NA	27.3332	0.0025	0.005	µg/dry g						4	30	PASS	H
Nickel (Ni)	NA	10.55	0.01	0.02	µg/dry g						0	30	PASS	H
Selenium (Se)	NA	0.194	0.025	0.05	µg/dry g						8	30	PASS	H
Silver (Ag)	NA	0.71	0.01	0.02	µg/dry g						12	30	PASS	H
Total Phosphorus	NA	428.369	0.016	0.05	µg/dry g						3	30	PASS	H
Zinc (Zn)	NA	150.22	0.025	0.05	µg/dry g						4	30	PASS	H

Sample ID: 31531-MS1

SWHB-14

Matrix: Sediment

Sampled: 08-Apr-14 11:49

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.3575	1E-05	0.00002	µg/dry g	0.2815	0.09685	93	70 - 130%	PASS				
		Method: EPA 6020				Batch ID: E-8080		Prepared: 15-May-15				Analyzed: 21-May-15		
Aluminum (Al)	NA	32079.9	1	5	µg/dry g	2252	29815.7	101	70 - 130%	PASS				
Antimony (Sb)	NA	56.952	0.025	0.05	µg/dry g	56.306	0.23	101	70 - 130%	PASS				
Arsenic (As)	NA	68.131	0.025	0.05	µg/dry g	56.306	7.595	108	70 - 130%	PASS				

Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31531-R2

SWHB-14

Matrix: Sediment

Sampled: 08-Apr-14 11:49

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6126

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.0943	1E-05	0.00002	µg/dry g				5 30	PASS	H
Aluminum (Al)	NA	30018.8	1	5	µg/dry g				1 30	PASS	H
Antimony (Sb)	NA	0.236	0.025	0.05	µg/dry g				5 30	PASS	H
Arsenic (As)	NA	7.452	0.025	0.05	µg/dry g				4 30	PASS	H
Barium (Ba)	NA	66.587	0.025	0.05	µg/dry g				2 30	PASS	H
Beryllium (Be)	NA	0.529	0.025	0.05	µg/dry g				1 30	PASS	H
Cadmium (Cd)	NA	0.2611	0.0025	0.005	µg/dry g				4 30	PASS	H
Chromium (Cr)	NA	30.8522	0.0025	0.005	µg/dry g				2 30	PASS	H
Copper (Cu)	NA	39.1366	0.0025	0.005	µg/dry g				1 30	PASS	H
Iron (Fe)	NA	28969.7	1	5	µg/dry g				0 30	PASS	H
Lead (Pb)	NA	12.7929	0.0025	0.005	µg/dry g				0 30	PASS	H
Nickel (Ni)	NA	10.34	0.01	0.02	µg/dry g				1 30	PASS	H
Selenium (Se)	NA	0.213	0.025	0.05	µg/dry g				7 30	PASS	H
Silver (Ag)	NA	0.26	0.01	0.02	µg/dry g				17 30	PASS	H
Total Phosphorus	NA	445.79	0.016	0.05	µg/dry g				4 30	PASS	H
Zinc (Zn)	NA	139.37	0.025	0.05	µg/dry g				1 30	PASS	H

Sample ID: 31541-MS1

SWHB-24

Matrix: Sediment

Sampled: 08-Apr-14 16:22

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.38012	1E-05	0.00002	µg/dry g	0.2924	0.11255	92	70 - 130%	PASS	
Aluminum (Al)	NA	31917.5	1	5	µg/dry g	2340	30172	75	70 - 130%	PASS	
Antimony (Sb)	NA	59.751	0.025	0.05	µg/dry g	58.48	0.251	102	70 - 130%	PASS	
Arsenic (As)	NA	69.681	0.025	0.05	µg/dry g	58.48	5.9	109	70 - 130%	PASS	
Barium (Ba)	NA	117.303	0.025	0.05	µg/dry g	58.48	58.195	101	70 - 130%	PASS	
Beryllium (Be)	NA	63.657	0.025	0.05	µg/dry g	58.48	0.532	108	70 - 130%	PASS	
Cadmium (Cd)	NA	60.7278	0.0025	0.005	µg/dry g	58.48	0.2094	103	70 - 130%	PASS	
Chromium (Cr)	NA	100.6255	0.0025	0.005	µg/dry g	58.48	38.0245	107	70 - 130%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Copper (Cu)	NA	128.4975	0.0025	0.005	µg/dry g	58.48	73.5831	94	70 - 130%	PASS		
Iron (Fe)	NA	28085.8	1	5	µg/dry g	2340	26109.8	84	70 - 130%	PASS		
Lead (Pb)	NA	73.0594	0.0025	0.005	µg/dry g	58.48	18.222	94	70 - 130%	PASS		
Nickel (Ni)	NA	69.57	0.01	0.02	µg/dry g	58.48	11.17	100	70 - 130%	PASS		
Selenium (Se)	NA	60.55	0.025	0.05	µg/dry g	58.48	0.282	103	70 - 130%	PASS		
Silver (Ag)	NA	5.94	0.01	0.02	µg/dry g	5.85	0.4	95	70 - 130%	PASS		
Total Phosphorus	NA	1816.494	0.016	0.05	µg/dry g	1462	371.133	99	70 - 130%	PASS		
Zinc (Zn)	NA	218.777	0.025	0.05	µg/dry g	58.48	162.163	97	70 - 130%	PASS		

Sample ID: 31541-MS2

SWHB-24

Matrix: Sediment

Sampled: 08-Apr-14 16:22

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.35965	1E-05	0.00002	µg/dry g	0.2924	0.11255	85	70 - 130%	PASS	8	30	PASS	
Aluminum (Al)	NA	32866.2	1	5	µg/dry g	2340	30172	115	70 - 130%	PASS	42	30	FAIL	SH
Antimony (Sb)	NA	59.771	0.025	0.05	µg/dry g	58.48	0.251	102	70 - 130%	PASS	0	30	PASS	
Arsenic (As)	NA	69.897	0.025	0.05	µg/dry g	58.48	5.9	109	70 - 130%	PASS	0	30	PASS	
Barium (Ba)	NA	119.619	0.025	0.05	µg/dry g	58.48	58.195	105	70 - 130%	PASS	4	30	PASS	
Beryllium (Be)	NA	63.426	0.025	0.05	µg/dry g	58.48	0.532	108	70 - 130%	PASS	0	30	PASS	
Cadmium (Cd)	NA	60.0794	0.0025	0.005	µg/dry g	58.48	0.2094	102	70 - 130%	PASS	1	30	PASS	
Chromium (Cr)	NA	100.6446	0.0025	0.005	µg/dry g	58.48	38.0245	107	70 - 130%	PASS	0	30	PASS	
Copper (Cu)	NA	129.1428	0.0025	0.005	µg/dry g	58.48	73.5831	95	70 - 130%	PASS	1	30	PASS	
Iron (Fe)	NA	28722.2	1	5	µg/dry g	2340	26109.8	112	70 - 130%	PASS	29	30	PASS	
Lead (Pb)	NA	72.7674	0.0025	0.005	µg/dry g	58.48	18.222	93	70 - 130%	PASS	1	30	PASS	
Nickel (Ni)	NA	69.61	0.01	0.02	µg/dry g	58.48	11.17	100	70 - 130%	PASS	0	30	PASS	
Selenium (Se)	NA	59.723	0.025	0.05	µg/dry g	58.48	0.282	102	70 - 130%	PASS	1	30	PASS	
Silver (Ag)	NA	5.9	0.01	0.02	µg/dry g	5.85	0.4	94	70 - 130%	PASS	1	30	PASS	
Total Phosphorus	NA	1854.002	0.016	0.05	µg/dry g	1462	371.133	101	70 - 130%	PASS	2	30	PASS	
Zinc (Zn)	NA	219.055	0.025	0.05	µg/dry g	58.48	162.163	97	70 - 130%	PASS	0	30	PASS	

Sample ID: 31541-R2

SWHB-24

Matrix: Sediment

Sampled: 08-Apr-14 16:22

Received: 27-Apr-15

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	0.1122	1E-05	0.00002	µg/dry g			1	30	PASS			H
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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE	
		Method: EPA 6020				Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15		
Aluminum (Al)	NA	30214.9	1	5	µg/dry g				0 30 PASS	H	
Antimony (Sb)	NA	0.249	0.025	0.05	µg/dry g				2 30 PASS	H	
Arsenic (As)	NA	5.889	0.025	0.05	µg/dry g				0 30 PASS	H	
Barium (Ba)	NA	59.136	0.025	0.05	µg/dry g				3 30 PASS	H	
Beryllium (Be)	NA	0.532	0.025	0.05	µg/dry g				0 30 PASS	H	
Cadmium (Cd)	NA	0.2145	0.0025	0.005	µg/dry g				5 30 PASS	H	
Chromium (Cr)	NA	38.0649	0.0025	0.005	µg/dry g				0 30 PASS	H	
Copper (Cu)	NA	73.6663	0.0025	0.005	µg/dry g				0 30 PASS	H	
Iron (Fe)	NA	26042.1	1	5	µg/dry g				1 30 PASS	H	
Lead (Pb)	NA	18.1006	0.0025	0.005	µg/dry g				1 30 PASS	H	
Nickel (Ni)	NA	11.17	0.01	0.02	µg/dry g				0 30 PASS	H	
Selenium (Se)	NA	0.24	0.025	0.05	µg/dry g				29 30 PASS	H	
Silver (Ag)	NA	0.43	0.01	0.02	µg/dry g				15 30 PASS	H	
Total Phosphorus	NA	366.85	0.016	0.05	µg/dry g				2 30 PASS	H	
Zinc (Zn)	NA	161.801	0.025	0.05	µg/dry g				0 30 PASS	H	

Sample ID: 31844-CRM1

QAQC CRM - ERA 540

Matrix: Sediment

Sampled:

Received:

		Method: EPA 245.7				Batch ID: E-6127	Prepared: 26-May-15		Analyzed: 26-May-15		
Mercury (Hg)	NA	8.4795	1E-05	0.00002	µg/dry g	9.25	92	80 - 120% PASS			
		Method: EPA 6020				Batch ID: E-8081	Prepared: 15-May-15		Analyzed: 26-May-15		
Aluminum (Al)	NA	18582.9	1	5	µg/dry g	9060	205	80 - 120% FAIL	1		
Antimony (Sb)	NA	182.964	0.025	0.05	µg/dry g	106	173	80 - 120% FAIL	1		
Arsenic (As)	NA	193.141	0.025	0.05	µg/dry g	182	106	80 - 120% PASS			
Beryllium (Be)	NA	102.098	0.025	0.05	µg/dry g	98.3	104	80 - 120% PASS			
Cadmium (Cd)	NA	62.913	0.0025	0.005	µg/dry g	60.4	104	80 - 120% PASS			
Chromium (Cr)	NA	140.6826	0.0025	0.005	µg/dry g	125	113	80 - 120% PASS			
Copper (Cu)	NA	78.6541	0.0025	0.005	µg/dry g	80.1	98	80 - 120% PASS			
Iron (Fe)	NA	19241	1	5	µg/dry g	12900	149	80 - 120% FAIL	1		
Lead (Pb)	NA	127.2938	0.0025	0.005	µg/dry g	136	94	80 - 120% PASS			
Nickel (Ni)	NA	130.53	0.01	0.02	µg/dry g	128	102	80 - 120% PASS			
Selenium (Se)	NA	85.603	0.025	0.05	µg/dry g	85.9	100	80 - 120% PASS			



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Elements	QUALITY CONTROL REPORT
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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
Silver (Ag)	NA	65.57	0.01	0.02	µg/dry g	61.3		107	80 - 120%		PASS	
Zinc (Zn)	NA	214.424	0.025	0.05	µg/dry g	204		105	80 - 120%		PASS	

Sample ID: 31845-B1	QAQC Procedural Blank Method: EPA 245.7	Matrix: DI Water Batch ID: E-6127	Sampled: Prepared: 26-May-15	Received: Analyzed: 26-May-15
Mercury (Hg)	NA ND	1E-05 0.00002	µg/dry g	
	Method: EPA 6020	Batch ID: E-8081	Prepared: 15-May-15	Analyzed: 26-May-15
Aluminum (Al)	NA ND	1 5	µg/dry g	
Antimony (Sb)	NA ND	0.025 0.05	µg/dry g	
Arsenic (As)	NA ND	0.025 0.05	µg/dry g	
Barium (Ba)	NA ND	0.025 0.05	µg/dry g	
Beryllium (Be)	NA ND	0.025 0.05	µg/dry g	
Cadmium (Cd)	NA ND	0.0025 0.005	µg/dry g	
Chromium (Cr)	NA ND	0.0025 0.005	µg/dry g	
Copper (Cu)	NA ND	0.0025 0.005	µg/dry g	
Iron (Fe)	NA ND	1 5	µg/dry g	
Lead (Pb)	NA ND	0.0025 0.005	µg/dry g	
Nickel (Ni)	NA ND	0.01 0.02	µg/dry g	
Selenium (Se)	NA ND	0.025 0.05	µg/dry g	
Silver (Ag)	NA ND	0.01 0.02	µg/dry g	
Total Phosphorus	NA ND	0.016 0.05	µg/dry g	
Zinc (Zn)	NA ND	0.025 0.05	µg/dry g	

Sample ID: 31845-BS1	QAQC Procedural Blank Method: EPA 245.7	Matrix: DI Water Batch ID: E-6127	Sampled: Prepared: 26-May-15	Received: Analyzed: 26-May-15
Mercury (Hg)	NA 992	1E-05 0.00002	µg/dry g 1000 0	99 80 - 120% PASS
	Method: EPA 6020	Batch ID: E-8081	Prepared: 15-May-15	Analyzed: 26-May-15
Aluminum (Al)	NA 2.1	1 5	µg/dry g 2 0	105 80 - 120% PASS
Antimony (Sb)	NA 2.096	0.025 0.05	µg/dry g 2 0	105 80 - 120% PASS
Arsenic (As)	NA 2.114	0.025 0.05	µg/dry g 2 0	106 80 - 120% PASS
Barium (Ba)	NA 2.065	0.025 0.05	µg/dry g 2 0	103 80 - 120% PASS
Beryllium (Be)	NA 2.105	0.025 0.05	µg/dry g 2 0	105 80 - 120% PASS



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Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Cadmium (Cd)	NA	2.1186	0.0025	0.005	µg/dry g	2	0	106	80 - 120%	PASS		
Chromium (Cr)	NA	2.0373	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS		
Copper (Cu)	NA	2.0543	0.0025	0.005	µg/dry g	2	0	103	80 - 120%	PASS		
Iron (Fe)	NA	2	1	5	µg/dry g	2	0	100	80 - 120%	PASS		
Lead (Pb)	NA	2.0471	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS		
Nickel (Ni)	NA	2.02	0.01	0.02	µg/dry g	2	0	101	80 - 120%	PASS		
Selenium (Se)	NA	2.005	0.025	0.05	µg/dry g	2	0	100	80 - 120%	PASS		
Silver (Ag)	NA	0.18	0.01	0.02	µg/dry g	0.2	0	90	80 - 120%	PASS		
Total Phosphorus	NA	47.46	0.016	0.05	µg/dry g	50	0	95	70 - 130%	PASS		
Zinc (Zn)	NA	2.192	0.025	0.05	µg/dry g	2	0	110	80 - 120%	PASS		

Sample ID: 31845-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 245.7

Batch ID: E-6127

Prepared: 26-May-15

Analyzed: 26-May-15

Mercury (Hg)	NA	1010	1E-05	0.00002	µg/dry g	1000	0	101	80 - 120%	PASS	2	30	PASS
		Method: EPA 6020				Batch ID: E-8081		Prepared: 15-May-15				Analyzed: 26-May-15	
Aluminum (Al)	NA	2.1	1	5	µg/dry g	2	0	105	80 - 120%	PASS	0	30	PASS
Antimony (Sb)	NA	2.033	0.025	0.05	µg/dry g	2	0	102	80 - 120%	PASS	3	30	PASS
Arsenic (As)	NA	2.105	0.025	0.05	µg/dry g	2	0	105	80 - 120%	PASS	1	30	PASS
Barium (Ba)	NA	2.01	0.025	0.05	µg/dry g	2	0	100	80 - 120%	PASS	3	30	PASS
Beryllium (Be)	NA	2.082	0.025	0.05	µg/dry g	2	0	104	80 - 120%	PASS	1	30	PASS
Cadmium (Cd)	NA	2.1195	0.0025	0.005	µg/dry g	2	0	106	80 - 120%	PASS	0	30	PASS
Chromium (Cr)	NA	2.0181	0.0025	0.005	µg/dry g	2	0	101	80 - 120%	PASS	1	30	PASS
Copper (Cu)	NA	2.033	0.0025	0.005	µg/dry g	2	0	102	80 - 120%	PASS	1	30	PASS
Iron (Fe)	NA	2	1	5	µg/dry g	2	0	100	80 - 120%	PASS	0	30	PASS
Lead (Pb)	NA	2.0154	0.0025	0.005	µg/dry g	2	0	101	80 - 120%	PASS	1	30	PASS
Nickel (Ni)	NA	1.99	0.01	0.02	µg/dry g	2	0	100	80 - 120%	PASS	1	30	PASS
Selenium (Se)	NA	2.009	0.025	0.05	µg/dry g	2	0	100	80 - 120%	PASS	0	30	PASS
Silver (Ag)	NA	0.19	0.01	0.02	µg/dry g	0.2	0	95	80 - 120%	PASS	5	30	PASS
Total Phosphorus	NA	46.436	0.016	0.05	µg/dry g	50	0	93	70 - 130%	PASS	2	30	PASS
Zinc (Zn)	NA	2.178	0.025	0.05	µg/dry g	2	0	109	80 - 120%	PASS	1	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31515-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g					
PCB005	NA	ND	0.05	0.1	ng/dry g					
PCB008	NA	ND	0.05	0.1	ng/dry g					
PCB015	NA	ND	0.05	0.1	ng/dry g					
PCB018	NA	ND	0.05	0.1	ng/dry g					
PCB027	NA	ND	0.05	0.1	ng/dry g					
PCB028	NA	ND	0.05	0.1	ng/dry g					
PCB029	NA	ND	0.05	0.1	ng/dry g					
PCB031	NA	ND	0.05	0.1	ng/dry g					
PCB033	NA	ND	0.05	0.1	ng/dry g					
PCB037	NA	ND	0.05	0.1	ng/dry g					
PCB044	NA	ND	0.05	0.1	ng/dry g					
PCB049	NA	ND	0.05	0.1	ng/dry g					
PCB052	NA	ND	0.05	0.1	ng/dry g					
PCB056(060)	NA	ND	0.1	0.2	ng/dry g					
PCB066	NA	ND	0.05	0.1	ng/dry g					
PCB070	NA	ND	0.05	0.1	ng/dry g					
PCB074	NA	ND	0.05	0.1	ng/dry g					
PCB077	NA	ND	0.05	0.1	ng/dry g					
PCB081	NA	ND	0.05	0.1	ng/dry g					
PCB087	NA	ND	0.05	0.1	ng/dry g					
PCB095	NA	ND	0.05	0.1	ng/dry g					
PCB097	NA	ND	0.05	0.1	ng/dry g					
PCB099	NA	ND	0.05	0.1	ng/dry g					
PCB101	NA	ND	0.05	0.1	ng/dry g					
PCB105	NA	ND	0.05	0.1	ng/dry g					
PCB110	NA	ND	0.05	0.1	ng/dry g					
PCB114	NA	ND	0.05	0.1	ng/dry g					
PCB118	NA	ND	0.05	0.1	ng/dry g					



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB119	NA	ND	0.05	0.1	ng/dry g							
PCB123	NA	ND	0.05	0.1	ng/dry g							
PCB126	NA	ND	0.05	0.1	ng/dry g							
PCB128	NA	ND	0.05	0.1	ng/dry g							
PCB137	NA	ND	0.05	0.1	ng/dry g							
PCB138	NA	ND	0.05	0.1	ng/dry g							
PCB141	NA	ND	0.05	0.1	ng/dry g							
PCB149	NA	ND	0.05	0.1	ng/dry g							
PCB151	NA	ND	0.05	0.1	ng/dry g							
PCB153	NA	ND	0.05	0.1	ng/dry g							
PCB156	NA	ND	0.05	0.1	ng/dry g							
PCB157	NA	ND	0.05	0.1	ng/dry g							
PCB158	NA	ND	0.05	0.1	ng/dry g							
PCB167	NA	ND	0.05	0.1	ng/dry g							
PCB168+132	NA	ND	0.1	0.2	ng/dry g							
PCB169	NA	ND	0.05	0.1	ng/dry g							
PCB170	NA	ND	0.05	0.1	ng/dry g							
PCB174	NA	ND	0.05	0.1	ng/dry g							
PCB177	NA	ND	0.05	0.1	ng/dry g							
PCB180	NA	ND	0.05	0.1	ng/dry g							
PCB183	NA	ND	0.05	0.1	ng/dry g							
PCB187	NA	ND	0.05	0.1	ng/dry g							
PCB189	NA	ND	0.05	0.1	ng/dry g							
PCB194	NA	ND	0.05	0.1	ng/dry g							
PCB195	NA	ND	0.05	0.1	ng/dry g							
PCB199(200)	NA	ND	0.1	0.2	ng/dry g							
PCB201	NA	ND	0.05	0.1	ng/dry g							
PCB203	NA	ND	0.05	0.1	ng/dry g							
PCB206	NA	ND	0.05	0.1	ng/dry g							
PCB209	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31515-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Method: EPA 8270D		Batch ID: O-7100		Prepared: 12-May-15		Analyzed: 28-May-15						
PCB003	NA	107.41	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB005	NA	91.58	0.05	0.1	ng/dry g	100	0	92	50 - 150%	PASS		
PCB008	NA	86.66	0.05	0.1	ng/dry g	100	0	87	50 - 150%	PASS		
PCB015	NA	109.79	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS		
PCB018	NA	97.46	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		
PCB027	NA	83.43	0.05	0.1	ng/dry g	100	0	83	50 - 150%	PASS		
PCB028	NA	91.31	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS		
PCB029	NA	93.35	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS		
PCB031	NA	114.16	0.05	0.1	ng/dry g	100	0	114	50 - 150%	PASS		
PCB033	NA	101.58	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS		
PCB037	NA	99.56	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS		
PCB044	NA	105.58	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS		
PCB049	NA	101.27	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS		
PCB052	NA	102.38	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS		
PCB056(060)	NA	114.1	0.1	0.2	ng/dry g	100	0	114	50 - 150%	PASS		
PCB066	NA	103.78	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS		
PCB070	NA	102.44	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS		
PCB074	NA	105.06	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB077	NA	105.5	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB081	NA	111.51	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS		
PCB087	NA	97.57	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS		
PCB095	NA	96.17	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS		
PCB097	NA	104.82	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB099	NA	97.09	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		
PCB101	NA	99.03	0.05	0.1	ng/dry g	100	0	99	50 - 150%	PASS		
PCB105	NA	101.2	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS		
PCB110	NA	97.4	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		
PCB114	NA	103.58	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS		
PCB118	NA	95.98	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS		
PCB119	NA	97.43	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB123	NA	98.25	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS		
PCB126	NA	105.09	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB128	NA	116.02	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS		
PCB137	NA	115.76	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS		
PCB138	NA	100.24	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS		
PCB141	NA	102.32	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS		
PCB149	NA	92.11	0.05	0.1	ng/dry g	100	0	92	50 - 150%	PASS		
PCB151	NA	107.21	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB153	NA	107.06	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB156	NA	123.65	0.05	0.1	ng/dry g	100	0	124	50 - 150%	PASS		
PCB157	NA	107	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB158	NA	108.14	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB167	NA	108.49	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB168+132	NA	191.1	0.1	0.2	ng/dry g	200	0	96	50 - 150%	PASS		
PCB169	NA	129.11	0.05	0.1	ng/dry g	100	0	129	50 - 150%	PASS		
PCB170	NA	107.02	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB174	NA	108.24	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB177	NA	113.07	0.05	0.1	ng/dry g	100	0	113	50 - 150%	PASS		
PCB180	NA	117.7	0.05	0.1	ng/dry g	100	0	118	50 - 150%	PASS		
PCB183	NA	104.73	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB187	NA	111.95	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS		
PCB189	NA	121.74	0.05	0.1	ng/dry g	100	0	122	50 - 150%	PASS		
PCB194	NA	117.64	0.05	0.1	ng/dry g	100	0	118	50 - 150%	PASS		
PCB195	NA	115.07	0.05	0.1	ng/dry g	100	0	115	50 - 150%	PASS		
PCB199(200)	NA	96.8	0.1	0.2	ng/dry g	100	0	97	50 - 150%	PASS		
PCB201	NA	109.71	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS		
PCB203	NA	104.64	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB206	NA	118.66	0.05	0.1	ng/dry g	100	0	119	50 - 150%	PASS		
PCB209	NA	118.88	0.05	0.1	ng/dry g	100	0	119	50 - 150%	PASS		

Sample ID: 31515-BS2

QAQC Procedural Blank
Method: EPA 8270D

Matrix: DI Water
Batch ID: O-7100

Sampled:
Prepared: 12-May-15

Received:
Analyzed: 28-May-15



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION		QA CODE
								%	LIMITS	PASS	%	LIMITS	
PCB003	NA	93.42	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	14	30	PASS
PCB005	NA	83.37	0.05	0.1	ng/dry g	100	0	83	50 - 150%	PASS	10	30	PASS
PCB008	NA	80.47	0.05	0.1	ng/dry g	100	0	80	50 - 150%	PASS	8	30	PASS
PCB015	NA	104.13	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS	6	30	PASS
PCB018	NA	84.12	0.05	0.1	ng/dry g	100	0	84	50 - 150%	PASS	14	30	PASS
PCB027	NA	74.22	0.05	0.1	ng/dry g	100	0	74	50 - 150%	PASS	11	30	PASS
PCB028	NA	87.32	0.05	0.1	ng/dry g	100	0	87	50 - 150%	PASS	4	30	PASS
PCB029	NA	82.36	0.05	0.1	ng/dry g	100	0	82	50 - 150%	PASS	13	30	PASS
PCB031	NA	98.87	0.05	0.1	ng/dry g	100	0	99	50 - 150%	PASS	14	30	PASS
PCB033	NA	89.5	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	12	30	PASS
PCB037	NA	102.22	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS	2	30	PASS
PCB044	NA	95.08	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS	11	30	PASS
PCB049	NA	90.32	0.05	0.1	ng/dry g	100	0	90	50 - 150%	PASS	12	30	PASS
PCB052	NA	89.24	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	14	30	PASS
PCB056(060)	NA	106.2	0.1	0.2	ng/dry g	100	0	106	50 - 150%	PASS	7	30	PASS
PCB066	NA	90.67	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS	13	30	PASS
PCB070	NA	95.32	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS	7	30	PASS
PCB074	NA	88.64	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	16	30	PASS
PCB077	NA	95.54	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	9	30	PASS
PCB081	NA	99.52	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS	11	30	PASS
PCB087	NA	96.72	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS	1	30	PASS
PCB095	NA	89.13	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	8	30	PASS
PCB097	NA	104.09	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS	1	30	PASS
PCB099	NA	92.95	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	4	30	PASS
PCB101	NA	91.27	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS	8	30	PASS
PCB105	NA	97.72	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS	3	30	PASS
PCB110	NA	88.82	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	9	30	PASS
PCB114	NA	96.17	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	8	30	PASS
PCB118	NA	98.84	0.05	0.1	ng/dry g	100	0	99	50 - 150%	PASS	3	30	PASS
PCB119	NA	89.12	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	9	30	PASS
PCB123	NA	94.13	0.05	0.1	ng/dry g	100	0	94	50 - 150%	PASS	4	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS		%	LIMITS		
PCB126	NA	116.63	0.05	0.1	ng/dry g	100	0	117	50 - 150%	PASS	11	30	PASS	
PCB128	NA	107.29	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS	8	30	PASS	
PCB137	NA	114.6	0.05	0.1	ng/dry g	100	0	115	50 - 150%	PASS	1	30	PASS	
PCB138	NA	104.99	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	5	30	PASS	
PCB141	NA	95.34	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS	7	30	PASS	
PCB149	NA	92.05	0.05	0.1	ng/dry g	100	0	92	50 - 150%	PASS	0	30	PASS	
PCB151	NA	96.87	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS	10	30	PASS	
PCB153	NA	105.46	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	2	30	PASS	
PCB156	NA	123.33	0.05	0.1	ng/dry g	100	0	123	50 - 150%	PASS	1	30	PASS	
PCB157	NA	107.68	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS	1	30	PASS	
PCB158	NA	107.26	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS	1	30	PASS	
PCB167	NA	109.53	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	2	30	PASS	
PCB168+132	NA	197.7	0.1	0.2	ng/dry g	200	0	99	50 - 150%	PASS	3	30	PASS	
PCB169	NA	126.48	0.05	0.1	ng/dry g	100	0	126	50 - 150%	PASS	2	30	PASS	
PCB170	NA	112.25	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS	5	30	PASS	
PCB174	NA	105.25	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	3	30	PASS	
PCB177	NA	112.68	0.05	0.1	ng/dry g	100	0	113	50 - 150%	PASS	0	30	PASS	
PCB180	NA	109.82	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	7	30	PASS	
PCB183	NA	105.92	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS	1	30	PASS	
PCB187	NA	101.21	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS	10	30	PASS	
PCB189	NA	125.25	0.05	0.1	ng/dry g	100	0	125	50 - 150%	PASS	2	30	PASS	
PCB194	NA	123.7	0.05	0.1	ng/dry g	100	0	124	50 - 150%	PASS	5	30	PASS	
PCB195	NA	118.38	0.05	0.1	ng/dry g	100	0	118	50 - 150%	PASS	3	30	PASS	
PCB199(200)	NA	92	0.1	0.2	ng/dry g	100	0	92	50 - 150%	PASS	5	30	PASS	
PCB201	NA	104.85	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	5	30	PASS	
PCB203	NA	110.34	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	5	30	PASS	
PCB206	NA	124.85	0.05	0.1	ng/dry g	100	0	125	50 - 150%	PASS	5	30	PASS	
PCB209	NA	109.75	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	8	30	PASS	

Sample ID: 31516-B1

QAQC Procedural Blank

Method: EPA 8270D

Matrix: DI Water

Batch ID: O-7102

Sampled:

Prepared: 14-May-15

Received:

Analyzed: 31-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g									
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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB005	NA	ND	0.05	0.1	ng/dry g							
PCB008	NA	ND	0.05	0.1	ng/dry g							
PCB015	NA	ND	0.05	0.1	ng/dry g							
PCB018	NA	ND	0.05	0.1	ng/dry g							
PCB027	NA	ND	0.05	0.1	ng/dry g							
PCB028	NA	ND	0.05	0.1	ng/dry g							
PCB029	NA	ND	0.05	0.1	ng/dry g							
PCB031	NA	ND	0.05	0.1	ng/dry g							
PCB033	NA	ND	0.05	0.1	ng/dry g							
PCB037	NA	ND	0.05	0.1	ng/dry g							
PCB044	NA	ND	0.05	0.1	ng/dry g							
PCB049	NA	ND	0.05	0.1	ng/dry g							
PCB052	NA	ND	0.05	0.1	ng/dry g							
PCB056(060)	NA	ND	0.1	0.2	ng/dry g							
PCB066	NA	ND	0.05	0.1	ng/dry g							
PCB070	NA	ND	0.05	0.1	ng/dry g							
PCB074	NA	ND	0.05	0.1	ng/dry g							
PCB077	NA	ND	0.05	0.1	ng/dry g							
PCB081	NA	ND	0.05	0.1	ng/dry g							
PCB087	NA	ND	0.05	0.1	ng/dry g							
PCB095	NA	ND	0.05	0.1	ng/dry g							
PCB097	NA	ND	0.05	0.1	ng/dry g							
PCB099	NA	ND	0.05	0.1	ng/dry g							
PCB101	NA	ND	0.05	0.1	ng/dry g							
PCB105	NA	ND	0.05	0.1	ng/dry g							
PCB110	NA	ND	0.05	0.1	ng/dry g							
PCB114	NA	ND	0.05	0.1	ng/dry g							
PCB118	NA	ND	0.05	0.1	ng/dry g							
PCB119	NA	ND	0.05	0.1	ng/dry g							
PCB123	NA	ND	0.05	0.1	ng/dry g							
PCB126	NA	ND	0.05	0.1	ng/dry g							



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB128	NA	ND	0.05	0.1	ng/dry g							
PCB137	NA	ND	0.05	0.1	ng/dry g							
PCB138	NA	ND	0.05	0.1	ng/dry g							
PCB141	NA	ND	0.05	0.1	ng/dry g							
PCB149	NA	ND	0.05	0.1	ng/dry g							
PCB151	NA	ND	0.05	0.1	ng/dry g							
PCB153	NA	ND	0.05	0.1	ng/dry g							
PCB156	NA	ND	0.05	0.1	ng/dry g							
PCB157	NA	ND	0.05	0.1	ng/dry g							
PCB158	NA	ND	0.05	0.1	ng/dry g							
PCB167	NA	ND	0.05	0.1	ng/dry g							
PCB168+132	NA	ND	0.1	0.2	ng/dry g							
PCB169	NA	ND	0.05	0.1	ng/dry g							
PCB170	NA	ND	0.05	0.1	ng/dry g							
PCB174	NA	ND	0.05	0.1	ng/dry g							
PCB177	NA	ND	0.05	0.1	ng/dry g							
PCB180	NA	ND	0.05	0.1	ng/dry g							
PCB183	NA	ND	0.05	0.1	ng/dry g							
PCB187	NA	ND	0.05	0.1	ng/dry g							
PCB189	NA	ND	0.05	0.1	ng/dry g							
PCB194	NA	ND	0.05	0.1	ng/dry g							
PCB195	NA	ND	0.05	0.1	ng/dry g							
PCB199(200)	NA	ND	0.1	0.2	ng/dry g							
PCB201	NA	ND	0.05	0.1	ng/dry g							
PCB203	NA	ND	0.05	0.1	ng/dry g							
PCB206	NA	ND	0.05	0.1	ng/dry g							
PCB209	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31516-BS1

QAQC Procedural Blank

Method: EPA 8270D

Matrix: DI Water

Batch ID: O-7102

Sampled:

Prepared: 14-May-15

Received:

Analyzed: 31-May-15

PCB003	NA	96.01	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS
PCB005	NA	69.86	0.05	0.1	ng/dry g	100	0	70	50 - 150%	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB008	NA	102.95	0.05	0.1	ng/dry g	100	0	103	50 - 150%	PASS		
PCB015	NA	109.03	0.05	0.1	ng/dry g	100	0	109	50 - 150%	PASS		
PCB018	NA	90.26	0.05	0.1	ng/dry g	100	0	90	50 - 150%	PASS		
PCB027	NA	73.47	0.05	0.1	ng/dry g	100	0	73	50 - 150%	PASS		
PCB028	NA	89.15	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS		
PCB029	NA	82.23	0.05	0.1	ng/dry g	100	0	82	50 - 150%	PASS		
PCB031	NA	96.95	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		
PCB033	NA	93.39	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS		
PCB037	NA	100.55	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS		
PCB044	NA	93.05	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS		
PCB049	NA	90.84	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS		
PCB052	NA	93.61	0.05	0.1	ng/dry g	100	0	94	50 - 150%	PASS		
PCB056(060)	NA	101.6	0.1	0.2	ng/dry g	100	0	102	50 - 150%	PASS		
PCB066	NA	86.96	0.05	0.1	ng/dry g	100	0	87	50 - 150%	PASS		
PCB070	NA	94.43	0.05	0.1	ng/dry g	100	0	94	50 - 150%	PASS		
PCB074	NA	96.09	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS		
PCB077	NA	96.94	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS		
PCB081	NA	102.09	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS		
PCB087	NA	92.33	0.05	0.1	ng/dry g	100	0	92	50 - 150%	PASS		
PCB095	NA	88.84	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS		
PCB097	NA	103.47	0.05	0.1	ng/dry g	100	0	103	50 - 150%	PASS		
PCB099	NA	95.01	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS		
PCB101	NA	93.37	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS		
PCB105	NA	104.93	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB110	NA	89.45	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS		
PCB114	NA	104.51	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB118	NA	98.34	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS		
PCB119	NA	88.85	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS		
PCB123	NA	90.86	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS		
PCB126	NA	127.42	0.05	0.1	ng/dry g	100	0	127	50 - 150%	PASS		
PCB128	NA	110.76	0.05	0.1	ng/dry g	100	0	111	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB137	NA	116.5	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS		
PCB138	NA	108.19	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB141	NA	100.73	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS		
PCB149	NA	84.72	0.05	0.1	ng/dry g	100	0	85	50 - 150%	PASS		
PCB151	NA	106.92	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB153	NA	103.94	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS		
PCB156	NA	124.26	0.05	0.1	ng/dry g	100	0	124	50 - 150%	PASS		
PCB157	NA	100.45	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS		
PCB158	NA	105.38	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB167	NA	106.98	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS		
PCB168+132	NA	187.4	0.1	0.2	ng/dry g	200	0	94	50 - 150%	PASS		
PCB169	NA	123.74	0.05	0.1	ng/dry g	100	0	124	50 - 150%	PASS		
PCB170	NA	107.75	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB174	NA	100.28	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS		
PCB177	NA	114.66	0.05	0.1	ng/dry g	100	0	115	50 - 150%	PASS		
PCB180	NA	116.11	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS		
PCB183	NA	105.59	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS		
PCB187	NA	104.53	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS		
PCB189	NA	125.11	0.05	0.1	ng/dry g	100	0	125	50 - 150%	PASS		
PCB194	NA	111.13	0.05	0.1	ng/dry g	100	0	111	50 - 150%	PASS		
PCB195	NA	116.41	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS		
PCB199(200)	NA	96	0.1	0.2	ng/dry g	100	0	96	50 - 150%	PASS		
PCB201	NA	105.57	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS		
PCB203	NA	107.79	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS		
PCB206	NA	121.44	0.05	0.1	ng/dry g	100	0	121	50 - 150%	PASS		
PCB209	NA	109.13	0.05	0.1	ng/dry g	100	0	109	50 - 150%	PASS		

Sample ID: 31516-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

PCB003	NA	84.58	0.05	0.1	ng/dry g	100	0	85	50 - 150%	PASS	12	30	PASS
PCB005	NA	70.53	0.05	0.1	ng/dry g	100	0	71	50 - 150%	PASS	1	30	PASS
PCB008	NA	79.05	0.05	0.1	ng/dry g	100	0	79	50 - 150%	PASS	26	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB015	NA	92.88	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	16	30	PASS
PCB018	NA	78.99	0.05	0.1	ng/dry g	100	0	79	50 - 150%	PASS	13	30	PASS
PCB027	NA	62.02	0.05	0.1	ng/dry g	100	0	62	50 - 150%	PASS	16	30	PASS
PCB028	NA	78.03	0.05	0.1	ng/dry g	100	0	78	50 - 150%	PASS	13	30	PASS
PCB029	NA	73.37	0.05	0.1	ng/dry g	100	0	73	50 - 150%	PASS	12	30	PASS
PCB031	NA	84.12	0.05	0.1	ng/dry g	100	0	84	50 - 150%	PASS	14	30	PASS
PCB033	NA	83.64	0.05	0.1	ng/dry g	100	0	84	50 - 150%	PASS	10	30	PASS
PCB037	NA	90.88	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS	10	30	PASS
PCB044	NA	85.12	0.05	0.1	ng/dry g	100	0	85	50 - 150%	PASS	9	30	PASS
PCB049	NA	81.77	0.05	0.1	ng/dry g	100	0	82	50 - 150%	PASS	10	30	PASS
PCB052	NA	83.63	0.05	0.1	ng/dry g	100	0	84	50 - 150%	PASS	11	30	PASS
PCB056(060)	NA	95.5	0.1	0.2	ng/dry g	100	0	95	50 - 150%	PASS	6	30	PASS
PCB066	NA	88.43	0.05	0.1	ng/dry g	100	0	88	50 - 150%	PASS	1	30	PASS
PCB070	NA	88.48	0.05	0.1	ng/dry g	100	0	88	50 - 150%	PASS	7	30	PASS
PCB074	NA	86.43	0.05	0.1	ng/dry g	100	0	86	50 - 150%	PASS	11	30	PASS
PCB077	NA	95.99	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	1	30	PASS
PCB081	NA	92.82	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	9	30	PASS
PCB087	NA	87.27	0.05	0.1	ng/dry g	100	0	87	50 - 150%	PASS	6	30	PASS
PCB095	NA	82.73	0.05	0.1	ng/dry g	100	0	83	50 - 150%	PASS	7	30	PASS
PCB097	NA	100.63	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS	2	30	PASS
PCB099	NA	95.51	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	1	30	PASS
PCB101	NA	85.87	0.05	0.1	ng/dry g	100	0	86	50 - 150%	PASS	8	30	PASS
PCB105	NA	93.05	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	12	30	PASS
PCB110	NA	87.08	0.05	0.1	ng/dry g	100	0	87	50 - 150%	PASS	2	30	PASS
PCB114	NA	89.44	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	16	30	PASS
PCB118	NA	95.97	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	2	30	PASS
PCB119	NA	88.23	0.05	0.1	ng/dry g	100	0	88	50 - 150%	PASS	1	30	PASS
PCB123	NA	90.73	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS	0	30	PASS
PCB126	NA	121.04	0.05	0.1	ng/dry g	100	0	121	50 - 150%	PASS	5	30	PASS
PCB128	NA	107	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS	4	30	PASS
PCB137	NA	99.86	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS	15	30	PASS



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS		%	LIMITS		
PCB138	NA	96.22	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	12	30	PASS	
PCB141	NA	90.6	0.05	0.1	ng/dry g	100	0	91	50 - 150%	PASS	10	30	PASS	
PCB149	NA	81.67	0.05	0.1	ng/dry g	100	0	82	50 - 150%	PASS	4	30	PASS	
PCB151	NA	93.86	0.05	0.1	ng/dry g	100	0	94	50 - 150%	PASS	13	30	PASS	
PCB153	NA	96.1	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	8	30	PASS	
PCB156	NA	120.13	0.05	0.1	ng/dry g	100	0	120	50 - 150%	PASS	3	30	PASS	
PCB157	NA	94.53	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS	5	30	PASS	
PCB158	NA	102.72	0.05	0.1	ng/dry g	100	0	103	50 - 150%	PASS	2	30	PASS	
PCB167	NA	103.29	0.05	0.1	ng/dry g	100	0	103	50 - 150%	PASS	4	30	PASS	
PCB168+132	NA	169.9	0.1	0.2	ng/dry g	200	0	85	50 - 150%	PASS	10	30	PASS	
PCB169	NA	119.82	0.05	0.1	ng/dry g	100	0	120	50 - 150%	PASS	3	30	PASS	
PCB170	NA	105.38	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	3	30	PASS	
PCB174	NA	94.62	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS	5	30	PASS	
PCB177	NA	101.82	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS	12	30	PASS	
PCB180	NA	107.06	0.05	0.1	ng/dry g	100	0	107	50 - 150%	PASS	8	30	PASS	
PCB183	NA	100.62	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS	5	30	PASS	
PCB187	NA	97.36	0.05	0.1	ng/dry g	100	0	97	50 - 150%	PASS	8	30	PASS	
PCB189	NA	122.68	0.05	0.1	ng/dry g	100	0	123	50 - 150%	PASS	2	30	PASS	
PCB194	NA	118.78	0.05	0.1	ng/dry g	100	0	119	50 - 150%	PASS	7	30	PASS	
PCB195	NA	108.54	0.05	0.1	ng/dry g	100	0	109	50 - 150%	PASS	6	30	PASS	
PCB199(200)	NA	88	0.1	0.2	ng/dry g	100	0	88	50 - 150%	PASS	9	30	PASS	
PCB201	NA	102.01	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS	4	30	PASS	
PCB203	NA	101.34	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS	7	30	PASS	
PCB206	NA	115.62	0.05	0.1	ng/dry g	100	0	116	50 - 150%	PASS	4	30	PASS	
PCB209	NA	105.3	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	4	30	PASS	

Sample ID: 31519-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

PCB008	NA	19.18	0.05	0.1	ng/dry g	22.3		86	60 - 140%	PASS				
PCB018	NA	36.68	0.05	0.1	ng/dry g	51		72	60 - 140%	PASS				
PCB028	NA	60.93	0.05	0.1	ng/dry g	80.8		75	60 - 140%	PASS				
PCB031	NA	78.7	0.05	0.1	ng/dry g	78.7		100	60 - 140%	PASS				



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB044	NA	42.37	0.05	0.1	ng/dry g	60.2		70	60 - 140%	PASS		
PCB049	NA	48.18	0.05	0.1	ng/dry g	53		91	60 - 140%	PASS		
PCB052	NA	57.17	0.05	0.1	ng/dry g	79.4		72	60 - 140%	PASS		
PCB066	NA	56.71	0.05	0.1	ng/dry g	71.9		79	60 - 140%	PASS		
PCB087	NA	25.02	0.05	0.1	ng/dry g	29.9		84	60 - 140%	PASS		
PCB095	NA	39.81	0.05	0.1	ng/dry g	65		61	60 - 140%	PASS		
PCB099	NA	22.51	0.05	0.1	ng/dry g	37.5		60	60 - 140%	PASS		
PCB101	NA	54.04	0.05	0.1	ng/dry g	73.4		74	60 - 140%	PASS		
PCB105	NA	17.19	0.05	0.1	ng/dry g	24.5		70	60 - 140%	PASS		
PCB110	NA	47.4	0.05	0.1	ng/dry g	63.5		75	60 - 140%	PASS		
PCB118	NA	37.74	0.05	0.1	ng/dry g	58		65	60 - 140%	PASS		
PCB128	NA	10.74	0.05	0.1	ng/dry g	8.5		126	60 - 140%	PASS		
PCB138	NA	77.01	0.05	0.1	ng/dry g	62.1		124	60 - 140%	PASS		
PCB149	NA	42.48	0.05	0.1	ng/dry g	49.7		85	60 - 140%	PASS		
PCB151	NA	14.48	0.05	0.1	ng/dry g	16.9		86	60 - 140%	PASS		
PCB153	NA	55.32	0.05	0.1	ng/dry g	74		75	60 - 140%	PASS		
PCB156	NA	5.43	0.05	0.1	ng/dry g	6.5		84	60 - 140%	PASS		
PCB170	NA	28.57	0.05	0.1	ng/dry g	22.6		126	60 - 140%	PASS		
PCB180	NA	46.28	0.05	0.1	ng/dry g	44.3		104	60 - 140%	PASS		
PCB183	NA	13.11	0.05	0.1	ng/dry g	12.2		107	60 - 140%	PASS		
PCB187	NA	27.91	0.05	0.1	ng/dry g	25.1		111	60 - 140%	PASS		
PCB194	NA	14.7	0.05	0.1	ng/dry g	11.2		131	60 - 140%	PASS		
PCB195	NA	4.94	0.05	0.1	ng/dry g	3.8		130	60 - 140%	PASS		
PCB206	NA	12.88	0.05	0.1	ng/dry g	9.2		140	60 - 140%	PASS		
PCB209	NA	8.24	0.05	0.1	ng/dry g	6.8		121	60 - 140%	PASS		

Sample ID: 31520-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 01-Jun-15

PCB008	NA	23.58	0.05	0.1	ng/dry g	22.3		106	60 - 140%	PASS		
PCB018	NA	51.08	0.05	0.1	ng/dry g	51		100	60 - 140%	PASS		
PCB028	NA	68.74	0.05	0.1	ng/dry g	80.8		85	60 - 140%	PASS		
PCB031	NA	90.18	0.05	0.1	ng/dry g	78.7		115	60 - 140%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB044	NA	37.58	0.05	0.1	ng/dry g	60.2		62	60 - 140%	PASS		
PCB049	NA	52.52	0.05	0.1	ng/dry g	53		99	60 - 140%	PASS		
PCB052	NA	54.86	0.05	0.1	ng/dry g	79.4		69	60 - 140%	PASS		
PCB066	NA	53.55	0.05	0.1	ng/dry g	71.9		74	60 - 140%	PASS		
PCB087	NA	18.14	0.05	0.1	ng/dry g	29.9		61	60 - 140%	PASS		
PCB095	NA	40.66	0.05	0.1	ng/dry g	65		63	60 - 140%	PASS		
PCB099	NA	23.68	0.05	0.1	ng/dry g	37.5		63	60 - 140%	PASS		
PCB101	NA	53.32	0.05	0.1	ng/dry g	73.4		73	60 - 140%	PASS		
PCB105	NA	15.43	0.05	0.1	ng/dry g	24.5		63	60 - 140%	PASS		
PCB110	NA	45.64	0.05	0.1	ng/dry g	63.5		72	60 - 140%	PASS		
PCB118	NA	39.29	0.05	0.1	ng/dry g	58		68	60 - 140%	PASS		
PCB128	NA	5.82	0.05	0.1	ng/dry g	8.5		68	60 - 140%	PASS		
PCB138	NA	63.21	0.05	0.1	ng/dry g	62.1		102	60 - 140%	PASS		
PCB149	NA	40.83	0.05	0.1	ng/dry g	49.7		82	60 - 140%	PASS		
PCB151	NA	13.75	0.05	0.1	ng/dry g	16.9		81	60 - 140%	PASS		
PCB153	NA	57.1	0.05	0.1	ng/dry g	74		77	60 - 140%	PASS		
PCB156	NA	3.96	0.05	0.1	ng/dry g	6.5		61	60 - 140%	PASS		
PCB170	NA	22.55	0.05	0.1	ng/dry g	22.6		100	60 - 140%	PASS		
PCB180	NA	40.43	0.05	0.1	ng/dry g	44.3		91	60 - 140%	PASS		
PCB183	NA	14.71	0.05	0.1	ng/dry g	12.2		121	60 - 140%	PASS		
PCB187	NA	29.25	0.05	0.1	ng/dry g	25.1		117	60 - 140%	PASS		
PCB194	NA	13.09	0.05	0.1	ng/dry g	11.2		117	60 - 140%	PASS		
PCB195	NA	5.18	0.05	0.1	ng/dry g	3.8		136	60 - 140%	PASS		
PCB206	NA	12.4	0.05	0.1	ng/dry g	9.2		135	60 - 140%	PASS		
PCB209	NA	9.35	0.05	0.1	ng/dry g	6.8		138	60 - 140%	PASS		

Sample ID: 31535-MS1

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

PCB003	NA	16.03	0.05	0.1	ng/dry g	16.55	0	97	50 - 150%	PASS		
PCB005	NA	12.34	0.05	0.1	ng/dry g	16.55	0	75	50 - 150%	PASS		
PCB008	NA	13.32	0.05	0.1	ng/dry g	16.55	0	80	50 - 150%	PASS		
PCB015	NA	15.89	0.05	0.1	ng/dry g	16.55	0	96	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB018	NA	12.79	0.05	0.1	ng/dry g	16.55	0	77	50 - 150%	PASS		
PCB027	NA	10.74	0.05	0.1	ng/dry g	16.55	0	65	50 - 150%	PASS		
PCB028	NA	13.33	0.05	0.1	ng/dry g	16.55	0.07	80	50 - 150%	PASS		
PCB029	NA	12.36	0.05	0.1	ng/dry g	16.55	0	75	50 - 150%	PASS		
PCB031	NA	16.65	0.05	0.1	ng/dry g	16.55	0.24	99	50 - 150%	PASS		
PCB033	NA	15.12	0.05	0.1	ng/dry g	16.55	0	91	50 - 150%	PASS		
PCB037	NA	14.04	0.05	0.1	ng/dry g	16.55	0	85	50 - 150%	PASS		
PCB044	NA	14.39	0.05	0.1	ng/dry g	16.55	0	87	50 - 150%	PASS		
PCB049	NA	15.37	0.05	0.1	ng/dry g	16.55	0	93	50 - 150%	PASS		
PCB052	NA	13.9	0.05	0.1	ng/dry g	16.55	0	84	50 - 150%	PASS		
PCB056(060)	NA	15.8	0.1	0.2	ng/dry g	16.5	0	96	50 - 150%	PASS		
PCB066	NA	13.7	0.05	0.1	ng/dry g	16.55	0	83	50 - 150%	PASS		
PCB070	NA	14.47	0.05	0.1	ng/dry g	16.55	0	87	50 - 150%	PASS		
PCB074	NA	14.39	0.05	0.1	ng/dry g	16.55	0	87	50 - 150%	PASS		
PCB077	NA	16.4	0.05	0.1	ng/dry g	16.55	0	99	50 - 150%	PASS		
PCB081	NA	16.15	0.05	0.1	ng/dry g	16.55	0	98	50 - 150%	PASS		
PCB087	NA	14.24	0.05	0.1	ng/dry g	16.55	0	86	50 - 150%	PASS		
PCB095	NA	13.78	0.05	0.1	ng/dry g	16.55	0	83	50 - 150%	PASS		
PCB097	NA	16.19	0.05	0.1	ng/dry g	16.55	0	98	50 - 150%	PASS		
PCB099	NA	14.62	0.05	0.1	ng/dry g	16.55	0	88	50 - 150%	PASS		
PCB101	NA	14.59	0.05	0.1	ng/dry g	16.55	0.07	88	50 - 150%	PASS		
PCB105	NA	15.37	0.05	0.1	ng/dry g	16.55	0	93	50 - 150%	PASS		
PCB110	NA	13.92	0.05	0.1	ng/dry g	16.55	0.07	84	50 - 150%	PASS		
PCB114	NA	14.9	0.05	0.1	ng/dry g	16.55	0	90	50 - 150%	PASS		
PCB118	NA	15.63	0.05	0.1	ng/dry g	16.55	0	94	50 - 150%	PASS		
PCB119	NA	14.73	0.05	0.1	ng/dry g	16.55	0	89	50 - 150%	PASS		
PCB123	NA	15.23	0.05	0.1	ng/dry g	16.55	0	92	50 - 150%	PASS		
PCB126	NA	19.19	0.05	0.1	ng/dry g	16.55	0	116	50 - 150%	PASS		
PCB128	NA	17.87	0.05	0.1	ng/dry g	16.55	0	108	50 - 150%	PASS		
PCB137	NA	15.46	0.05	0.1	ng/dry g	16.55	0	93	50 - 150%	PASS		
PCB138	NA	16.55	0.05	0.1	ng/dry g	16.55	0.24	99	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB141	NA	15.53	0.05	0.1	ng/dry g	16.55	0	94	50 - 150%	PASS		
PCB149	NA	13.67	0.05	0.1	ng/dry g	16.55	0	83	50 - 150%	PASS		
PCB151	NA	15.55	0.05	0.1	ng/dry g	16.55	0	94	50 - 150%	PASS		
PCB153	NA	16.17	0.05	0.1	ng/dry g	16.55	0.19	97	50 - 150%	PASS		
PCB156	NA	20.48	0.05	0.1	ng/dry g	16.55	0	124	50 - 150%	PASS		
PCB157	NA	15.44	0.05	0.1	ng/dry g	16.55	0.08	93	50 - 150%	PASS		
PCB158	NA	16.75	0.05	0.1	ng/dry g	16.55	0.09	101	50 - 150%	PASS		
PCB167	NA	16.13	0.05	0.1	ng/dry g	16.55	0	97	50 - 150%	PASS		
PCB168+132	NA	31.2	0.1	0.2	ng/dry g	33.1	0	94	50 - 150%	PASS		
PCB169	NA	20.94	0.05	0.1	ng/dry g	16.55	0	127	50 - 150%	PASS		
PCB170	NA	18.93	0.05	0.1	ng/dry g	16.55	0	114	50 - 150%	PASS		
PCB174	NA	16.31	0.05	0.1	ng/dry g	16.55	0	99	50 - 150%	PASS		
PCB177	NA	16.82	0.05	0.1	ng/dry g	16.55	0	102	50 - 150%	PASS		
PCB180	NA	18.05	0.05	0.1	ng/dry g	16.55	0	109	50 - 150%	PASS		
PCB183	NA	17.64	0.05	0.1	ng/dry g	16.55	0	107	50 - 150%	PASS		
PCB187	NA	17.08	0.05	0.1	ng/dry g	16.55	0	103	50 - 150%	PASS		
PCB189	NA	22.58	0.05	0.1	ng/dry g	16.55	0	136	50 - 150%	PASS		
PCB194	NA	20.77	0.05	0.1	ng/dry g	16.55	0	125	50 - 150%	PASS		
PCB195	NA	18.35	0.05	0.1	ng/dry g	16.55	0	111	50 - 150%	PASS		
PCB199(200)	NA	13.8	0.1	0.2	ng/dry g	16.5	0	84	50 - 150%	PASS		
PCB201	NA	17.41	0.05	0.1	ng/dry g	16.55	0	105	50 - 150%	PASS		
PCB203	NA	15.38	0.05	0.1	ng/dry g	16.55	0	93	50 - 150%	PASS		
PCB206	NA	20.64	0.05	0.1	ng/dry g	16.55	0	125	50 - 150%	PASS		
PCB209	NA	17.58	0.05	0.1	ng/dry g	16.55	0	106	50 - 150%	PASS		

Sample ID: 31535-MS2

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

PCB003	NA	17.41	0.05	0.1	ng/dry g	17.49	0	100	50 - 150%	PASS	3	30	PASS
PCB005	NA	14.48	0.05	0.1	ng/dry g	17.49	0	83	50 - 150%	PASS	10	30	PASS
PCB008	NA	15.05	0.05	0.1	ng/dry g	17.49	0	86	50 - 150%	PASS	7	30	PASS
PCB015	NA	18.19	0.05	0.1	ng/dry g	17.49	0	104	50 - 150%	PASS	8	30	PASS
PCB018	NA	14.39	0.05	0.1	ng/dry g	17.49	0	82	50 - 150%	PASS	6	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS	PASS	%	LIMITS	PASS	
PCB027	NA	11.91	0.05	0.1	ng/dry g	17.49	0	68	50 - 150%	PASS	5	30	PASS	
PCB028	NA	14.05	0.05	0.1	ng/dry g	17.49	0.07	80	50 - 150%	PASS	0	30	PASS	
PCB029	NA	13.45	0.05	0.1	ng/dry g	17.49	0	77	50 - 150%	PASS	3	30	PASS	
PCB031	NA	17.2	0.05	0.1	ng/dry g	17.49	0.24	97	50 - 150%	PASS	2	30	PASS	
PCB033	NA	16.35	0.05	0.1	ng/dry g	17.49	0	93	50 - 150%	PASS	2	30	PASS	
PCB037	NA	16.51	0.05	0.1	ng/dry g	17.49	0	94	50 - 150%	PASS	10	30	PASS	
PCB044	NA	15.01	0.05	0.1	ng/dry g	17.49	0	86	50 - 150%	PASS	1	30	PASS	
PCB049	NA	15.67	0.05	0.1	ng/dry g	17.49	0	90	50 - 150%	PASS	3	30	PASS	
PCB052	NA	16.35	0.05	0.1	ng/dry g	17.49	0	93	50 - 150%	PASS	10	30	PASS	
PCB056(060)	NA	17.5	0.1	0.2	ng/dry g	17.5	0	100	50 - 150%	PASS	4	30	PASS	
PCB066	NA	16.4	0.05	0.1	ng/dry g	17.49	0	94	50 - 150%	PASS	12	30	PASS	
PCB070	NA	17.28	0.05	0.1	ng/dry g	17.49	0	99	50 - 150%	PASS	13	30	PASS	
PCB074	NA	16.52	0.05	0.1	ng/dry g	17.49	0	94	50 - 150%	PASS	8	30	PASS	
PCB077	NA	17.84	0.05	0.1	ng/dry g	17.49	0	102	50 - 150%	PASS	3	30	PASS	
PCB081	NA	16.96	0.05	0.1	ng/dry g	17.49	0	97	50 - 150%	PASS	1	30	PASS	
PCB087	NA	15.98	0.05	0.1	ng/dry g	17.49	0	91	50 - 150%	PASS	6	30	PASS	
PCB095	NA	14.96	0.05	0.1	ng/dry g	17.49	0	86	50 - 150%	PASS	4	30	PASS	
PCB097	NA	17.44	0.05	0.1	ng/dry g	17.49	0	100	50 - 150%	PASS	2	30	PASS	
PCB099	NA	15.35	0.05	0.1	ng/dry g	17.49	0	88	50 - 150%	PASS	0	30	PASS	
PCB101	NA	16.07	0.05	0.1	ng/dry g	17.49	0.07	91	50 - 150%	PASS	3	30	PASS	
PCB105	NA	16.87	0.05	0.1	ng/dry g	17.49	0	96	50 - 150%	PASS	3	30	PASS	
PCB110	NA	15.5	0.05	0.1	ng/dry g	17.49	0.07	88	50 - 150%	PASS	5	30	PASS	
PCB114	NA	16.16	0.05	0.1	ng/dry g	17.49	0	92	50 - 150%	PASS	2	30	PASS	
PCB118	NA	16.97	0.05	0.1	ng/dry g	17.49	0	97	50 - 150%	PASS	3	30	PASS	
PCB119	NA	15.32	0.05	0.1	ng/dry g	17.49	0	88	50 - 150%	PASS	1	30	PASS	
PCB123	NA	15.54	0.05	0.1	ng/dry g	17.49	0	89	50 - 150%	PASS	3	30	PASS	
PCB126	NA	22.41	0.05	0.1	ng/dry g	17.49	0	128	50 - 150%	PASS	10	30	PASS	
PCB128	NA	19.68	0.05	0.1	ng/dry g	17.49	0	113	50 - 150%	PASS	5	30	PASS	
PCB137	NA	19.05	0.05	0.1	ng/dry g	17.49	0	109	50 - 150%	PASS	16	30	PASS	
PCB138	NA	18.1	0.05	0.1	ng/dry g	17.49	0.24	102	50 - 150%	PASS	3	30	PASS	
PCB141	NA	17.43	0.05	0.1	ng/dry g	17.49	0	100	50 - 150%	PASS	6	30	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS	PASS	%	LIMITS	PASS	
PCB149	NA	14.83	0.05	0.1	ng/dry g	17.49	0	85	50 - 150%	PASS	2	30	PASS	
PCB151	NA	15.98	0.05	0.1	ng/dry g	17.49	0	91	50 - 150%	PASS	3	30	PASS	
PCB153	NA	18.31	0.05	0.1	ng/dry g	17.49	0.19	104	50 - 150%	PASS	7	30	PASS	
PCB156	NA	21.94	0.05	0.1	ng/dry g	17.49	0	125	50 - 150%	PASS	1	30	PASS	
PCB157	NA	18.1	0.05	0.1	ng/dry g	17.49	0.08	103	50 - 150%	PASS	10	30	PASS	
PCB158	NA	18.46	0.05	0.1	ng/dry g	17.49	0.09	105	50 - 150%	PASS	4	30	PASS	
PCB167	NA	19.06	0.05	0.1	ng/dry g	17.49	0	109	50 - 150%	PASS	12	30	PASS	
PCB168+132	NA	32.6	0.1	0.2	ng/dry g	35	0	93	50 - 150%	PASS	1	30	PASS	
PCB169	NA	24.11	0.05	0.1	ng/dry g	17.49	0	138	50 - 150%	PASS	8	30	PASS	
PCB170	NA	21.24	0.05	0.1	ng/dry g	17.49	0	121	50 - 150%	PASS	6	30	PASS	
PCB174	NA	17.41	0.05	0.1	ng/dry g	17.49	0	100	50 - 150%	PASS	1	30	PASS	
PCB177	NA	20.64	0.05	0.1	ng/dry g	17.49	0	118	50 - 150%	PASS	15	30	PASS	
PCB180	NA	20.39	0.05	0.1	ng/dry g	17.49	0	117	50 - 150%	PASS	7	30	PASS	
PCB183	NA	19.12	0.05	0.1	ng/dry g	17.49	0	109	50 - 150%	PASS	2	30	PASS	
PCB187	NA	18.43	0.05	0.1	ng/dry g	17.49	0	105	50 - 150%	PASS	2	30	PASS	
PCB189	NA	24.14	0.05	0.1	ng/dry g	17.49	0	138	50 - 150%	PASS	1	30	PASS	
PCB194	NA	24.13	0.05	0.1	ng/dry g	17.49	0	138	50 - 150%	PASS	10	30	PASS	
PCB195	NA	21.57	0.05	0.1	ng/dry g	17.49	0	123	50 - 150%	PASS	10	30	PASS	
PCB199(200)	NA	16.4	0.1	0.2	ng/dry g	17.5	0	94	50 - 150%	PASS	11	30	PASS	
PCB201	NA	18.27	0.05	0.1	ng/dry g	17.49	0	104	50 - 150%	PASS	1	30	PASS	
PCB203	NA	17.44	0.05	0.1	ng/dry g	17.49	0	100	50 - 150%	PASS	7	30	PASS	
PCB206	NA	23.09	0.05	0.1	ng/dry g	17.49	0	132	50 - 150%	PASS	5	30	PASS	
PCB209	NA	19.71	0.05	0.1	ng/dry g	17.49	0	113	50 - 150%	PASS	6	30	PASS	

Sample ID: 31535-R2

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 30-May-15

PCB003	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB005	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB008	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB015	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB018	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB027	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB028	NA	ND	0.05	0.1	ng/dry g			89	30	FAIL	H,SL	
PCB029	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB031	NA	0.32	0.05	0.1	ng/dry g			72	30	FAIL	H,SL	
PCB033	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB037	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB044	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB049	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB052	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB056(060)	NA	ND	0.1	0.2	ng/dry g			0	30	PASS	H	
PCB066	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB070	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB074	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB077	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB081	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB087	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB095	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB097	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB099	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB101	NA	0.14	0.05	0.1	ng/dry g			95	30	FAIL	H,SL	
PCB105	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB110	NA	0.13	0.05	0.1	ng/dry g			89	30	FAIL	H,SL	
PCB114	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB118	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB119	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB123	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB126	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB128	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB137	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB138	NA	0.24	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB141	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB149	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB151	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB153	NA	0.14	0.05	0.1	ng/dry g					53	30	FAIL	H,SL
PCB156	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB157	NA	0.17	0.05	0.1	ng/dry g					109	30	FAIL	H,SL
PCB158	NA	ND	0.05	0.1	ng/dry g					117	30	FAIL	H,SL
PCB167	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g					0	30	PASS	H
PCB169	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB170	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB174	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB177	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB180	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB183	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB187	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB189	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB194	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB195	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB199(200)	NA	ND	0.1	0.2	ng/dry g					0	30	PASS	H
PCB201	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB203	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB206	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PCB209	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H

Sample ID: 31536-MS1

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 31-May-15

PCB003	NA	23.48	0.05	0.1	ng/dry g	22.51	0	104	50 - 150%	PASS
PCB005	NA	15.79	0.05	0.1	ng/dry g	22.51	0	70	50 - 150%	PASS
PCB008	NA	20.59	0.05	0.1	ng/dry g	22.51	0	91	50 - 150%	PASS
PCB015	NA	22.95	0.05	0.1	ng/dry g	22.51	0	102	50 - 150%	PASS
PCB018	NA	18.84	0.05	0.1	ng/dry g	22.51	0	84	50 - 150%	PASS
PCB027	NA	16.17	0.05	0.1	ng/dry g	22.51	0	72	50 - 150%	PASS
PCB028	NA	18.09	0.05	0.1	ng/dry g	22.51	0	80	50 - 150%	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB029	NA	17.7	0.05	0.1	ng/dry g	22.51	0	79	50 - 150%	PASS		
PCB031	NA	22.89	0.05	0.1	ng/dry g	22.51	0	102	50 - 150%	PASS		
PCB033	NA	20.67	0.05	0.1	ng/dry g	22.51	0	92	50 - 150%	PASS		
PCB037	NA	20.65	0.05	0.1	ng/dry g	22.51	0	92	50 - 150%	PASS		
PCB044	NA	19.52	0.05	0.1	ng/dry g	22.51	0	87	50 - 150%	PASS		
PCB049	NA	20.65	0.05	0.1	ng/dry g	22.51	0	92	50 - 150%	PASS		
PCB052	NA	19.9	0.05	0.1	ng/dry g	22.51	0.17	88	50 - 150%	PASS		
PCB056(060)	NA	23	0.1	0.2	ng/dry g	22.5	0	102	50 - 150%	PASS		
PCB066	NA	20.27	0.05	0.1	ng/dry g	22.51	0.25	89	50 - 150%	PASS		
PCB070	NA	21.28	0.05	0.1	ng/dry g	22.51	0	95	50 - 150%	PASS		
PCB074	NA	21.47	0.05	0.1	ng/dry g	22.51	0	95	50 - 150%	PASS		
PCB077	NA	21.59	0.05	0.1	ng/dry g	22.51	0	96	50 - 150%	PASS		
PCB081	NA	21.23	0.05	0.1	ng/dry g	22.51	0	94	50 - 150%	PASS		
PCB087	NA	19.22	0.05	0.1	ng/dry g	22.51	0	85	50 - 150%	PASS		
PCB095	NA	19.9	0.05	0.1	ng/dry g	22.51	0	88	50 - 150%	PASS		
PCB097	NA	22.54	0.05	0.1	ng/dry g	22.51	0.57	98	50 - 150%	PASS		
PCB099	NA	21.11	0.05	0.1	ng/dry g	22.51	0.26	93	50 - 150%	PASS		
PCB101	NA	20.77	0.05	0.1	ng/dry g	22.51	0.2	91	50 - 150%	PASS		
PCB105	NA	20.5	0.05	0.1	ng/dry g	22.51	0	91	50 - 150%	PASS		
PCB110	NA	20.18	0.05	0.1	ng/dry g	22.51	0.15	89	50 - 150%	PASS		
PCB114	NA	19.75	0.05	0.1	ng/dry g	22.51	0	88	50 - 150%	PASS		
PCB118	NA	21.48	0.05	0.1	ng/dry g	22.51	0	95	50 - 150%	PASS		
PCB119	NA	19.12	0.05	0.1	ng/dry g	22.51	0	85	50 - 150%	PASS		
PCB123	NA	20.58	0.05	0.1	ng/dry g	22.51	0	91	50 - 150%	PASS		
PCB126	NA	26.45	0.05	0.1	ng/dry g	22.51	0	118	50 - 150%	PASS		
PCB128	NA	24.28	0.05	0.1	ng/dry g	22.51	0	108	50 - 150%	PASS		
PCB137	NA	22.99	0.05	0.1	ng/dry g	22.51	0	102	50 - 150%	PASS		
PCB138	NA	22.15	0.05	0.1	ng/dry g	22.51	0.27	97	50 - 150%	PASS		
PCB141	NA	21	0.05	0.1	ng/dry g	22.51	0.19	92	50 - 150%	PASS		
PCB149	NA	18.44	0.05	0.1	ng/dry g	22.51	0.41	80	50 - 150%	PASS		
PCB151	NA	23.15	0.05	0.1	ng/dry g	22.51	0	103	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB153	NA	24.47	0.05	0.1	ng/dry g	22.51	0.68	106	50 - 150%	PASS		
PCB156	NA	26.86	0.05	0.1	ng/dry g	22.51	0	119	50 - 150%	PASS		
PCB157	NA	20.85	0.05	0.1	ng/dry g	22.51	0	93	50 - 150%	PASS		
PCB158	NA	22.61	0.05	0.1	ng/dry g	22.51	0.2	100	50 - 150%	PASS		
PCB167	NA	23.28	0.05	0.1	ng/dry g	22.51	0	103	50 - 150%	PASS		
PCB168+132	NA	41.5	0.1	0.2	ng/dry g	45	0	92	50 - 150%	PASS		
PCB169	NA	28.41	0.05	0.1	ng/dry g	22.51	0	126	50 - 150%	PASS		
PCB170	NA	23.95	0.05	0.1	ng/dry g	22.51	0	106	50 - 150%	PASS		
PCB174	NA	19.24	0.05	0.1	ng/dry g	22.51	0.18	85	50 - 150%	PASS		
PCB177	NA	22.42	0.05	0.1	ng/dry g	22.51	0	100	50 - 150%	PASS		
PCB180	NA	24.54	0.05	0.1	ng/dry g	22.51	0	109	50 - 150%	PASS		
PCB183	NA	24.1	0.05	0.1	ng/dry g	22.51	0	107	50 - 150%	PASS		
PCB187	NA	23.9	0.05	0.1	ng/dry g	22.51	0.31	105	50 - 150%	PASS		
PCB189	NA	28.89	0.05	0.1	ng/dry g	22.51	0	128	50 - 150%	PASS		
PCB194	NA	26.9	0.05	0.1	ng/dry g	22.51	0	120	50 - 150%	PASS		
PCB195	NA	25.37	0.05	0.1	ng/dry g	22.51	0	113	50 - 150%	PASS		
PCB199(200)	NA	20.1	0.1	0.2	ng/dry g	22.5	0	89	50 - 150%	PASS		
PCB201	NA	22.57	0.05	0.1	ng/dry g	22.51	0	100	50 - 150%	PASS		
PCB203	NA	22.05	0.05	0.1	ng/dry g	22.51	0	98	50 - 150%	PASS		
PCB206	NA	26.16	0.05	0.1	ng/dry g	22.51	0	116	50 - 150%	PASS		
PCB209	NA	21.38	0.05	0.1	ng/dry g	22.51	0	95	50 - 150%	PASS		

Sample ID: 31536-MS2

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	27.17	0.05	0.1	ng/dry g	25.24	0	108	50 - 150%	PASS	4	30	PASS
PCB005	NA	19.84	0.05	0.1	ng/dry g	25.24	0	79	50 - 150%	PASS	12	30	PASS
PCB008	NA	28.48	0.05	0.1	ng/dry g	25.24	0	113	50 - 150%	PASS	22	30	PASS
PCB015	NA	27.9	0.05	0.1	ng/dry g	25.24	0	111	50 - 150%	PASS	8	30	PASS
PCB018	NA	22.27	0.05	0.1	ng/dry g	25.24	0	88	50 - 150%	PASS	5	30	PASS
PCB027	NA	18.29	0.05	0.1	ng/dry g	25.24	0	72	50 - 150%	PASS	0	30	PASS
PCB028	NA	21.34	0.05	0.1	ng/dry g	25.24	0	85	50 - 150%	PASS	6	30	PASS
PCB029	NA	22.22	0.05	0.1	ng/dry g	25.24	0	88	50 - 150%	PASS	11	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB031	NA	27.65	0.05	0.1	ng/dry g	25.24	0	110	50 - 150%	PASS	8	30	PASS
PCB033	NA	23.55	0.05	0.1	ng/dry g	25.24	0	93	50 - 150%	PASS	1	30	PASS
PCB037	NA	23.63	0.05	0.1	ng/dry g	25.24	0	94	50 - 150%	PASS	2	30	PASS
PCB044	NA	22.29	0.05	0.1	ng/dry g	25.24	0	88	50 - 150%	PASS	1	30	PASS
PCB049	NA	22.8	0.05	0.1	ng/dry g	25.24	0	90	50 - 150%	PASS	2	30	PASS
PCB052	NA	24.07	0.05	0.1	ng/dry g	25.24	0.17	95	50 - 150%	PASS	8	30	PASS
PCB056(060)	NA	24.3	0.1	0.2	ng/dry g	25.2	0	96	50 - 150%	PASS	6	30	PASS
PCB066	NA	23.5	0.05	0.1	ng/dry g	25.24	0.25	92	50 - 150%	PASS	3	30	PASS
PCB070	NA	23.81	0.05	0.1	ng/dry g	25.24	0	94	50 - 150%	PASS	1	30	PASS
PCB074	NA	24.24	0.05	0.1	ng/dry g	25.24	0	96	50 - 150%	PASS	1	30	PASS
PCB077	NA	23.93	0.05	0.1	ng/dry g	25.24	0	95	50 - 150%	PASS	1	30	PASS
PCB081	NA	23.45	0.05	0.1	ng/dry g	25.24	0	93	50 - 150%	PASS	1	30	PASS
PCB087	NA	22.71	0.05	0.1	ng/dry g	25.24	0	90	50 - 150%	PASS	6	30	PASS
PCB095	NA	22.57	0.05	0.1	ng/dry g	25.24	0	89	50 - 150%	PASS	1	30	PASS
PCB097	NA	24.88	0.05	0.1	ng/dry g	25.24	0.57	96	50 - 150%	PASS	2	30	PASS
PCB099	NA	24.96	0.05	0.1	ng/dry g	25.24	0.26	98	50 - 150%	PASS	5	30	PASS
PCB101	NA	24.22	0.05	0.1	ng/dry g	25.24	0.2	95	50 - 150%	PASS	4	30	PASS
PCB105	NA	23.22	0.05	0.1	ng/dry g	25.24	0	92	50 - 150%	PASS	1	30	PASS
PCB110	NA	22.99	0.05	0.1	ng/dry g	25.24	0.15	90	50 - 150%	PASS	1	30	PASS
PCB114	NA	22.82	0.05	0.1	ng/dry g	25.24	0	90	50 - 150%	PASS	2	30	PASS
PCB118	NA	23.46	0.05	0.1	ng/dry g	25.24	0	93	50 - 150%	PASS	2	30	PASS
PCB119	NA	23.21	0.05	0.1	ng/dry g	25.24	0	92	50 - 150%	PASS	8	30	PASS
PCB123	NA	22.74	0.05	0.1	ng/dry g	25.24	0	90	50 - 150%	PASS	1	30	PASS
PCB126	NA	29.25	0.05	0.1	ng/dry g	25.24	0	116	50 - 150%	PASS	2	30	PASS
PCB128	NA	27.5	0.05	0.1	ng/dry g	25.24	0	109	50 - 150%	PASS	1	30	PASS
PCB137	NA	28.12	0.05	0.1	ng/dry g	25.24	0	111	50 - 150%	PASS	8	30	PASS
PCB138	NA	24.42	0.05	0.1	ng/dry g	25.24	0.27	96	50 - 150%	PASS	1	30	PASS
PCB141	NA	23.71	0.05	0.1	ng/dry g	25.24	0.19	93	50 - 150%	PASS	1	30	PASS
PCB149	NA	20.34	0.05	0.1	ng/dry g	25.24	0.41	79	50 - 150%	PASS	1	30	PASS
PCB151	NA	24.03	0.05	0.1	ng/dry g	25.24	0	95	50 - 150%	PASS	8	30	PASS
PCB153	NA	26.15	0.05	0.1	ng/dry g	25.24	0.68	101	50 - 150%	PASS	5	30	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS		%	LIMITS		
PCB156	NA	27.82	0.05	0.1	ng/dry g	25.24	0	110	50 - 150%	PASS	8	30	PASS	
PCB157	NA	23.92	0.05	0.1	ng/dry g	25.24	0	95	50 - 150%	PASS	2	30	PASS	
PCB158	NA	25.47	0.05	0.1	ng/dry g	25.24	0.2	100	50 - 150%	PASS	0	30	PASS	
PCB167	NA	24.77	0.05	0.1	ng/dry g	25.24	0	98	50 - 150%	PASS	5	30	PASS	
PCB168+132	NA	44.5	0.1	0.2	ng/dry g	50.5	0	88	50 - 150%	PASS	4	30	PASS	
PCB169	NA	30.02	0.05	0.1	ng/dry g	25.24	0	119	50 - 150%	PASS	6	30	PASS	
PCB170	NA	26.86	0.05	0.1	ng/dry g	25.24	0	106	50 - 150%	PASS	0	30	PASS	
PCB174	NA	25.08	0.05	0.1	ng/dry g	25.24	0.18	99	50 - 150%	PASS	15	30	PASS	
PCB177	NA	24.68	0.05	0.1	ng/dry g	25.24	0	98	50 - 150%	PASS	2	30	PASS	
PCB180	NA	27.16	0.05	0.1	ng/dry g	25.24	0	108	50 - 150%	PASS	1	30	PASS	
PCB183	NA	26.75	0.05	0.1	ng/dry g	25.24	0	106	50 - 150%	PASS	1	30	PASS	
PCB187	NA	25.61	0.05	0.1	ng/dry g	25.24	0.31	100	50 - 150%	PASS	5	30	PASS	
PCB189	NA	29.63	0.05	0.1	ng/dry g	25.24	0	117	50 - 150%	PASS	9	30	PASS	
PCB194	NA	28.75	0.05	0.1	ng/dry g	25.24	0	114	50 - 150%	PASS	5	30	PASS	
PCB195	NA	27	0.05	0.1	ng/dry g	25.24	0	107	50 - 150%	PASS	5	30	PASS	
PCB199(200)	NA	21.6	0.1	0.2	ng/dry g	25.2	0	86	50 - 150%	PASS	3	30	PASS	
PCB201	NA	24.51	0.05	0.1	ng/dry g	25.24	0	97	50 - 150%	PASS	3	30	PASS	
PCB203	NA	23.31	0.05	0.1	ng/dry g	25.24	0	92	50 - 150%	PASS	6	30	PASS	
PCB206	NA	29.23	0.05	0.1	ng/dry g	25.24	0	116	50 - 150%	PASS	0	30	PASS	
PCB209	NA	26.81	0.05	0.1	ng/dry g	25.24	0	106	50 - 150%	PASS	11	30	PASS	

Sample ID: 31536-R2

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

PCB003	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB005	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB008	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB015	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB018	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB027	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB028	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB029	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PCB031	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB033	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB037	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB044	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB049	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB052	NA	0.34	0.05	0.1	ng/dry g			149	30	FAIL	H,SL	
PCB056(060)	NA	ND	0.1	0.2	ng/dry g			0	30	PASS	H	
PCB066	NA	0.35	0.05	0.1	ng/dry g			75	30	FAIL	H,SL	
PCB070	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB074	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB077	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB081	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB087	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB095	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB097	NA	0.49	0.05	0.1	ng/dry g			28	30	PASS	H	
PCB099	NA	0.52	0.05	0.1	ng/dry g			165	30	FAIL	H,SL	
PCB101	NA	0.39	0.05	0.1	ng/dry g			155	30	FAIL	H,SL	
PCB105	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB110	NA	0.3	0.05	0.1	ng/dry g			143	30	FAIL	H,SL	
PCB114	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB118	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB119	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB123	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB126	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB128	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB137	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB138	NA	0.55	0.05	0.1	ng/dry g			167	30	FAIL	H,SL	
PCB141	NA	0.39	0.05	0.1	ng/dry g			155	30	FAIL	H,SL	
PCB149	NA	0.37	0.05	0.1	ng/dry g			20	30	PASS	H	
PCB151	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB153	NA	0.6	0.05	0.1	ng/dry g			25	30	PASS	H	
PCB156	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB157	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB158	NA	0.39	0.05	0.1	ng/dry g			155	30	FAIL	H,SL	
PCB167	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB168+132	NA	ND	0.1	0.2	ng/dry g			0	30	PASS	H	
PCB169	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB170	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB174	NA	ND	0.05	0.1	ng/dry g			152	30	FAIL	H,SL	
PCB177	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB180	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB183	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB187	NA	0.62	0.05	0.1	ng/dry g			170	30	FAIL	H,SL	
PCB189	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB194	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB195	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB199(200)	NA	ND	0.1	0.2	ng/dry g			0	30	PASS	H	
PCB201	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB203	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB206	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	
PCB209	NA	ND	0.05	0.1	ng/dry g			0	30	PASS	H	



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31515-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 03-Jun-15

(DFPBDE)	NA	104			% Recovery	100		104	50 - 150%	PASS
(FTBDE)	NA	96			% Recovery	100		96	50 - 150%	PASS
PBDE017	NA	ND	0.05	0.1	ng/dry g					
PBDE028	NA	ND	0.05	0.1	ng/dry g					
PBDE047	NA	ND	0.05	0.1	ng/dry g					
PBDE049	NA	ND	0.05	0.1	ng/dry g					
PBDE066	NA	ND	0.05	0.1	ng/dry g					
PBDE071	NA	ND	0.05	0.1	ng/dry g					
PBDE085	NA	ND	0.05	0.1	ng/dry g					
PBDE099	NA	ND	0.05	0.1	ng/dry g					
PBDE100	NA	ND	0.05	0.1	ng/dry g					
PBDE138	NA	ND	0.05	0.1	ng/dry g					
PBDE153	NA	ND	0.05	0.1	ng/dry g					
PBDE154	NA	ND	0.05	0.1	ng/dry g					
PBDE183	NA	ND	0.05	0.1	ng/dry g					
PBDE190	NA	ND	0.05	0.1	ng/dry g					
PBDE209	NA	ND	0.05	0.1	ng/dry g					

Sample ID: 31515-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 03-Jun-15

(DFPBDE)	NA	107			% Recovery	100	0	107	50 - 150%	PASS
(FTBDE)	NA	77			% Recovery	100	0	77	50 - 150%	PASS
PBDE017	NA	99.63	0.05	0.1	ng/dry g	100	0	100	50 - 150%	PASS
PBDE028	NA	111.92	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS
PBDE047	NA	106.14	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS
PBDE049	NA	87.94	0.05	0.1	ng/dry g	100	0	88	50 - 150%	PASS
PBDE066	NA	101.7	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS
PBDE071	NA	103.7	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS
PBDE085	NA	118.77	0.05	0.1	ng/dry g	100	0	119	50 - 150%	PASS



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE099	NA	114.39	0.05	0.1	ng/dry g	100	0	114	50 - 150%	PASS		
PBDE100	NA	110.13	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS		
PBDE138	NA	111.71	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS		
PBDE153	NA	110.47	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS		
PBDE154	NA	114.6	0.05	0.1	ng/dry g	100	0	115	50 - 150%	PASS		
PBDE183	NA	112.01	0.05	0.1	ng/dry g	100	0	112	50 - 150%	PASS		
PBDE190	NA	99.13	0.05	0.1	ng/dry g	100	0	99	50 - 150%	PASS		
PBDE209	NA	574.23	0.05	0.1	ng/dry g	500	0	115	50 - 150%	PASS		

Sample ID: 31515-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 03-Jun-15

(DFPBDE)	NA	106			% Recovery	100	0	106	50 - 150%	PASS	1	30	PASS
(FTBDE)	NA	76			% Recovery	100	0	76	50 - 150%	PASS	1	30	PASS
PBDE017	NA	104.76	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	5	30	PASS
PBDE028	NA	98.74	0.05	0.1	ng/dry g	100	0	99	50 - 150%	PASS	12	30	PASS
PBDE047	NA	105.4	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	1	30	PASS
PBDE049	NA	89	0.05	0.1	ng/dry g	100	0	89	50 - 150%	PASS	1	30	PASS
PBDE066	NA	105.77	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS	4	30	PASS
PBDE071	NA	109.68	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	6	30	PASS
PBDE085	NA	117.61	0.05	0.1	ng/dry g	100	0	118	50 - 150%	PASS	1	30	PASS
PBDE099	NA	113.75	0.05	0.1	ng/dry g	100	0	114	50 - 150%	PASS	0	30	PASS
PBDE100	NA	107.61	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS	2	30	PASS
PBDE138	NA	110.09	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	2	30	PASS
PBDE153	NA	113.46	0.05	0.1	ng/dry g	100	0	113	50 - 150%	PASS	3	30	PASS
PBDE154	NA	117.4	0.05	0.1	ng/dry g	100	0	117	50 - 150%	PASS	2	30	PASS
PBDE183	NA	113.5	0.05	0.1	ng/dry g	100	0	113	50 - 150%	PASS	2	30	PASS
PBDE190	NA	108.41	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS	9	30	PASS
PBDE209	NA	573.08	0.05	0.1	ng/dry g	500	0	115	50 - 150%	PASS	0	30	PASS

Sample ID: 31516-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	108			% Recovery	100		108	50 - 150%	PASS			
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CA ELAP #2769

PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(FTBDE)	NA	93			% Recovery	100		93	50 - 150%	PASS		
PBDE017	NA	ND	0.05	0.1	ng/dry g							
PBDE028	NA	ND	0.05	0.1	ng/dry g							
PBDE047	NA	ND	0.05	0.1	ng/dry g							
PBDE049	NA	ND	0.05	0.1	ng/dry g							
PBDE066	NA	ND	0.05	0.1	ng/dry g							
PBDE071	NA	ND	0.05	0.1	ng/dry g							
PBDE085	NA	ND	0.05	0.1	ng/dry g							
PBDE099	NA	ND	0.05	0.1	ng/dry g							
PBDE100	NA	ND	0.05	0.1	ng/dry g							
PBDE138	NA	ND	0.05	0.1	ng/dry g							
PBDE153	NA	ND	0.05	0.1	ng/dry g							
PBDE154	NA	ND	0.05	0.1	ng/dry g							
PBDE183	NA	ND	0.05	0.1	ng/dry g							
PBDE190	NA	ND	0.05	0.1	ng/dry g							
PBDE209	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31516-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	108			% Recovery	100	0	108	50 - 150%	PASS
(FTBDE)	NA	85			% Recovery	100	0	85	50 - 150%	PASS
PBDE017	NA	92.83	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS
PBDE028	NA	102.65	0.05	0.1	ng/dry g	100	0	103	50 - 150%	PASS
PBDE047	NA	109.33	0.05	0.1	ng/dry g	100	0	109	50 - 150%	PASS
PBDE049	NA	76.38	0.05	0.1	ng/dry g	100	0	76	50 - 150%	PASS
PBDE066	NA	106.23	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS
PBDE071	NA	101.52	0.05	0.1	ng/dry g	100	0	102	50 - 150%	PASS
PBDE085	NA	97.83	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS
PBDE099	NA	104.03	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS
PBDE100	NA	106.17	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS
PBDE138	NA	96.21	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS
PBDE153	NA	95.34	0.05	0.1	ng/dry g	100	0	95	50 - 150%	PASS



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE154	NA	97.89	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS		
PBDE183	NA	90.04	0.05	0.1	ng/dry g	100	0	90	50 - 150%	PASS		
PBDE190	NA	79.63	0.05	0.1	ng/dry g	100	0	80	50 - 150%	PASS		
PBDE209	NA	107.51	0.05	0.1	ng/dry g	500	0	22	50 - 150%	FAIL		5

Sample ID: 31516-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	103			% Recovery	100	0	103	50 - 150%	PASS	5	30	PASS
(FTBDE)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	9	30	PASS
PBDE017	NA	86.16	0.05	0.1	ng/dry g	100	0	86	50 - 150%	PASS	8	30	PASS
PBDE028	NA	105.06	0.05	0.1	ng/dry g	100	0	105	50 - 150%	PASS	2	30	PASS
PBDE047	NA	109.71	0.05	0.1	ng/dry g	100	0	110	50 - 150%	PASS	1	30	PASS
PBDE049	NA	92.87	0.05	0.1	ng/dry g	100	0	93	50 - 150%	PASS	20	30	PASS
PBDE066	NA	107.83	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS	2	30	PASS
PBDE071	NA	96.18	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	6	30	PASS
PBDE085	NA	96.49	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	2	30	PASS
PBDE099	NA	106.3	0.05	0.1	ng/dry g	100	0	106	50 - 150%	PASS	2	30	PASS
PBDE100	NA	108.11	0.05	0.1	ng/dry g	100	0	108	50 - 150%	PASS	2	30	PASS
PBDE138	NA	103.72	0.05	0.1	ng/dry g	100	0	104	50 - 150%	PASS	8	30	PASS
PBDE153	NA	96	0.05	0.1	ng/dry g	100	0	96	50 - 150%	PASS	1	30	PASS
PBDE154	NA	98.1	0.05	0.1	ng/dry g	100	0	98	50 - 150%	PASS	0	30	PASS
PBDE183	NA	93.89	0.05	0.1	ng/dry g	100	0	94	50 - 150%	PASS	4	30	PASS
PBDE190	NA	87.5	0.05	0.1	ng/dry g	100	0	88	50 - 150%	PASS	10	30	PASS
PBDE209	NA	94.62	0.05	0.1	ng/dry g	500	0	19	50 - 150%	FAIL	15	30	PASS

Sample ID: 31519-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 18-Jun-15

PBDE047	NA	1.7	0.05	0.1	ng/dry g	1.72		99	60 - 140%	PASS			
PBDE099	NA	1.48	0.05	0.1	ng/dry g	2		74	60 - 140%	PASS			
PBDE100	NA	0.58	0.05	0.1	ng/dry g	0.4		145	60 - 140%	FAIL			R
PBDE153	NA	4.94	0.05	0.1	ng/dry g	6.44		77	60 - 140%	PASS			
PBDE154	NA	0.99	0.05	0.1	ng/dry g	1.06		93	60 - 140%	PASS			



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE183	NA	25.72	0.05	0.1	ng/dry g	31.8		81	60 - 140%	PASS		
PBDE209	NA	45.79	0.05	0.1	ng/dry g	93.5		49	60 - 140%	FAIL		5

Sample ID: 31520-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

PBDE047	NA	1.7	0.05	0.1	ng/dry g	1.72		99	60 - 140%	PASS		
PBDE099	NA	2.09	0.05	0.1	ng/dry g	2		104	60 - 140%	PASS		
PBDE100	NA	0.45	0.05	0.1	ng/dry g	0.4		112	60 - 140%	PASS		
PBDE153	NA	6.03	0.05	0.1	ng/dry g	6.44		94	60 - 140%	PASS		
PBDE154	NA	1.12	0.05	0.1	ng/dry g	1.06		106	60 - 140%	PASS		
PBDE183	NA	27.21	0.05	0.1	ng/dry g	31.8		86	60 - 140%	PASS		
PBDE209	NA	43.42	0.05	0.1	ng/dry g	93.5		46	60 - 140%	FAIL		5

Sample ID: 31535-MS1

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 03-Jun-15

(DFPBDE)	NA	100				% Recovery	100	0	100	70 - 130%	PASS	
(FTBDE)	NA	82				% Recovery	100	0	82	70 - 130%	PASS	
PBDE017	NA	18.72	0.05	0.1	ng/dry g	16.55	0	113	70 - 130%	PASS		
PBDE028	NA	15.46	0.05	0.1	ng/dry g	16.55	0	93	70 - 130%	PASS		
PBDE047	NA	16.14	0.05	0.1	ng/dry g	16.55	0.15	97	70 - 130%	PASS		
PBDE049	NA	13.94	0.05	0.1	ng/dry g	16.55	0	84	70 - 130%	PASS		
PBDE066	NA	16.24	0.05	0.1	ng/dry g	16.55	0	98	70 - 130%	PASS		
PBDE071	NA	15.88	0.05	0.1	ng/dry g	16.55	0	96	70 - 130%	PASS		
PBDE085	NA	17.88	0.05	0.1	ng/dry g	16.55	0	108	70 - 130%	PASS		
PBDE099	NA	17.4	0.05	0.1	ng/dry g	16.55	0.13	104	70 - 130%	PASS		
PBDE100	NA	17.18	0.05	0.1	ng/dry g	16.55	0	104	70 - 130%	PASS		
PBDE138	NA	19.68	0.05	0.1	ng/dry g	16.55	0	119	70 - 130%	PASS		
PBDE153	NA	18.5	0.05	0.1	ng/dry g	16.55	0	112	70 - 130%	PASS		
PBDE154	NA	17.91	0.05	0.1	ng/dry g	16.55	0	108	70 - 130%	PASS		
PBDE183	NA	17.78	0.05	0.1	ng/dry g	16.55	0	107	70 - 130%	PASS		
PBDE190	NA	18.15	0.05	0.1	ng/dry g	16.55	0	110	70 - 130%	PASS		
PBDE209	NA	59.8	0.05	0.1	ng/dry g	82.75	0	72	70 - 130%	PASS		



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31535-MS2		SWHB-18			Matrix: Sediment			Sampled: 08-Apr-14 9:53			Received: 27-Apr-15			
		Method: EPA 8270D-NCI			Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 03-Jun-15			
(DFPBDE)	NA	101			% Recovery	100	0	101	70 - 130%	PASS	1	30	PASS	
(FTBDE)	NA	96			% Recovery	100	0	96	70 - 130%	PASS	16	30	PASS	
PBDE017	NA	19.52	0.05	0.1	ng/dry g	17.49	0	112	70 - 130%	PASS	1	30	PASS	
PBDE028	NA	17.56	0.05	0.1	ng/dry g	17.49	0	100	70 - 130%	PASS	7	30	PASS	
PBDE047	NA	17.22	0.05	0.1	ng/dry g	17.49	0.15	98	70 - 130%	PASS	1	30	PASS	
PBDE049	NA	13.82	0.05	0.1	ng/dry g	17.49	0	79	70 - 130%	PASS	6	30	PASS	
PBDE066	NA	17.4	0.05	0.1	ng/dry g	17.49	0	99	70 - 130%	PASS	1	30	PASS	
PBDE071	NA	17.06	0.05	0.1	ng/dry g	17.49	0	98	70 - 130%	PASS	2	30	PASS	
PBDE085	NA	17.4	0.05	0.1	ng/dry g	17.49	0	99	70 - 130%	PASS	9	30	PASS	
PBDE099	NA	16.87	0.05	0.1	ng/dry g	17.49	0.13	96	70 - 130%	PASS	8	30	PASS	
PBDE100	NA	17.09	0.05	0.1	ng/dry g	17.49	0	98	70 - 130%	PASS	6	30	PASS	
PBDE138	NA	17.45	0.05	0.1	ng/dry g	17.49	0	100	70 - 130%	PASS	17	30	PASS	
PBDE153	NA	16.17	0.05	0.1	ng/dry g	17.49	0	92	70 - 130%	PASS	20	30	PASS	
PBDE154	NA	17.33	0.05	0.1	ng/dry g	17.49	0	99	70 - 130%	PASS	9	30	PASS	
PBDE183	NA	14.99	0.05	0.1	ng/dry g	17.49	0	86	70 - 130%	PASS	22	30	PASS	
PBDE190	NA	14.46	0.05	0.1	ng/dry g	17.49	0	83	70 - 130%	PASS	28	30	PASS	
PBDE209	NA	38.89	0.05	0.1	ng/dry g	87.45	0	44	70 - 130%	FAIL	48	30	FAIL	5

Sample ID: 31535-R2		SWHB-18			Matrix: Sediment			Sampled: 08-Apr-14 9:53			Received: 27-Apr-15			
		Method: EPA 8270D-NCI			Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 04-Jun-15			
(DFPBDE)	NA	87			% Recovery	100		87	50 - 150%	PASS	6	30	PASS	H
(FTBDE)	NA	67			% Recovery	100		67	50 - 150%	PASS	5	30	PASS	H
PBDE017	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PBDE028	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PBDE047	NA	0.17	0.05	0.1	ng/dry g						27	30	PASS	H
PBDE049	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PBDE066	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PBDE071	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H
PBDE085	NA	ND	0.05	0.1	ng/dry g						0	30	PASS	H



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PBDE099	NA	0.14	0.05	0.1	ng/dry g					7	30	PASS	H
PBDE100	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE138	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE153	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE154	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE183	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE190	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE209	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H

Sample ID: 31536-MS1

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	108			% Recovery	100	0	108	70 - 130%	PASS		
(FTBDE)	NA	76			% Recovery	100	0	76	70 - 130%	PASS		
PBDE017	NA	21.73	0.05	0.1	ng/dry g	22.51	0	97	70 - 130%	PASS		
PBDE028	NA	24.82	0.05	0.1	ng/dry g	22.51	0	110	70 - 130%	PASS		
PBDE047	NA	23.62	0.05	0.1	ng/dry g	22.51	0.2	104	70 - 130%	PASS		
PBDE049	NA	20.13	0.05	0.1	ng/dry g	22.51	0	89	70 - 130%	PASS		
PBDE066	NA	24.32	0.05	0.1	ng/dry g	22.51	0	108	70 - 130%	PASS		
PBDE071	NA	23.86	0.05	0.1	ng/dry g	22.51	0	106	70 - 130%	PASS		
PBDE085	NA	25.78	0.05	0.1	ng/dry g	22.51	0	115	70 - 130%	PASS		
PBDE099	NA	25.92	0.05	0.1	ng/dry g	22.51	0.27	114	70 - 130%	PASS		
PBDE100	NA	25.85	0.05	0.1	ng/dry g	22.51	0	115	70 - 130%	PASS		
PBDE138	NA	25.94	0.05	0.1	ng/dry g	22.51	0.08	115	70 - 130%	PASS		
PBDE153	NA	27.56	0.05	0.1	ng/dry g	22.51	0.07	122	70 - 130%	PASS		
PBDE154	NA	25.68	0.05	0.1	ng/dry g	22.51	0.08	114	70 - 130%	PASS		
PBDE183	NA	25.42	0.05	0.1	ng/dry g	22.51	0	113	70 - 130%	PASS		
PBDE190	NA	20.36	0.05	0.1	ng/dry g	22.51	0	90	70 - 130%	PASS		
PBDE209	NA	12.34	0.05	0.1	ng/dry g	112.55	0	11	70 - 130%	FAIL		5

Sample ID: 31536-MS2

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	103			% Recovery	100	0	103	70 - 130%	PASS	5	30	PASS
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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(FTBDE)	NA	74			% Recovery	100	0	74	70 - 130%	PASS	3 30	PASS
PBDE017	NA	22.38	0.05	0.1	ng/dry g	25.24	0	89	70 - 130%	PASS	9 30	PASS
PBDE028	NA	24.06	0.05	0.1	ng/dry g	25.24	0	95	70 - 130%	PASS	15 30	PASS
PBDE047	NA	26.6	0.05	0.1	ng/dry g	25.24	0.2	105	70 - 130%	PASS	1 30	PASS
PBDE049	NA	21.41	0.05	0.1	ng/dry g	25.24	0	85	70 - 130%	PASS	5 30	PASS
PBDE066	NA	25.21	0.05	0.1	ng/dry g	25.24	0	100	70 - 130%	PASS	8 30	PASS
PBDE071	NA	26.68	0.05	0.1	ng/dry g	25.24	0	106	70 - 130%	PASS	0 30	PASS
PBDE085	NA	27.23	0.05	0.1	ng/dry g	25.24	0	108	70 - 130%	PASS	6 30	PASS
PBDE099	NA	27.96	0.05	0.1	ng/dry g	25.24	0.27	110	70 - 130%	PASS	4 30	PASS
PBDE100	NA	28.19	0.05	0.1	ng/dry g	25.24	0	112	70 - 130%	PASS	3 30	PASS
PBDE138	NA	26.72	0.05	0.1	ng/dry g	25.24	0.08	106	70 - 130%	PASS	8 30	PASS
PBDE153	NA	27	0.05	0.1	ng/dry g	25.24	0.07	107	70 - 130%	PASS	13 30	PASS
PBDE154	NA	27.05	0.05	0.1	ng/dry g	25.24	0.08	107	70 - 130%	PASS	6 30	PASS
PBDE183	NA	24.89	0.05	0.1	ng/dry g	25.24	0	99	70 - 130%	PASS	13 30	PASS
PBDE190	NA	19.22	0.05	0.1	ng/dry g	25.24	0	76	70 - 130%	PASS	17 30	PASS
PBDE209	NA	11.6	0.05	0.1	ng/dry g	126.2	0	9	70 - 130%	FAIL	20 30	PASS 5

Sample ID: 31536-R2

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 05-Jun-15

(DFPBDE)	NA	78			% Recovery	100		78	50 - 150%	PASS	4 30	PASS	H
(FTBDE)	NA	61			% Recovery	100		61	50 - 150%	PASS	5 30	PASS	H
PBDE017	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE028	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE047	NA	0.17	0.05	0.1	ng/dry g						34 30	FAIL	H,SL
PBDE049	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE066	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE071	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE085	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE099	NA	0.24	0.05	0.1	ng/dry g						22 30	PASS	H
PBDE100	NA	ND	0.05	0.1	ng/dry g						0 30	PASS	H
PBDE138	NA	ND	0.05	0.1	ng/dry g						105 30	FAIL	H,SL
PBDE153	NA	ND	0.05	0.1	ng/dry g						89 30	FAIL	H,SL



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PBDE154	NA	0.09	0.05	0.1	ng/dry g					25	30	PASS	J,H
PBDE183	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE190	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H
PBDE209	NA	ND	0.05	0.1	ng/dry g					0	30	PASS	H



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31515-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(d10-Acenaphthene)	NA	68			% Recovery	100		68 50 - 150%	PASS	
(d10-Phenanthrene)	NA	78			% Recovery	100		78 50 - 150%	PASS	
(d12-Chrysene)	NA	89			% Recovery	100		89 50 - 150%	PASS	
(d8-Naphthalene)	NA	59			% Recovery	100		59 25 - 125%	PASS	
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31515-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(d10-Acenaphthene)	NA	79			% Recovery	100	0	79	50 - 150%	PASS
(d10-Phenanthrene)	NA	86			% Recovery	100	0	86	50 - 150%	PASS
(d12-Chrysene)	NA	94			% Recovery	100	0	94	50 - 150%	PASS
(d8-Naphthalene)	NA	71			% Recovery	100	0	71	25 - 125%	PASS
1-Methylnaphthalene	NA	361.7	1	5	ng/dry g	500	0	72	50 - 150%	PASS
1-Methylphenanthrene	NA	535.2	1	5	ng/dry g	500	0	107	50 - 150%	PASS
2,3,5-Trimethylnaphthalene	NA	462	1	5	ng/dry g	500	0	92	50 - 150%	PASS
2,6-Dimethylnaphthalene	NA	427.5	1	5	ng/dry g	500	0	86	50 - 150%	PASS
2-Methylnaphthalene	NA	372.9	1	5	ng/dry g	500	0	75	50 - 150%	PASS
Acenaphthene	NA	428.2	1	5	ng/dry g	500	0	86	50 - 150%	PASS
Acenaphthylene	NA	411.5	1	5	ng/dry g	500	0	82	50 - 150%	PASS
Anthracene	NA	420.5	1	5	ng/dry g	500	0	84	50 - 150%	PASS
Benz[a]anthracene	NA	612	1	5	ng/dry g	500	0	122	50 - 150%	PASS
Benzo[a]pyrene	NA	506.9	1	5	ng/dry g	500	0	101	50 - 150%	PASS
Benzo[b]fluoranthene	NA	538.5	1	5	ng/dry g	500	0	108	50 - 150%	PASS
Benzo[e]pyrene	NA	513.9	1	5	ng/dry g	500	0	103	50 - 150%	PASS
Benzo[g,h,i]perylene	NA	488.7	1	5	ng/dry g	500	0	98	50 - 150%	PASS
Benzo[k]fluoranthene	NA	480.1	1	5	ng/dry g	500	0	96	50 - 150%	PASS
Biphenyl	NA	412.2	1	5	ng/dry g	500	0	82	50 - 150%	PASS
Chrysene	NA	479.4	1	5	ng/dry g	500	0	96	50 - 150%	PASS
Dibenz[a,h]anthracene	NA	546	1	5	ng/dry g	500	0	109	50 - 150%	PASS
Dibenzothiophene	NA	479.4	1	5	ng/dry g	500	0	96	50 - 150%	PASS
Fluoranthene	NA	526.2	1	5	ng/dry g	500	0	105	50 - 150%	PASS
Fluorene	NA	465.1	1	5	ng/dry g	500	0	93	50 - 150%	PASS
Indeno[1,2,3-c,d]pyrene	NA	505	1	5	ng/dry g	500	0	101	50 - 150%	PASS
Naphthalene	NA	267.7	1	5	ng/dry g	500	0	54	25 - 125%	PASS
Perylene	NA	393.6	1	5	ng/dry g	500	0	79	50 - 150%	PASS
Phenanthrene	NA	484.7	1	5	ng/dry g	500	0	97	50 - 150%	PASS
Pyrene	NA	528	1	5	ng/dry g	500	0	106	50 - 150%	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
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Sample ID: 31515-BS2	QAQC Procedural Blank				Matrix: DI Water			Sampled:			Received:		
	Method: EPA 8270D				Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 28-May-15		
(d10-Acenaphthene)	NA	68			% Recovery	100	0	68	50 - 150%	PASS	15	30	PASS
(d10-Phenanthrene)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	10	30	PASS
(d12-Chrysene)	NA	94			% Recovery	100	0	94	50 - 150%	PASS	0	30	PASS
(d8-Naphthalene)	NA	60			% Recovery	100	0	60	25 - 125%	PASS	17	30	PASS
1-Methylnaphthalene	NA	313.9	1	5	ng/dry g	500	0	63	50 - 150%	PASS	13	30	PASS
1-Methylphenanthrene	NA	507.3	1	5	ng/dry g	500	0	101	50 - 150%	PASS	6	30	PASS
2,3,5-Trimethylnaphthalene	NA	411.6	1	5	ng/dry g	500	0	82	50 - 150%	PASS	11	30	PASS
2,6-Dimethylnaphthalene	NA	361.6	1	5	ng/dry g	500	0	72	50 - 150%	PASS	18	30	PASS
2-Methylnaphthalene	NA	331.1	1	5	ng/dry g	500	0	66	50 - 150%	PASS	13	30	PASS
Acenaphthene	NA	376	1	5	ng/dry g	500	0	75	50 - 150%	PASS	14	30	PASS
Acenaphthylene	NA	357.3	1	5	ng/dry g	500	0	71	50 - 150%	PASS	14	30	PASS
Anthracene	NA	397.4	1	5	ng/dry g	500	0	79	50 - 150%	PASS	6	30	PASS
Benz[a]anthracene	NA	567.8	1	5	ng/dry g	500	0	114	50 - 150%	PASS	7	30	PASS
Benzo[a]pyrene	NA	536.6	1	5	ng/dry g	500	0	107	50 - 150%	PASS	6	30	PASS
Benzo[b]fluoranthene	NA	568.8	1	5	ng/dry g	500	0	114	50 - 150%	PASS	5	30	PASS
Benzo[e]pyrene	NA	525.1	1	5	ng/dry g	500	0	105	50 - 150%	PASS	2	30	PASS
Benzo[g,h,i]perylene	NA	485.1	1	5	ng/dry g	500	0	97	50 - 150%	PASS	1	30	PASS
Benzo[k]fluoranthene	NA	502.1	1	5	ng/dry g	500	0	100	50 - 150%	PASS	4	30	PASS
Biphenyl	NA	357.5	1	5	ng/dry g	500	0	71	50 - 150%	PASS	13	30	PASS
Chrysene	NA	482.2	1	5	ng/dry g	500	0	96	50 - 150%	PASS	0	30	PASS
Dibenz[a,h]anthracene	NA	608.8	1	5	ng/dry g	500	0	122	50 - 150%	PASS	11	30	PASS
Dibenzothiophene	NA	421.3	1	5	ng/dry g	500	0	84	50 - 150%	PASS	13	30	PASS
Fluoranthene	NA	515.3	1	5	ng/dry g	500	0	103	50 - 150%	PASS	2	30	PASS
Fluorene	NA	413	1	5	ng/dry g	500	0	83	50 - 150%	PASS	11	30	PASS
Indeno[1,2,3-c,d]pyrene	NA	545	1	5	ng/dry g	500	0	109	50 - 150%	PASS	8	30	PASS
Naphthalene	NA	244.1	1	5	ng/dry g	500	0	49	25 - 125%	PASS	10	30	PASS
Perylene	NA	421.3	1	5	ng/dry g	500	0	84	50 - 150%	PASS	6	30	PASS
Phenanthrene	NA	447.6	1	5	ng/dry g	500	0	90	50 - 150%	PASS	7	30	PASS
Pyrene	NA	520.9	1	5	ng/dry g	500	0	104	50 - 150%	PASS	2	30	PASS



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CA ELAP #2769

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31516-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(d10-Acenaphthene)	NA	73			% Recovery	100		73	50 - 150%	PASS
(d10-Phenanthrene)	NA	79			% Recovery	100		79	50 - 150%	PASS
(d12-Chrysene)	NA	91			% Recovery	100		91	50 - 150%	PASS
(d8-Naphthalene)	NA	55			% Recovery	100		55	25 - 125%	PASS
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31516-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(d10-Acenaphthene)	NA	70			% Recovery	100	0	70	50 - 150%	PASS
(d10-Phenanthrene)	NA	82			% Recovery	100	0	82	50 - 150%	PASS
(d12-Chrysene)	NA	97			% Recovery	100	0	97	50 - 150%	PASS
(d8-Naphthalene)	NA	56			% Recovery	100	0	56	25 - 125%	PASS
1-Methylnaphthalene	NA	336.2	1	5	ng/dry g	500	0	67	50 - 150%	PASS
1-Methylphenanthrene	NA	540	1	5	ng/dry g	500	0	108	50 - 150%	PASS
2,3,5-Trimethylnaphthalene	NA	430.9	1	5	ng/dry g	500	0	86	50 - 150%	PASS
2,6-Dimethylnaphthalene	NA	385.9	1	5	ng/dry g	500	0	77	50 - 150%	PASS
2-Methylnaphthalene	NA	340.1	1	5	ng/dry g	500	0	68	50 - 150%	PASS
Acenaphthene	NA	375.8	1	5	ng/dry g	500	0	75	50 - 150%	PASS
Acenaphthylene	NA	396	1	5	ng/dry g	500	0	79	50 - 150%	PASS
Anthracene	NA	459.4	1	5	ng/dry g	500	0	92	50 - 150%	PASS
Benz[a]anthracene	NA	554.5	1	5	ng/dry g	500	0	111	50 - 150%	PASS
Benzo[a]pyrene	NA	507.5	1	5	ng/dry g	500	0	101	50 - 150%	PASS
Benzo[b]fluoranthene	NA	565.4	1	5	ng/dry g	500	0	113	50 - 150%	PASS
Benzo[e]pyrene	NA	502.7	1	5	ng/dry g	500	0	101	50 - 150%	PASS
Benzo[g,h,i]perylene	NA	566.3	1	5	ng/dry g	500	0	113	50 - 150%	PASS
Benzo[k]fluoranthene	NA	471.3	1	5	ng/dry g	500	0	94	50 - 150%	PASS
Biphenyl	NA	366	1	5	ng/dry g	500	0	73	50 - 150%	PASS
Chrysene	NA	475.6	1	5	ng/dry g	500	0	95	50 - 150%	PASS
Dibenz[a,h]anthracene	NA	654	1	5	ng/dry g	500	0	131	50 - 150%	PASS
Dibenzothiophene	NA	449.1	1	5	ng/dry g	500	0	90	50 - 150%	PASS
Fluoranthene	NA	528.7	1	5	ng/dry g	500	0	106	50 - 150%	PASS
Fluorene	NA	454.2	1	5	ng/dry g	500	0	91	50 - 150%	PASS
Indeno[1,2,3-c,d]pyrene	NA	683.5	1	5	ng/dry g	500	0	137	50 - 150%	PASS
Naphthalene	NA	310.3	1	5	ng/dry g	500	0	62	25 - 125%	PASS
Perylene	NA	454.6	1	5	ng/dry g	500	0	91	50 - 150%	PASS
Phenanthrene	NA	448.9	1	5	ng/dry g	500	0	90	50 - 150%	PASS
Pyrene	NA	527.2	1	5	ng/dry g	500	0	105	50 - 150%	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
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Sample ID: 31516-BS2	QAQC Procedural Blank				Matrix: DI Water			Sampled:			Received:		
	Method: EPA 8270D				Batch ID: O-7102			Prepared: 14-May-15			Analyzed: 31-May-15		
(d10-Acenaphthene)	NA	63			% Recovery	100	0	63	50 - 150%	PASS	11	30	PASS
(d10-Phenanthrene)	NA	73			% Recovery	100	0	73	50 - 150%	PASS	12	30	PASS
(d12-Chrysene)	NA	105			% Recovery	100	0	105	50 - 150%	PASS	8	30	PASS
(d8-Naphthalene)	NA	51			% Recovery	100	0	51	25 - 125%	PASS	9	30	PASS
1-Methylnaphthalene	NA	316.1	1	5	ng/dry g	500	0	63	50 - 150%	PASS	6	30	PASS
1-Methylphenanthrene	NA	497.1	1	5	ng/dry g	500	0	99	50 - 150%	PASS	9	30	PASS
2,3,5-Trimethylnaphthalene	NA	375.4	1	5	ng/dry g	500	0	75	50 - 150%	PASS	14	30	PASS
2,6-Dimethylnaphthalene	NA	348.5	1	5	ng/dry g	500	0	70	50 - 150%	PASS	10	30	PASS
2-Methylnaphthalene	NA	316.3	1	5	ng/dry g	500	0	63	50 - 150%	PASS	8	30	PASS
Acenaphthene	NA	337.6	1	5	ng/dry g	500	0	68	50 - 150%	PASS	10	30	PASS
Acenaphthylene	NA	354.5	1	5	ng/dry g	500	0	71	50 - 150%	PASS	11	30	PASS
Anthracene	NA	400	1	5	ng/dry g	500	0	80	50 - 150%	PASS	14	30	PASS
Benz[a]anthracene	NA	589.7	1	5	ng/dry g	500	0	118	50 - 150%	PASS	6	30	PASS
Benzo[a]pyrene	NA	549.2	1	5	ng/dry g	500	0	110	50 - 150%	PASS	8	30	PASS
Benzo[b]fluoranthene	NA	646.2	1	5	ng/dry g	500	0	129	50 - 150%	PASS	13	30	PASS
Benzo[e]pyrene	NA	556.8	1	5	ng/dry g	500	0	111	50 - 150%	PASS	9	30	PASS
Benzo[g,h,i]perylene	NA	548.9	1	5	ng/dry g	500	0	110	50 - 150%	PASS	3	30	PASS
Benzo[k]fluoranthene	NA	534.8	1	5	ng/dry g	500	0	107	50 - 150%	PASS	13	30	PASS
Biphenyl	NA	335.5	1	5	ng/dry g	500	0	67	50 - 150%	PASS	9	30	PASS
Chrysene	NA	518.4	1	5	ng/dry g	500	0	104	50 - 150%	PASS	9	30	PASS
Dibenz[a,h]anthracene	NA	582.6	1	5	ng/dry g	500	0	117	50 - 150%	PASS	11	30	PASS
Dibenzothiophene	NA	401.6	1	5	ng/dry g	500	0	80	50 - 150%	PASS	12	30	PASS
Fluoranthene	NA	503	1	5	ng/dry g	500	0	101	50 - 150%	PASS	5	30	PASS
Fluorene	NA	385	1	5	ng/dry g	500	0	77	50 - 150%	PASS	17	30	PASS
Indeno[1,2,3-c,d]pyrene	NA	659.8	1	5	ng/dry g	500	0	132	50 - 150%	PASS	4	30	PASS
Naphthalene	NA	286.4	1	5	ng/dry g	500	0	57	25 - 125%	PASS	8	30	PASS
Perylene	NA	509.5	1	5	ng/dry g	500	0	102	50 - 150%	PASS	11	30	PASS
Phenanthrene	NA	393.8	1	5	ng/dry g	500	0	79	50 - 150%	PASS	13	30	PASS
Pyrene	NA	503.1	1	5	ng/dry g	500	0	101	50 - 150%	PASS	4	30	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31519-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(d10-Acenaphthene)	NA	51			% Recovery	100		51	60 - 140%	PASS	
(d10-Phenanthrene)	NA	72			% Recovery	100		72	60 - 140%	PASS	
(d12-Chrysene)	NA	112			% Recovery	100		112	60 - 140%	PASS	
(d8-Naphthalene)	NA	28			% Recovery	100		28	60 - 140%	PASS	
1-Methylnaphthalene	NA	185.4	1	5	ng/dry g	470		39	60 - 140%	FAIL	4
1-Methylphenanthrene	NA	1469.3	1	5	ng/dry g	1700		86	60 - 140%	PASS	
2-Methylnaphthalene	NA	305	1	5	ng/dry g	740		41	60 - 140%	FAIL	4
Acenaphthene	NA	240	1	5	ng/dry g	390		62	60 - 140%	PASS	
Anthracene	NA	1255.5	1	5	ng/dry g	1130		111	60 - 140%	PASS	
Benz[a]anthracene	NA	6405.1	1	5	ng/dry g	4720		136	60 - 140%	PASS	
Benzo[a]pyrene	NA	5620.4	1	5	ng/dry g	4300		131	60 - 140%	PASS	
Benzo[b]fluoranthene	NA	6070.1	1	5	ng/dry g	5960		102	60 - 140%	PASS	
Benzo[e]pyrene	NA	4522.7	1	5	ng/dry g	3280		138	60 - 140%	PASS	
Benzo[g,h,i]perylene	NA	2778.9	1	5	ng/dry g	2840		98	60 - 140%	PASS	
Benzo[k]fluoranthene	NA	2753.5	1	5	ng/dry g	2300		120	60 - 140%	PASS	
Biphenyl	NA	157	1	5	ng/dry g	250		63	60 - 140%	PASS	
Chrysene	NA	6684.4	1	5	ng/dry g	4860		138	60 - 140%	PASS	
Dibenz[a,h]anthracene	NA	1336.5	1	5	ng/dry g	1259		106	60 - 140%	PASS	
Dibenzothiophene	NA	576.9	1	5	ng/dry g	500		115	60 - 140%	PASS	
Fluoranthene	NA	8782.6	1	5	ng/dry g	8920		98	60 - 140%	PASS	
Fluorene	NA	295	1	5	ng/dry g	480		61	60 - 140%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	3034	1	5	ng/dry g	2780		109	60 - 140%	PASS	
Naphthalene	NA	466.9	1	5	ng/dry g	1280		36	60 - 140%	FAIL	4
Perylene	NA	1133.1	1	5	ng/dry g	1170		97	60 - 140%	PASS	
Phenanthrene	NA	4061.8	1	5	ng/dry g	5270		77	60 - 140%	PASS	
Pyrene	NA	9011.8	1	5	ng/dry g	9700		93	60 - 140%	PASS	

Sample ID: 31520-CRM1

QAQC CRM - SRM 1944

Matrix: Sediment

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 01-Jun-15



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(d10-Acenaphthene)	NA	76			% Recovery	100		76	60 - 140%	PASS		
(d10-Phenanthrene)	NA	86			% Recovery	100		86	60 - 140%	PASS		
(d12-Chrysene)	NA	112			% Recovery	100		112	60 - 140%	PASS		
(d8-Naphthalene)	NA	64			% Recovery	100		64	60 - 140%	PASS		
1-Methylnaphthalene	NA	333.8	1	5	ng/dry g	470		71	60 - 140%	PASS		
1-Methylphenanthrene	NA	1373.3	1	5	ng/dry g	1700		81	60 - 140%	PASS		
2-Methylnaphthalene	NA	534	1	5	ng/dry g	740		72	60 - 140%	PASS		
Acenaphthene	NA	254	1	5	ng/dry g	390		65	60 - 140%	PASS		
Anthracene	NA	1317.3	1	5	ng/dry g	1130		117	60 - 140%	PASS		
Benz[a]anthracene	NA	5585.9	1	5	ng/dry g	4720		118	60 - 140%	PASS		
Benzo[a]pyrene	NA	4429.6	1	5	ng/dry g	4300		103	60 - 140%	PASS		
Benzo[b]fluoranthene	NA	5470	1	5	ng/dry g	5960		92	60 - 140%	PASS		
Benzo[e]pyrene	NA	3626.1	1	5	ng/dry g	3280		111	60 - 140%	PASS		
Benzo[g,h,i]perylene	NA	3038.9	1	5	ng/dry g	2840		107	60 - 140%	PASS		
Benzo[k]fluoranthene	NA	2318.2	1	5	ng/dry g	2300		101	60 - 140%	PASS		
Biphenyl	NA	163.6	1	5	ng/dry g	250		65	60 - 140%	PASS		
Chrysene	NA	6130.9	1	5	ng/dry g	4860		126	60 - 140%	PASS		
Dibenz[a,h]anthracene	NA	1376	1	5	ng/dry g	1259		109	60 - 140%	PASS		
Dibenzothiophene	NA	666.6	1	5	ng/dry g	500		133	60 - 140%	PASS		
Fluoranthene	NA	8659.9	1	5	ng/dry g	8920		97	60 - 140%	PASS		
Fluorene	NA	307	1	5	ng/dry g	480		64	60 - 140%	PASS		
Indeno[1,2,3-c,d]pyrene	NA	2824	1	5	ng/dry g	2780		102	60 - 140%	PASS		
Naphthalene	NA	870.5	1	5	ng/dry g	1280		68	60 - 140%	PASS		
Perylene	NA	958.1	1	5	ng/dry g	1170		82	60 - 140%	PASS		
Phenanthrene	NA	4454.9	1	5	ng/dry g	5270		85	60 - 140%	PASS		
Pyrene	NA	8556.9	1	5	ng/dry g	9700		88	60 - 140%	PASS		

Sample ID: 31535-MS1

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 28-May-15

(d10-Acenaphthene)	NA	57			% Recovery	100	0	57	50 - 150%	PASS	
(d10-Phenanthrene)	NA	62			% Recovery	100	0	62	50 - 150%	PASS	
(d12-Chrysene)	NA	83			% Recovery	100	0	83	50 - 150%	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(d8-Naphthalene)	NA	56			% Recovery	100	0	56	25 - 125%	PASS		
1-Methylnaphthalene	NA	56.3	1	5	ng/dry g	82.8	0	68	50 - 150%	PASS		
1-Methylphenanthrene	NA	86.8	1	5	ng/dry g	82.8	1.3	103	50 - 150%	PASS		
2,3,5-Trimethylnaphthalene	NA	73.6	1	5	ng/dry g	82.8	0	89	50 - 150%	PASS		
2,6-Dimethylnaphthalene	NA	64.3	1	5	ng/dry g	82.8	0.6	77	50 - 150%	PASS		
2-Methylnaphthalene	NA	58.4	1	5	ng/dry g	82.8	0.5	70	50 - 150%	PASS		
Acenaphthene	NA	62.8	1	5	ng/dry g	82.8	0	76	50 - 150%	PASS		
Acenaphthylene	NA	63.8	1	5	ng/dry g	82.8	0	77	50 - 150%	PASS		
Anthracene	NA	63.1	1	5	ng/dry g	82.8	0.5	76	50 - 150%	PASS		
Benz[a]anthracene	NA	100.8	1	5	ng/dry g	82.8	2.2	119	50 - 150%	PASS		
Benzo[a]pyrene	NA	103.1	1	5	ng/dry g	82.8	4.9	119	50 - 150%	PASS		
Benzo[b]fluoranthene	NA	122.1	1	5	ng/dry g	82.8	4	143	50 - 150%	PASS		
Benzo[e]pyrene	NA	102.4	1	5	ng/dry g	82.8	3.8	119	50 - 150%	PASS		
Benzo[g,h,i]perylene	NA	85.3	1	5	ng/dry g	82.8	7	95	50 - 150%	PASS		
Benzo[k]fluoranthene	NA	95	1	5	ng/dry g	82.8	2.3	112	50 - 150%	PASS		
Biphenyl	NA	61.7	1	5	ng/dry g	82.8	0	75	50 - 150%	PASS		
Chrysene	NA	89.2	1	5	ng/dry g	82.8	3.9	103	50 - 150%	PASS		
Dibenz[a,h]anthracene	NA	118.9	1	5	ng/dry g	82.8	1.5	142	50 - 150%	PASS		
Dibenzothiophene	NA	74.6	1	5	ng/dry g	82.8	1.2	89	50 - 150%	PASS		
Fluoranthene	NA	96.6	1	5	ng/dry g	82.8	6.8	108	50 - 150%	PASS		
Fluorene	NA	70	1	5	ng/dry g	82.8	1.5	83	50 - 150%	PASS		
Indeno[1,2,3-c,d]pyrene	NA	113.6	1	5	ng/dry g	82.8	7.9	128	50 - 150%	PASS		
Naphthalene	NA	45.3	1	5	ng/dry g	82.8	1.5	53	25 - 125%	PASS		
Perylene	NA	84.5	1	5	ng/dry g	82.8	0.8	101	50 - 150%	PASS		
Phenanthrene	NA	78.8	1	5	ng/dry g	82.8	7.4	86	50 - 150%	PASS		
Pyrene	NA	100.2	1	5	ng/dry g	82.8	8	111	50 - 150%	PASS		

Sample ID: 31535-MS2

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 28-May-15

(d10-Acenaphthene)	NA	67			% Recovery	100	0	67	50 - 150%	PASS	16	30	PASS
(d10-Phenanthrene)	NA	71			% Recovery	100	0	71	50 - 150%	PASS	14	30	PASS
(d12-Chrysene)	NA	93			% Recovery	100	0	93	50 - 150%	PASS	11	30	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS	PASS	%	LIMITS	PASS	
(d8-Naphthalene)	NA	59			% Recovery	100	0	59	25 - 125%	PASS	5	30	PASS	
1-Methylnaphthalene	NA	63.6	1	5	ng/dry g	87.4	0	73	50 - 150%	PASS	7	30	PASS	
1-Methylphenanthrene	NA	97.2	1	5	ng/dry g	87.4	1.3	110	50 - 150%	PASS	7	30	PASS	
2,3,5-Trimethylnaphthalene	NA	83	1	5	ng/dry g	87.4	0	95	50 - 150%	PASS	7	30	PASS	
2,6-Dimethylnaphthalene	NA	75.4	1	5	ng/dry g	87.4	0.6	86	50 - 150%	PASS	11	30	PASS	
2-Methylnaphthalene	NA	66	1	5	ng/dry g	87.4	0.5	75	50 - 150%	PASS	7	30	PASS	
Acenaphthene	NA	73.1	1	5	ng/dry g	87.4	0	84	50 - 150%	PASS	10	30	PASS	
Acenaphthylene	NA	74.7	1	5	ng/dry g	87.4	0	85	50 - 150%	PASS	10	30	PASS	
Anthracene	NA	69.1	1	5	ng/dry g	87.4	0.5	78	50 - 150%	PASS	3	30	PASS	
Benz[a]anthracene	NA	117.6	1	5	ng/dry g	87.4	2.2	132	50 - 150%	PASS	10	30	PASS	
Benzo[a]pyrene	NA	124.2	1	5	ng/dry g	87.4	4.9	136	50 - 150%	PASS	13	30	PASS	
Benzo[b]fluoranthene	NA	156.3	1	5	ng/dry g	87.4	4	174	50 - 150%	FAIL	20	30	PASS	M
Benzo[e]pyrene	NA	124.6	1	5	ng/dry g	87.4	3.8	138	50 - 150%	PASS	15	30	PASS	
Benzo[g,h,i]perylene	NA	96.9	1	5	ng/dry g	87.4	7	103	50 - 150%	PASS	8	30	PASS	
Benzo[k]fluoranthene	NA	117	1	5	ng/dry g	87.4	2.3	131	50 - 150%	PASS	16	30	PASS	
Biphenyl	NA	72.3	1	5	ng/dry g	87.4	0	83	50 - 150%	PASS	10	30	PASS	
Chrysene	NA	100.1	1	5	ng/dry g	87.4	3.9	110	50 - 150%	PASS	7	30	PASS	
Dibenz[a,h]anthracene	NA	139.2	1	5	ng/dry g	87.4	1.5	158	50 - 150%	FAIL	11	30	PASS	M
Dibenzothiophene	NA	84.9	1	5	ng/dry g	87.4	1.2	96	50 - 150%	PASS	8	30	PASS	
Fluoranthene	NA	106.7	1	5	ng/dry g	87.4	6.8	114	50 - 150%	PASS	5	30	PASS	
Fluorene	NA	80.9	1	5	ng/dry g	87.4	1.5	91	50 - 150%	PASS	9	30	PASS	
Indeno[1,2,3-c,d]pyrene	NA	137.7	1	5	ng/dry g	87.4	7.9	149	50 - 150%	PASS	15	30	PASS	
Naphthalene	NA	50.2	1	5	ng/dry g	87.4	1.5	56	25 - 125%	PASS	6	30	PASS	
Perylene	NA	95.8	1	5	ng/dry g	87.4	0.8	109	50 - 150%	PASS	8	30	PASS	
Phenanthrene	NA	91	1	5	ng/dry g	87.4	7.4	96	50 - 150%	PASS	11	30	PASS	
Pyrene	NA	110.3	1	5	ng/dry g	87.4	8	117	50 - 150%	PASS	5	30	PASS	

Sample ID: 31535-R2

SWHB-18

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7100

Sampled: 08-Apr-14 9:53

Prepared: 12-May-15

Received: 27-Apr-15

Analyzed: 30-May-15

(d10-Acenaphthene)	NA	49			% Recovery	100		49	50 - 150%	FAIL	13	30	PASS	H,3
(d10-Phenanthrene)	NA	52			% Recovery	100		52	50 - 150%	PASS	2	30	PASS	H
(d12-Chrysene)	NA	64			% Recovery	100		64	50 - 150%	PASS	8	30	PASS	H



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CA ELAP #2769

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION		QA CODE	
								%	LIMITS	PASS	%	LIMITS		
(d8-Naphthalene)	NA	51			% Recovery	100		51	25 - 125%	PASS	13	30	PASS	H
1-Methylnaphthalene	NA	ND	1	5	ng/dry g						0	30	PASS	H
1-Methylphenanthrene	NA	1	1	5	ng/dry g						40	30	FAIL	J,H,SL
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g						0	30	PASS	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g						10	30	PASS	H
2-Methylnaphthalene	NA	ND	1	5	ng/dry g						10	30	PASS	H
Acenaphthene	NA	ND	1	5	ng/dry g						0	30	PASS	H
Acenaphthylene	NA	ND	1	5	ng/dry g						0	30	PASS	H
Anthracene	NA	1	1	5	ng/dry g						0	30	PASS	J,H
Benz[a]anthracene	NA	2.3	1	5	ng/dry g						9	30	PASS	J,H
Benzo[a]pyrene	NA	6.3	1	5	ng/dry g						60	30	FAIL	H,SL
Benzo[b]fluoranthene	NA	4.7	1	5	ng/dry g						32	30	FAIL	J,H,SL
Benzo[e]pyrene	NA	4.4	1	5	ng/dry g						32	30	FAIL	J,H,SL
Benzo[g,h,i]perylene	NA	7.6	1	5	ng/dry g						17	30	PASS	H
Benzo[k]fluoranthene	NA	2.5	1	5	ng/dry g						17	30	PASS	J,H
Biphenyl	NA	ND	1	5	ng/dry g						0	30	PASS	H
Chrysene	NA	4.1	1	5	ng/dry g						8	30	PASS	J,H
Dibenz[a,h]anthracene	NA	1.3	1	5	ng/dry g						32	30	FAIL	J,H,SL
Dibenzothiophene	NA	1.1	1	5	ng/dry g						24	30	PASS	J,H
Fluoranthene	NA	6.8	1	5	ng/dry g						1	30	PASS	H
Fluorene	NA	1.6	1	5	ng/dry g						6	30	PASS	J,H
Indeno[1,2,3-c,d]pyrene	NA	8.4	1	5	ng/dry g						11	30	PASS	H
Naphthalene	NA	1.5	1	5	ng/dry g						6	30	PASS	J,H
Perylene	NA	1.5	1	5	ng/dry g						40	30	FAIL	J,H,SL
Phenanthrene	NA	6.7	1	5	ng/dry g						19	30	PASS	H
Pyrene	NA	8.2	1	5	ng/dry g						6	30	PASS	H

Sample ID: 31536-MS1

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 31-May-15

(d10-Acenaphthene)	NA	76			% Recovery	100	0	76	50 - 150%	PASS				
(d10-Phenanthrene)	NA	80			% Recovery	100	0	80	50 - 150%	PASS				
(d12-Chrysene)	NA	93			% Recovery	100	0	93	50 - 150%	PASS				



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(d8-Naphthalene)	NA	66			% Recovery	100	0	66	25 - 125%	PASS		
1-Methylnaphthalene	NA	89.6	1	5	ng/dry g	112.5	0.5	79	50 - 150%	PASS		
1-Methylphenanthrene	NA	120.9	1	5	ng/dry g	112.5	2.1	106	50 - 150%	PASS		
2,3,5-Trimethylnaphthalene	NA	101	1	5	ng/dry g	112.5	0	90	50 - 150%	PASS		
2,6-Dimethylnaphthalene	NA	96.3	1	5	ng/dry g	112.5	2.2	84	50 - 150%	PASS		
2-Methylnaphthalene	NA	91.1	1	5	ng/dry g	112.5	1.6	80	50 - 150%	PASS		
Acenaphthene	NA	92.2	1	5	ng/dry g	112.5	0.7	81	50 - 150%	PASS		
Acenaphthylene	NA	104.2	1	5	ng/dry g	112.5	1.9	91	50 - 150%	PASS		
Anthracene	NA	103.3	1	5	ng/dry g	112.5	2.3	90	50 - 150%	PASS		
Benz[a]anthracene	NA	132.1	1	5	ng/dry g	112.5	6.2	112	50 - 150%	PASS		
Benzo[a]pyrene	NA	134.4	1	5	ng/dry g	112.5	13.1	108	50 - 150%	PASS		
Benzo[b]fluoranthene	NA	142.4	1	5	ng/dry g	112.5	11.1	117	50 - 150%	PASS		
Benzo[e]pyrene	NA	120.5	1	5	ng/dry g	112.5	9.6	99	50 - 150%	PASS		
Benzo[g,h,i]perylene	NA	142.4	1	5	ng/dry g	112.5	17	111	50 - 150%	PASS		
Benzo[k]fluoranthene	NA	119.7	1	5	ng/dry g	112.5	4.8	102	50 - 150%	PASS		
Biphenyl	NA	93.4	1	5	ng/dry g	112.5	1.3	82	50 - 150%	PASS		
Chrysene	NA	116	1	5	ng/dry g	112.5	8.7	95	50 - 150%	PASS		
Dibenz[a,h]anthracene	NA	149	1	5	ng/dry g	112.5	4.5	128	50 - 150%	PASS		
Dibenzothiophene	NA	102.2	1	5	ng/dry g	112.5	0	91	50 - 150%	PASS		
Fluoranthene	NA	138.9	1	5	ng/dry g	112.5	14.4	111	50 - 150%	PASS		
Fluorene	NA	106.4	1	5	ng/dry g	112.5	3	92	50 - 150%	PASS		
Indeno[1,2,3-c,d]pyrene	NA	178.6	1	5	ng/dry g	112.5	22.3	139	50 - 150%	PASS		
Naphthalene	NA	83.7	1	5	ng/dry g	112.5	2.3	72	25 - 125%	PASS		
Perylene	NA	112.7	1	5	ng/dry g	112.5	3.3	97	50 - 150%	PASS		
Phenanthrene	NA	111.1	1	5	ng/dry g	112.5	10.2	90	50 - 150%	PASS		
Pyrene	NA	141.4	1	5	ng/dry g	112.5	18.2	110	50 - 150%	PASS		

Sample ID: 31536-MS2

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

(d10-Acenaphthene)	NA	77			% Recovery	100	0	77	50 - 150%	PASS	1	30	PASS
(d10-Phenanthrene)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	3	30	PASS
(d12-Chrysene)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	18	30	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION			QA CODE
								%	LIMITS		%	LIMITS		
(d8-Naphthalene)	NA	68			% Recovery	100	0	68	25 - 125%	PASS	3	30	PASS	
1-Methylnaphthalene	NA	102.1	1	5	ng/dry g	126.2	0.5	81	50 - 150%	PASS	2	30	PASS	
1-Methylphenanthrene	NA	131.8	1	5	ng/dry g	126.2	2.1	103	50 - 150%	PASS	3	30	PASS	
2,3,5-Trimethylnaphthalene	NA	117	1	5	ng/dry g	126.2	0	93	50 - 150%	PASS	3	30	PASS	
2,6-Dimethylnaphthalene	NA	109.5	1	5	ng/dry g	126.2	2.2	85	50 - 150%	PASS	1	30	PASS	
2-Methylnaphthalene	NA	102.2	1	5	ng/dry g	126.2	1.6	80	50 - 150%	PASS	0	30	PASS	
Acenaphthene	NA	106.2	1	5	ng/dry g	126.2	0.7	84	50 - 150%	PASS	4	30	PASS	
Acenaphthylene	NA	119.9	1	5	ng/dry g	126.2	1.9	94	50 - 150%	PASS	3	30	PASS	
Anthracene	NA	110.7	1	5	ng/dry g	126.2	2.3	86	50 - 150%	PASS	5	30	PASS	
Benz[a]anthracene	NA	125.7	1	5	ng/dry g	126.2	6.2	95	50 - 150%	PASS	16	30	PASS	
Benzo[a]pyrene	NA	126.9	1	5	ng/dry g	126.2	13.1	90	50 - 150%	PASS	18	30	PASS	
Benzo[b]fluoranthene	NA	137.1	1	5	ng/dry g	126.2	11.1	100	50 - 150%	PASS	16	30	PASS	
Benzo[e]pyrene	NA	114.9	1	5	ng/dry g	126.2	9.6	83	50 - 150%	PASS	18	30	PASS	
Benzo[g,h,i]perylene	NA	148.8	1	5	ng/dry g	126.2	17	104	50 - 150%	PASS	7	30	PASS	
Benzo[k]fluoranthene	NA	113.4	1	5	ng/dry g	126.2	4.8	86	50 - 150%	PASS	17	30	PASS	
Biphenyl	NA	106	1	5	ng/dry g	126.2	1.3	83	50 - 150%	PASS	1	30	PASS	
Chrysene	NA	107.3	1	5	ng/dry g	126.2	8.7	78	50 - 150%	PASS	20	30	PASS	
Dibenz[a,h]anthracene	NA	145.2	1	5	ng/dry g	126.2	4.5	111	50 - 150%	PASS	14	30	PASS	
Dibenzothiophene	NA	114.8	1	5	ng/dry g	126.2	0	91	50 - 150%	PASS	0	30	PASS	
Fluoranthene	NA	146	1	5	ng/dry g	126.2	14.4	104	50 - 150%	PASS	7	30	PASS	
Fluorene	NA	119.8	1	5	ng/dry g	126.2	3	93	50 - 150%	PASS	1	30	PASS	
Indeno[1,2,3-c,d]pyrene	NA	189.6	1	5	ng/dry g	126.2	22.3	133	50 - 150%	PASS	4	30	PASS	
Naphthalene	NA	95.4	1	5	ng/dry g	126.2	2.3	74	25 - 125%	PASS	3	30	PASS	
Perylene	NA	102.3	1	5	ng/dry g	126.2	3.3	78	50 - 150%	PASS	22	30	PASS	
Phenanthrene	NA	122.6	1	5	ng/dry g	126.2	10.2	89	50 - 150%	PASS	1	30	PASS	
Pyrene	NA	147	1	5	ng/dry g	126.2	18.2	102	50 - 150%	PASS	8	30	PASS	

Sample ID: 31536-R2

SWHB-19

Method: EPA 8270D

Matrix: Sediment

Batch ID: O-7102

Sampled: 08-Apr-14 10:26

Prepared: 14-May-15

Received: 27-Apr-15

Analyzed: 01-Jun-15

(d10-Acenaphthene)	NA	58			% Recovery	100		58	50 - 150%	PASS	11	30	PASS	H
(d10-Phenanthrene)	NA	73			% Recovery	100		73	50 - 150%	PASS	9	30	PASS	H
(d12-Chrysene)	NA	52			% Recovery	100		52	50 - 150%	PASS	11	30	PASS	H



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION		QA CODE	
								%	LIMITS	PASS	%	LIMITS		
(d8-Naphthalene)	NA	48			% Recovery	100		48	25 - 125%	PASS	23	30	PASS	H
1-Methylnaphthalene	NA	1	1	5	ng/dry g						0	30	PASS	J,H
1-Methylphenanthrene	NA	2	1	5	ng/dry g						5	30	PASS	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g						0	30	PASS	H
2,6-Dimethylnaphthalene	NA	2	1	5	ng/dry g						18	30	PASS	J,H
2-Methylnaphthalene	NA	1.6	1	5	ng/dry g						6	30	PASS	J,H
Acenaphthene	NA	1.4	1	5	ng/dry g						33	30	FAIL	J,H,SL
Acenaphthylene	NA	2	1	5	ng/dry g						16	30	PASS	J,H
Anthracene	NA	3	1	5	ng/dry g						55	30	FAIL	J,H,SL
Benz[a]anthracene	NA	7.5	1	5	ng/dry g						42	30	FAIL	H,SL
Benzo[a]pyrene	NA	14.3	1	5	ng/dry g						17	30	PASS	H
Benzo[b]fluoranthene	NA	12.1	1	5	ng/dry g						17	30	PASS	H
Benzo[e]pyrene	NA	10.3	1	5	ng/dry g						13	30	PASS	H
Benzo[g,h,i]perylene	NA	18.1	1	5	ng/dry g						13	30	PASS	H
Benzo[k]fluoranthene	NA	5.1	1	5	ng/dry g						10	30	PASS	H
Biphenyl	NA	1.2	1	5	ng/dry g						22	30	PASS	J,H
Chrysene	NA	9.8	1	5	ng/dry g						27	30	PASS	H
Dibenz[a,h]anthracene	NA	4.7	1	5	ng/dry g						9	30	PASS	J,H
Dibenzothiophene	NA	ND	1	5	ng/dry g						0	30	PASS	H
Fluoranthene	NA	17.3	1	5	ng/dry g						41	30	FAIL	H,NH
Fluorene	NA	3.2	1	5	ng/dry g						13	30	PASS	J,H
Indeno[1,2,3-c,d]pyrene	NA	24	1	5	ng/dry g						15	30	PASS	H
Naphthalene	NA	2.3	1	5	ng/dry g						4	30	PASS	J,H
Perylene	NA	3.6	1	5	ng/dry g						22	30	PASS	J,H
Phenanthrene	NA	11.5	1	5	ng/dry g						25	30	PASS	H
Pyrene	NA	22.6	1	5	ng/dry g						48	30	FAIL	H,NH



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31515-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 23-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g					
Bifenthrin	NA	ND	0.25	0.5	ng/dry g					
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g					
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g					
Cypermethrin	NA	ND	0.25	0.5	ng/dry g					
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g					
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g					
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g					
Fenvalerate	NA	ND	0.25	0.5	ng/dry g					
Fluvalinate	NA	ND	0.25	0.5	ng/dry g					
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g					
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g					
Prallethrin	NA	ND	0.25	0.5	ng/dry g					

Sample ID: 31515-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 23-May-15

Allethrin	NA	515.45	0.25	0.5	ng/dry g	500	0	103	50 - 150%	PASS
Bifenthrin	NA	643.43	0.25	0.5	ng/dry g	500	0	129	50 - 150%	PASS
Cyfluthrin	NA	499	0.25	0.5	ng/dry g	505	0	99	50 - 150%	PASS
Cyhalothrin, Total Lambda	NA	520.09	0.25	0.5	ng/dry g	500	0	104	50 - 150%	PASS
Cypermethrin	NA	492.23	0.25	0.5	ng/dry g	500	0	98	50 - 150%	PASS
Danitol (Fenpropathrin)	NA	594.15	0.25	0.5	ng/dry g	500	0	119	50 - 150%	PASS
Deltamethrin/Tralomethrin	NA	966.94	0.25	0.5	ng/dry g	1000	0	97	50 - 150%	PASS
Esfenvalerate	NA	491.56	0.25	0.5	ng/dry g	500	0	98	50 - 150%	PASS
Fenvalerate	NA	501.79	0.25	0.5	ng/dry g	500	0	100	50 - 150%	PASS
Fluvalinate	NA	510.29	0.25	0.5	ng/dry g	500	0	102	50 - 150%	PASS
Permethrin, cis-	NA	151.18	0.25	0.5	ng/dry g	133.5	0	113	50 - 150%	PASS
Permethrin, trans-	NA	345.36	0.25	0.5	ng/dry g	358	0	96	50 - 150%	PASS
Prallethrin	NA	513.21	0.25	0.5	ng/dry g	500	0	103	50 - 150%	PASS



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	

Sample ID: 31515-BS2	QAQC Procedural Blank				Matrix: DI Water			Sampled:			Received:		
	Method: EPA 8270D-NCI				Batch ID: O-7100			Prepared: 12-May-15			Analyzed: 23-May-15		
Allethrin	NA	549.4	0.25	0.5	ng/dry g	500	0	110	50 - 150%	PASS	7	30	PASS
Bifenthrin	NA	663.99	0.25	0.5	ng/dry g	500	0	133	50 - 150%	PASS	3	30	PASS
Cyfluthrin	NA	491.25	0.25	0.5	ng/dry g	505	0	97	50 - 150%	PASS	2	30	PASS
Cyhalothrin, Total Lambda	NA	504.35	0.25	0.5	ng/dry g	500	0	101	50 - 150%	PASS	3	30	PASS
Cypermethrin	NA	475.69	0.25	0.5	ng/dry g	500	0	95	50 - 150%	PASS	3	30	PASS
Danitol (Fenpropathrin)	NA	581.29	0.25	0.5	ng/dry g	500	0	116	50 - 150%	PASS	3	30	PASS
Deltamethrin/Tralomethrin	NA	988.29	0.25	0.5	ng/dry g	1000	0	99	50 - 150%	PASS	2	30	PASS
Esfenvalerate	NA	471.68	0.25	0.5	ng/dry g	500	0	94	50 - 150%	PASS	4	30	PASS
Fenvalerate	NA	477.34	0.25	0.5	ng/dry g	500	0	95	50 - 150%	PASS	5	30	PASS
Fluvalinate	NA	484.87	0.25	0.5	ng/dry g	500	0	97	50 - 150%	PASS	5	30	PASS
Permethrin, cis-	NA	136.7	0.25	0.5	ng/dry g	133.5	0	102	50 - 150%	PASS	10	30	PASS
Permethrin, trans-	NA	369.87	0.25	0.5	ng/dry g	358	0	103	50 - 150%	PASS	7	30	PASS
Prallethrin	NA	527.85	0.25	0.5	ng/dry g	500	0	106	50 - 150%	PASS	3	30	PASS

Sample ID: 31516-B1	QAQC Procedural Blank				Matrix: DI Water			Sampled:			Received:		
	Method: EPA 8270D-NCI				Batch ID: O-7102			Prepared: 14-May-15			Analyzed: 27-May-15		
Allethrin	NA	ND	0.25	0.5	ng/dry g								
Bifenthrin	NA	ND	0.25	0.5	ng/dry g								
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g								
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g								
Cypermethrin	NA	ND	0.25	0.5	ng/dry g								
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g								
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g								
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g								
Fenvalerate	NA	ND	0.25	0.5	ng/dry g								
Fluvalinate	NA	ND	0.25	0.5	ng/dry g								
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g								
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g								
Prallethrin	NA	ND	0.25	0.5	ng/dry g								



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31516-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Allethrin	NA	446.04	0.25	0.5	ng/dry g	500	0	89	50 - 150%	PASS		
Bifenthrin	NA	477.38	0.25	0.5	ng/dry g	500	0	95	50 - 150%	PASS		
Cyfluthrin	NA	409	0.25	0.5	ng/dry g	505	0	81	50 - 150%	PASS		
Cyhalothrin, Total Lambda	NA	408.56	0.25	0.5	ng/dry g	500	0	82	50 - 150%	PASS		
Cypermethrin	NA	396.63	0.25	0.5	ng/dry g	500	0	79	50 - 150%	PASS		
Danitol (Fenpropathrin)	NA	458.8	0.25	0.5	ng/dry g	500	0	92	50 - 150%	PASS		
Deltamethrin/Tralomethrin	NA	856.57	0.25	0.5	ng/dry g	1000	0	86	50 - 150%	PASS		
Esfenvalerate	NA	397.81	0.25	0.5	ng/dry g	500	0	80	50 - 150%	PASS		
Fenvalerate	NA	398.34	0.25	0.5	ng/dry g	500	0	80	50 - 150%	PASS		
Fluvalinate	NA	406.97	0.25	0.5	ng/dry g	500	0	81	50 - 150%	PASS		
Permethrin, cis-	NA	121.69	0.25	0.5	ng/dry g	133.5	0	91	50 - 150%	PASS		
Permethrin, trans-	NA	297.63	0.25	0.5	ng/dry g	358	0	83	50 - 150%	PASS		
Prallethrin	NA	442.94	0.25	0.5	ng/dry g	500	0	89	50 - 150%	PASS		

Sample ID: 31516-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Allethrin	NA	456.82	0.25	0.5	ng/dry g	500	0	91	50 - 150%	PASS	2	30	PASS
Bifenthrin	NA	480.54	0.25	0.5	ng/dry g	500	0	96	50 - 150%	PASS	1	30	PASS
Cyfluthrin	NA	410.82	0.25	0.5	ng/dry g	505	0	81	50 - 150%	PASS	0	30	PASS
Cyhalothrin, Total Lambda	NA	412.16	0.25	0.5	ng/dry g	500	0	82	50 - 150%	PASS	0	30	PASS
Cypermethrin	NA	398.76	0.25	0.5	ng/dry g	500	0	80	50 - 150%	PASS	1	30	PASS
Danitol (Fenpropathrin)	NA	460.13	0.25	0.5	ng/dry g	500	0	92	50 - 150%	PASS	0	30	PASS
Deltamethrin/Tralomethrin	NA	899.46	0.25	0.5	ng/dry g	1000	0	90	50 - 150%	PASS	5	30	PASS
Esfenvalerate	NA	390.15	0.25	0.5	ng/dry g	500	0	78	50 - 150%	PASS	3	30	PASS
Fenvalerate	NA	400.61	0.25	0.5	ng/dry g	500	0	80	50 - 150%	PASS	0	30	PASS
Fluvalinate	NA	398.5	0.25	0.5	ng/dry g	500	0	80	50 - 150%	PASS	1	30	PASS
Permethrin, cis-	NA	93.86	0.25	0.5	ng/dry g	133.5	0	70	50 - 150%	PASS	26	30	PASS
Permethrin, trans-	NA	272.01	0.25	0.5	ng/dry g	358	0	76	50 - 150%	PASS	9	30	PASS
Prallethrin	NA	447.2	0.25	0.5	ng/dry g	500	0	89	50 - 150%	PASS	0	30	PASS



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
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Sample ID: 31535-MS1

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 23-May-15

Allethrin	NA	177.8	0.25	0.5	ng/dry g	82.75	0	215	70 - 130%	FAIL		M
Bifenthrin	NA	182.22	0.25	0.5	ng/dry g	82.75	0	220	70 - 130%	FAIL		M
Cyfluthrin	NA	88.18	0.25	0.5	ng/dry g	83.58	0	106	70 - 130%	PASS		
Cyhalothrin, Total Lambda	NA	103.94	0.25	0.5	ng/dry g	82.75	0	126	70 - 130%	PASS		
Cypermethrin	NA	85.16	0.25	0.5	ng/dry g	82.75	0	103	70 - 130%	PASS		
Danitol (Fenpropathrin)	NA	151	0.25	0.5	ng/dry g	82.75	0	182	70 - 130%	FAIL		M
Deltamethrin/Tralomethrin	NA	167.85	0.25	0.5	ng/dry g	165.5	0	101	70 - 130%	PASS		
Esfenvalerate	NA	77.95	0.25	0.5	ng/dry g	82.75	0	94	70 - 130%	PASS		
Fenvalerate	NA	80.54	0.25	0.5	ng/dry g	82.75	0	97	70 - 130%	PASS		
Fluvalinate	NA	72.35	0.25	0.5	ng/dry g	82.75	0	87	70 - 130%	PASS		
Permethrin, cis-	NA	25.38	0.25	0.5	ng/dry g	22.09	0	115	70 - 130%	PASS		
Permethrin, trans-	NA	68.29	0.25	0.5	ng/dry g	59.25	0	115	70 - 130%	PASS		
Prallethrin	NA	129.77	0.25	0.5	ng/dry g	82.75	0	157	70 - 130%	FAIL		M

Sample ID: 31535-MS2

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 24-May-15

Allethrin	NA	141.51	0.25	0.5	ng/dry g	87.45	0	162	70 - 130%	FAIL	28	30	PASS	M
Bifenthrin	NA	160.4	0.25	0.5	ng/dry g	87.45	0	183	70 - 130%	FAIL	18	30	PASS	M
Cyfluthrin	NA	88	0.25	0.5	ng/dry g	88.32	0	100	70 - 130%	PASS	6	30	PASS	
Cyhalothrin, Total Lambda	NA	100.79	0.25	0.5	ng/dry g	87.45	0	115	70 - 130%	PASS	9	30	PASS	
Cypermethrin	NA	81.47	0.25	0.5	ng/dry g	87.45	0	93	70 - 130%	PASS	10	30	PASS	
Danitol (Fenpropathrin)	NA	130.17	0.25	0.5	ng/dry g	87.45	0	149	70 - 130%	FAIL	20	30	PASS	M
Deltamethrin/Tralomethrin	NA	174.62	0.25	0.5	ng/dry g	174.9	0	100	70 - 130%	PASS	1	30	PASS	
Esfenvalerate	NA	73.7	0.25	0.5	ng/dry g	87.45	0	84	70 - 130%	PASS	11	30	PASS	
Fenvalerate	NA	78.04	0.25	0.5	ng/dry g	87.45	0	89	70 - 130%	PASS	9	30	PASS	
Fluvalinate	NA	72.71	0.25	0.5	ng/dry g	87.45	0	83	70 - 130%	PASS	5	30	PASS	
Permethrin, cis-	NA	27.04	0.25	0.5	ng/dry g	23.35	0	116	70 - 130%	PASS	1	30	PASS	
Permethrin, trans-	NA	70.32	0.25	0.5	ng/dry g	62.61	0	112	70 - 130%	PASS	3	30	PASS	
Prallethrin	NA	108.65	0.25	0.5	ng/dry g	87.45	0	124	70 - 130%	PASS	23	30	PASS	



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31535-R2

SWHB-18

Matrix: Sediment

Sampled: 08-Apr-14 9:53

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7100

Prepared: 12-May-15

Analyzed: 24-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g			0	30	PASS	H

Sample ID: 31536-MS1

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Allethrin	NA	111.88	0.25	0.5	ng/dry g	112.55	0	99	70 - 130%	PASS	
Bifenthrin	NA	130.4	0.25	0.5	ng/dry g	112.55	0	116	70 - 130%	PASS	
Cyfluthrin	NA	98.99	0.25	0.5	ng/dry g	113.68	0	87	70 - 130%	PASS	
Cyhalothrin, Total Lambda	NA	101.1	0.25	0.5	ng/dry g	112.55	0	90	70 - 130%	PASS	
Cypermethrin	NA	96.95	0.25	0.5	ng/dry g	112.55	0	86	70 - 130%	PASS	
Danitol (Fenpropathrin)	NA	116.7	0.25	0.5	ng/dry g	112.55	0	104	70 - 130%	PASS	
Deltamethrin/Tralomethrin	NA	278.02	0.25	0.5	ng/dry g	225.1	0	124	70 - 130%	PASS	
Esfenvalerate	NA	94.9	0.25	0.5	ng/dry g	112.55	0	84	70 - 130%	PASS	
Fenvalerate	NA	96.18	0.25	0.5	ng/dry g	112.55	0	85	70 - 130%	PASS	
Fluvalinate	NA	93.36	0.25	0.5	ng/dry g	112.55	0	83	70 - 130%	PASS	
Permethrin, cis-	NA	26.69	0.25	0.5	ng/dry g	30.05	0	89	70 - 130%	PASS	
Permethrin, trans-	NA	65.71	0.25	0.5	ng/dry g	80.59	0	82	70 - 130%	PASS	
Prallethrin	NA	110.38	0.25	0.5	ng/dry g	112.55	0	98	70 - 130%	PASS	



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Pyrethroids

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	

Sample ID: 31536-MS2

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Allethrin	NA	140.26	0.25	0.5	ng/dry g	126.2	0	111	70 - 130%	PASS	11	30	PASS
Bifenthrin	NA	149.71	0.25	0.5	ng/dry g	126.2	0	119	70 - 130%	PASS	3	30	PASS
Cyfluthrin	NA	106.19	0.25	0.5	ng/dry g	127.46	0	83	70 - 130%	PASS	5	30	PASS
Cyhalothrin, Total Lambda	NA	106.46	0.25	0.5	ng/dry g	126.2	0	84	70 - 130%	PASS	7	30	PASS
Cypermethrin	NA	103.63	0.25	0.5	ng/dry g	126.2	0	82	70 - 130%	PASS	5	30	PASS
Danitol (Fenpropathrin)	NA	136.73	0.25	0.5	ng/dry g	126.2	0	108	70 - 130%	PASS	4	30	PASS
Deltamethrin/Tralomethrin	NA	303.94	0.25	0.5	ng/dry g	252.4	0	120	70 - 130%	PASS	3	30	PASS
Esfenvalerate	NA	101.65	0.25	0.5	ng/dry g	126.2	0	81	70 - 130%	PASS	4	30	PASS
Fenvalerate	NA	101.87	0.25	0.5	ng/dry g	126.2	0	81	70 - 130%	PASS	5	30	PASS
Fluvalinate	NA	96.07	0.25	0.5	ng/dry g	126.2	0	76	70 - 130%	PASS	9	30	PASS
Permethrin, cis-	NA	29.22	0.25	0.5	ng/dry g	33.7	0	87	70 - 130%	PASS	2	30	PASS
Permethrin, trans-	NA	82.16	0.25	0.5	ng/dry g	90.36	0	91	70 - 130%	PASS	10	30	PASS
Prallethrin	NA	135.21	0.25	0.5	ng/dry g	126.2	0	107	70 - 130%	PASS	9	30	PASS

Sample ID: 31536-R2

SWHB-19

Matrix: Sediment

Sampled: 08-Apr-14 10:26

Received: 27-Apr-15

Method: EPA 8270D-NCI

Batch ID: O-7102

Prepared: 14-May-15

Analyzed: 27-May-15

Allethrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Bifenthrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Cyfluthrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Cyhalothrin, Total Lambda	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Cypermethrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Danitol (Fenpropathrin)	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Deltamethrin/Tralomethrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Esfenvalerate	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Fenvalerate	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Fluvalinate	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Permethrin, cis-	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Permethrin, trans-	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H
Prallethrin	NA	ND	0.25	0.5	ng/dry g						0	30	PASS	H

SUBCONTRACT

REPORT

PHYSICS

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ENVIRONMENTAL LABORATORIES, INC.

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INSTITUTE FOR INTEGRATED RESEARCH IN MATERIALS, ENVIRONMENTS & SOCIETY

June 15, 2015

Physis Environmental Laboratories, Inc.
1904 E. Wright Circle
Anaheim, CA 92806

Re: IIRMES Project ID: 119-15-03
Physis Environmental Laboratories, In Project ID: 1504003-001

ATTN: Misty Mercier

IIRMES is pleased to provide you with the enclosed analytical data report for your 1504003-001 project. According to the chain-of-custody, 30 samples were received intact at IIRMES on 5/7/2015. Per your instructions, the samples were analyzed for:

- Clay <0.0039 mm Using Method SM 2560
- Sand 0.0625 to <2.0 mm Using Method SM 2560
- Silt 0.0039 to <0.0625 mm Using Method SM 2560
- Total Nitrogen Using Method EPA 9060
- Total Organic Carbon Using Method EPA 9060

Please don't hesitate to call if you have any questions and thank you very much for using our laboratory for your analytical needs.

Regards,
Alexander Long

Reviewed and Approved _____

Project Sample List

Physis Environmental Laboratories, Inc.

IIRMES Project ID: 119-15-03

Project Officer: Misty Mercier

Project Description: 1504003-001

<i>Sample ID#</i>	<i>Client Sample ID</i>	<i>Sample Description</i>	<i>Date Sampled</i>	<i>Matrix</i>
10825	QAQC	Lab Blank		DI Water
10826	QAQC	SRM 1944		Sediment
10827	SWHB-01		16-Apr-14	Sediment
10828	SWHB-02		09-Apr-14	Sediment
10829	SWHB-40		16-Apr-14	Sediment
10830	SWHB-07		09-Apr-14	Sediment
10831	SWHB-08		09-Apr-14	Sediment
10832	SWHB-09		09-Apr-14	Sediment
10833	SWHB-10		09-Apr-14	Sediment
10834	SWHB-11		08-Apr-14	Sediment
10835	SWHB-12		08-Apr-14	Sediment
10836	SWHB-13		09-Apr-14	Sediment
10837	SWHB-14		08-Apr-14	Sediment
10838	SWHB-15		15-Apr-14	Sediment
10839	SWHB-19		08-Apr-14	Sediment
10840	SWHB-20		08-Apr-14	Sediment
10841	SWHB-21		15-Apr-14	Sediment
10842	SWHB-16		08-Apr-14	Sediment
10843	SWHB-41		09-Apr-14	Sediment
10844	SWHB-18		08-Apr-14	Sediment
10845	SWHB-22		15-Apr-14	Sediment
10846	SWHB-23		08-Apr-14	Sediment
10847	SWHB-24		08-Apr-14	Sediment
10848	SWHB-25		08-Apr-14	Sediment

Project Sample List

Physis Environmental Laboratories, Inc.

IIRMES Project ID: 119-15-03

Project Officer: Misty Mercier

Project Description: 1504003-001

10849	SWHB-26	17-Apr-14	Sediment
10850	SWHB-27	18-Apr-14	Sediment
10851	SWHB-33	09-Apr-14	Sediment
10852	SWHB-36	09-Apr-14	Sediment
10853	SWHB-06	07-Apr-14	Sediment
10854	SWHB-28	17-Apr-14	Sediment
10855	SWHB-53	18-Apr-14	Sediment
10856	SWHB-30	18-Apr-14	Sediment



Institute for Integrated Research in Materials, Environments, and Society

Quality Assurance Summary

Laboratory Batch: The IIRMES Quality Manual (QM) defines a laboratory batch as a group of 20 or fewer samples of similar matrix that are processed together under the same conditions using the same reagents. QC samples are associated with each batch and are used to assess the validity of the sample analyses.

Procedural Blank: Potential laboratory contamination during sample processing and analysis is monitored through the analysis of procedural blanks at a minimum frequency of 1 per batch. The IIRMES QM requires that all measurable procedural blank constituents be less than 10x the MDL and that any detectable constituents be flagged in the sample results with a *B* qualifier.

Accuracy: Accuracy of the project data is indicated by the analysis of a combination of blank spikes (BS), matrix spikes (MS), laboratory control spikes (LCS), certified reference materials (CRM), and/or surrogate spikes at a minimum frequency of 1 per batch. The IIRMES QM requires that 95% of the compounds greater than 10x the MDL be within the specified acceptance limits.

Precision: Precision of the project data is determined by the analysis of duplicate matrix spikes, blank spikes, and/or duplicate test sample analysis on a minimum frequency of 1 per batch. The IIRMES QM requires that for 95% of the compounds greater than 10x the MDL, the relative percent difference (RPD) be within the specified acceptance range.

Holding Time: The IIRMES QM requires that all samples be processed and analyzed within the method specific recommended holding times. Those sample analyses falling outside that specified holding time will be flagged in the sample results with a *H*.

Total/Dissolved Fraction: In some instances the results for the dissolved fraction may be higher than the total fraction for a particular analyte. This is typically caused by the corresponding analytical variation for each result and indicates the target analyte is primarily in the dissolved phase of the sample.



Institute for Integrated Research in Materials, Environments, and Society

IIRMES Qualifier Codes

<u>Code</u>	<u>Definition</u>
ND	Analyte not detected at or above the listed minimum detection limit (MDL)
B	Analyte was detected in the associated procedural blank
H	Sample was received and/or analyzed past the recommended holding time
J	Analyte was detected at a concentration above the MDL but below the reporting limit (RL), therefore the reported value is estimated
N	Insufficient sample, analysis could not be performed
M	Analyte was outside the specified recovery and/or RPD acceptance limits due to matrix interference. The associated blank spikes were within limits, therefore the sample data was reported without further clarification
Q1	Analyte concentration in the sample exceeded the spike concentration, therefore the MS recovery and/or RPD limits do not apply
Q2	Analyte results for R1 and/or R2 were lower than 10x the MDL, therefore the RPD limits do not apply
NH	Sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory procedures, therefore the corresponding RPD was outside the specified acceptance limits.

DATA REPORT



INSTITUTE FOR INTEGRATED RESEARCH IN MATERIALS, ENVIRONMENTS & SOCIETY

California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840 (562-985-2469)

General Chemistry

ANALYTICAL REPORT

Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
10827-R1	SWHB-01				Sediment	Sampled: 4/16/2014	15:45		Received: 07-May-15	
Clay <0.0039 mm	NA	18.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	40.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	40.5	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.09	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.88	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10828-R1	SWHB-02				Sediment	Sampled: 4/9/2014	12:07		Received: 07-May-15	
Clay <0.0039 mm	NA	5.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	81.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	12.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.03	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.28	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10829-R1	SWHB-40				Sediment	Sampled: 4/16/2014	12:24		Received: 07-May-15	
Clay <0.0039 mm	NA	13.4	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	52.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	33.8	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.07	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.62	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10830-R1	SWHB-07				Sediment	Sampled: 4/9/2014	9:50		Received: 07-May-15	
Clay <0.0039 mm	NA	24	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	18.3	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	57.8	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.17	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	

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General Chemistry

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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Total Organic Carbon	NA	1.64	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10831-R1	SWHB-08				Sediment	Sampled: 4/9/2014	10:32		Received: 07-May-15	
Clay <0.0039 mm	NA	23.5	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	28.5	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	48	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.12	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	1.22	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10832-R1	SWHB-09				Sediment	Sampled: 4/9/2014	12:38		Received: 07-May-15	
Clay <0.0039 mm	NA	2.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	92.4	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	4.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.02	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.17	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10833-R1	SWHB-10				Sediment	Sampled: 4/9/2014	13:05		Received: 07-May-15	
Clay <0.0039 mm	NA	11.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	64.4	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	23.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.07	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.61	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10834-R1	SWHB-11				Sediment	Sampled: 4/8/2014	9:14		Received: 07-May-15	
Clay <0.0039 mm	NA	14.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	44.5	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	41.2	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	

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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Total Nitrogen	NA	0.07	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.63	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10835-R1	SWHB-12				Sediment	Sampled: 4/8/2014	13:36		Received: 07-May-15	
Clay <0.0039 mm	NA	19.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	42.8	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	37.7	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.09	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
Total Organic Carbon	NA	0.86	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
10836-R1	SWHB-13				Sediment	Sampled: 4/9/2014	8:41		Received: 07-May-15	
Clay <0.0039 mm	NA	21.9	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	44.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	33.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.07	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.67	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10837-R1	SWHB-14				Sediment	Sampled: 4/8/2014	11:49		Received: 07-May-15	
Clay <0.0039 mm	NA	13.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	53.2	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	33.3	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.08	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.63	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10838-R1	SWHB-15				Sediment	Sampled: 4/15/2014	9:02		Received: 07-May-15	
Clay <0.0039 mm	NA	17.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	35.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	

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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Silt 0.0039 to <0.0625 mm	NA	46.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.07	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.63	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10839-R1	SWHB-19				Sediment	Sampled: 4/8/2014	10:26		Received: 07-May-15	
Clay <0.0039 mm	NA	23.4	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	27.5	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	49.1	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.14	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	1.3	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10840-R1	SWHB-20				Sediment	Sampled: 4/8/2014	14:55		Received: 07-May-15	
Clay <0.0039 mm	NA	10.9	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	56.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	32.3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.09	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
Total Organic Carbon	NA	1.29	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
10841-R1	SWHB-21				Sediment	Sampled: 4/15/2014	17:34		Received: 07-May-15	
Clay <0.0039 mm	NA	2.8	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	87.7	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	9	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.02	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.23	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10842-R1	SWHB-16				Sediment	Sampled: 4/8/2014	13:01		Received: 07-May-15	
Clay <0.0039 mm	NA	13.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	

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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Sand 0.0625 to <2.0 mm	NA	48.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	38.3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.09	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
Total Organic Carbon	NA	0.79	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
10843-R1	SWHB-41				Sediment	Sampled: 4/9/2014	17:56		Received: 07-May-15	
Clay <0.0039 mm	NA	18	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	38.6	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	43.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.09	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	0.88	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10844-R1	SWHB-18				Sediment	Sampled: 4/8/2014	9:53		Received: 07-May-15	
Clay <0.0039 mm	NA	22.4	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	32.3	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	44.8	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.11	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
Total Organic Carbon	NA	1.03	0.01	0.02	% Dry Weight	GC-03-015	5/19/2015	5/19/2015	EPA 9060	
10845-R1	SWHB-22				Sediment	Sampled: 4/15/2014	14:13		Received: 07-May-15	
Clay <0.0039 mm	NA	8.3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	65.9	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	26	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.08	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.7	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10846-R1	SWHB-23				Sediment	Sampled: 4/8/2014	11:05		Received: 07-May-15	

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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Clay <0.0039 mm	NA	11.6	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	61.3	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	26.9	0.05	0.05	%	GC-03-014	5/12/2015	5/19/2015	SM 2560	
Total Nitrogen	NA	0.08	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.68	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10847-R1	SWHB-24				Sediment	Sampled: 4/8/2014	16:22		Received: 07-May-15	
Clay <0.0039 mm	NA	22.6	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	41	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	36.8	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.15	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
Total Organic Carbon	NA	1.35	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
10848-R1	SWHB-25				Sediment	Sampled: 4/8/2014	15:37		Received: 07-May-15	
Clay <0.0039 mm	NA	19.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	47.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	33.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.1	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
Total Organic Carbon	NA	0.76	0.01	0.02	% Dry Weight	GC-03-018	6/2/2015	6/2/2015	EPA 9060	
10849-R1	SWHB-26				Sediment	Sampled: 4/17/2014	12:56		Received: 07-May-15	
Clay <0.0039 mm	NA	5.1	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	73.9	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	21.2	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.04	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.28	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	



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Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
10850-R1	SWHB-27				Sediment	Sampled: 4/18/2014	14:42			Received: 07-May-15
Clay <0.0039 mm	NA	3.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	79.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	16.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.05	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.3	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10851-R1	SWHB-33				Sediment	Sampled: 4/9/2014	15:30			Received: 07-May-15
Clay <0.0039 mm	NA	19.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	32.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	47.6	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.16	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	1.29	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10852-R1	SWHB-36				Sediment	Sampled: 4/9/2014	17:01			Received: 07-May-15
Clay <0.0039 mm	NA	2.2	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	89	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	8.2	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.02	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.12	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10853-R1	SWHB-06				Sediment	Sampled: 4/7/2014	8:35			Received: 07-May-15
Clay <0.0039 mm	NA	3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	92.3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	4.6	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.02	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	

119-15-03 1504003-001



INSTITUTE FOR INTEGRATED RESEARCH IN MATERIALS, ENVIRONMENTS & SOCIETY

California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840 (562-985-2469)

General Chemistry

ANALYTICAL REPORT

Analyte	Fraction	Result	MDL	RL	Units	Batch	Prepared	Analyzed	Method	QA Code
Total Organic Carbon	NA	0.35	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10854-R1	SWHB-28				Sediment	Sampled: 4/17/2014	16:12		Received: 07-May-15	
Clay <0.0039 mm	NA	3.8	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	80.5	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	15.1	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.06	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.36	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10855-R1	SWHB-53				Sediment	Sampled: 4/18/2014	13:29		Received: 07-May-15	
Clay <0.0039 mm	NA	4.4	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	78	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	17.3	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.05	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.32	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
10856-R1	SWHB-30				Sediment	Sampled: 4/18/2014	8:30		Received: 07-May-15	
Clay <0.0039 mm	NA	1.2	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Sand 0.0625 to <2.0 mm	NA	83.1	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Silt 0.0039 to <0.0625 mm	NA	15.7	0.05	0.05	%	GC-03-016	5/19/2015	6/9/2015	SM 2560	
Total Nitrogen	NA	0.02	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	
Total Organic Carbon	NA	0.24	0.01	0.02	% Dry Weight	GC-03-017	5/21/2015	5/21/2015	EPA 9060	

QUALITY CONTROL REPORT



INSTITUTE FOR INTEGRATED RESEARCH IN MATERIALS, ENVIRONMENTS & SOCIETY
 California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840 (562-985-2469)

General Chemistry

QUALITY CONTROL REPORT

Analyte	Batch ID	Result	MDL	RL	Units	Spike Level	Source Result	% Recovery	Acceptance Limits	Limit Pass/Fail	RPD	RPD LIMIT	Limit Pass/Fail	QA Code
Fraction: Lab Blank	NA 10825-B1													
		QAQC Lab Blank												
		DI Water												
Clay <0.0039 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	ND	0.05	0.05	%	0								
Clay <0.0039 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	ND	0.05	0.05	%	0								
Sand 0.0625 to <2.0 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	ND	0.05	0.05	%	0								
Sand 0.0625 to <2.0 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	ND	0.05	0.05	%	0								
Silt 0.0039 to <0.0625 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	ND	0.05	0.05	%	0								
Silt 0.0039 to <0.0625 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	ND	0.05	0.05	%	0								
Total Nitrogen Prepared: 21-May-15 Analyzed: 21-May-15	GC-03-017	ND	0.01	0.02	% Dry Weight	0								



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 California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840 (562-985-2469)

General Chemistry

QUALITY CONTROL REPORT

Analyte	Batch ID	Result	MDL	RL	Units	Spike Level	Source Result	% Recovery	Acceptance Limits	Limit Pass/Fail	RPD	RPD LIMIT	Limit Pass/Fail	QA Code
Total Nitrogen Prepared: 19-May-15 Analyzed: 19-May-15	GC-03-015	ND	0.01	0.02	% Dry Weight	0								
Total Nitrogen Prepared: 02-Jun-15 Analyzed: 02-Jun-15	GC-03-018	ND	0.01	0.02	% Dry Weight	0								
Total Organic Carbon Prepared: 02-Jun-15 Analyzed: 02-Jun-15	GC-03-018	ND	0.01	0.02	% Dry Weight	0								
Total Organic Carbon Prepared: 19-May-15 Analyzed: 19-May-15	GC-03-015	ND	0.01	0.02	% Dry Weight	0								
Total Organic Carbon Prepared: 21-May-15 Analyzed: 21-May-15	GC-03-017	ND	0.01	0.02	% Dry Weight	0								
Fraction: CRM	NA 10826-CRM1													
		QAQC SRM 1944												
		Sediment												
Total Organic Carbon Prepared: 02-Jun-15 Analyzed: 02-Jun-15	GC-03-018	4.86	0.01	0.02	% Dry Weight	4.4		110	3.3 - 5.5	PASS				
Total Organic Carbon Prepared: 21-May-15 Analyzed: 21-May-15	GC-03-017	4.65	0.01	0.02	% Dry Weight	4.4		106	3.3 - 5.5	PASS				



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 California State University, Long Beach, 1250 Bellflower Blvd., Long Beach, CA 90840 (562-985-2469)

General Chemistry

QUALITY CONTROL REPORT

Analyte	Batch ID	Result	MDL	RL	Units	Spike Level	Source Result	% Recovery	Acceptance Limits	Limit Pass/Fail	RPD	RPD LIMIT	Limit Pass/Fail	QA Code
Total Organic Carbon Prepared: 19-May-15 Analyzed: 19-May-15	GC-03-015	4.77	0.01	0.02	% Dry Weight	4.4		108	3.3 - 5.5	PASS				
Fraction: Lab Dup	NA 10835-R2													
		SWHB-12			Sediment									
Total Nitrogen Prepared: 02-Jun-15 Analyzed: 02-Jun-15	GC-03-018	0.1	0.01	0.02	% Dry Weight	0					11	30	PASS	
Total Organic Carbon Prepared: 02-Jun-15 Analyzed: 02-Jun-15	GC-03-018	0.91	0.01	0.02	% Dry Weight	0					6	30	PASS	
Fraction: Lab Dup	NA 10838-R2													
		SWHB-15			Sediment									
Total Nitrogen Prepared: 19-May-15 Analyzed: 19-May-15	GC-03-015	0.07	0.01	0.02	% Dry Weight	0					0	30	PASS	
Total Organic Carbon Prepared: 19-May-15 Analyzed: 19-May-15	GC-03-015	0.6	0.01	0.02	% Dry Weight	0					5	30	PASS	
Fraction: Lab Dup	NA 10839-R2													
		SWHB-19			Sediment									



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General Chemistry

QUALITY CONTROL REPORT

Analyte	Batch ID	Result	MDL	RL	Units	Spike Level	Source Result	% Recovery	Acceptance Limits	Limit Pass/Fail	RPD	RPD LIMIT	Limit Pass/Fail	QA Code
Clay <0.0039 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	20.2	0.05	0.05	%	0					15	30	PASS	
Sand 0.0625 to <2.0 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	35.1	0.05	0.05	%	0					24	30	PASS	
Silt 0.0039 to <0.0625 mm Prepared: 12-May-15 Analyzed: 19-May-15	GC-03-014	44.7	0.05	0.05	%	0					9	30	PASS	
Fraction: NA Lab Dup 10845-R2														
					SWHB-22 Sediment									
Total Nitrogen Prepared: 21-May-15 Analyzed: 21-May-15	GC-03-017	0.09	0.01	0.02	% Dry Weight	0					12	30	PASS	
Total Organic Carbon Prepared: 21-May-15 Analyzed: 21-May-15	GC-03-017	0.67	0.01	0.02	% Dry Weight	0					4	30	PASS	
Fraction: NA Lab Dup 10848-R2														
					SWHB-25 Sediment									
Clay <0.0039 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	20.2	0.05	0.05	%	0					4	30	PASS	



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General Chemistry

QUALITY CONTROL REPORT

Analyte	Batch ID	Result	MDL	RL	Units	Spike Level	Source Result	% Recovery	Acceptance Limits	Limit Pass/Fail	RPD	RPD LIMIT	Limit Pass/Fail	QA Code
Sand 0.0625 to <2.0 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	44.6	0.05	0.05	%	0					6	30	PASS	
Silt 0.0039 to <0.0625 mm Prepared: 19-May-15 Analyzed: 09-Jun-15	GC-03-016	34.5	0.05	0.05	%	0					3	30	PASS	

CHAIN-OF-CUSTODY



Sample Receipt Form

Institute for Integrated Research in Materials, Environments, and Society (IIRMES)

Client: Physis Date Received: 5/7/15

Temperature: 5 °C Wet Ice Blue Ice Dry Ice N/A

Custody seals present and intact? Yes No Not Applicable

COC received with samples?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Notes:
COC signed and dated?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Analyses requested on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Correct sample containers used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container labels match COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Adequate sample volumes received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers received intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Number of Samples Received: <u>30</u>			

Samples checked by: Ulex King Date: 5/7/15

COMPANY NAME Physis Environmental Laboratories, Inc.		EMAIL <u>sc@physislabs.com</u>		PROJECT NAME / NUMBER 1504003-001			COC PAGE 1 of 3		
PROJECT MANAGER Misty Mercier		FAX 714 602-5321		PO #	PHYSIS SOS # 1504003	TYPE OF ICE USED <input type="checkbox"/> WET <input type="checkbox"/> BLUE <input type="checkbox"/> DRY			
COMPANY ADDRESS 1904 E. Wright Circle Anaheim, CA 92806		PHONE 714 602-5320 office 714 335-5918 cell		SAMPLED BY			SHIPPED VIA <input type="checkbox"/> FEDEX <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input checked="" type="checkbox"/> Physis <input type="checkbox"/> other		

TURNAROUND TIME
 STANDARD 15 -20 BD RUSH business days

REPORT FORMAT
 PDF/EDD SWAMP EDD other

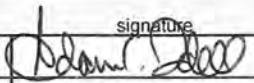
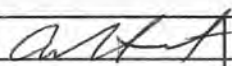
SPECIAL INSTRUCTIONS
 please report down to the MDL
 Please report results in dry weight

PHYSIS MATRIX CODES
SW = seawater FW = freshwater RW = rainwater
WW = wastewater DW = drinking water
S = sediment T = tissue E = extract O = other (specify)

REQUESTED ANALYSES

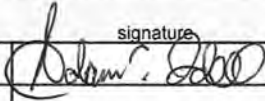
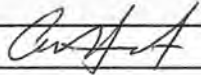
SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE		physis matrix code	# of bottles	TOC	Grain Size																
		date	time																				
1	SWHB-01	4/16/14	15:45	SED	1	X	X																
2	SWHB-02	4/9/14	12:07	SED	1	X	X																
3	SWHB-40	4/16/14	12:24	SED	1	X	X																
4	SWHB-07	4/9/14	9:50	SED	1	X	X																
5	SWHB-08	4/9/14	10:32	SED	1	X	X																
6	SWHB-09	4/9/14	12:38	SED	1	X	X																
7	SWHB-10	4/9/14	13:05	SED	1	X	X																
8	SWHB-11	4/8/14	9:14	SED	1	X	X																
9	SWHB-12	4/8/14	13:36	SED	1	X	X																
10	SWHB-13	4/9/14	8:41	SED	1	X	X																

print Adam Idell	signature 	company Physis Labs	date & time 5/1/15 16:40	A-Hamilton		IIRMES	5/1/15 16:40
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COMPANY NAME Physis Environmental Laboratories, Inc.		EMAIL sc@physislabs.com		PROJECT NAME / NUMBER 1504003-001			COC PAGE 2 of 3								
PROJECT MANAGER Misty Mercier		FAX 714 602-5321		PO #	PHYSIS SOS # 1504003	TYPE OF ICE USED <input type="checkbox"/> WET <input type="checkbox"/> BLUE <input type="checkbox"/> DRY									
COMPANY ADDRESS 1904 E. Wright Circle Anaheim, CA 92806		PHONE 714 602-5320 office 714 335-5918 cell		SAMPLED BY			SHIPPED VIA <input type="checkbox"/> FEDEX <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input checked="" type="checkbox"/> Physis <input type="checkbox"/> other								
TURNAROUND TIME <input checked="" type="checkbox"/> STANDARD 15 -20 BD <input type="checkbox"/> RUSH business days		<h2>REQUESTED ANALYSES</h2>													
REPORT FORMAT <input checked="" type="checkbox"/> PDF/EDD <input type="checkbox"/> SWAMP EDD <input type="checkbox"/> other															
SPECIAL INSTRUCTIONS <p style="text-align: center;">please report down to the MDL Please report results in dry weight</p>															
PHYSIS MATRIX CODES <p style="text-align: center;"><u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)</p>		TOC Grain Size													
SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE date time		physis matrix code	# of bottles										
1	SWHB-14	4/8/14	11:49	SED	1	X	X								
2	SWHB-15	4/15/14	9:02	SED	1	X	X								
3	SWHB-19	4/8/14	10:26	SED	1	X	X								
4	SWHB-20	4/8/14	14:55	SED	1	X	X								
5	SWHB-21	4/15/14	17:34	SED	1	X	X								
6	SWHB-16	4/8/14	13:01	SED	1	X	X								
7	SWHB-41	4/9/14	17:56	SED	1	X	X								
8	SWHB-18	4/8/14	9:53	SED	1	X	X								
9	SWHB-22	4/15/14	14:13	SED	1	X	X								
10	SWHB-23	4/8/14	11:05	SED	1	X	X								
print Adam Idell		signature 		company Physis Labs		date & time 5/7/15 16:40		A-Hamilton 		IIRMES		5/7/15 16:40			

CHAIN of CUSTODY

SEND TO: IIRMES

COMPANY NAME Physis Environmental Laboratories, Inc.		EMAIL sc@physislabs.com		PROJECT NAME / NUMBER 1504003-001			COC PAGE 3 of 3												
PROJECT MANAGER Misty Mercier		FAX 714 602-5321		PO #	PHYSIS SOS # 1504003	TYPE OF ICE USED <input checked="" type="checkbox"/> MET <input checked="" type="checkbox"/> FUE <input checked="" type="checkbox"/> FRY													
COMPANY ADDRESS 1904 E. Wright Circle Anaheim, CA 92806		PHONE 714 602-5320 office 714 335-5918 cell		SAMPLED BY			SHIPPED VIA <input type="checkbox"/> FEDEX <input checked="" type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> ent <input checked="" type="checkbox"/> physis <input type="checkbox"/> her												
TURNAROUND TIME <input checked="" type="checkbox"/> STANDARD 15 -20 BD <input type="checkbox"/> RUSH business days				REQUESTED ANALYSES															
REPORT FORMAT <input checked="" type="checkbox"/> PDF/EDD <input type="checkbox"/> SWAMP EDD <input type="checkbox"/> other																			
SPECIAL INSTRUCTIONS <p style="text-align:center;">please report down to the MDL Please report results in dry weight</p>																			
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)																			
SAMPLE ID		SAMPLE DESCRIPTION		SAMPLE date time		physis matrix code	# of bottles												
1	SWHB-24			4/8/14	16:22	SED	1	X	X										
2	SWHB-25			4/8/14	15:37	SED	1	X	X										
3	SWHB-26			4/17/14	12:56	SED	1	X	X										
4	SWHB-27			4/18/14	14:42	SED	1	X	X										
5	SWHB-33			4/9/14	15:30	SED	1	X	X										
6	SWHB-36			4/9/14	17:01	SED	1	X	X										
7	SWHB-06			4/7/14	8:35	SED	1	X	X										
8	SWHB-28			4/17/14	16:12	SED	1	X	X										
9	SWHB-53			4/18/14	13:29	SED	1	X	X										
10	SWHB-30			4/18/14	8:30	SED	1	X	X										
print Adam Idell		signature 		company Physis Labs		date & time 5/7/15 16:40		A-Hamilton						IIRMES			5/7/15 16:40		

CHAIN OF CUSTODY

TERRA FUTURE ENERGY SOLUTIONS AURA
ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-01	4/16/14	1548	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-01	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-02	4/9/14	1207	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-02	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-40 CB	4/16/14	1224	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-40 CB	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/T/H
 Relinquished By: [Signature] Date/Time: 4/27/15 1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-07	4/9/14	0950	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-07	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-08	4/9/14	1032	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-08	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-09	4/9/14	1238	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-09	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JS/TH
 Relinquished By: [Signature] Date/Time: 4-15/1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-10	4/9/14	1305	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-10	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-11	4/8/2014	0914	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-11	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-12	4/8/14	1336	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-12	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/TJA

Relinquished By: [Signature]

Date/Time: 4-22-15 1230

Received By: [Signature]

Date/Time: 4/27/15 12:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-13	4/9/14	0841	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-13	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-14	4/8/14	1149	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-14	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-15	4/15/14	0902	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-15	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/TH

Relinquished By: *[Signature]*

Date/Time: 4-22-15 / 1230

Received By: *[Signature]*

Date/Time: 4/27/15 12:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-19	4/8/14	1026	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-19	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-20	4/8/14	1455	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-20	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-21	4/15/14	1734	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-21	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/TH
Relinquished By: Chris Stransky Date/Time: 4-27-15/1230 Received By: Adam [Signature] Date/Time: 4/27/15 12:30
Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-16	4/8/14	1301	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-16	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-41 JB	4/9/14	1756	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-41 JB	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-18	4/8/14	0953	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-18	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/TA
 Relinquished By: Chris Stransky Date/Time: 4/27/15 1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-22	4/15/14	1413	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-22	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-23	4/8/14	1105	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-23	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-24	4/8/14	1622	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-24	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JB/TH
 Relinquished By: [Signature] Date/Time: 4-27-15 1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
Attn: Chris Stransky
9210 Sky Park Court, Suite 200
San Diego, CA 92123
Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
Attn: Misty Mercier
1904 East Wright Circle
Anaheim, California 92806
Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-25	4/8/14	1537	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-25	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-26	4/17/14	1256	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-26	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-27	4/18/14	1442	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-27	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: IB/JH

Relinquished By: [Signature]

Date/Time: 4-27-15 1230

Received By: [Signature]

Date/Time: 4/27/15 12:30

Relinquished By: _____

Date/Time: _____

Received By: _____

Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB- 03 ³³ (33)	4/9/14	1530	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB- 03 ³³ (33)	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB- 03 ³⁶ (36)	4/9/14	1701	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB- 03 ³⁶ (36)	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-06	4/17/14	0835	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-06	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JS/TH
 Relinquished By: [Signature] Date/Time: 4-27-15 1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

Analysis Request and Chain of Custody

City of San Diego

San Diego Bay Shallow Water Habitat Study

From:

AMEC Environment & Infrastructure
 Attn: Chris Stransky
 9210 Sky Park Court, Suite 200
 San Diego, CA 92123
 Phone: 858-300-4350 Fax: 858-300-4301

To:

Physis Environmental Laboratories, Inc.
 Attn: Misty Mercier
 1904 East Wright Circle
 Anaheim, California 92806
 Phone: 714-602-5320 Fax: 714-602-5321

SampleID	Date	Time	Analyses	Sample Type	Bottle Size	Preservative	Bottle Count
SWHB-28	4/17/14	1612	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-28	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB- 28 ⁵³	4/18/14	1814 ¹³²⁹	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB- 28 ⁵³	↓	↓	Grain Size	Grab	Ziploc Bag	None	1
SWHB-30	4/18/14	0830	General Chemistry, Metals, PBDE, PCBs, PAHs, Pyrethroid Pesticides,	Grab	4 oz Glass	None	2
SWHB-30	↓	↓	Grain Size	Grab	Ziploc Bag	None	1

Comments: See attachment for detailed analytical list.

Sampler's Initials: JBAH
 Relinquished By: [Signature] Date/Time: 4-27-15 1230 Received By: [Signature] Date/Time: 4/27/15 12:30
 Relinquished By: _____ Date/Time: _____ Received By: _____ Date/Time: _____

SAMPLE RECEIPT SUMMARY

CLIENT: SCCWRP Date Received: Apr 27, 2015 Received By: AI Inspected By: AI

COURIER

PHYSIS
 CLIENT
 FEDEX
 UPS
start 11:50 end 13:15
 OTHER: _____

COOLER

COOLER
 BOX
 total #
 OTHER: _____
 2

TEMPERATURE

-2.9 °C
 WET ICE
 BLUE ICE
 DRY ICE
 NONE

SAMPLE INTEGRITY UPON RECEIPT

1. COC(s) included and completely filled out..... **YES**
2. All sample containers arrived intact..... **NO; see notes below**
3. All samples listed on COC(s) are present..... **YES**
4. Information on containers consistent with information on COC(s)..... **YES**
5. Correct containers and volume for all analyses indicated..... **YES**
6. All samples received within method holding time..... **YES**
7. Correct preservation used for all analyses indicated..... **YES**
8. Name of sampler included on COC(s)..... **YES**

NOTES

Sample ID SWHB-12 bag for grain size was not received.
 Sample ID SWHB-16 bag for grain size was not received.
 Sample ID SWHB-20 bag for grain size was not received.
 Sample ID SWHB-24 bag for grain size was not received.
 Sample ID SWHB-25 bag for grain size was not received.

CHAIN of CUSTODY

COMPANY NAME Amec Foster Wheeler Inc.	EMAIL chris.stransky@amec.com; dorisv@sccwrp.org	PROJECT NAME / NUMBER San Diego Bay Shallow Water Habitat Tissues	COC PAGE 1 of 1
PROJECT MANAGER Chris Stransky (Amec), Doris Vidal (SCCWRP)	FAX	PO #	PHYSIS SOS #
COMPANY ADDRESS: AMEC 9210 Sky Park Court San Diego, CA	PHONE 858-300-4350; 714-755-3216 office 858-775-5547 (Chris) cell	SAMPLED BY Tyler Huff/ Jeremy Burns	
		TYPE OF ICE USED <input type="checkbox"/> WET <input type="checkbox"/> BLUE <input type="checkbox"/> DRY	
		SHIPPED VIA <input type="checkbox"/> FEDEX <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Physis <input type="checkbox"/> other	

TURNAROUND TIME <input checked="" type="checkbox"/> STANDARD (15-20 business days) <input type="checkbox"/> RUSH business days
REPORT FORMAT <input checked="" type="checkbox"/> PHYSIS PDF/EDD <input type="checkbox"/> SWAMP EDD <input type="checkbox"/> other
SPECIAL INSTRUCTIONS Remaining samples missing from the first batch submitted. Project Billing to SCCWRP. Please include Chris Stransky (Amec) and Doris Vidal (SCCWRP) on all data deliverables.

REQUESTED ANALYSES

PLEASE SEE PHYSIS SOS

PHYSIS MATRIX CODES
SW = seawater FW = freshwater RW = rainwater
WW = wastewater DW = drinking water
S = sediment I = tissue E = extract O = other (specify)

SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE		physis matrix code	# of bottles	Grain Size														
		date	time																	
1	SWHB-12	Sediment	4/8/14	13:36			X													
2	SWHB-16	Sediment	4/8/14	13:01			X													
3	SWHB-20	Sediment	4/8/14	14:55			X													
4	SWHB-24	Sediment	4/8/14	16:22			X													
5	SWHB-25	Sediment	4/8/14	15:37			X													
6																				
7																				
8																				
9																				
10																				

RELINQUISHED BY				RECEIVED BY			
print <i>Tyler Huff</i>	signature 	company AMEC	date & time 5/21/15 12:5	print Adam Dell	signature 	company Physis	date & time 12:15 5/21/15

SAMPLE RECEIPT SUMMARY

CLIENT: SCCWRP Date Received: May 21, 2015 Received By: AI Inspected By: AI

COURIER

PHYSIS CLIENT FEDEX UPS

start 09:45 end 14:15 OTHER: _____

COOLER

COOLER BOX total # _____

OTHER: _____ 3

TEMPERATURE

6.1 °C WET ICE BLUE ICE

DRY ICE NONE

SAMPLE INTEGRITY UPON RECEIPT

1. COC(s) included and completely filled out..... **YES**
2. All sample containers arrived intact..... **YES**
3. All samples listed on COC(s) are present..... **YES**
4. Information on containers consistent with information on COC(s)..... **YES**
5. Correct containers and volume for all analyses indicated..... **YES**
6. All samples received within method holding time..... **YES**
7. Correct preservation used for all analyses indicated..... **NO; see notes below**
8. Name of sampler included on COC(s)..... **YES**

NOTES

See Temperature



July 07, 2015

Ken Schiff
Southern California Coastal Water Research Project
3535 Harbor Blvd., Suite 110
Costa Mesa, CA 92626-1437

Project Name: San Diego Bay Shallow Water Habitat Tissues
Physis Project ID: 1504003-002

Dear Ken,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/21/2015. A total of 68 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Conventionals
Percent Solids by SM 2540 B
Percent Lipids by Gravimetric
Elements
Trace Selenium by EPA 6020
Trace Mercury by EPA 245.7
Organics
Toxaphene w/ OCPs by EPA 8270D-NCI
Polynuclear Aromatic Hydrocarbons by EPA 8270D
PBDE Congeners by EPA 8270D-NCI
Organochlorine Pesticides & PCB Congeners by EPA 8270D

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Rich Gossett
Extension 201
310-420-4964 cell
richgossett@physislabs.com

PROJECT SAMPLE LIST

Southern California Coastal Water Research Project
 San Diego Bay Shallow Water Habitat Tissues

PHYSIS Project ID: 1504003-002
 Total Samples: 68

PHYSIS ID	Sample ID	Description	Date	Time	Matrix
31956	SWHB-26-SBB	Spotted sand bass, whole	4/22/2014		Tissue
31957	SWHB-26-CH	California Halibut, whole	4/22/2014		Tissue
31958	SWHB-26-SP-Small	Shiner perch, whole	4/22/2014		Tissue
31959	SWHB-26-SP-Large	Shiner perch, muscle with skin	4/22/2014		Tissue
31960	SWHB-26-BP	Black perch, whole	4/22/2014		Tissue
31961	SWHB-26-C	Crustacea	4/22/2014		Tissue
31962	SWHB-26-P	Polychaetes	4/22/2014		Tissue
31963	SWHB-26-M	Mollusks	4/22/2014		Tissue
31964	SWHB-26-FC	Brown shrimp	4/22/2014		Tissue
31965	SWHB-26-ZP	Plankton	5/8/2014		Tissue
31966	SWHB-27-SBB	Spotted sand bass, whole	4/23/2014		Tissue
31967	SWHB-27-CH	California halibut, whole	4/23/2014		Tissue
31968	SWHB-27-SP	Shiner perch, whole	4/23/2014		Tissue
31969	SWHB-27-P	Polychaetes	4/23/2014		Tissue
31970	SWHB-27-M	Mollusks	4/23/2014		Tissue
31971	SWHB-27-ZP	Plankton	4/23/2014		Tissue
31972	SWHB-30-SBB	Spotted sand bass, whole	4/23/2014		Tissue
31973	SWHB-30-CH	California halibut, whole	4/23/2014		Tissue
31974	SWHB-30-BP	Black perch, whole	4/23/2014		Tissue
31975	SWHB-30-C	Crustacea	4/23/2014		Tissue
31976	SWHB-30-P	Polychaetes	4/23/2014		Tissue
31977	SWHB-30-M	Mollusks	4/23/2014		Tissue
31978	SWHB-30-Crabs	Crabs	4/23/2014		Tissue
31979	SWHB-30-ZP	Plankton	5/12/2014		Tissue
31980	SWHB-01-SBB	Spotted sand bass, whole	4/22/2014		Tissue
31981	SWHB-01-CH	California Halibut, whole	4/22/2014		Tissue
31982	SWHB-01-SP	Shiner perch, whole	4/22/2014		Tissue
31983	SWHB-01-C	Crustacea	4/22/2014		Tissue
31984	SWHB-01-P	Polychaetes	4/22/2014		Tissue
31985	SWHB-01-M	Mollusks	4/22/2014		Tissue
31986	SWHB-01-FC	Brown Shrimp	4/22/2014		Tissue
31987	SWHB-01-ZP	Plankton	5/8/2014		Tissue
31988	SWHB-06-SBB	Spotted sand bass, whole	4/22/2014		Tissue
31989	SWHB-06-CH-Small	California halibut, whole	4/22/2014		Tissue
31990	SWHB-06-CH-Large	California halibut, whole	4/22/2014		Tissue

Southern California Coastal Water Research Project
 San Diego Bay Shallow Water Habitat Tissues

PHYSIS Project ID: 1504003-002
 Total Samples: 68

PHYSIS ID	Sample ID	Description	Date	Time	Matrix
31991	SWHB-06-P	Polychaetes	4/22/2014		Tissue
31992	SWHB-06-M	Mollusks	4/22/2014		Tissue
31993	SWHB-06-ZP	Plankton	5/9/2014		Tissue
31994	SWHB-40-SBB	Spotted sand bass, whole	4/22/2014		Tissue
31995	SWHB-40-CH	California Halibut, whole	4/22/2014		Tissue
31996	SWHB-40-SP	Shiner perch, whole	4/22/2014		Tissue
31997	SWHB-40-C	Crustacea	4/22/2014		Tissue
31998	SWHB-40-P	Polychaetes	4/22/2014		Tissue
31999	SWHB-40-M	Mollusks	4/22/2014		Tissue
32000	SWHB-40-ZP	Plankton	5/9/2014		Tissue
32001	SWHB-15-SBB	Spotted sand bass, whole	4/21/2014		Tissue
32002	SWHB-15-CH	California Halibut, whole	4/21/2014		Tissue
32003	SWHB-15-SA-small	Slough anchovy, whole	4/21/2014		Tissue
32004	SWHB-15-C	Crustacea	4/21/2014		Tissue
32005	SWHB-15-P	Polychaetes	4/21/2014		Tissue
32006	SWHB-15-M	Mollusks	4/21/2014		Tissue
32007	SWHB-15-ZP	Plankton	5/7/2014		Tissue
32008	SWHB-21-SBB	Spotted sand bass, whole	4/21/2014		Tissue
32009	SWHB-21-CH-small	California halibut, whole	4/21/2014		Tissue
32010	SWHB-21-CH-large	California halibut, whole	4/21/2014		Tissue
32011	SWHB-21-C	Crustacea	4/21/2014		Tissue
32012	SWHB-21-P	Polychaetes	4/21/2014		Tissue
32013	SWHB-21-B	Mollusks	4/21/2014		Tissue
32014	SWHB-21-ZP	Plankton	5/7/2014		Tissue
32015	SWHB-22-SBB	Spotted sand bass, whole	4/21/2014		Tissue
32016	SWHB-22-CH	California Halibut, whole	4/21/2014		Tissue
32017	SWHB-22-SP	Shiner perch, whole	4/21/2014		Tissue
32018	SWHB-22-P	Polychaetes	4/21/2014		Tissue
32019	SWHB-22-M	Mollusks	4/21/2014		Tissue
32020	SWHB-22-ZP	Plankton	5/7/2014		Tissue
32029	SWHB-26-27-Goby	Goby sp., whole	4/22/2014		Tissue
32030	SWHB-01-06-40-Goby	Goby sp., whole	4/22/2014		Tissue
32031	SWHB-15-22-Goby	Goby sp., whole	4/21/2014		Tissue

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS₁/MS₂, BS₁/BS₂, LCS₁/LCS₂, LCM₁/LCM₂, CRM₁/CRM₂, surrogate spikes and/or replicate project sample analysis (R₁/R₂) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

PERCENT SOLIDS

- N There was not enough tissue for Percent Solids analysis; therefore the corresponding data is reported on a wet weight basis instead of a dry weight basis. This affected a total of ten project samples.

POLYNUCLEAR AROMATIC HYDROCARBONS

- 1 One LMW surrogate (d8-Naphthalene) was below the specified acceptance limits in two project samples as a result of increased loss of this compound during sample preparation due to compound volatility. All other surrogate recoveries in the QC and other project samples were within acceptance limits and were therefore not affected.
- 2 RPDs of several PAHs were above the specified acceptance limits in the BS1/BS2 as a result of increased variation in loss of these compounds during sample preparation due to compound volatility. All other BS RPDs were within acceptance limits and were therefore not affected.

PCB CONGENERS

- 3 Four HMW congeners in two batches were above the specified acceptance limits in the BS as a result of possible issues with a change in sensitivity between the calibration curve and the BS. Two of these congeners (PCB194 and PCB206) were detected in several samples and these suggest that the concentrations may be overestimated within the affected batch (O-7122). All other BS recoveries were within acceptance limits and were therefore not affected.
- 4 Three congeners were outside specified acceptance limits in the CRM as a result of possible matrix interference combined with the low concentration of these congeners in the CRM matrix. All other CRM recoveries were within acceptance limits and were therefore not affected.

ORGANICS TUNE

Physis uses the software supplied with its Agilent GCMS systems to tune its instruments. Moreover, with today's technology software algorithms provided by the instrument manufacturer provide a more stable system across a wider mass range than manual tuning to achieve specific tuning targets such as DFTPP. The following quote is from EPA Method 8270D Section 11.3.1.

“The analyst is always free to choose criteria that are tighter than those included in this method or to use other documented criteria provided they are used consistently throughout

the initial calibration, calibration verification, and sample analyses.”

The key here is that the instrument is tuned and that those tune settings are used for the subsequent analysis of the calibration curve, calibration verification, and samples. Moreover, another key reason for tuning to specific criteria is to insure that the GCMS is generating spectra that match the spectra in the NIST Library for confirming the identification of the target analyte. Physis can provide library search results for our calibration standards indicating a very high match quality with the NIST library spectra.

PERFORMANCE-BASED CHEMISTRY

The chemistry results provided in this report are derived from “performance-based” chemistry rather than the use of specific EPA published laboratory methods. This does not eliminate our responsibility to use Good Laboratory Practices. It does allow for incorporation of improvements in technology or the use of laboratory preferences for techniques that improve the efficiency and sensitivity of the laboratory and maintain or enhance the quality of the data.

“The Environmental Protection Agency (EPA) is actively working to implement the President’s program for reinventing government and reforming regulatory policy. As part of this program, EPA has been working at breaking down barriers to using new monitoring techniques. One barrier is the requirement to use specific measurement methods or technologies in complying with some of the Agency’s regulations. EPA’s Environmental Monitoring Management Council (EMMC), members of the regulated community, and Congress agree that EPA needs to change the way it specifies monitoring requirements in regulations and permits. There is broad acceptance for Agency-wide use of a nonprescriptive performance-based measurement system (PBMS)”. PBMS conveys "what" needs to be accomplished, but not prescriptively "how" to do it. EPA defines PBMS as a set of processes wherein the data needs, mandates, or limitations of a program or project are specified, and serve as criteria for selecting appropriate methods to meet those needs in a cost-effective manner. The criteria may be published in regulations, technical guidance documents, permits, work plans, or enforcement orders. Under a performance-based approach, EPA would specify:

- Questions to be answered by monitoring.
- Decisions to be supported by the data.
- Level of uncertainty acceptable for making decisions.
- Documentation to be generated to support this approach in the RCRA monitoring program.

(Taken from OSWER PBMS Implementation Plan, October 9, 1998, A Cooperative Effort Among: OSW, OERR, OUST, TIO, FFROL and CEPP0).”

The US EPA has included references to being “performance-based” in many of their newer methods. The use of performance-based methods is even more critical for programs like this study in order to allow the laboratory to adapt methods that optimize the goal of the project in terms of achieving ultra-low sensitivity and analysis of new chemicals of concern. I would also like to quote US EPA Method 8270-

“In addition, SW-846 methods, with the exception of required method use for the analysis of method-defined parameters, are intended to be guidance methods which contain general information on how to perform an analytical procedure or technique which a laboratory can use as a basic starting point

for generating its own detailed Standard Operating Procedure (SOP), either for its own general use or for a specific project application.”

Performance-based chemistry was first used for NOAA’s National Status and Trends Program in the early 1980’s which is now operated under the US EPA as the National Coastal Condition Assessment Program (NCCA). The NS&T program included 3 large well-established laboratories for the analysis of samples from each of 3 regions of the United States. It was concluded at the beginning of this program that a significant improvement in the quality and comparability of the results would be achieved by allowing the participating laboratories to optimize their own individual methods. The key to this approach and any subsequent performance-based chemistry programs is the successful inclusion of an interlaboratory comparison as well as the clear detailed specification of data quality objectives (DQOs) for the project. All the Bight Survey projects from 1994 to 2013 have been performance-based and each of the surveys included interlaboratory comparisons as a key component for ensuring high quality data that is comparable between laboratories over time.

The one area that has not evolved along with the advent of performance-based chemistry is the data validation process. Today’s data validation process still relies upon collecting and evaluating laboratory analytical information and comparing it to the details of a specific EPA analytical method such as EPA 8270 for GCMS analysis or EPA 6020 for ICPMS analysis. This can occur even when the requirement in the method is outdated and based on old technology. Data validation procedures need to be adapted to performance-based chemistry allowing for any individual laboratory to use or not use any method or any part of a method they choose as long as they can demonstrate their ability to successfully pass interlaboratory comparisons, performance evaluation samples, and meet the data quality objectives of the project QA Plan.

EPA METHOD MODIFICATIONS

With reference to performance-based methods, the following information is provided as a basis of comparison between the Physis methods used for this study and the associated EPA Method. Its purpose is solely to provide information and is not intended to highlight errors. Physis has successfully participated in several interlaboratory comparison studies including the Bight 13 Project demonstrating the viability of our analytical process. Physis has included the QAQC data in this report necessary to show that the results comply with the project QA Plan and indicate acceptable accuracy and precision.

- A. Internal Laboratory QAQC Frequency for GCMS Analyses- Physis uses GC columns that are longer and narrower and the GC oven is programmed at a very slow rate of 2.5°C per minute both of which are not typically used by most laboratories. The purpose for this is to maximize separation of the 100’s to 1000’s of compounds present in environmental samples reducing co-elution with interfering compounds, reducing background noise, and enhancing the accuracy of quantitation. At the same time this process extends the run-time for each sample to ca. 90 minutes as compared to the 15-30 minutes with typical conditions. At 90 minutes per run, the maximum number of runs for any 12-hour period is 8. Each batch of samples typically includes the DFTPP tune solution and the initial calibration verification of from 1 to 4 solutions (Depending on the target parameters) for a total of 2-5 runs leaving an opening for 3-6 samples before having to redo the QA samples if the 12-hour constraint is applied. At this rate it’s not economically viable to follow the 12-hour rule and complete the analyses of the samples.

Since the 12-hour criteria was established when the state-of-the-art was GCs equipped with packed columns and GCMS systems were not anywhere near as stable as the electronics of today. Physis does

follow the criteria's intent by analyzing the calibration verification standards at the beginning, middle, and end of each batch of no more than 20 samples rather than every 12 hours.

- B. Calibration and Quantitation- Physis bases its calibration curve on the mass of each compound rather than concentration. Using the internal standard method of quantitation, use of mass rather than concentration eliminates the extract or digestate volume term from the formula used to calculate concentrations in the samples. Therefore there is no need to measure the precise volume of the extract or digestate. For GCMS analysis, extract volumes can be quite low and small volume changes will be reflected in increased variation of the internal standard response from sample to sample due to differences in the extract volume and not due to the instability of the GCMS. Through long-term experience, Physis chemists are trained to take into consideration this change in volume when evaluating whether a change in the internal standard response is caused by a change in the GCMS sensitivity or extract volume.

The "recovery" of the Internal Standard and its variability is reported in Form VII SV-1 for reporting IS peak areas. For the sample IS compared to the ICV/CCV IS peak area, this form has a wide acceptance range at 50-200% which is considerably larger than the variation in the nominal estimate made of our extract volumes. Therefore significant deviations from expected IS responses are clearly obvious to the analyst and would require corrective action and re-analysis. The difficulty is the fact that Form VII SV-1 does not accommodate volumes and therefore does not allow for evaluation of the sample IS as it compares to the ICV/CCV on an even basis.

- C. Negative Chemical Ionization- Some target analytes are analyzed using the GCMS in the Negative Chemical Ionization Mode (NCI). This results in non-standard mass spectra that cannot be compared to the EI spectra in the NIST library.
- D. Aroclor PCBs- Physis analyzes PCBs using a congener-based calibration standard composed of 52 or more different congeners representing ca. 75-80% of the PCBs discharged into the environment. Physis uses the results from the congener analysis to estimate Aroclor concentrations. To do this, Physis determines the Aroclor mixture present in the sample, sums the results for the congeners present in that Aroclor mixture then corrects the result to account for the missing mass based on a previous comparison of an Aroclor calibration standard to the congener mixture. Physis does not perform blank or matrix spikes using Aroclor mixtures since PCB spiking is done via the congener solution. Aroclor-based quantitation is inherently inaccurate and imprecise and results based on our process are as accurate if not more accurate than the Aroclor-based process since the quantitation is based on individual peaks rather than summing peaks.
- E. Pyrethroid/Fipronil Surrogates- Physis spikes all samples with a surrogate solution containing TCMX, PCB030, PCB112, and PCB198 for the Chlorinated Pesticides, Congener PCBs, Pyrethroids, and Fipronils; d8-Naphthalene, d10-Acenaphthene, d10-Phenanthrene, d12- Chrysene, and d12-Perylene for the PAHs; and FBDE-3002, FBDE-5004, and FBDE-8001 for the PBDEs. Since Pyrethroids and Fipronils are quantified using NCI, only the PCB112 and PCB198 surrogates are used as surrogates for these compounds.

PHYSIS

PANALYTICAL
REPORT

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CA ELAP #2769

Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1 SWHB-26-SBB Spotted sand bass, whole Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 09-Jun-15						
(PCB030)	NA	81			% Recovery	
(PCB112)	NA	97			% Recovery	
(PCB198)	NA	85			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	11.44	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	44.6	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	3.03	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	10.54	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	10.83	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 11-Jun-15						
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31957-R1 SWHB-26-CH California Halibut, whole, Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 10-Jun-15						
(PCB030)	NA	89			% Recovery	
(PCB112)	NA	103			% Recovery	
(PCB198)	NA	79			% Recovery	
(TCMX)	NA	94			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	4.03	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	55.74	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	2.04	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.75	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	4.81	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	2.83	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31958-R1

SWHB-26-SP-Small Shiner perch, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(PCB030)	NA	83			% Recovery	
(PCB112)	NA	95			% Recovery	
(PCB198)	NA	81			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	6.45	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	6.53	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	78.94	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	3.61	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	3.93	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	1.26	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	3.63	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	3.86	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31959-R1

SWHB-26-SP-Large Shiner perch, muscl

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15



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Chlorinated Pesticides

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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	85			% Recovery	
(PCB112)	NA	104			% Recovery	
(PCB198)	NA	89			% Recovery	
(TCMX)	NA	90			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	20.81	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.14	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31960-R1

SWHB-26-BP Black perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(PCB030)	NA	92			% Recovery	
(PCB112)	NA	99			% Recovery	
(PCB198)	NA	90			% Recovery	
(TCMX)	NA	97			% Recovery	
2,4'-DDD	NA	14.48	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	14.31	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	58.27	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	2.1	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	6.06	0.05	0.1	ng/dry g	H



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	10.43	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	8.74	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31961-R1	SWHB-26-C Crustacea	Matrix: Tissue	Sampled: 22-Apr-14	Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 12-Jun-15		
(PCB030)	NA	120	% Recovery			
(PCB112)	NA	144	% Recovery			
(PCB198)	NA	115	% Recovery			
(TCMX)	NA	114	% Recovery			
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	12.41	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31962-R1	SWHB-26-P Polychaetes	Matrix: Tissue	Sampled: 22-Apr-14	Received: 21-May-15
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 13-Jun-15
(PCB030)	NA	90	% Recovery	
(PCB112)	NA	104	% Recovery	
(PCB198)	NA	82	% Recovery	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(TCMX)	NA	95			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	25.25	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	23.74	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	20.11	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31963-R1

SWHB-26-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	87			% Recovery	
(PCB112)	NA	101			% Recovery	
(PCB198)	NA	87			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	25.19	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	22.55	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.8	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	1.91	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.18	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	1	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31964-R1		WHB-26-FC Brown shrimp		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7118		Prepared: 29-May-15		Received: 21-May-15
(PCB030)	NA	79			% Recovery	
(PCB112)	NA	94			% Recovery	
(PCB198)	NA	71			% Recovery	
(TCMX)	NA	81			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	1.98	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	11.8	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31965-R1		SWHB-26-ZP Plankton		Matrix: Tissue		Sampled: 08-May-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	113			% Recovery	
(PCB112)	NA	122			% Recovery	
(PCB198)	NA	115			% Recovery	
(TCMX)	NA	111			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	11.23	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	51.33	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	11.8	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31966-R1

SWHB-27-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	84			% Recovery	
(PCB112)	NA	98			% Recovery	
(PCB198)	NA	90			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	8.82	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	2.09	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	33.65	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	30.4	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	6.93	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	6.67	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31967-R1 SWHB-27-CH California halibut, whole Matrix: Tissue Sampled: 23-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7118 Prepared: 29-May-15 Analyzed: 13-Jun-15						
(PCB030)	NA	91			% Recovery	
(PCB112)	NA	108			% Recovery	
(PCB198)	NA	81			% Recovery	
(TCMX)	NA	96			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	1.44	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	3.55	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	52.43	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	33.06	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	3.09	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	0.24	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	4.27	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	4.14	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7118 Prepared: 29-May-15 Analyzed: 18-Jun-15						
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31968-R1 SWHB-27-SP Shiner perch, whole, comp Matrix: Tissue Sampled: 23-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 10-Jun-15						
(PCB030)	NA	94			% Recovery	
(PCB112)	NA	110			% Recovery	
(PCB198)	NA	94			% Recovery	
(TCMX)	NA	100			% Recovery	
2,4'-DDD	NA	2.75	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	12.33	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	78.37	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	2.57	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	8.11	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	1.48	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	10.29	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	12.99	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31969-R1	SWHB-27-P Polychaetes	Matrix: Tissue	Sampled: 23-Apr-14	Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 13-Jun-15		
(PCB030)	NA	76	% Recovery			
(PCB112)	NA	91	% Recovery			
(PCB198)	NA	79	% Recovery			
(TCMX)	NA	81	% Recovery			
2,4'-DDD	NA	8.89	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	12.24	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	27.59	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	4.96	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	1.05	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.19	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31970-R1	SWHB-27-M Mollusks	Matrix: Tissue	Sampled: 23-Apr-14	Received: 21-May-15
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 14-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	82			% Recovery	
(PCB112)	NA	90			% Recovery	
(PCB198)	NA	77			% Recovery	
(TCMX)	NA	84			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31971-R1	SWHB-27-ZP Plankton	Matrix: Tissue	Sampled: 23-Apr-14	Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7120	Prepared: 03-Jun-15	Analyzed: 25-Jun-15		
(PCB030)	NA	112		% Recovery		
(PCB112)	NA	120		% Recovery		
(PCB198)	NA	122		% Recovery		
(TCMX)	NA	106		% Recovery		
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	128.97	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	1.96	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	3.03	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31972-R1

SWHB-30-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	85			% Recovery	
(PCB112)	NA	104			% Recovery	
(PCB198)	NA	81			% Recovery	
(TCMX)	NA	93			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	3.59	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	61.77	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	29.54	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.68	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	5.39	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31973-R1

SWHB-30-CH California halibut, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	84			% Recovery	
(PCB112)	NA	95			% Recovery	
(PCB198)	NA	79			% Recovery	



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(TCMX)	NA	84			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	11.88	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31974-R1

SWHB-30-BP Black perch, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	83			% Recovery	
(PCB112)	NA	99			% Recovery	
(PCB198)	NA	87			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	1.28	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	28.04	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.63	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	0.85	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	1.17	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31975-R1		SWHB-30-C Crustacea		Matrix: Tissue		Sampled: 23-Apr-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	109			% Recovery	
(PCB112)	NA	122			% Recovery	
(PCB198)	NA	122			% Recovery	
(TCMX)	NA	112			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	1.38	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	5.05	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/wet g	H,N
Sample ID: 31976-R1		SWHB-30-P Polychaetes		Matrix: Tissue		Sampled: 23-Apr-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	111			% Recovery	
(PCB112)	NA	130			% Recovery	
(PCB198)	NA	124			% Recovery	
(TCMX)	NA	108			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	15.39	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	11.01	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31977-R1	SWHB-30-M Mollusks	Matrix: Tissue	Sampled: 23-Apr-14	Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7120	Prepared: 03-Jun-15	Analyzed: 25-Jun-15		
(PCB030)	NA	105	% Recovery			
(PCB112)	NA	123	% Recovery			
(PCB198)	NA	127	% Recovery			
(TCMX)	NA	100	% Recovery			
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	30.06	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	3.02	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/wet g	H,N



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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31978-R1 SWHB-30-Crabs Crabs Matrix: Tissue Sampled: 23-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 25-Jun-15						
(PCB030)	NA	108			% Recovery	
(PCB112)	NA	122			% Recovery	
(PCB198)	NA	123			% Recovery	
(TCMX)	NA	101			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	3.7	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	14.36	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 03-Jul-15						
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31979-R1 SWHB-30-ZP Plankton Matrix: Tissue Sampled: 12-May-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 25-Jun-15						
(PCB030)	NA	109			% Recovery	
(PCB112)	NA	120			% Recovery	
(PCB198)	NA	125			% Recovery	
(TCMX)	NA	110			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	35.88	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.94	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.03	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31980-R1

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	80			% Recovery	
(PCB112)	NA	97			% Recovery	
(PCB198)	NA	88			% Recovery	
(TCMX)	NA	86			% Recovery	
2,4'-DDD	NA	6.47	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	4.27	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	36.78	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	32.62	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	6.99	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	6.05	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31981-R1

SWHB-01-CH California halibut, whole, c

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	83			% Recovery	
(PCB112)	NA	105			% Recovery	
(PCB198)	NA	77			% Recovery	
(TCMX)	NA	84			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	38.49	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	3.58	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.49	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	2.26	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	2.56	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31982-R1

SWHB-01-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(PCB030)	NA	86			% Recovery	
(PCB112)	NA	105			% Recovery	
(PCB198)	NA	82			% Recovery	
(TCMX)	NA	90			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	58.61	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	3.06	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	1.05	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	1.43	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.67	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.79	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31983-R1

SWHB-01-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	107			% Recovery	
(PCB112)	NA	119			% Recovery	
(PCB198)	NA	129			% Recovery	
(TCMX)	NA	103			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	10.86	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31984-R1

SWHB-01-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	107			% Recovery	
(PCB112)	NA	116			% Recovery	
(PCB198)	NA	123			% Recovery	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(TCMX)	NA	102			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	6.35	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	39.53	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	2.03	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	3.92	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31985-R1

SWHB-01-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	114			% Recovery	
(PCB112)	NA	118			% Recovery	
(PCB198)	NA	121			% Recovery	
(TCMX)	NA	113			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	4.08	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	9.6	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	26.11	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	3.51	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	1.22	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	2.82	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	4.06	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31986-R1		SWHB-01-FC Brown Shrimp		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	112			% Recovery	
(PCB112)	NA	126			% Recovery	
(PCB198)	NA	127			% Recovery	
(TCMX)	NA	106			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	6.41	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.86	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31987-R1		SWHB-01-ZP Plankton		Matrix: Tissue		Sampled: 08-May-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	111			% Recovery	
(PCB112)	NA	121			% Recovery	
(PCB198)	NA	108			% Recovery	
(TCMX)	NA	108			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31988-R1

SWHB-06-SBB Spotted sand bass, whol

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	91			% Recovery	
(PCB112)	NA	110			% Recovery	
(PCB198)	NA	90			% Recovery	
(TCMX)	NA	98			% Recovery	
2,4'-DDD	NA	8.14	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	2.91	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	39.23	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	7.54	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	7.48	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Chlorinated Pesticides

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31989-R1 SWHB-06-CH-Small California halibut, w Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7118 Prepared: 29-May-15 Analyzed: 13-Jun-15						
(PCB030)	NA	85			% Recovery	
(PCB112)	NA	98			% Recovery	
(PCB198)	NA	79			% Recovery	
(TCMX)	NA	83			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	22.97	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.11	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.34	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7118 Prepared: 29-May-15 Analyzed: 18-Jun-15						
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31990-R1 SWHB-06-CH-Large California halibut, w Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7118 Prepared: 29-May-15 Analyzed: 13-Jun-15						
(PCB030)	NA	86			% Recovery	
(PCB112)	NA	100			% Recovery	
(PCB198)	NA	86			% Recovery	
(TCMX)	NA	89			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	0.84	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	26.65	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.44	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.86	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31991-R1	SWHB-06-P Polychaetes	Matrix: Tissue	Sampled: 22-Apr-14	Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 14-Jun-15		
(PCB030)	NA	85	% Recovery			
(PCB112)	NA	100	% Recovery			
(PCB198)	NA	81	% Recovery			
(TCMX)	NA	87	% Recovery			
2,4'-DDD	NA	2.56	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	3.89	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	7.65	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31992-R1	SWHB-06-M Mollusks	Matrix: Tissue	Sampled: 22-Apr-14	Received: 21-May-15
Method: EPA 8270D		Batch ID: O-7118	Prepared: 29-May-15	Analyzed: 14-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	95			% Recovery	
(PCB112)	NA	107			% Recovery	
(PCB198)	NA	81			% Recovery	
(TCMX)	NA	97			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	2.67	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	6.02	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 18-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 31993-R1

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	111			% Recovery	
(PCB112)	NA	121			% Recovery	
(PCB198)	NA	118			% Recovery	
(TCMX)	NA	111			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	35.89	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31994-R1

SWHB-40-SBB Spotted sand bass, whol

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	74			% Recovery	
(PCB112)	NA	90			% Recovery	
(PCB198)	NA	71			% Recovery	
(TCMX)	NA	78			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	18.35	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	3.14	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	3.27	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31995-R1

SWHB-40-CH California halibut, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	86			% Recovery	
(PCB112)	NA	103			% Recovery	
(PCB198)	NA	83			% Recovery	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(TCMX)	NA	90			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	4.45	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	54.93	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	2.37	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	2.13	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	5.26	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	6.17	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31996-R1

SWHB-40-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	82			% Recovery	
(PCB112)	NA	98			% Recovery	
(PCB198)	NA	84			% Recovery	
(TCMX)	NA	85			% Recovery	
2,4'-DDD	NA	5.31	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	67.97	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	2.77	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	4.14	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	0.95	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	6.5	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	5.68	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31997-R1		SWHB-40-C Crustacea		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	110			% Recovery	
(PCB112)	NA	120			% Recovery	
(PCB198)	NA	121			% Recovery	
(TCMX)	NA	109			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	3.25	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.74	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 31998-R1		SWHB-40-P Polychaetes		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Received: 21-May-15
(PCB030)	NA	115			% Recovery	
(PCB112)	NA	119			% Recovery	
(PCB198)	NA	118			% Recovery	
(TCMX)	NA	113			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	3.44	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	15.86	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 31999-R1

SWHB-40-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	112			% Recovery	
(PCB112)	NA	114			% Recovery	
(PCB198)	NA	123			% Recovery	
(TCMX)	NA	106			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	2.63	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	7.03	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	1.98	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.86	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.3	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.68	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32000-R1 SWHB-40-ZP Plankton Matrix: Tissue Sampled: 09-May-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 26-Jun-15						
(PCB030)	NA	105			% Recovery	
(PCB112)	NA	116			% Recovery	
(PCB198)	NA	125			% Recovery	
(TCMX)	NA	100			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	26.05	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 03-Jul-15						
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 32001-R1 SWHB-15-SBB Spotted sand bass, whole, Matrix: Tissue Sampled: 21-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 10-Jun-15						
(PCB030)	NA	86			% Recovery	
(PCB112)	NA	100			% Recovery	
(PCB198)	NA	85			% Recovery	
(TCMX)	NA	92			% Recovery	
2,4'-DDD	NA	9.5	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	54.48	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	2.56	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	3.31	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	4.19	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32002-R1

SWHB-15-CH California halibut, whole, c

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(PCB030)	NA	93			% Recovery	
(PCB112)	NA	111			% Recovery	
(PCB198)	NA	84			% Recovery	
(TCMX)	NA	98			% Recovery	
2,4'-DDD	NA	3.14	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	51.64	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	3.06	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.32	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32003-R1

SWHB-15-SA-small Slough anchovy, who

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	85			% Recovery	
(PCB112)	NA	100			% Recovery	
(PCB198)	NA	86			% Recovery	
(TCMX)	NA	90			% Recovery	
2,4'-DDD	NA	10.67	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	119.09	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	6.41	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	1.2	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	0.66	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	6.63	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	6.56	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 11-Jun-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 32004-R1

SWHB-15-C Crustacea

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	107			% Recovery	
(PCB112)	NA	115			% Recovery	
(PCB198)	NA	134			% Recovery	
(TCMX)	NA	103			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	5.97	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/wet g	H,N

Sample ID: 32005-R1

SWHB-15-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	96			% Recovery	
(PCB112)	NA	115			% Recovery	
(PCB198)	NA	136			% Recovery	
(TCMX)	NA	91			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	5.55	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/wet g	H,N

Sample ID: 32006-R1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	91			% Recovery	
(PCB112)	NA	101			% Recovery	
(PCB198)	NA	120			% Recovery	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(TCMX)	NA	83			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	5.35	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 32007-R1

SWHB-15-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	92			% Recovery	
(PCB112)	NA	114			% Recovery	
(PCB198)	NA	117			% Recovery	
(TCMX)	NA	88			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	143.02	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	48.92	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 03-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 32008-R1		SWHB-21-SBB Spotted sand bass, whole		Matrix: Tissue		Sampled: 21-Apr-14
Method: EPA 8270D		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
(PCB030)	NA	112			% Recovery	
(PCB112)	NA	115			% Recovery	
(PCB198)	NA	130			% Recovery	
(TCMX)	NA	113			% Recovery	
2,4'-DDD	NA	6.28	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	36.93	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	2.81	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	6.89	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	7.79	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 04-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 32009-R1		SWHB-21-CH-small California halibut, w		Matrix: Tissue		Sampled: 21-Apr-14
Method: EPA 8270D		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
(PCB030)	NA	105			% Recovery	
(PCB112)	NA	112			% Recovery	
(PCB198)	NA	123			% Recovery	
(TCMX)	NA	99			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	4.58	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	42.63	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	5.1	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.83	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.34	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32010-R1

SWHB-21-CH-large California halibut, wh

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

(PCB030)	NA	105			% Recovery	
(PCB112)	NA	107			% Recovery	
(PCB198)	NA	129			% Recovery	
(TCMX)	NA	110			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	51.22	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	0.34	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	3.04	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	1.57	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32011-R1 SWHB-21-C Crustacea Matrix: Tissue Sampled: 21-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 29-Jun-15						
(PCB030)	NA	89			% Recovery	
(PCB112)	NA	105			% Recovery	
(PCB198)	NA	125			% Recovery	
(TCMX)	NA	78			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 04-Jul-15						
Toxaphene	NA	ND	10	50	ng/wet g	H,N
Sample ID: 32012-R1 SWHB-21-P Polychaetes Matrix: Tissue Sampled: 21-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 29-Jun-15						
(PCB030)	NA	102			% Recovery	
(PCB112)	NA	112			% Recovery	
(PCB198)	NA	132			% Recovery	
(TCMX)	NA	94			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	4.26	0.05	0.1	ng/wet g	H,N



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/wet g	H,N
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Sample ID: 32013-R1

SWHB-21-B Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

(PCB030)	NA	102			% Recovery	
(PCB112)	NA	110			% Recovery	
(PCB198)	NA	116			% Recovery	
(TCMX)	NA	100			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	3.01	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	1.41	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	0.33	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/wet g	H,N
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Sample ID: 32014-R1

SWHB-21-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(PCB030)	NA	102			% Recovery	
(PCB112)	NA	112			% Recovery	
(PCB198)	NA	130			% Recovery	
(TCMX)	NA	95			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	101.82	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	20.06	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	5.19	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 04-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H

Sample ID: 32015-R1

SWHB-22-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	76			% Recovery	
(PCB112)	NA	89			% Recovery	
(PCB198)	NA	75			% Recovery	
(TCMX)	NA	80			% Recovery	
2,4'-DDD	NA	8.77	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	8.62	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	26.54	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	0.49	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	5.98	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	4.55	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32016-R1

SWHB-22-CH California halibut, whole, c

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	83			% Recovery	
(PCB112)	NA	102			% Recovery	
(PCB198)	NA	82			% Recovery	
(TCMX)	NA	84			% Recovery	
2,4'-DDD	NA	2.35	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	29.43	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	1.04	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.88	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.98	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32017-R1

SWHB-22-SP Shiner perch, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 14-Jun-15

(PCB030)	NA	85			% Recovery	
(PCB112)	NA	104			% Recovery	
(PCB198)	NA	91			% Recovery	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(TCMX)	NA	89			% Recovery	
2,4'-DDD	NA	7.2	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	3.16	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	55.92	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	0.82	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32018-R1

SWHB-22-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

(PCB030)	NA	107			% Recovery	
(PCB112)	NA	114			% Recovery	
(PCB198)	NA	126			% Recovery	
(TCMX)	NA	101			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	13.67	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	3.03	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	4.62	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 04-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 32019-R1		SWHB-22-M Mollusks		Matrix: Tissue		Sampled: 21-Apr-14
Method: EPA 8270D		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
(PCB030)	NA	80			% Recovery	
(PCB112)	NA	104			% Recovery	
(PCB198)	NA	121			% Recovery	
(TCMX)	NA	71			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	1.67	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 04-Jul-15
Toxaphene	NA	ND	10	50	ng/dry g	H
Sample ID: 32020-R1		SWHB-22-ZP Plankton		Matrix: Tissue		Sampled: 07-May-14
Method: EPA 8270D		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
(PCB030)	NA	107			% Recovery	
(PCB112)	NA	116			% Recovery	
(PCB198)	NA	127			% Recovery	
(TCMX)	NA	105			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
2,4'-DDT	NA	27.09	0.05	0.1	ng/dry g	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDE	NA	24.42	0.05	0.1	ng/dry g	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g	H
cis-Nonachlor	NA	1.86	0.05	0.1	ng/dry g	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g	H
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g	H

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/dry g	H
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Sample ID: 32029-R1

SWHB-26-27-Goby Goby sp., whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

(PCB030)	NA	111			% Recovery	
(PCB112)	NA	114			% Recovery	
(PCB198)	NA	126			% Recovery	
(TCMX)	NA	109			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	10.91	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	0.86	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	0.37	0.05	0.1	ng/wet g	H,N

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 04-Jul-15

Toxaphene	NA	ND	10	50	ng/wet g	H,N
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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32030-R1 SWHB-01-06-40-Goby Goby sp., whole Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 29-Jun-15						
(PCB030)	NA	103			% Recovery	
(PCB112)	NA	107			% Recovery	
(PCB198)	NA	123			% Recovery	
(TCMX)	NA	100			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	10.33	0.05	0.1	ng/wet g	H,N
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	0.45	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 04-Jul-15						
Toxaphene	NA	ND	10	50	ng/wet g	H,N
Sample ID: 32031-R1 SWHB-15-22-Goby Goby sp., whole Matrix: Tissue Sampled: 21-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 29-Jun-15						
(PCB030)	NA	106			% Recovery	
(PCB112)	NA	109			% Recovery	
(PCB198)	NA	133			% Recovery	
(TCMX)	NA	101			% Recovery	
2,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDE	NA	ND	0.05	0.1	ng/wet g	H,N
2,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDD	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDE	NA	10.62	0.05	0.1	ng/wet g	H,N



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
4,4'-DDMU	NA	ND	0.05	0.1	ng/wet g	H,N
4,4'-DDT	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-alpha	NA	ND	0.05	0.1	ng/wet g	H,N
Chlordane-gamma	NA	ND	0.05	0.1	ng/wet g	H,N
cis-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Oxychlordane	NA	ND	0.05	0.1	ng/wet g	H,N
trans-Nonachlor	NA	ND	0.05	0.1	ng/wet g	H,N
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 04-Jul-15
Toxaphene	NA	ND	10	50	ng/wet g	H,N



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Conventionals

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1	SWHB-26-SBB Spotted sand bass, whole	Matrix: Tissue				
	Method: Gravimetric	Batch ID: C-22091				
Percent Lipids	NA	9.26	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B				
Percent Solids	NA	22.7	0.1	0.1	% Dry Weight	H
Sample ID: 31957-R1	SWHB-26-CH California Halibut, whole,	Matrix: Tissue				
	Method: Gravimetric	Batch ID: C-22091				
Percent Lipids	NA	3.97	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B				
Percent Solids	NA	20.5	0.1	0.1	% Dry Weight	H
Sample ID: 31958-R1	SWHB-26-SP-Small Shiner perch, whole,	Matrix: Tissue				
	Method: Gravimetric	Batch ID: C-22091				
Percent Lipids	NA	8.31	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B				
Percent Solids	NA	22.7	0.1	0.1	% Dry Weight	H
Sample ID: 31959-R1	SWHB-26-SP-Large Shiner perch, muscl	Matrix: Tissue				
	Method: Gravimetric	Batch ID: C-22091				
Percent Lipids	NA	4.39	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B				
Percent Solids	NA	19.6	0.1	0.1	% Dry Weight	H
Sample ID: 31960-R1	SWHB-26-BP Black perch, whole, comp	Matrix: Tissue				
	Method: Gravimetric	Batch ID: C-22091				
Percent Lipids	NA	11.63	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B				
Percent Solids	NA	23.1	0.1	0.1	% Dry Weight	H
Sample ID: 31961-R1	SWHB-26-C Crustacea	Matrix: Tissue				
	Method: SM 2540 B	Batch ID: C-22090				
Percent Solids	NA	32.9	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093				



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Percent Lipids	NA	2.99	0.01	0.05	% Dry Weight	H
Sample ID: 31962-R1	SWHB-26-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22.9	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	7.27	0.01	0.05	% Dry Weight	H
Sample ID: 31963-R1	SWHB-26-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	20.5	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	6.11	0.01	0.05	% Dry Weight	H
Sample ID: 31964-R1	WHB-26-FC Brown shrimp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22.9	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	2.79	0.01	0.05	% Dry Weight	H
Sample ID: 31965-R1	SWHB-26-ZP Plankton	Matrix: Tissue		Sampled: 08-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	10.7	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	5.96	0.01	0.05	% Dry Weight	H
Sample ID: 31966-R1	SWHB-27-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22.9	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	8.56	0.01	0.05	% Dry Weight	H
Sample ID: 31967-R1	SWHB-27-CH California halibut, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22.6	0.1	0.1	% Dry Weight	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	3.13	0.01	0.05	% Dry Weight	H
Sample ID: 31968-R1	SWHB-27-SP Shiner perch, whole, comp	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091		Prepared: 01-Jun-15		Analyzed: 01-Jun-15
Percent Lipids	NA	6.56	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B		Prepared: 27-May-15		Analyzed: 27-May-15
Percent Solids	NA	23.6	0.1	0.1	% Dry Weight	H
Sample ID: 31969-R1	SWHB-27-P Polychaetes	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	9.23	0.01	0.05	% Dry Weight	H
Sample ID: 31970-R1	SWHB-27-M Mollusks	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	18.4	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	6.48	0.01	0.05	% Dry Weight	H
Sample ID: 31971-R1	SWHB-27-ZP Plankton	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	16.3	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	8.98	0.01	0.05	% Dry Weight	H
Sample ID: 31972-R1	SWHB-30-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	24.5	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	5.22	0.01	0.05	% Dry Weight	H
Sample ID: 31973-R1	SWHB-30-CH California halibut, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Percent Solids	NA	21.2	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093			Prepared: 04-Jun-15	Analyzed: 04-Jun-15
Percent Lipids	NA	1.15	0.01	0.05	% Dry Weight	H
Sample ID: 31974-R1	SWHB-30-BP Black perch, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	21.8	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093			Prepared: 04-Jun-15	Analyzed: 04-Jun-15
Percent Lipids	NA	5.87	0.01	0.05	% Dry Weight	H
Sample ID: 31975-R1	SWHB-30-C Crustacea	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	2.1	0.01	0.05	% Wet Weight	H,N
Sample ID: 31976-R1	SWHB-30-P Polychaetes	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	28.2	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15
Percent Lipids	NA	6.57	0.01	0.05	% Dry Weight	H
Sample ID: 31977-R1	SWHB-30-M Mollusks	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	0.9	0.01	0.05	% Wet Weight	H,N
Sample ID: 31978-R1	SWHB-30-Crabs Crabs	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	28.3	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15
Percent Lipids	NA	3.52	0.01	0.05	% Dry Weight	H
Sample ID: 31979-R1	SWHB-30-ZP Plankton	Matrix: Tissue		Sampled: 12-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	11.8	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15
Percent Lipids	NA	10.11	0.01	0.05	% Dry Weight	H



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Sample ID: 31980-R1	SWHB-01-SBB Spotted sand bass, whole	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091			Prepared: 01-Jun-15	Analyzed: 01-Jun-15
Percent Lipids	NA	7.93	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B			Prepared: 27-May-15	Analyzed: 27-May-15
Percent Solids	NA	23.5	0.1	0.1	% Dry Weight	H
Sample ID: 31981-R1	SWHB-01-CH California halibut, whole, c	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091			Prepared: 01-Jun-15	Analyzed: 01-Jun-15
Percent Lipids	NA	2.32	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B			Prepared: 27-May-15	Analyzed: 27-May-15
Percent Solids	NA	21.8	0.1	0.1	% Dry Weight	H
Sample ID: 31982-R1	SWHB-01-SP Shiner perch, whole, comp	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091			Prepared: 01-Jun-15	Analyzed: 01-Jun-15
Percent Lipids	NA	10.26	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B			Prepared: 27-May-15	Analyzed: 27-May-15
Percent Solids	NA	21.3	0.1	0.1	% Dry Weight	H
Sample ID: 31983-R1	SWHB-01-C Crustacea	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094			Prepared: 05-Jun-15	Analyzed: 05-Jun-15
Percent Solids	NA	33	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15
Percent Lipids	NA	3.29	0.01	0.05	% Dry Weight	H
Sample ID: 31984-R1	SWHB-01-P Polychaetes	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094			Prepared: 05-Jun-15	Analyzed: 05-Jun-15
Percent Solids	NA	25.1	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15
Percent Lipids	NA	9.44	0.01	0.05	% Dry Weight	H
Sample ID: 31985-R1	SWHB-01-M Mollusks	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094			Prepared: 05-Jun-15	Analyzed: 05-Jun-15
Percent Solids	NA	18.5	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099			Prepared: 11-Jun-15	Analyzed: 11-Jun-15



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Percent Lipids	NA	1.53	0.01	0.05	% Dry Weight	H
Sample ID: 31986-R1	SWHB-01-FC Brown Shrimp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	26	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	2.39	0.01	0.05	% Dry Weight	H
Sample ID: 31987-R1	SWHB-01-ZP Plankton	Matrix: Tissue		Sampled: 08-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	11.2	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	6.9	0.01	0.05	% Dry Weight	H
Sample ID: 31988-R1	SWHB-06-SBB Spotted sand bass, whol	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	26.3	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	6.86	0.01	0.05	% Dry Weight	H
Sample ID: 31989-R1	SWHB-06-CH-Small California halibut, w	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	21	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	2.18	0.01	0.05	% Dry Weight	H
Sample ID: 31990-R1	SWHB-06-CH-Large California halibut, w	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	22.1	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093		Prepared: 04-Jun-15		Analyzed: 04-Jun-15
Percent Lipids	NA	2.46	0.01	0.05	% Dry Weight	H
Sample ID: 31991-R1	SWHB-06-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090		Prepared: 29-May-15		Analyzed: 29-May-15
Percent Solids	NA	28	0.1	0.1	% Dry Weight	H



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Percent Lipids	Method: Gravimetric NA	Batch ID: C-22093 6.14	0.01	Prepared: 04-Jun-15 0.05	Analyzed: 04-Jun-15	H
Sample ID: 31992-R1	SWHB-06-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14	Received: 21-May-15	
Percent Solids	Method: SM 2540 B NA	Batch ID: C-22090 23.6	0.1	Prepared: 29-May-15 0.1	Analyzed: 29-May-15	H
Percent Lipids	Method: Gravimetric NA	Batch ID: C-22093 2.02	0.01	Prepared: 04-Jun-15 0.05	Analyzed: 04-Jun-15	H
Sample ID: 31993-R1	SWHB-06-ZP Plankton	Matrix: Tissue		Sampled: 09-May-14	Received: 21-May-15	
Percent Solids	Method: SM 2540 B NA	Batch ID: C-22094 10	0.1	Prepared: 05-Jun-15 0.1	Analyzed: 05-Jun-15	H
Percent Lipids	Method: Gravimetric NA	Batch ID: C-22099 8.26	0.01	Prepared: 11-Jun-15 0.05	Analyzed: 11-Jun-15	H
Sample ID: 31994-R1	SWHB-40-SBB Spotted sand bass, whol	Matrix: Tissue		Sampled: 22-Apr-14	Received: 21-May-15	
Percent Lipids	Method: Gravimetric NA	Batch ID: C-22091 4.89	0.01	Prepared: 01-Jun-15 0.05	Analyzed: 01-Jun-15	H
Percent Solids	Method: SM 2540 B NA	Batch ID: SM-2540B 21	0.1	Prepared: 27-May-15 0.1	Analyzed: 27-May-15	H
Sample ID: 31995-R1	SWHB-40-CH California halibut, whole,	Matrix: Tissue		Sampled: 22-Apr-14	Received: 21-May-15	
Percent Lipids	Method: Gravimetric NA	Batch ID: C-22091 4.38	0.01	Prepared: 01-Jun-15 0.05	Analyzed: 01-Jun-15	H
Percent Solids	Method: SM 2540 B NA	Batch ID: SM-2540B 22.7	0.1	Prepared: 27-May-15 0.1	Analyzed: 27-May-15	H
Sample ID: 31996-R1	SWHB-40-SP Shiner perch, whole, comp	Matrix: Tissue		Sampled: 22-Apr-14	Received: 21-May-15	
Percent Lipids	Method: Gravimetric NA	Batch ID: C-22091 6.22	0.01	Prepared: 01-Jun-15 0.05	Analyzed: 01-Jun-15	H
Percent Solids	Method: SM 2540 B NA	Batch ID: SM-2540B 22.2	0.1	Prepared: 27-May-15 0.1	Analyzed: 27-May-15	H
Sample ID: 31997-R1	SWHB-40-C Crustacea	Matrix: Tissue		Sampled: 22-Apr-14	Received: 21-May-15	
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15	Analyzed: 05-Jun-15	



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Percent Solids	NA	32.5	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	1.41	0.01	0.05	% Dry Weight	H
Sample ID: 31998-R1	SWHB-40-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	21.8	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	7.48	0.01	0.05	% Dry Weight	H
Sample ID: 31999-R1	SWHB-40-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	37.1	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	3.62	0.01	0.05	% Dry Weight	H
Sample ID: 32000-R1	SWHB-40-ZP Plankton	Matrix: Tissue		Sampled: 09-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22094		Prepared: 05-Jun-15		Analyzed: 05-Jun-15
Percent Solids	NA	8.7	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22099		Prepared: 11-Jun-15		Analyzed: 11-Jun-15
Percent Lipids	NA	7	0.01	0.05	% Dry Weight	H
Sample ID: 32001-R1	SWHB-15-SBB Spotted sand bass, whole,	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091		Prepared: 01-Jun-15		Analyzed: 01-Jun-15
Percent Lipids	NA	5.84	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B		Prepared: 27-May-15		Analyzed: 27-May-15
Percent Solids	NA	24.7	0.1	0.1	% Dry Weight	H
Sample ID: 32002-R1	SWHB-15-CH California halibut, whole, c	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091		Prepared: 01-Jun-15		Analyzed: 01-Jun-15
Percent Lipids	NA	2.79	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B		Prepared: 27-May-15		Analyzed: 27-May-15
Percent Solids	NA	22.3	0.1	0.1	% Dry Weight	H
Sample ID: 32003-R1	SWHB-15-SA-small Slough anchovy, who	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15



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	Method: Gravimetric	Batch ID: C-22091		Prepared: 01-Jun-15		Analyzed: 01-Jun-15
Percent Lipids	NA	7.9	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B		Prepared: 27-May-15		Analyzed: 27-May-15
Percent Solids	NA	23.8	0.1	0.1	% Dry Weight	H
Sample ID: 32004-R1	SWHB-15-C Crustacea	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	1.73	0.01	0.05	% Wet Weight	H,N
Sample ID: 32005-R1	SWHB-15-P Polychaetes	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	2.24	0.01	0.05	% Wet Weight	H,N
Sample ID: 32006-R1	SWHB-15-M Mollusks	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	59	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	1.31	0.01	0.05	% Dry Weight	H
Sample ID: 32007-R1	SWHB-15-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	13	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	7.7	0.01	0.05	% Dry Weight	H
Sample ID: 32008-R1	SWHB-21-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	23	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	7.23	0.01	0.05	% Dry Weight	H
Sample ID: 32009-R1	SWHB-21-CH-small California halibut, w	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	20.6	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15



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Percent Lipids	NA	3.29	0.01	0.05	% Dry Weight	H
Sample ID: 32010-R1	SWHB-21-CH-large California halibut, wh	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	23.2	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	2.54	0.01	0.05	% Dry Weight	H
Sample ID: 32011-R1	SWHB-21-C Crustacea	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	1.35	0.01	0.05	% Wet Weight	H,N
Sample ID: 32012-R1	SWHB-21-P Polychaetes	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	1.13	0.01	0.05	% Wet Weight	H,N
Sample ID: 32013-R1	SWHB-21-B Mollusks	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	59	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	0.48	0.01	0.05	% Wet Weight	H,N
Sample ID: 32014-R1	SWHB-21-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092		Prepared: 03-Jun-15		Analyzed: 03-Jun-15
Percent Solids	NA	8.6	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104		Prepared: 23-Jun-15		Analyzed: 23-Jun-15
Percent Lipids	NA	5.14	0.01	0.05	% Dry Weight	H
Sample ID: 32015-R1	SWHB-22-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22091		Prepared: 01-Jun-15		Analyzed: 01-Jun-15
Percent Lipids	NA	10.43	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B		Prepared: 27-May-15		Analyzed: 27-May-15
Percent Solids	NA	25	0.1	0.1	% Dry Weight	H
Sample ID: 32016-R1	SWHB-22-CH California halibut, whole, c	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15



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	Method: Gravimetric	Batch ID: C-22091			Prepared: 01-Jun-15	Analyzed: 01-Jun-15
Percent Lipids	NA	2.46	0.01	0.05	% Dry Weight	H
	Method: SM 2540 B	Batch ID: SM-2540B			Prepared: 27-May-15	Analyzed: 27-May-15
Percent Solids	NA	27.2	0.1	0.1	% Dry Weight	H
Sample ID: 32017-R1	SWHB-22-SP Shiner perch, whole	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22090			Prepared: 29-May-15	Analyzed: 29-May-15
Percent Solids	NA	17.1	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22093			Prepared: 04-Jun-15	Analyzed: 04-Jun-15
Percent Lipids	NA	7.09	0.01	0.05	% Dry Weight	H
Sample ID: 32018-R1	SWHB-22-P Polychaetes	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092			Prepared: 03-Jun-15	Analyzed: 03-Jun-15
Percent Solids	NA	24.8	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104			Prepared: 23-Jun-15	Analyzed: 23-Jun-15
Percent Lipids	NA	6.72	0.01	0.05	% Dry Weight	H
Sample ID: 32019-R1	SWHB-22-M Mollusks	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092			Prepared: 03-Jun-15	Analyzed: 03-Jun-15
Percent Solids	NA	53.9	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104			Prepared: 23-Jun-15	Analyzed: 23-Jun-15
Percent Lipids	NA	0.95	0.01	0.05	% Dry Weight	H
Sample ID: 32020-R1	SWHB-22-ZP Plankton	Matrix: Tissue			Sampled: 07-May-14	Received: 21-May-15
	Method: SM 2540 B	Batch ID: C-22092			Prepared: 03-Jun-15	Analyzed: 03-Jun-15
Percent Solids	NA	12.6	0.1	0.1	% Dry Weight	H
	Method: Gravimetric	Batch ID: C-22104			Prepared: 23-Jun-15	Analyzed: 23-Jun-15
Percent Lipids	NA	6.52	0.01	0.05	% Dry Weight	H
Sample ID: 32029-R1	SWHB-26-27-Goby Goby sp., whole	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104			Prepared: 23-Jun-15	Analyzed: 23-Jun-15
Percent Lipids	NA	1.41	0.01	0.05	% Wet Weight	H,N
Sample ID: 32030-R1	SWHB-01-06-40-Goby Goby sp., whole	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: Gravimetric	Batch ID: C-22104			Prepared: 23-Jun-15	Analyzed: 23-Jun-15



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Percent Lipids	NA	1.29	0.01	0.05	% Wet Weight	H,N
Sample ID: 32031-R1	SWHB-15-22-Goby Goby sp., whole	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: Gravimetric	Batch ID: C-22104	Prepared: 23-Jun-15		Analyzed: 23-Jun-15	
Percent Lipids	NA	1.23	0.01	0.05	% Wet Weight	H,N



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1	SWHB-26-SBB Spotted sand bass, whole	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6128				
Mercury (Hg)	NA	0.2599	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086				
Selenium (Se)	NA	1.613	0.025	0.05	µg/dry g	H
Sample ID: 31957-R1	SWHB-26-CH California Halibut, whole,	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6128				
Mercury (Hg)	NA	0.2474	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086				
Selenium (Se)	NA	1.891	0.025	0.05	µg/dry g	H
Sample ID: 31958-R1	SWHB-26-SP-Small Shiner perch, whole,	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6128				
Mercury (Hg)	NA	0.0989	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086				
Selenium (Se)	NA	1.273	0.025	0.05	µg/dry g	H
Sample ID: 31959-R1	SWHB-26-SP-Large Shiner perch, muscl	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6128				
Mercury (Hg)	NA	0.1387	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086				
Selenium (Se)	NA	0.997	0.025	0.05	µg/dry g	H
Sample ID: 31960-R1	SWHB-26-BP Black perch, whole, comp	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6128				
Mercury (Hg)	NA	0.061	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086				
Selenium (Se)	NA	1.59	0.025	0.05	µg/dry g	H
Sample ID: 31961-R1	SWHB-26-C Crustacea	Matrix: Tissue				
	Method: EPA 245.7	Batch ID: E-6129				
Mercury (Hg)	NA	0.1041	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087				



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Selenium (Se)	NA	1.545	0.025	0.05	µg/dry g	H
Sample ID: 31962-R1	SWHB-26-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.1479	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	5.44	0.025	0.05	µg/dry g	H
Sample ID: 31963-R1	SWHB-26-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.4277	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	3.106	0.025	0.05	µg/dry g	H
Sample ID: 31964-R1	WHB-26-FC Brown shrimp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.1274	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.35	0.025	0.05	µg/dry g	H
Sample ID: 31965-R1	SWHB-26-ZP Plankton	Matrix: Tissue		Sampled: 08-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2743	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.124	0.025	0.05	µg/dry g	H
Sample ID: 31966-R1	SWHB-27-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2461	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	2	0.025	0.05	µg/dry g	H
Sample ID: 31967-R1	SWHB-27-CH California halibut, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.1524	0.00001	0.00002	µg/dry g	H



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	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.51	0.025	0.05	µg/dry g	H
Sample ID: 31968-R1	SWHB-27-SP Shiner perch, whole, comp	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.1524	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.257	0.025	0.05	µg/dry g	H
Sample ID: 31969-R1	SWHB-27-P Polychaetes	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2063	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	6.159	0.025	0.05	µg/dry g	H
Sample ID: 31970-R1	SWHB-27-M Mollusks	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2674	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	3.901	0.025	0.05	µg/dry g	H
Sample ID: 31971-R1	SWHB-27-ZP Plankton	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.196	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.285	0.025	0.05	µg/dry g	H
Sample ID: 31972-R1	SWHB-30-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.4199	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.834	0.025	0.05	µg/dry g	H
Sample ID: 31973-R1	SWHB-30-CH California halibut, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15



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Mercury (Hg)	NA	0.1119	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.238	0.025	0.05	µg/dry g	H
Sample ID: 31974-R1	SWHB-30-BP Black perch, whole	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.1074	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.452	0.025	0.05	µg/dry g	H
Sample ID: 31976-R1	SWHB-30-P Polychaetes	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.0555	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	3.332	0.025	0.05	µg/dry g	H
Sample ID: 31978-R1	SWHB-30-Crabs Crabs	Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.0413	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.433	0.025	0.05	µg/dry g	H
Sample ID: 31979-R1	SWHB-30-ZP Plankton	Matrix: Tissue		Sampled: 12-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.047	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.742	0.025	0.05	µg/dry g	H
Sample ID: 31980-R1	SWHB-01-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.3858	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	2.01	0.025	0.05	µg/dry g	H
Sample ID: 31981-R1	SWHB-01-CH California halibut, whole, c	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15



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	Method: EPA 245.7	Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.1846	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.645	0.025	0.05	µg/dry g	H
Sample ID: 31982-R1	SWHB-01-SP Shiner perch, whole, comp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.0771	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.635	0.025	0.05	µg/dry g	H
Sample ID: 31983-R1	SWHB-01-C Crustacea	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.11	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.546	0.025	0.05	µg/dry g	H
Sample ID: 31984-R1	SWHB-01-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	1.02	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	2.43	0.025	0.05	µg/dry g	H
Sample ID: 31985-R1	SWHB-01-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1807	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	4.608	0.025	0.05	µg/dry g	H
Sample ID: 31986-R1	SWHB-01-FC Brown Shrimp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.158	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.413	0.025	0.05	µg/dry g	H



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Sample ID: 31987-R1	SWHB-01-ZP Plankton	Matrix: Tissue		Sampled: 08-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.6436	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.18	0.025	0.05	µg/dry g	H
Sample ID: 31988-R1	SWHB-06-SBB Spotted sand bass, whol	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.4732	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.892	0.025	0.05	µg/dry g	H
Sample ID: 31989-R1	SWHB-06-CH-Small California halibut, w	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.1703	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.345	0.025	0.05	µg/dry g	H
Sample ID: 31990-R1	SWHB-06-CH-Large California halibut, w	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2048	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.35	0.025	0.05	µg/dry g	H
Sample ID: 31991-R1	SWHB-06-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2839	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	5.187	0.025	0.05	µg/dry g	H
Sample ID: 31992-R1	SWHB-06-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.2638	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15



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Selenium (Se)	NA	2.853	0.025	0.05	µg/dry g	H
Sample ID: 31993-R1	SWHB-06-ZP Plankton	Matrix: Tissue		Sampled: 09-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.3418	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.31	0.025	0.05	µg/dry g	H
Sample ID: 31994-R1	SWHB-40-SBB Spotted sand bass, whol	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.4105	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.943	0.025	0.05	µg/dry g	H
Sample ID: 31995-R1	SWHB-40-CH California halibut, whole,	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.2516	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.592	0.025	0.05	µg/dry g	H
Sample ID: 31996-R1	SWHB-40-SP Shiner perch, whole, comp	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.2089	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.608	0.025	0.05	µg/dry g	H
Sample ID: 31997-R1	SWHB-40-C Crustacea	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1246	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.084	0.025	0.05	µg/dry g	H
Sample ID: 31998-R1	SWHB-40-P Polychaetes	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.24	0.00001	0.00002	µg/dry g	H



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	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	3.391	0.025	0.05	µg/dry g	H
Sample ID: 31999-R1	SWHB-40-M Mollusks	Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1151	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.588	0.025	0.05	µg/dry g	H
Sample ID: 32000-R1	SWHB-40-ZP Plankton	Matrix: Tissue		Sampled: 09-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1727	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.367	0.025	0.05	µg/dry g	H
Sample ID: 32001-R1	SWHB-15-SBB Spotted sand bass, whole,	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.6215	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.923	0.025	0.05	µg/dry g	H
Sample ID: 32002-R1	SWHB-15-CH California halibut, whole, c	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.1592	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.571	0.025	0.05	µg/dry g	H
Sample ID: 32003-R1	SWHB-15-SA-small Slough anchovy, who	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.1292	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.359	0.025	0.05	µg/dry g	H
Sample ID: 32006-R1	SWHB-15-M Mollusks	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Mercury (Hg)	NA	0.0771	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	0.897	0.025	0.05	µg/dry g	H
Sample ID: 32007-R1	SWHB-15-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1384	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.402	0.025	0.05	µg/dry g	H
Sample ID: 32008-R1	SWHB-21-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.2627	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	2.154	0.025	0.05	µg/dry g	H
Sample ID: 32009-R1	SWHB-21-CH-small California halibut, w	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.111	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.676	0.025	0.05	µg/dry g	H
Sample ID: 32010-R1	SWHB-21-CH-large California halibut, wh	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1869	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.565	0.025	0.05	µg/dry g	H
Sample ID: 32013-R1	SWHB-21-B Mollusks	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.0635	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	0.583	0.025	0.05	µg/dry g	H
Sample ID: 32014-R1	SWHB-21-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.0745	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.749	0.025	0.05	µg/dry g	H
Sample ID: 32015-R1	SWHB-22-SBB Spotted sand bass, whole	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.3161	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.998	0.025	0.05	µg/dry g	H
Sample ID: 32016-R1	SWHB-22-CH California halibut, whole, c	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15
Mercury (Hg)	NA	0.182	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15
Selenium (Se)	NA	1.19	0.025	0.05	µg/dry g	H
Sample ID: 32017-R1	SWHB-22-SP Shiner perch, whole	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15
Mercury (Hg)	NA	0.0832	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.566	0.025	0.05	µg/dry g	H
Sample ID: 32018-R1	SWHB-22-P Polychaetes	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1494	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	3.962	0.025	0.05	µg/dry g	H
Sample ID: 32019-R1	SWHB-22-M Mollusks	Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.0573	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	0.995	0.025	0.05	µg/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32020-R1	SWHB-22-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15
	Method: EPA 245.7	Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15
Mercury (Hg)	NA	0.1075	0.00001	0.00002	µg/dry g	H
	Method: EPA 6020	Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15
Selenium (Se)	NA	1.169	0.025	0.05	µg/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1		SWHB-26-SBB Spotted sand bass, whole		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7114		Prepared: 27-May-15		Received: 21-May-15
						Analyzed: 09-Jun-15
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	2.76	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	25.43	0.05	0.1	ng/dry g	H
PCB052	NA	30.26	0.05	0.1	ng/dry g	H
PCB066	NA	45.94	0.05	0.1	ng/dry g	H
PCB070	NA	3.95	0.05	0.1	ng/dry g	H
PCB074	NA	15.86	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	17.84	0.05	0.1	ng/dry g	H
PCB099	NA	90.02	0.05	0.1	ng/dry g	H
PCB101	NA	90.42	0.05	0.1	ng/dry g	H
PCB105	NA	27.89	0.05	0.1	ng/dry g	H
PCB110	NA	22.81	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	100.53	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	3.07	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	35.12	0.05	0.1	ng/dry g	H
PCB138	NA	204.59	0.05	0.1	ng/dry g	H
PCB149	NA	47.77	0.05	0.1	ng/dry g	H
PCB151	NA	15.9	0.05	0.1	ng/dry g	H
PCB153	NA	271.98	0.05	0.1	ng/dry g	H
PCB156	NA	15.02	0.05	0.1	ng/dry g	H
PCB157	NA	4.5	0.05	0.1	ng/dry g	H
PCB158	NA	15.41	0.05	0.1	ng/dry g	H
PCB167	NA	11.24	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	20.14	0.05	0.1	ng/dry g	H
PCB177	NA	16.61	0.05	0.1	ng/dry g	H
PCB180	NA	64.51	0.05	0.1	ng/dry g	H
PCB183	NA	23.48	0.05	0.1	ng/dry g	H
PCB187	NA	83.13	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	14.01	0.05	0.1	ng/dry g	H
PCB201	NA	17.29	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31957-R1

SWHB-26-CH California Halibut, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	2.03	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	13.45	0.05	0.1	ng/dry g	H
PCB052	NA	13.97	0.05	0.1	ng/dry g	H
PCB066	NA	20	0.05	0.1	ng/dry g	H
PCB070	NA	3.4	0.05	0.1	ng/dry g	H
PCB074	NA	6.68	0.05	0.1	ng/dry g	H
PCB077	NA	2.67	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	15.14	0.05	0.1	ng/dry g	H
PCB099	NA	72.57	0.05	0.1	ng/dry g	H
PCB101	NA	70.2	0.05	0.1	ng/dry g	H
PCB105	NA	14.93	0.05	0.1	ng/dry g	H
PCB110	NA	27.29	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	62.29	0.05	0.1	ng/dry g	H
PCB119	NA	6.51	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB123	NA	4.32	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	35.49	0.05	0.1	ng/dry g	H
PCB138	NA	215.69	0.05	0.1	ng/dry g	H
PCB149	NA	49.38	0.05	0.1	ng/dry g	H
PCB151	NA	21.58	0.05	0.1	ng/dry g	H
PCB153	NA	308.61	0.05	0.1	ng/dry g	H
PCB156	NA	10.63	0.05	0.1	ng/dry g	H
PCB157	NA	3.72	0.05	0.1	ng/dry g	H
PCB158	NA	14.32	0.05	0.1	ng/dry g	H
PCB167	NA	8.11	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	33.12	0.05	0.1	ng/dry g	H
PCB177	NA	21.1	0.05	0.1	ng/dry g	H
PCB180	NA	58.43	0.05	0.1	ng/dry g	H
PCB183	NA	24.54	0.05	0.1	ng/dry g	H
PCB187	NA	97.98	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	11.91	0.05	0.1	ng/dry g	H
PCB201	NA	15.56	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31958-R1

SWHB-26-SP-Small Shiner perch, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	3.06	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	3.41	0.05	0.1	ng/dry g	H
PCB049	NA	12.29	0.05	0.1	ng/dry g	H
PCB052	NA	13.97	0.05	0.1	ng/dry g	H
PCB066	NA	18.41	0.05	0.1	ng/dry g	H
PCB070	NA	5.38	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB074	NA	4.94	0.05	0.1	ng/dry g	H
PCB077	NA	1.61	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	9.36	0.05	0.1	ng/dry g	H
PCB099	NA	42.15	0.05	0.1	ng/dry g	H
PCB101	NA	44.12	0.05	0.1	ng/dry g	H
PCB105	NA	12.1	0.05	0.1	ng/dry g	H
PCB110	NA	13.99	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	36.24	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	10.02	0.05	0.1	ng/dry g	H
PCB138	NA	90.03	0.05	0.1	ng/dry g	H
PCB149	NA	17.42	0.05	0.1	ng/dry g	H
PCB151	NA	12.84	0.05	0.1	ng/dry g	H
PCB153	NA	116.31	0.05	0.1	ng/dry g	H
PCB156	NA	5.22	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	4.01	0.05	0.1	ng/dry g	H
PCB167	NA	5.74	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	5.28	0.05	0.1	ng/dry g	H
PCB180	NA	24.88	0.05	0.1	ng/dry g	H
PCB183	NA	8.14	0.05	0.1	ng/dry g	H
PCB187	NA	37.47	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	7.46	0.05	0.1	ng/dry g	H
PCB201	NA	7.06	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB206	NA	ND	0.05	0.1	ng/dry g	H
Sample ID: 31959-R1 SWHB-26-SP-Large Shiner perch, muscl Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 10-Jun-15						
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	5.08	0.05	0.1	ng/dry g	H
PCB052	NA	3.82	0.05	0.1	ng/dry g	H
PCB066	NA	6.13	0.05	0.1	ng/dry g	H
PCB070	NA	0.98	0.05	0.1	ng/dry g	H
PCB074	NA	1.14	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	6.76	0.05	0.1	ng/dry g	H
PCB099	NA	12.78	0.05	0.1	ng/dry g	H
PCB101	NA	13.67	0.05	0.1	ng/dry g	H
PCB105	NA	1.92	0.05	0.1	ng/dry g	H
PCB110	NA	6.22	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	7.33	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	2.15	0.05	0.1	ng/dry g	H
PCB138	NA	21.06	0.05	0.1	ng/dry g	H
PCB149	NA	4.02	0.05	0.1	ng/dry g	H
PCB151	NA	2.63	0.05	0.1	ng/dry g	H
PCB153	NA	28.69	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	1.3	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	10.25	0.05	0.1	ng/dry g	H
PCB183	NA	5.52	0.05	0.1	ng/dry g	H
PCB187	NA	7.42	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	3.95	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31960-R1

SWHB-26-BP Black perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	7.55	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	11.28	0.05	0.1	ng/dry g	H
PCB049	NA	31.01	0.05	0.1	ng/dry g	H
PCB052	NA	42.02	0.05	0.1	ng/dry g	H
PCB066	NA	55.81	0.05	0.1	ng/dry g	H
PCB070	NA	20.65	0.05	0.1	ng/dry g	H
PCB074	NA	14.35	0.05	0.1	ng/dry g	H
PCB077	NA	3.16	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	26.07	0.05	0.1	ng/dry g	H
PCB099	NA	118.09	0.05	0.1	ng/dry g	H
PCB101	NA	111.96	0.05	0.1	ng/dry g	H
PCB105	NA	30.24	0.05	0.1	ng/dry g	H
PCB110	NA	44.09	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	107.35	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB119	NA	7.76	0.05	0.1	ng/dry g	H
PCB123	NA	5.28	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	40.09	0.05	0.1	ng/dry g	H
PCB138	NA	275.6	0.05	0.1	ng/dry g	H
PCB149	NA	62.94	0.05	0.1	ng/dry g	H
PCB151	NA	30.5	0.05	0.1	ng/dry g	H
PCB153	NA	375.99	0.05	0.1	ng/dry g	H
PCB156	NA	19.69	0.05	0.1	ng/dry g	H
PCB157	NA	6.58	0.05	0.1	ng/dry g	H
PCB158	NA	15.92	0.05	0.1	ng/dry g	H
PCB167	NA	17.66	0.05	0.1	ng/dry g	H
PCB168+132	NA	44.5	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	43.41	0.05	0.1	ng/dry g	H
PCB177	NA	31.87	0.05	0.1	ng/dry g	H
PCB180	NA	88.53	0.05	0.1	ng/dry g	H
PCB183	NA	40.66	0.05	0.1	ng/dry g	H
PCB187	NA	102.74	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	15.49	0.05	0.1	ng/dry g	H
PCB201	NA	19.15	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31961-R1

SWHB-26-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	6.42	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB070	NA	2.98	0.05	0.1	ng/dry g	H
PCB074	NA	2.63	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	6.04	0.05	0.1	ng/dry g	H
PCB099	NA	19.01	0.05	0.1	ng/dry g	H
PCB101	NA	12.57	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	4.89	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	12.05	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	5.63	0.05	0.1	ng/dry g	H
PCB138	NA	32.47	0.05	0.1	ng/dry g	H
PCB149	NA	3.78	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	62.32	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	15.63	0.05	0.1	ng/dry g	H
PCB158	NA	1.85	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	13.26	0.05	0.1	ng/dry g	H
PCB177	NA	6.31	0.05	0.1	ng/dry g	H
PCB180	NA	16.51	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	16.69	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31962-R1

SWHB-26-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	11.72	0.05	0.1	ng/dry g	H
PCB052	NA	7.79	0.05	0.1	ng/dry g	H
PCB066	NA	11.24	0.05	0.1	ng/dry g	H
PCB070	NA	5.69	0.05	0.1	ng/dry g	H
PCB074	NA	5.81	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	7.23	0.05	0.1	ng/dry g	H
PCB099	NA	35.48	0.05	0.1	ng/dry g	H
PCB101	NA	33.59	0.05	0.1	ng/dry g	H
PCB105	NA	6.39	0.05	0.1	ng/dry g	H
PCB110	NA	17.81	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	19.39	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	9.4	0.05	0.1	ng/dry g	H
PCB138	NA	65.9	0.05	0.1	ng/dry g	H
PCB149	NA	26.41	0.05	0.1	ng/dry g	H
PCB151	NA	6.25	0.05	0.1	ng/dry g	H
PCB153	NA	86.9	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB158	NA	3.87	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	7.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	12.15	0.05	0.1	ng/dry g	H
PCB177	NA	15.64	0.05	0.1	ng/dry g	H
PCB180	NA	26.85	0.05	0.1	ng/dry g	H
PCB183	NA	8.48	0.05	0.1	ng/dry g	H
PCB187	NA	42.49	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	8.14	0.05	0.1	ng/dry g	H

Sample ID: 31963-R1

SWHB-26-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	16.01	0.05	0.1	ng/dry g	H
PCB052	NA	4.07	0.05	0.1	ng/dry g	H
PCB066	NA	11.74	0.05	0.1	ng/dry g	H
PCB070	NA	4.72	0.05	0.1	ng/dry g	H
PCB074	NA	4.98	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	5.79	0.05	0.1	ng/dry g	H
PCB099	NA	18.51	0.05	0.1	ng/dry g	H
PCB101	NA	20.92	0.05	0.1	ng/dry g	H
PCB105	NA	3.64	0.05	0.1	ng/dry g	H
PCB110	NA	10.57	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB118	NA	16.11	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	50.05	0.05	0.1	ng/dry g	H
PCB149	NA	19.32	0.05	0.1	ng/dry g	H
PCB151	NA	3.83	0.05	0.1	ng/dry g	H
PCB153	NA	52.7	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	4.83	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	8.7	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	13.43	0.05	0.1	ng/dry g	H
PCB177	NA	5.85	0.05	0.1	ng/dry g	H
PCB180	NA	13.94	0.05	0.1	ng/dry g	H
PCB183	NA	4.97	0.05	0.1	ng/dry g	H
PCB187	NA	18.43	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31964-R1

WHB-26-FC Brown shrimp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 14-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB066	NA	1.54	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	5.15	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	1.28	0.05	0.1	ng/dry g	H
PCB105	NA	1.92	0.05	0.1	ng/dry g	H
PCB110	NA	0.5	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	3.46	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	1.55	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	4.9	0.05	0.1	ng/dry g	H
PCB149	NA	ND	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	6.71	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	2.01	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	2.56	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31965-R1

SWHB-26-ZP Plankton

Matrix: Tissue

Sampled: 08-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	52.3	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	56.76	0.05	0.1	ng/dry g	H
PCB070	NA	33.85	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	74.12	0.05	0.1	ng/dry g	H
PCB101	NA	77.08	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	47.4	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	64.92	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	73.53	0.05	0.1	ng/dry g	H
PCB149	NA	17.52	0.05	0.1	ng/dry g	H
PCB151	NA	20.09	0.05	0.1	ng/dry g	H
PCB153	NA	112.62	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB157	NA	10.63	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	32.1	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31966-R1

SWHB-27-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	4.3	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	3.72	0.05	0.1	ng/dry g	H
PCB049	NA	18.16	0.05	0.1	ng/dry g	H
PCB052	NA	19.41	0.05	0.1	ng/dry g	H
PCB066	NA	24.11	0.05	0.1	ng/dry g	H
PCB070	NA	2.82	0.05	0.1	ng/dry g	H
PCB074	NA	13.67	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	16.77	0.05	0.1	ng/dry g	H
PCB099	NA	73.13	0.05	0.1	ng/dry g	H
PCB101	NA	66.78	0.05	0.1	ng/dry g	H
PCB105	NA	22.26	0.05	0.1	ng/dry g	H
PCB110	NA	20.83	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	72.08	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	2.55	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	30.6	0.05	0.1	ng/dry g	H
PCB138	NA	163.72	0.05	0.1	ng/dry g	H
PCB149	NA	36.8	0.05	0.1	ng/dry g	H
PCB151	NA	13.34	0.05	0.1	ng/dry g	H
PCB153	NA	241.37	0.05	0.1	ng/dry g	H
PCB156	NA	13.3	0.05	0.1	ng/dry g	H
PCB157	NA	3.34	0.05	0.1	ng/dry g	H
PCB158	NA	11.11	0.05	0.1	ng/dry g	H
PCB167	NA	8.81	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	26.25	0.05	0.1	ng/dry g	H
PCB177	NA	14.9	0.05	0.1	ng/dry g	H
PCB180	NA	63.47	0.05	0.1	ng/dry g	H
PCB183	NA	22.39	0.05	0.1	ng/dry g	H
PCB187	NA	68.41	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	11.8	0.05	0.1	ng/dry g	H
PCB201	NA	13.68	0.05	0.1	ng/dry g	H
PCB206	NA	7.18	0.05	0.1	ng/dry g	H

Sample ID: 31967-R1

SWHB-27-CH California halibut, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	13.95	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB052	NA	15.34	0.05	0.1	ng/dry g	H
PCB066	NA	16	0.05	0.1	ng/dry g	H
PCB070	NA	3.47	0.05	0.1	ng/dry g	H
PCB074	NA	7.79	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	13.9	0.05	0.1	ng/dry g	H
PCB099	NA	55.44	0.05	0.1	ng/dry g	H
PCB101	NA	58.48	0.05	0.1	ng/dry g	H
PCB105	NA	19.81	0.05	0.1	ng/dry g	H
PCB110	NA	29.09	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	48.44	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	4.49	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	23.46	0.05	0.1	ng/dry g	H
PCB138	NA	147.08	0.05	0.1	ng/dry g	H
PCB149	NA	30.45	0.05	0.1	ng/dry g	H
PCB151	NA	18.41	0.05	0.1	ng/dry g	H
PCB153	NA	188.34	0.05	0.1	ng/dry g	H
PCB156	NA	9.17	0.05	0.1	ng/dry g	H
PCB157	NA	2.01	0.05	0.1	ng/dry g	H
PCB158	NA	11.58	0.05	0.1	ng/dry g	H
PCB167	NA	3.24	0.05	0.1	ng/dry g	H
PCB168+132	NA	9.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	27.01	0.05	0.1	ng/dry g	H
PCB177	NA	17.88	0.05	0.1	ng/dry g	H
PCB180	NA	51.8	0.05	0.1	ng/dry g	H
PCB183	NA	16.69	0.05	0.1	ng/dry g	H
PCB187	NA	58.95	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	7.15	0.05	0.1	ng/dry g	H
PCB201	NA	12.57	0.05	0.1	ng/dry g	H
PCB206	NA	4.75	0.05	0.1	ng/dry g	H

Sample ID: 31968-R1

SWHB-27-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	4.88	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	10.16	0.05	0.1	ng/dry g	H
PCB049	NA	28.52	0.05	0.1	ng/dry g	H
PCB052	NA	29.8	0.05	0.1	ng/dry g	H
PCB066	NA	36.15	0.05	0.1	ng/dry g	H
PCB070	NA	13.67	0.05	0.1	ng/dry g	H
PCB074	NA	14.58	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	25.87	0.05	0.1	ng/dry g	H
PCB099	NA	105.3	0.05	0.1	ng/dry g	H
PCB101	NA	113.84	0.05	0.1	ng/dry g	H
PCB105	NA	34.67	0.05	0.1	ng/dry g	H
PCB110	NA	38.36	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	114.26	0.05	0.1	ng/dry g	H
PCB119	NA	8.45	0.05	0.1	ng/dry g	H
PCB123	NA	3.73	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	41.68	0.05	0.1	ng/dry g	H
PCB138	NA	266.02	0.05	0.1	ng/dry g	H
PCB149	NA	38.66	0.05	0.1	ng/dry g	H
PCB151	NA	29.62	0.05	0.1	ng/dry g	H
PCB153	NA	327.71	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB156	NA	23.8	0.05	0.1	ng/dry g	H
PCB157	NA	5.86	0.05	0.1	ng/dry g	H
PCB158	NA	16.4	0.05	0.1	ng/dry g	H
PCB167	NA	12.44	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	31.62	0.05	0.1	ng/dry g	H
PCB177	NA	30.53	0.05	0.1	ng/dry g	H
PCB180	NA	82.37	0.05	0.1	ng/dry g	H
PCB183	NA	33.84	0.05	0.1	ng/dry g	H
PCB187	NA	92.31	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	15.25	0.05	0.1	ng/dry g	H
PCB201	NA	14.3	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31969-R1

SWHB-27-P Polychaetes

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	8.33	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	12.91	0.05	0.1	ng/dry g	H
PCB052	NA	12.65	0.05	0.1	ng/dry g	H
PCB066	NA	20.36	0.05	0.1	ng/dry g	H
PCB070	NA	6.2	0.05	0.1	ng/dry g	H
PCB074	NA	5.57	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	12.05	0.05	0.1	ng/dry g	H
PCB099	NA	31.62	0.05	0.1	ng/dry g	H
PCB101	NA	38.8	0.05	0.1	ng/dry g	H
PCB105	NA	11.22	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB110	NA	25.68	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	34.18	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	22.51	0.05	0.1	ng/dry g	H
PCB138	NA	97.37	0.05	0.1	ng/dry g	H
PCB149	NA	30.53	0.05	0.1	ng/dry g	H
PCB151	NA	9.6	0.05	0.1	ng/dry g	H
PCB153	NA	89.73	0.05	0.1	ng/dry g	H
PCB156	NA	13.79	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	8.3	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	22.78	0.05	0.1	ng/dry g	H
PCB177	NA	17.53	0.05	0.1	ng/dry g	H
PCB180	NA	34.91	0.05	0.1	ng/dry g	H
PCB183	NA	11.46	0.05	0.1	ng/dry g	H
PCB187	NA	41.02	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	8.28	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31970-R1

SWHB-27-M Mollusks

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 14-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB049	NA	18.33	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	9.36	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	26.52	0.05	0.1	ng/dry g	H
PCB099	NA	17.18	0.05	0.1	ng/dry g	H
PCB101	NA	19.87	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	13.2	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	21.21	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	32.05	0.05	0.1	ng/dry g	H
PCB149	NA	14.61	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	28.46	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	13.98	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	11.59	0.05	0.1	ng/dry g	H
PCB183	NA	4.46	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31971-R1

SWHB-27-ZP Plankton

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	23.34	0.05	0.1	ng/dry g	H
PCB052	NA	10.65	0.05	0.1	ng/dry g	H
PCB066	NA	12.09	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	34.98	0.05	0.1	ng/dry g	H
PCB101	NA	42.5	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	24.97	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	30.71	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	17.03	0.05	0.1	ng/dry g	H
PCB138	NA	57.07	0.05	0.1	ng/dry g	H
PCB149	NA	29.72	0.05	0.1	ng/dry g	H
PCB151	NA	8.74	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB153	NA	87.97	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	6.08	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	27.53	0.05	0.1	ng/dry g	H
PCB183	NA	2.93	0.05	0.1	ng/dry g	H
PCB187	NA	30.97	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	10.23	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31972-R1

SWHB-30-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	1.31	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	8.63	0.05	0.1	ng/dry g	H
PCB052	NA	7.57	0.05	0.1	ng/dry g	H
PCB066	NA	7.37	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	4.71	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	7.67	0.05	0.1	ng/dry g	H
PCB099	NA	37.19	0.05	0.1	ng/dry g	H
PCB101	NA	33.55	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB105	NA	13.87	0.05	0.1	ng/dry g	H
PCB110	NA	9.49	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	39.2	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	1.43	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	15.08	0.05	0.1	ng/dry g	H
PCB138	NA	93.49	0.05	0.1	ng/dry g	H
PCB149	NA	17.46	0.05	0.1	ng/dry g	H
PCB151	NA	8.38	0.05	0.1	ng/dry g	H
PCB153	NA	146.2	0.05	0.1	ng/dry g	H
PCB156	NA	6.42	0.05	0.1	ng/dry g	H
PCB157	NA	1.61	0.05	0.1	ng/dry g	H
PCB158	NA	4.45	0.05	0.1	ng/dry g	H
PCB167	NA	3.3	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	16.17	0.05	0.1	ng/dry g	H
PCB177	NA	8.99	0.05	0.1	ng/dry g	H
PCB180	NA	31.81	0.05	0.1	ng/dry g	H
PCB183	NA	13.15	0.05	0.1	ng/dry g	H
PCB187	NA	44.42	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	7.34	0.05	0.1	ng/dry g	H
PCB201	NA	9.28	0.05	0.1	ng/dry g	H
PCB206	NA	2.93	0.05	0.1	ng/dry g	H

Sample ID: 31973-R1

SWHB-30-CH California halibut, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	1.38	0.05	0.1	ng/dry g	H
PCB066	NA	1.99	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	2.71	0.05	0.1	ng/dry g	H
PCB099	NA	6.2	0.05	0.1	ng/dry g	H
PCB101	NA	8.28	0.05	0.1	ng/dry g	H
PCB105	NA	2.26	0.05	0.1	ng/dry g	H
PCB110	NA	3.14	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	8.12	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	1.6	0.05	0.1	ng/dry g	H
PCB138	NA	23.92	0.05	0.1	ng/dry g	H
PCB149	NA	3.2	0.05	0.1	ng/dry g	H
PCB151	NA	2.23	0.05	0.1	ng/dry g	H
PCB153	NA	30.79	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	1.2	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	8.03	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB183	NA	2.7	0.05	0.1	ng/dry g	H
PCB187	NA	12.05	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	1.37	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31974-R1

SWHB-30-BP Black perch, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	1.04	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	5.03	0.05	0.1	ng/dry g	H
PCB066	NA	3.34	0.05	0.1	ng/dry g	H
PCB070	NA	2.1	0.05	0.1	ng/dry g	H
PCB074	NA	1.7	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	2.89	0.05	0.1	ng/dry g	H
PCB099	NA	12.25	0.05	0.1	ng/dry g	H
PCB101	NA	11.74	0.05	0.1	ng/dry g	H
PCB105	NA	5.02	0.05	0.1	ng/dry g	H
PCB110	NA	2.14	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	14	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	1.07	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	3.81	0.05	0.1	ng/dry g	H
PCB138	NA	37.11	0.05	0.1	ng/dry g	H
PCB149	NA	3.47	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB151	NA	1.31	0.05	0.1	ng/dry g	H
PCB153	NA	43.08	0.05	0.1	ng/dry g	H
PCB156	NA	2.12	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	2.34	0.05	0.1	ng/dry g	H
PCB167	NA	0.85	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.8	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	11.42	0.05	0.1	ng/dry g	H
PCB177	NA	5.16	0.05	0.1	ng/dry g	H
PCB180	NA	18.3	0.05	0.1	ng/dry g	H
PCB183	NA	4.77	0.05	0.1	ng/dry g	H
PCB187	NA	12.92	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	4.36	0.05	0.1	ng/dry g	H
PCB201	NA	2.51	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31975-R1

SWHB-30-C Crustacea

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	ND	0.05	0.1	ng/wet g	H,N
PCB052	NA	ND	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	ND	0.05	0.1	ng/wet g	H,N
PCB099	NA	1.62	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB101	NA	ND	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	ND	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	3.59	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	4.86	0.05	0.1	ng/wet g	H,N
PCB149	NA	ND	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	4.85	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	0.65	0.05	0.1	ng/wet g	H,N
PCB158	NA	ND	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	1.27	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	ND	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 31976-R1

SWHB-30-P Polychaetes

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	5.14	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	4.18	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	5.19	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	11.07	0.05	0.1	ng/dry g	H
PCB101	NA	6.57	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	7.99	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	10.7	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	22.54	0.05	0.1	ng/dry g	H
PCB149	NA	2.16	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	14.59	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB180	NA	8.51	0.05	0.1	ng/dry g	H
PCB183	NA	2.49	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31977-R1

SWHB-30-M Mollusks

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	5.04	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	5.55	0.05	0.1	ng/wet g	H,N
PCB052	NA	ND	0.05	0.1	ng/wet g	H,N
PCB066	NA	4.1	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	ND	0.05	0.1	ng/wet g	H,N
PCB099	NA	ND	0.05	0.1	ng/wet g	H,N
PCB101	NA	ND	0.05	0.1	ng/wet g	H,N
PCB105	NA	2.42	0.05	0.1	ng/wet g	H,N
PCB110	NA	ND	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	ND	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB149	NA	ND	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	1.83	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	ND	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	ND	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 31978-R1

SWHB-30-Crabs Crabs

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	8.37	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	ND	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	10.24	0.05	0.1	ng/dry g	H
PCB149	NA	1.49	0.05	0.1	ng/dry g	H
PCB151	NA	1.35	0.05	0.1	ng/dry g	H
PCB153	NA	16.32	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	7.93	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	4.65	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31979-R1

SWHB-30-ZP Plankton

Matrix: Tissue

Sampled: 12-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	8.4	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	7.81	0.05	0.1	ng/dry g	H
PCB070	NA	5.01	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	14.91	0.05	0.1	ng/dry g	H
PCB101	NA	13.69	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	9	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	14.09	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	7.03	0.05	0.1	ng/dry g	H
PCB138	NA	34.48	0.05	0.1	ng/dry g	H
PCB149	NA	16.17	0.05	0.1	ng/dry g	H
PCB151	NA	2.33	0.05	0.1	ng/dry g	H
PCB153	NA	36.6	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.9	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	4.89	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	6.97	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	3.54	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31980-R1

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	2.1	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	1.36	0.05	0.1	ng/dry g	H
PCB049	NA	20.16	0.05	0.1	ng/dry g	H
PCB052	NA	21.07	0.05	0.1	ng/dry g	H
PCB066	NA	36.42	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	11.25	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	11.74	0.05	0.1	ng/dry g	H
PCB099	NA	109.4	0.05	0.1	ng/dry g	H
PCB101	NA	91.59	0.05	0.1	ng/dry g	H
PCB105	NA	25.12	0.05	0.1	ng/dry g	H
PCB110	NA	18.33	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	103.61	0.05	0.1	ng/dry g	H
PCB119	NA	4.38	0.05	0.1	ng/dry g	H
PCB123	NA	3.95	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	41.35	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB138	NA	254.16	0.05	0.1	ng/dry g	H
PCB149	NA	52.14	0.05	0.1	ng/dry g	H
PCB151	NA	15.79	0.05	0.1	ng/dry g	H
PCB153	NA	395.61	0.05	0.1	ng/dry g	H
PCB156	NA	14.96	0.05	0.1	ng/dry g	H
PCB157	NA	5.87	0.05	0.1	ng/dry g	H
PCB158	NA	14.19	0.05	0.1	ng/dry g	H
PCB167	NA	11.16	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	35.39	0.05	0.1	ng/dry g	H
PCB177	NA	18.08	0.05	0.1	ng/dry g	H
PCB180	NA	76.95	0.05	0.1	ng/dry g	H
PCB183	NA	28.79	0.05	0.1	ng/dry g	H
PCB187	NA	118.16	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	20.69	0.05	0.1	ng/dry g	H
PCB201	NA	23.16	0.05	0.1	ng/dry g	H
PCB206	NA	7.99	0.05	0.1	ng/dry g	H

Sample ID: 31981-R1

SWHB-01-CH California halibut, whole, c

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	8.05	0.05	0.1	ng/dry g	H
PCB052	NA	7.61	0.05	0.1	ng/dry g	H
PCB066	NA	10.88	0.05	0.1	ng/dry g	H
PCB070	NA	1.56	0.05	0.1	ng/dry g	H
PCB074	NA	2.96	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB087	NA	5.54	0.05	0.1	ng/dry g	H
PCB099	NA	46.44	0.05	0.1	ng/dry g	H
PCB101	NA	39.95	0.05	0.1	ng/dry g	H
PCB105	NA	7.57	0.05	0.1	ng/dry g	H
PCB110	NA	15.07	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	31.8	0.05	0.1	ng/dry g	H
PCB119	NA	4.19	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	20.01	0.05	0.1	ng/dry g	H
PCB138	NA	100.57	0.05	0.1	ng/dry g	H
PCB149	NA	29.57	0.05	0.1	ng/dry g	H
PCB151	NA	15.29	0.05	0.1	ng/dry g	H
PCB153	NA	155.87	0.05	0.1	ng/dry g	H
PCB156	NA	4.62	0.05	0.1	ng/dry g	H
PCB157	NA	1.75	0.05	0.1	ng/dry g	H
PCB158	NA	6.82	0.05	0.1	ng/dry g	H
PCB167	NA	5.04	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	14.41	0.05	0.1	ng/dry g	H
PCB177	NA	12.51	0.05	0.1	ng/dry g	H
PCB180	NA	23.63	0.05	0.1	ng/dry g	H
PCB183	NA	11.09	0.05	0.1	ng/dry g	H
PCB187	NA	50.85	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	12.51	0.05	0.1	ng/dry g	H
PCB201	NA	6.11	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31982-R1

SWHB-01-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	3.22	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	5.58	0.05	0.1	ng/dry g	H
PCB049	NA	14.67	0.05	0.1	ng/dry g	H
PCB052	NA	13.69	0.05	0.1	ng/dry g	H
PCB066	NA	14.53	0.05	0.1	ng/dry g	H
PCB070	NA	3.91	0.05	0.1	ng/dry g	H
PCB074	NA	2.56	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	7.44	0.05	0.1	ng/dry g	H
PCB099	NA	31.62	0.05	0.1	ng/dry g	H
PCB101	NA	33.68	0.05	0.1	ng/dry g	H
PCB105	NA	6.89	0.05	0.1	ng/dry g	H
PCB110	NA	12.18	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	24.01	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	8.73	0.05	0.1	ng/dry g	H
PCB138	NA	60.48	0.05	0.1	ng/dry g	H
PCB149	NA	17.47	0.05	0.1	ng/dry g	H
PCB151	NA	7.15	0.05	0.1	ng/dry g	H
PCB153	NA	87.43	0.05	0.1	ng/dry g	H
PCB156	NA	3.47	0.05	0.1	ng/dry g	H
PCB157	NA	1.07	0.05	0.1	ng/dry g	H
PCB158	NA	5.62	0.05	0.1	ng/dry g	H
PCB167	NA	2.68	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	7.68	0.05	0.1	ng/dry g	H
PCB180	NA	23.72	0.05	0.1	ng/dry g	H
PCB183	NA	7.53	0.05	0.1	ng/dry g	H
PCB187	NA	21.45	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	9.46	0.05	0.1	ng/dry g	H
PCB201	NA	7.23	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31983-R1

SWHB-01-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	13.83	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	18.47	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	48.28	0.05	0.1	ng/dry g	H
PCB101	NA	21.41	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	14.44	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	30.95	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	84.77	0.05	0.1	ng/dry g	H
PCB149	NA	13.01	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	136.66	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	9.9	0.05	0.1	ng/dry g	H
PCB180	NA	21.02	0.05	0.1	ng/dry g	H
PCB183	NA	5.17	0.05	0.1	ng/dry g	H
PCB187	NA	39.27	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31984-R1

SWHB-01-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	24.91	0.05	0.1	ng/dry g	H
PCB052	NA	12.74	0.05	0.1	ng/dry g	H
PCB066	NA	27.51	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	101.46	0.05	0.1	ng/dry g	H
PCB101	NA	91.61	0.05	0.1	ng/dry g	H
PCB105	NA	13.72	0.05	0.1	ng/dry g	H
PCB110	NA	31.99	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	62.99	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	25.28	0.05	0.1	ng/dry g	H
PCB138	NA	161.29	0.05	0.1	ng/dry g	H
PCB149	NA	100.51	0.05	0.1	ng/dry g	H
PCB151	NA	18.76	0.05	0.1	ng/dry g	H
PCB153	NA	237.29	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	16.05	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	41.31	0.05	0.1	ng/dry g	H
PCB180	NA	22.98	0.05	0.1	ng/dry g	H
PCB183	NA	9.15	0.05	0.1	ng/dry g	H
PCB187	NA	100.78	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	27.43	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31985-R1

SWHB-01-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 26-Jun-15
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	24.44	0.05	0.1	ng/dry g	H
PCB052	NA	17.69	0.05	0.1	ng/dry g	H
PCB066	NA	24.88	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	4.88	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	71.4	0.05	0.1	ng/dry g	H
PCB101	NA	71.31	0.05	0.1	ng/dry g	H
PCB105	NA	15.41	0.05	0.1	ng/dry g	H
PCB110	NA	46.86	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	53.73	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	23.06	0.05	0.1	ng/dry g	H
PCB138	NA	135.13	0.05	0.1	ng/dry g	H
PCB149	NA	89.67	0.05	0.1	ng/dry g	H
PCB151	NA	26.81	0.05	0.1	ng/dry g	H
PCB153	NA	170.29	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	19.5	0.1	0.2	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	6.36	0.05	0.1	ng/dry g	H
PCB177	NA	25.73	0.05	0.1	ng/dry g	H
PCB180	NA	18.13	0.05	0.1	ng/dry g	H
PCB183	NA	7	0.05	0.1	ng/dry g	H
PCB187	NA	63.48	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31986-R1

SWHB-01-FC Brown Shrimp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	6.57	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	2.08	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	21.7	0.05	0.1	ng/dry g	H
PCB101	NA	7.47	0.05	0.1	ng/dry g	H
PCB105	NA	3.57	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	21.64	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	37.06	0.05	0.1	ng/dry g	H
PCB149	NA	ND	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	41.75	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	0.8	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	3.64	0.05	0.1	ng/dry g	H
PCB177	NA	6.32	0.05	0.1	ng/dry g	H
PCB180	NA	8.39	0.05	0.1	ng/dry g	H
PCB183	NA	2.7	0.05	0.1	ng/dry g	H
PCB187	NA	21.43	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31987-R1

SWHB-01-ZP Plankton

Matrix: Tissue

Sampled: 08-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	65.45	0.05	0.1	ng/dry g	H
PCB049	NA	65.25	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	132.81	0.05	0.1	ng/dry g	H
PCB070	NA	24.81	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	162.69	0.05	0.1	ng/dry g	H
PCB101	NA	79.25	0.05	0.1	ng/dry g	H
PCB105	NA	47.6	0.05	0.1	ng/dry g	H
PCB110	NA	92.15	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	122.15	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	219.63	0.05	0.1	ng/dry g	H
PCB149	NA	86.84	0.05	0.1	ng/dry g	H
PCB151	NA	17.75	0.05	0.1	ng/dry g	H
PCB153	NA	232.98	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	41.05	0.05	0.1	ng/dry g	H
PCB168+132	NA	23.6	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	15.48	0.05	0.1	ng/dry g	H
PCB187	NA	83.47	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31988-R1		SWHB-06-SBB Spotted sand bass, whol		Matrix: Tissue		Sampled: 22-Apr-14
Method: EPA 8270D		Batch ID: O-7118		Prepared: 29-May-15		Received: 21-May-15
						Analyzed: 13-Jun-15
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	4.62	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	17.47	0.05	0.1	ng/dry g	H
PCB052	NA	16.39	0.05	0.1	ng/dry g	H
PCB066	NA	21.26	0.05	0.1	ng/dry g	H
PCB070	NA	1.78	0.05	0.1	ng/dry g	H
PCB074	NA	6.94	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	6.45	0.05	0.1	ng/dry g	H
PCB099	NA	88.19	0.05	0.1	ng/dry g	H
PCB101	NA	71.36	0.05	0.1	ng/dry g	H
PCB105	NA	22.33	0.05	0.1	ng/dry g	H
PCB110	NA	19.62	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	86.59	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	36.89	0.05	0.1	ng/dry g	H
PCB138	NA	208.5	0.05	0.1	ng/dry g	H
PCB149	NA	38.73	0.05	0.1	ng/dry g	H
PCB151	NA	13.17	0.05	0.1	ng/dry g	H
PCB153	NA	383.3	0.05	0.1	ng/dry g	H
PCB156	NA	12.78	0.05	0.1	ng/dry g	H
PCB157	NA	3.87	0.05	0.1	ng/dry g	H
PCB158	NA	15.61	0.05	0.1	ng/dry g	H
PCB167	NA	10.21	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	24.75	0.05	0.1	ng/dry g	H
PCB177	NA	14.07	0.05	0.1	ng/dry g	H
PCB180	NA	70.07	0.05	0.1	ng/dry g	H
PCB183	NA	34.67	0.05	0.1	ng/dry g	H
PCB187	NA	96.22	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	15.14	0.05	0.1	ng/dry g	H
PCB201	NA	10.36	0.05	0.1	ng/dry g	H
PCB206	NA	13.06	0.05	0.1	ng/dry g	H

Sample ID: 31989-R1

SWHB-06-CH-Small California halibut, w

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	7.4	0.05	0.1	ng/dry g	H
PCB052	NA	5.13	0.05	0.1	ng/dry g	H
PCB066	NA	9.33	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	3.07	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	8.74	0.05	0.1	ng/dry g	H
PCB099	NA	40.26	0.05	0.1	ng/dry g	H
PCB101	NA	31.3	0.05	0.1	ng/dry g	H
PCB105	NA	8.47	0.05	0.1	ng/dry g	H
PCB110	NA	17.61	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	30.43	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	14.71	0.05	0.1	ng/dry g	H
PCB138	NA	109.29	0.05	0.1	ng/dry g	H
PCB149	NA	21.23	0.05	0.1	ng/dry g	H
PCB151	NA	12.08	0.05	0.1	ng/dry g	H
PCB153	NA	139.56	0.05	0.1	ng/dry g	H
PCB156	NA	5.75	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	5.45	0.05	0.1	ng/dry g	H
PCB167	NA	2.45	0.05	0.1	ng/dry g	H
PCB168+132	NA	21.6	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	11.57	0.05	0.1	ng/dry g	H
PCB177	NA	16.85	0.05	0.1	ng/dry g	H
PCB180	NA	32.75	0.05	0.1	ng/dry g	H
PCB183	NA	14.28	0.05	0.1	ng/dry g	H
PCB187	NA	43.94	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	5.29	0.05	0.1	ng/dry g	H
PCB201	NA	5.92	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31990-R1

SWHB-06-CH-Large California halibut, w

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	8.54	0.05	0.1	ng/dry g	H
PCB052	NA	10.58	0.05	0.1	ng/dry g	H
PCB066	NA	9.57	0.05	0.1	ng/dry g	H
PCB070	NA	2.83	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB074	NA	3.86	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	8.33	0.05	0.1	ng/dry g	H
PCB099	NA	51.55	0.05	0.1	ng/dry g	H
PCB101	NA	42.93	0.05	0.1	ng/dry g	H
PCB105	NA	11.4	0.05	0.1	ng/dry g	H
PCB110	NA	22.45	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	42.55	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	19.4	0.05	0.1	ng/dry g	H
PCB138	NA	128.26	0.05	0.1	ng/dry g	H
PCB149	NA	32.18	0.05	0.1	ng/dry g	H
PCB151	NA	15.51	0.05	0.1	ng/dry g	H
PCB153	NA	174.8	0.05	0.1	ng/dry g	H
PCB156	NA	8.95	0.05	0.1	ng/dry g	H
PCB157	NA	2.05	0.05	0.1	ng/dry g	H
PCB158	NA	8.24	0.05	0.1	ng/dry g	H
PCB167	NA	4.16	0.05	0.1	ng/dry g	H
PCB168+132	NA	6	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	19.42	0.05	0.1	ng/dry g	H
PCB177	NA	21.59	0.05	0.1	ng/dry g	H
PCB180	NA	36.73	0.05	0.1	ng/dry g	H
PCB183	NA	16.09	0.05	0.1	ng/dry g	H
PCB187	NA	53.52	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	4.96	0.05	0.1	ng/dry g	H
PCB201	NA	10.6	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB206	NA	4.83	0.05	0.1	ng/dry g	H

Sample ID: 31991-R1

SWHB-06-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 14-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	31.87	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	14.63	0.05	0.1	ng/dry g	H
PCB099	NA	63.54	0.05	0.1	ng/dry g	H
PCB101	NA	42.32	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	30.35	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	37.17	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	83.98	0.05	0.1	ng/dry g	H
PCB149	NA	28.65	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	106	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	20.64	0.05	0.1	ng/dry g	H
PCB180	NA	29.81	0.05	0.1	ng/dry g	H
PCB183	NA	4.92	0.05	0.1	ng/dry g	H
PCB187	NA	33.17	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31992-R1

SWHB-06-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 14-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	2.97	0.05	0.1	ng/dry g	H
PCB066	NA	3.84	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	5.11	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	4.41	0.05	0.1	ng/dry g	H
PCB099	NA	7.23	0.05	0.1	ng/dry g	H
PCB101	NA	6.39	0.05	0.1	ng/dry g	H
PCB105	NA	2.85	0.05	0.1	ng/dry g	H
PCB110	NA	5.33	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	7.2	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	9.28	0.05	0.1	ng/dry g	H
PCB149	NA	6.02	0.05	0.1	ng/dry g	H
PCB151	NA	0.68	0.05	0.1	ng/dry g	H
PCB153	NA	14.44	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	4.43	0.05	0.1	ng/dry g	H
PCB183	NA	2.99	0.05	0.1	ng/dry g	H
PCB187	NA	6.41	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31993-R1

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	17.59	0.05	0.1	ng/dry g	H
PCB049	NA	47.99	0.05	0.1	ng/dry g	H
PCB052	NA	62.25	0.05	0.1	ng/dry g	H
PCB066	NA	19.33	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB070	NA	18.81	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	72.34	0.05	0.1	ng/dry g	H
PCB101	NA	104.22	0.05	0.1	ng/dry g	H
PCB105	NA	42.62	0.05	0.1	ng/dry g	H
PCB110	NA	79.74	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	59.83	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	139.88	0.05	0.1	ng/dry g	H
PCB149	NA	85.4	0.05	0.1	ng/dry g	H
PCB151	NA	5.45	0.05	0.1	ng/dry g	H
PCB153	NA	149.97	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	40.21	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	27.2	0.05	0.1	ng/dry g	H
PCB187	NA	35.03	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31994-R1

SWHB-40-SBB Spotted sand bass, whol

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	13.81	0.05	0.1	ng/dry g	H
PCB052	NA	10.63	0.05	0.1	ng/dry g	H
PCB066	NA	16.81	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	7.84	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	5.74	0.05	0.1	ng/dry g	H
PCB099	NA	68.42	0.05	0.1	ng/dry g	H
PCB101	NA	45.53	0.05	0.1	ng/dry g	H
PCB105	NA	16.45	0.05	0.1	ng/dry g	H
PCB110	NA	9.02	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	60.12	0.05	0.1	ng/dry g	H
PCB119	NA	0.57	0.05	0.1	ng/dry g	H
PCB123	NA	1.37	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	22.05	0.05	0.1	ng/dry g	H
PCB138	NA	135.61	0.05	0.1	ng/dry g	H
PCB149	NA	20.98	0.05	0.1	ng/dry g	H
PCB151	NA	6.9	0.05	0.1	ng/dry g	H
PCB153	NA	218.89	0.05	0.1	ng/dry g	H
PCB156	NA	8.94	0.05	0.1	ng/dry g	H
PCB157	NA	2.15	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB158	NA	8.53	0.05	0.1	ng/dry g	H
PCB167	NA	5.93	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	19.86	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	51.75	0.05	0.1	ng/dry g	H
PCB183	NA	16.24	0.05	0.1	ng/dry g	H
PCB187	NA	60.57	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	13.78	0.05	0.1	ng/dry g	H
PCB201	NA	15.21	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31995-R1

SWHB-40-CH California halibut, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	1.22	0.05	0.1	ng/dry g	H
PCB037	NA	5.74	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	20.37	0.05	0.1	ng/dry g	H
PCB052	NA	22.33	0.05	0.1	ng/dry g	H
PCB066	NA	22.3	0.05	0.1	ng/dry g	H
PCB070	NA	4.25	0.05	0.1	ng/dry g	H
PCB074	NA	8.96	0.05	0.1	ng/dry g	H
PCB077	NA	2.58	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	14.2	0.05	0.1	ng/dry g	H
PCB099	NA	114.08	0.05	0.1	ng/dry g	H
PCB101	NA	88.38	0.05	0.1	ng/dry g	H
PCB105	NA	17.05	0.05	0.1	ng/dry g	H
PCB110	NA	40.82	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB118	NA	75.34	0.05	0.1	ng/dry g	H
PCB119	NA	9.79	0.05	0.1	ng/dry g	H
PCB123	NA	3.43	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	34.11	0.05	0.1	ng/dry g	H
PCB138	NA	260.74	0.05	0.1	ng/dry g	H
PCB149	NA	69.73	0.05	0.1	ng/dry g	H
PCB151	NA	28.58	0.05	0.1	ng/dry g	H
PCB153	NA	385.9	0.05	0.1	ng/dry g	H
PCB156	NA	14.48	0.05	0.1	ng/dry g	H
PCB157	NA	4.71	0.05	0.1	ng/dry g	H
PCB158	NA	12.25	0.05	0.1	ng/dry g	H
PCB167	NA	13.8	0.05	0.1	ng/dry g	H
PCB168+132	NA	11.7	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	15.05	0.05	0.1	ng/dry g	H
PCB177	NA	28.29	0.05	0.1	ng/dry g	H
PCB180	NA	66.5	0.05	0.1	ng/dry g	H
PCB183	NA	40.47	0.05	0.1	ng/dry g	H
PCB187	NA	107.41	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	15.45	0.05	0.1	ng/dry g	H
PCB201	NA	20.21	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31996-R1

SWHB-40-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	2.87	0.05	0.1	ng/dry g	H
PCB037	NA	3.18	0.05	0.1	ng/dry g	H
PCB044	NA	5.59	0.05	0.1	ng/dry g	H
PCB049	NA	18.96	0.05	0.1	ng/dry g	H
PCB052	NA	26.55	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB066	NA	25.18	0.05	0.1	ng/dry g	H
PCB070	NA	7.97	0.05	0.1	ng/dry g	H
PCB074	NA	9.37	0.05	0.1	ng/dry g	H
PCB077	NA	2.1	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	21.3	0.05	0.1	ng/dry g	H
PCB099	NA	101.8	0.05	0.1	ng/dry g	H
PCB101	NA	100.49	0.05	0.1	ng/dry g	H
PCB105	NA	23.98	0.05	0.1	ng/dry g	H
PCB110	NA	30.22	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	84.5	0.05	0.1	ng/dry g	H
PCB119	NA	6.29	0.05	0.1	ng/dry g	H
PCB123	NA	4.43	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	27.7	0.05	0.1	ng/dry g	H
PCB138	NA	230.21	0.05	0.1	ng/dry g	H
PCB149	NA	38.8	0.05	0.1	ng/dry g	H
PCB151	NA	26.79	0.05	0.1	ng/dry g	H
PCB153	NA	327.61	0.05	0.1	ng/dry g	H
PCB156	NA	15.67	0.05	0.1	ng/dry g	H
PCB157	NA	3.64	0.05	0.1	ng/dry g	H
PCB158	NA	12.73	0.05	0.1	ng/dry g	H
PCB167	NA	12.45	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	35.7	0.05	0.1	ng/dry g	H
PCB177	NA	33.65	0.05	0.1	ng/dry g	H
PCB180	NA	58.82	0.05	0.1	ng/dry g	H
PCB183	NA	27.21	0.05	0.1	ng/dry g	H
PCB187	NA	92.57	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB194	NA	16.51	0.05	0.1	ng/dry g	H
PCB201	NA	14.87	0.05	0.1	ng/dry g	H
PCB206	NA	6.42	0.05	0.1	ng/dry g	H

Sample ID: 31997-R1

SWHB-40-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	6.21	0.05	0.1	ng/dry g	H
PCB052	NA	2.85	0.05	0.1	ng/dry g	H
PCB066	NA	6.69	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	21.65	0.05	0.1	ng/dry g	H
PCB101	NA	6.47	0.05	0.1	ng/dry g	H
PCB105	NA	4.35	0.05	0.1	ng/dry g	H
PCB110	NA	ND	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	11.96	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	32.03	0.05	0.1	ng/dry g	H
PCB149	NA	5.78	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	45.72	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	6.19	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	105.1	0.05	0.1	ng/dry g	H
PCB177	NA	2.24	0.05	0.1	ng/dry g	H
PCB180	NA	12.16	0.05	0.1	ng/dry g	H
PCB183	NA	4.08	0.05	0.1	ng/dry g	H
PCB187	NA	11.92	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31998-R1

SWHB-40-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	17.83	0.05	0.1	ng/dry g	H
PCB052	NA	11.56	0.05	0.1	ng/dry g	H
PCB066	NA	19.25	0.05	0.1	ng/dry g	H
PCB070	NA	6.01	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	56.54	0.05	0.1	ng/dry g	H
PCB101	NA	74.88	0.05	0.1	ng/dry g	H
PCB105	NA	14.84	0.05	0.1	ng/dry g	H
PCB110	NA	38.79	0.05	0.1	ng/dry g	H



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	53.67	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	32.74	0.05	0.1	ng/dry g	H
PCB138	NA	113.45	0.05	0.1	ng/dry g	H
PCB149	NA	57.01	0.05	0.1	ng/dry g	H
PCB151	NA	19.32	0.05	0.1	ng/dry g	H
PCB153	NA	170.54	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	9.26	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	8.64	0.05	0.1	ng/dry g	H
PCB177	NA	29.83	0.05	0.1	ng/dry g	H
PCB180	NA	32.2	0.05	0.1	ng/dry g	H
PCB183	NA	8.83	0.05	0.1	ng/dry g	H
PCB187	NA	79.2	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	21	0.05	0.1	ng/dry g	H
PCB206	NA	7.15	0.05	0.1	ng/dry g	H

Sample ID: 31999-R1

SWHB-40-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	6.17	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB052	NA	6.08	0.05	0.1	ng/dry g	H
PCB066	NA	6.62	0.05	0.1	ng/dry g	H
PCB070	NA	3.75	0.05	0.1	ng/dry g	H
PCB074	NA	1.78	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	22.53	0.05	0.1	ng/dry g	H
PCB101	NA	26.04	0.05	0.1	ng/dry g	H
PCB105	NA	2.38	0.05	0.1	ng/dry g	H
PCB110	NA	12.48	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	16.54	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	3.78	0.05	0.1	ng/dry g	H
PCB138	NA	35.86	0.05	0.1	ng/dry g	H
PCB149	NA	27.59	0.05	0.1	ng/dry g	H
PCB151	NA	7.22	0.05	0.1	ng/dry g	H
PCB153	NA	53.02	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	1.98	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	3.2	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	1.01	0.05	0.1	ng/dry g	H
PCB177	NA	7.09	0.05	0.1	ng/dry g	H
PCB180	NA	4.09	0.05	0.1	ng/dry g	H
PCB183	NA	2.52	0.05	0.1	ng/dry g	H
PCB187	NA	20.99	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	1.21	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32000-R1

SWHB-40-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	13.42	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	28.07	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	58.03	0.05	0.1	ng/dry g	H
PCB101	NA	54.4	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	47.52	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	75.25	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	44.84	0.05	0.1	ng/dry g	H
PCB138	NA	118.36	0.05	0.1	ng/dry g	H
PCB149	NA	45.68	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	119.06	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	36.55	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	28.03	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	45.34	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	16	0.05	0.1	ng/dry g	H

Sample ID: 32001-R1

SWHB-15-SBB Spotted sand bass, whole, Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	8.12	0.05	0.1	ng/dry g	H
PCB052	NA	9.08	0.05	0.1	ng/dry g	H
PCB066	NA	10.68	0.05	0.1	ng/dry g	H
PCB070	NA	1.67	0.05	0.1	ng/dry g	H
PCB074	NA	3.95	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	6.54	0.05	0.1	ng/dry g	H
PCB099	NA	62.51	0.05	0.1	ng/dry g	H
PCB101	NA	28.33	0.05	0.1	ng/dry g	H
PCB105	NA	252.38	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB110	NA	6.1	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	47.67	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	23.13	0.05	0.1	ng/dry g	H
PCB138	NA	118.74	0.05	0.1	ng/dry g	H
PCB149	NA	14.42	0.05	0.1	ng/dry g	H
PCB151	NA	2.53	0.05	0.1	ng/dry g	H
PCB153	NA	252.76	0.05	0.1	ng/dry g	H
PCB156	NA	10.18	0.05	0.1	ng/dry g	H
PCB157	NA	1.71	0.05	0.1	ng/dry g	H
PCB158	NA	11.38	0.05	0.1	ng/dry g	H
PCB167	NA	6.68	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	15.17	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	47.46	0.05	0.1	ng/dry g	H
PCB183	NA	19.93	0.05	0.1	ng/dry g	H
PCB187	NA	57.89	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	11.02	0.05	0.1	ng/dry g	H
PCB201	NA	5.72	0.05	0.1	ng/dry g	H
PCB206	NA	15.01	0.05	0.1	ng/dry g	H

Sample ID: 32002-R1

SWHB-15-CH California halibut, whole, c

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB049	NA	4.85	0.05	0.1	ng/dry g	H
PCB052	NA	4.98	0.05	0.1	ng/dry g	H
PCB066	NA	7.03	0.05	0.1	ng/dry g	H
PCB070	NA	1.81	0.05	0.1	ng/dry g	H
PCB074	NA	2.26	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	4.81	0.05	0.1	ng/dry g	H
PCB099	NA	25.57	0.05	0.1	ng/dry g	H
PCB101	NA	16.08	0.05	0.1	ng/dry g	H
PCB105	NA	2.51	0.05	0.1	ng/dry g	H
PCB110	NA	7.73	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	14.35	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	1.22	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	6.19	0.05	0.1	ng/dry g	H
PCB138	NA	45.85	0.05	0.1	ng/dry g	H
PCB149	NA	14.03	0.05	0.1	ng/dry g	H
PCB151	NA	4.58	0.05	0.1	ng/dry g	H
PCB153	NA	89.58	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	4.56	0.05	0.1	ng/dry g	H
PCB167	NA	1.3	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	6.79	0.05	0.1	ng/dry g	H
PCB183	NA	10.5	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB187	NA	17.53	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	6.54	0.05	0.1	ng/dry g	H
PCB201	NA	4.07	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32003-R1

SWHB-15-SA-small Slough anchovy, who

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	3.88	0.05	0.1	ng/dry g	H
PCB049	NA	13.64	0.05	0.1	ng/dry g	H
PCB052	NA	17.57	0.05	0.1	ng/dry g	H
PCB066	NA	17.06	0.05	0.1	ng/dry g	H
PCB070	NA	5.11	0.05	0.1	ng/dry g	H
PCB074	NA	2.56	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	11.96	0.05	0.1	ng/dry g	H
PCB099	NA	45.37	0.05	0.1	ng/dry g	H
PCB101	NA	67.48	0.05	0.1	ng/dry g	H
PCB105	NA	9.08	0.05	0.1	ng/dry g	H
PCB110	NA	24.65	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	44.36	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	19.09	0.05	0.1	ng/dry g	H
PCB138	NA	117.25	0.05	0.1	ng/dry g	H
PCB149	NA	61.79	0.05	0.1	ng/dry g	H
PCB151	NA	14.22	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB153	NA	200.09	0.05	0.1	ng/dry g	H
PCB156	NA	5.62	0.05	0.1	ng/dry g	H
PCB157	NA	1.59	0.05	0.1	ng/dry g	H
PCB158	NA	5.29	0.05	0.1	ng/dry g	H
PCB167	NA	5.52	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	11.23	0.05	0.1	ng/dry g	H
PCB177	NA	15.51	0.05	0.1	ng/dry g	H
PCB180	NA	26.73	0.05	0.1	ng/dry g	H
PCB183	NA	15.97	0.05	0.1	ng/dry g	H
PCB187	NA	53.23	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	6.6	0.05	0.1	ng/dry g	H
PCB201	NA	5.91	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32004-R1

SWHB-15-C Crustacea

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	2.6	0.05	0.1	ng/wet g	H,N
PCB052	NA	ND	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	5.44	0.05	0.1	ng/wet g	H,N
PCB099	NA	4.81	0.05	0.1	ng/wet g	H,N
PCB101	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	ND	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	3.79	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	4.56	0.05	0.1	ng/wet g	H,N
PCB149	NA	ND	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	9.83	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	ND	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	ND	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32005-R1

SWHB-15-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	ND	0.05	0.1	ng/wet g	H,N
PCB052	NA	6.02	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	5.33	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	7.67	0.05	0.1	ng/wet g	H,N
PCB099	NA	ND	0.05	0.1	ng/wet g	H,N
PCB101	NA	4.44	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	ND	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	5.49	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	7.27	0.05	0.1	ng/wet g	H,N
PCB149	NA	2.78	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	9.26	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	ND	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	ND	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32006-R1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	1.18	0.05	0.1	ng/dry g	H
PCB101	NA	1.27	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	2.11	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	2.44	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	3.19	0.05	0.1	ng/dry g	H
PCB149	NA	1.37	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	3.04	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	ND	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32007-R1

SWHB-15-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	26.15	0.05	0.1	ng/dry g	H
PCB099	NA	43.79	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB101	NA	34.38	0.05	0.1	ng/dry g	H
PCB105	NA	11.37	0.05	0.1	ng/dry g	H
PCB110	NA	15.16	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	25.61	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	54.9	0.05	0.1	ng/dry g	H
PCB149	NA	26.9	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	130.38	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	8.22	0.05	0.1	ng/dry g	H
PCB187	NA	31.69	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32008-R1

SWHB-21-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	20.16	0.05	0.1	ng/dry g	H
PCB052	NA	12.48	0.05	0.1	ng/dry g	H
PCB066	NA	24.18	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	9.85	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	11.93	0.05	0.1	ng/dry g	H
PCB099	NA	111.59	0.05	0.1	ng/dry g	H
PCB101	NA	86.6	0.05	0.1	ng/dry g	H
PCB105	NA	16.69	0.05	0.1	ng/dry g	H
PCB110	NA	16.98	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	94.75	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	36.35	0.05	0.1	ng/dry g	H
PCB138	NA	170.36	0.05	0.1	ng/dry g	H
PCB149	NA	50.17	0.05	0.1	ng/dry g	H
PCB151	NA	13.01	0.05	0.1	ng/dry g	H
PCB153	NA	322.08	0.05	0.1	ng/dry g	H
PCB156	NA	8.19	0.05	0.1	ng/dry g	H
PCB157	NA	4.38	0.05	0.1	ng/dry g	H
PCB158	NA	9.87	0.05	0.1	ng/dry g	H
PCB167	NA	6.89	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	33.07	0.05	0.1	ng/dry g	H
PCB177	NA	10.71	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB180	NA	59.07	0.05	0.1	ng/dry g	H
PCB183	NA	23.58	0.05	0.1	ng/dry g	H
PCB187	NA	90.1	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	14.95	0.05	0.1	ng/dry g	H
PCB201	NA	15.64	0.05	0.1	ng/dry g	H
PCB206	NA	7.91	0.05	0.1	ng/dry g	H

Sample ID: 32009-R1

SWHB-21-CH-small California halibut, w

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	13.44	0.05	0.1	ng/dry g	H
PCB052	NA	11.65	0.05	0.1	ng/dry g	H
PCB066	NA	12.53	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	8.63	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	11.17	0.05	0.1	ng/dry g	H
PCB099	NA	68.76	0.05	0.1	ng/dry g	H
PCB101	NA	59.22	0.05	0.1	ng/dry g	H
PCB105	NA	8.35	0.05	0.1	ng/dry g	H
PCB110	NA	29.42	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	54.33	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	3.17	0.05	0.1	ng/dry g	H
PCB128	NA	16.05	0.05	0.1	ng/dry g	H
PCB138	NA	143.64	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB149	NA	51.2	0.05	0.1	ng/dry g	H
PCB151	NA	17.23	0.05	0.1	ng/dry g	H
PCB153	NA	182.64	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	1.5	0.05	0.1	ng/dry g	H
PCB158	NA	4.17	0.05	0.1	ng/dry g	H
PCB167	NA	3.97	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	9.89	0.05	0.1	ng/dry g	H
PCB177	NA	16.48	0.05	0.1	ng/dry g	H
PCB180	NA	30.46	0.05	0.1	ng/dry g	H
PCB183	NA	13.16	0.05	0.1	ng/dry g	H
PCB187	NA	54.4	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	2.27	0.05	0.1	ng/dry g	H
PCB201	NA	3.04	0.05	0.1	ng/dry g	H
PCB206	NA	1.69	0.05	0.1	ng/dry g	H

Sample ID: 32010-R1

SWHB-21-CH-large California halibut, wh

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	9.53	0.05	0.1	ng/dry g	H
PCB052	NA	4.43	0.05	0.1	ng/dry g	H
PCB066	NA	10.61	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	4.31	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	10.04	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB099	NA	65.49	0.05	0.1	ng/dry g	H
PCB101	NA	55.82	0.05	0.1	ng/dry g	H
PCB105	NA	6.7	0.05	0.1	ng/dry g	H
PCB110	NA	22.82	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	57.78	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	1.48	0.05	0.1	ng/dry g	H
PCB128	NA	19.16	0.05	0.1	ng/dry g	H
PCB138	NA	122.66	0.05	0.1	ng/dry g	H
PCB149	NA	38.05	0.05	0.1	ng/dry g	H
PCB151	NA	15.31	0.05	0.1	ng/dry g	H
PCB153	NA	203.08	0.05	0.1	ng/dry g	H
PCB156	NA	5.48	0.05	0.1	ng/dry g	H
PCB157	NA	1.31	0.05	0.1	ng/dry g	H
PCB158	NA	4.64	0.05	0.1	ng/dry g	H
PCB167	NA	3.94	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	16.77	0.05	0.1	ng/dry g	H
PCB177	NA	13.38	0.05	0.1	ng/dry g	H
PCB180	NA	36.49	0.05	0.1	ng/dry g	H
PCB183	NA	17.32	0.05	0.1	ng/dry g	H
PCB187	NA	60.33	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	4.76	0.05	0.1	ng/dry g	H
PCB201	NA	8.44	0.05	0.1	ng/dry g	H
PCB206	NA	1.78	0.05	0.1	ng/dry g	H

Sample ID: 32011-R1

SWHB-21-C Crustacea

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	13.84	0.05	0.1	ng/wet g	H,N
PCB052	NA	5.66	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	42.28	0.05	0.1	ng/wet g	H,N
PCB099	NA	ND	0.05	0.1	ng/wet g	H,N
PCB101	NA	ND	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	9.26	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	10.29	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	ND	0.05	0.1	ng/wet g	H,N
PCB149	NA	7.61	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	24.5	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	9.87	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N



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CA ELAP #2769

PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	ND	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32012-R1

SWHB-21-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	15.07	0.05	0.1	ng/wet g	H,N
PCB052	NA	ND	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	ND	0.05	0.1	ng/wet g	H,N
PCB099	NA	32.33	0.05	0.1	ng/wet g	H,N
PCB101	NA	12	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	ND	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	8.44	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB138	NA	18.47	0.05	0.1	ng/wet g	H,N
PCB149	NA	10.83	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	27.26	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	4.5	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	3.27	0.05	0.1	ng/wet g	H,N
PCB180	NA	4.78	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	9.26	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32013-R1

SWHB-21-B Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	1.78	0.05	0.1	ng/wet g	H,N
PCB052	NA	ND	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB087	NA	3.3	0.05	0.1	ng/wet g	H,N
PCB099	NA	ND	0.05	0.1	ng/wet g	H,N
PCB101	NA	1.98	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	2.05	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	0.91	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	2.5	0.05	0.1	ng/wet g	H,N
PCB138	NA	2.64	0.05	0.1	ng/wet g	H,N
PCB149	NA	1.62	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	4.63	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	1.31	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	ND	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	0.63	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	ND	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32014-R1

SWHB-21-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	65.76	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	54.99	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	41.94	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	29.7	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	24.22	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	25.96	0.05	0.1	ng/dry g	H
PCB138	NA	110.41	0.05	0.1	ng/dry g	H
PCB149	NA	30.31	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	115.63	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	20.96	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	30.07	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32015-R1

SWHB-22-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	11.56	0.05	0.1	ng/dry g	H
PCB052	NA	7.33	0.05	0.1	ng/dry g	H
PCB066	NA	16.11	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	5.44	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	5.63	0.05	0.1	ng/dry g	H
PCB099	NA	53.84	0.05	0.1	ng/dry g	H
PCB101	NA	34.9	0.05	0.1	ng/dry g	H
PCB105	NA	7.81	0.05	0.1	ng/dry g	H
PCB110	NA	5.72	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	38.71	0.05	0.1	ng/dry g	H
PCB119	NA	2.04	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB128	NA	20.56	0.05	0.1	ng/dry g	H
PCB138	NA	86.69	0.05	0.1	ng/dry g	H
PCB149	NA	17.71	0.05	0.1	ng/dry g	H
PCB151	NA	4.76	0.05	0.1	ng/dry g	H
PCB153	NA	188.37	0.05	0.1	ng/dry g	H
PCB156	NA	5.3	0.05	0.1	ng/dry g	H
PCB157	NA	1.95	0.05	0.1	ng/dry g	H
PCB158	NA	3.1	0.05	0.1	ng/dry g	H
PCB167	NA	4.13	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	26.31	0.05	0.1	ng/dry g	H
PCB183	NA	8.37	0.05	0.1	ng/dry g	H
PCB187	NA	45.33	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	10.72	0.05	0.1	ng/dry g	H
PCB201	NA	5.42	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32016-R1

SWHB-22-CH California halibut, whole, c

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	5.21	0.05	0.1	ng/dry g	H
PCB052	NA	6.13	0.05	0.1	ng/dry g	H
PCB066	NA	5.46	0.05	0.1	ng/dry g	H
PCB070	NA	1.78	0.05	0.1	ng/dry g	H
PCB074	NA	1.97	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	2.51	0.05	0.1	ng/dry g	H
PCB099	NA	29.7	0.05	0.1	ng/dry g	H
PCB101	NA	21.71	0.05	0.1	ng/dry g	H
PCB105	NA	5.35	0.05	0.1	ng/dry g	H
PCB110	NA	10.32	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	20.22	0.05	0.1	ng/dry g	H
PCB119	NA	3.87	0.05	0.1	ng/dry g	H
PCB123	NA	1.81	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	12.01	0.05	0.1	ng/dry g	H
PCB138	NA	62.29	0.05	0.1	ng/dry g	H
PCB149	NA	17.25	0.05	0.1	ng/dry g	H
PCB151	NA	6.66	0.05	0.1	ng/dry g	H
PCB153	NA	105.27	0.05	0.1	ng/dry g	H
PCB156	NA	1.98	0.05	0.1	ng/dry g	H
PCB157	NA	1	0.05	0.1	ng/dry g	H
PCB158	NA	3.43	0.05	0.1	ng/dry g	H
PCB167	NA	1.89	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	9.5	0.05	0.1	ng/dry g	H
PCB180	NA	12.27	0.05	0.1	ng/dry g	H
PCB183	NA	4.81	0.05	0.1	ng/dry g	H
PCB187	NA	38.25	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	4.04	0.05	0.1	ng/dry g	H
PCB201	NA	5.76	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32017-R1

SWHB-22-SP Shiner perch, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D		Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 14-Jun-15
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	11.53	0.05	0.1	ng/dry g	H
PCB052	NA	13.52	0.05	0.1	ng/dry g	H
PCB066	NA	9.38	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	6.21	0.05	0.1	ng/dry g	H
PCB099	NA	45.12	0.05	0.1	ng/dry g	H
PCB101	NA	31.11	0.05	0.1	ng/dry g	H
PCB105	NA	7.39	0.05	0.1	ng/dry g	H
PCB110	NA	12.14	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	39.53	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	11.25	0.05	0.1	ng/dry g	H
PCB138	NA	80.63	0.05	0.1	ng/dry g	H
PCB149	NA	14.41	0.05	0.1	ng/dry g	H
PCB151	NA	4.3	0.05	0.1	ng/dry g	H
PCB153	NA	128.93	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	3.94	0.05	0.1	ng/dry g	H
PCB167	NA	2.17	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	9.43	0.05	0.1	ng/dry g	H
PCB177	NA	10.4	0.05	0.1	ng/dry g	H
PCB180	NA	19.55	0.05	0.1	ng/dry g	H
PCB183	NA	5.04	0.05	0.1	ng/dry g	H
PCB187	NA	34.07	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32018-R1

SWHB-22-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	ND	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	22.87	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	9.65	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	20.25	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	29.27	0.05	0.1	ng/dry g	H
PCB149	NA	14.44	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	62.79	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	9.27	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	22.77	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	ND	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32019-R1

SWHB-22-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	5.81	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	0.8	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	3.08	0.05	0.1	ng/dry g	H
PCB099	NA	ND	0.05	0.1	ng/dry g	H
PCB101	NA	ND	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	1.22	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	1.58	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	ND	0.05	0.1	ng/dry g	H
PCB138	NA	4.91	0.05	0.1	ng/dry g	H
PCB149	NA	1.48	0.05	0.1	ng/dry g	H
PCB151	NA	ND	0.05	0.1	ng/dry g	H
PCB153	NA	6.14	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	ND	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	ND	0.05	0.1	ng/dry g	H
PCB187	NA	1.46	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	1.88	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32020-R1	SWHB-22-ZP Plankton	Matrix: Tissue		Sampled: 07-May-14		Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 29-Jun-15
PCB018	NA	ND	0.05	0.1	ng/dry g	H
PCB028	NA	ND	0.05	0.1	ng/dry g	H
PCB037	NA	ND	0.05	0.1	ng/dry g	H
PCB044	NA	ND	0.05	0.1	ng/dry g	H
PCB049	NA	ND	0.05	0.1	ng/dry g	H
PCB052	NA	ND	0.05	0.1	ng/dry g	H
PCB066	NA	ND	0.05	0.1	ng/dry g	H
PCB070	NA	ND	0.05	0.1	ng/dry g	H
PCB074	NA	ND	0.05	0.1	ng/dry g	H
PCB077	NA	ND	0.05	0.1	ng/dry g	H
PCB081	NA	ND	0.05	0.1	ng/dry g	H
PCB087	NA	36.55	0.05	0.1	ng/dry g	H
PCB099	NA	56.03	0.05	0.1	ng/dry g	H
PCB101	NA	43.2	0.05	0.1	ng/dry g	H
PCB105	NA	ND	0.05	0.1	ng/dry g	H
PCB110	NA	20.89	0.05	0.1	ng/dry g	H
PCB114	NA	ND	0.05	0.1	ng/dry g	H
PCB118	NA	37.73	0.05	0.1	ng/dry g	H
PCB119	NA	ND	0.05	0.1	ng/dry g	H
PCB123	NA	ND	0.05	0.1	ng/dry g	H
PCB126	NA	ND	0.05	0.1	ng/dry g	H
PCB128	NA	8.57	0.05	0.1	ng/dry g	H
PCB138	NA	78.38	0.05	0.1	ng/dry g	H
PCB149	NA	35.38	0.05	0.1	ng/dry g	H
PCB151	NA	9.69	0.05	0.1	ng/dry g	H
PCB153	NA	107.41	0.05	0.1	ng/dry g	H
PCB156	NA	ND	0.05	0.1	ng/dry g	H
PCB157	NA	ND	0.05	0.1	ng/dry g	H
PCB158	NA	12.55	0.05	0.1	ng/dry g	H
PCB167	NA	ND	0.05	0.1	ng/dry g	H



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB168+132	NA	1.8	0.1	0.2	ng/dry g	H
PCB169	NA	ND	0.05	0.1	ng/dry g	H
PCB170	NA	ND	0.05	0.1	ng/dry g	H
PCB177	NA	ND	0.05	0.1	ng/dry g	H
PCB180	NA	ND	0.05	0.1	ng/dry g	H
PCB183	NA	7.45	0.05	0.1	ng/dry g	H
PCB187	NA	38	0.05	0.1	ng/dry g	H
PCB189	NA	ND	0.05	0.1	ng/dry g	H
PCB194	NA	28.13	0.05	0.1	ng/dry g	H
PCB201	NA	ND	0.05	0.1	ng/dry g	H
PCB206	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32029-R1

SWHB-26-27-Goby Goby sp., whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	4.69	0.05	0.1	ng/wet g	H,N
PCB052	NA	6.11	0.05	0.1	ng/wet g	H,N
PCB066	NA	5.87	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	4.1	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	10.14	0.05	0.1	ng/wet g	H,N
PCB099	NA	20.41	0.05	0.1	ng/wet g	H,N
PCB101	NA	13.44	0.05	0.1	ng/wet g	H,N
PCB105	NA	3.78	0.05	0.1	ng/wet g	H,N
PCB110	NA	10.3	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	25.59	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	7.97	0.05	0.1	ng/wet g	H,N
PCB138	NA	41.76	0.05	0.1	ng/wet g	H,N
PCB149	NA	10.42	0.05	0.1	ng/wet g	H,N
PCB151	NA	5.39	0.05	0.1	ng/wet g	H,N
PCB153	NA	44.8	0.05	0.1	ng/wet g	H,N
PCB156	NA	2.61	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	2.86	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	3.64	0.05	0.1	ng/wet g	H,N
PCB180	NA	13.64	0.05	0.1	ng/wet g	H,N
PCB183	NA	5.15	0.05	0.1	ng/wet g	H,N
PCB187	NA	18.33	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	4.13	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32030-R1

SWHB-01-06-40-Goby Goby sp., whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 29-Jun-15

PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	2.31	0.05	0.1	ng/wet g	H,N
PCB052	NA	4	0.05	0.1	ng/wet g	H,N
PCB066	NA	5.22	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB074	NA	0.78	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	5.9	0.05	0.1	ng/wet g	H,N
PCB099	NA	24.26	0.05	0.1	ng/wet g	H,N
PCB101	NA	8.82	0.05	0.1	ng/wet g	H,N
PCB105	NA	2.2	0.05	0.1	ng/wet g	H,N
PCB110	NA	6.79	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	28.67	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	11.87	0.05	0.1	ng/wet g	H,N
PCB138	NA	52.94	0.05	0.1	ng/wet g	H,N
PCB149	NA	12.21	0.05	0.1	ng/wet g	H,N
PCB151	NA	5.95	0.05	0.1	ng/wet g	H,N
PCB153	NA	65.79	0.05	0.1	ng/wet g	H,N
PCB156	NA	5.55	0.05	0.1	ng/wet g	H,N
PCB157	NA	1.34	0.05	0.1	ng/wet g	H,N
PCB158	NA	1.81	0.05	0.1	ng/wet g	H,N
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	10.96	0.05	0.1	ng/wet g	H,N
PCB177	NA	5.51	0.05	0.1	ng/wet g	H,N
PCB180	NA	19.72	0.05	0.1	ng/wet g	H,N
PCB183	NA	6.12	0.05	0.1	ng/wet g	H,N
PCB187	NA	25.18	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	2.27	0.05	0.1	ng/wet g	H,N
PCB201	NA	8.06	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB206	NA	2.97	0.05	0.1	ng/wet g	H,N
Sample ID: 32031-R1 SWHB-15-22-Goby Goby sp., whole Matrix: Tissue Sampled: 21-Apr-14 Received: 21-May-15 Method: EPA 8270D Batch ID: O-7122 Prepared: 01-Jun-15 Analyzed: 29-Jun-15						
PCB018	NA	ND	0.05	0.1	ng/wet g	H,N
PCB028	NA	ND	0.05	0.1	ng/wet g	H,N
PCB037	NA	ND	0.05	0.1	ng/wet g	H,N
PCB044	NA	ND	0.05	0.1	ng/wet g	H,N
PCB049	NA	2.53	0.05	0.1	ng/wet g	H,N
PCB052	NA	2.58	0.05	0.1	ng/wet g	H,N
PCB066	NA	ND	0.05	0.1	ng/wet g	H,N
PCB070	NA	ND	0.05	0.1	ng/wet g	H,N
PCB074	NA	ND	0.05	0.1	ng/wet g	H,N
PCB077	NA	ND	0.05	0.1	ng/wet g	H,N
PCB081	NA	ND	0.05	0.1	ng/wet g	H,N
PCB087	NA	ND	0.05	0.1	ng/wet g	H,N
PCB099	NA	7.16	0.05	0.1	ng/wet g	H,N
PCB101	NA	2.36	0.05	0.1	ng/wet g	H,N
PCB105	NA	ND	0.05	0.1	ng/wet g	H,N
PCB110	NA	1.1	0.05	0.1	ng/wet g	H,N
PCB114	NA	ND	0.05	0.1	ng/wet g	H,N
PCB118	NA	2.69	0.05	0.1	ng/wet g	H,N
PCB119	NA	ND	0.05	0.1	ng/wet g	H,N
PCB123	NA	ND	0.05	0.1	ng/wet g	H,N
PCB126	NA	ND	0.05	0.1	ng/wet g	H,N
PCB128	NA	ND	0.05	0.1	ng/wet g	H,N
PCB138	NA	7.62	0.05	0.1	ng/wet g	H,N
PCB149	NA	3.11	0.05	0.1	ng/wet g	H,N
PCB151	NA	ND	0.05	0.1	ng/wet g	H,N
PCB153	NA	18.75	0.05	0.1	ng/wet g	H,N
PCB156	NA	ND	0.05	0.1	ng/wet g	H,N
PCB157	NA	ND	0.05	0.1	ng/wet g	H,N
PCB158	NA	1.23	0.05	0.1	ng/wet g	H,N



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PCB Congeners

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PCB167	NA	ND	0.05	0.1	ng/wet g	H,N
PCB168+132	NA	ND	0.1	0.2	ng/wet g	H,N
PCB169	NA	ND	0.05	0.1	ng/wet g	H,N
PCB170	NA	ND	0.05	0.1	ng/wet g	H,N
PCB177	NA	0.34	0.05	0.1	ng/wet g	H,N
PCB180	NA	ND	0.05	0.1	ng/wet g	H,N
PCB183	NA	ND	0.05	0.1	ng/wet g	H,N
PCB187	NA	3.38	0.05	0.1	ng/wet g	H,N
PCB189	NA	ND	0.05	0.1	ng/wet g	H,N
PCB194	NA	1.37	0.05	0.1	ng/wet g	H,N
PCB201	NA	ND	0.05	0.1	ng/wet g	H,N
PCB206	NA	ND	0.05	0.1	ng/wet g	H,N



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1 SWHB-26-SBB Spotted sand bass, whole Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D-NCI Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 11-Jun-15						
(DFPBDE)	NA	97			% Recovery	
(FTBDE)	NA	95			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.62	0.05	0.1	ng/dry g	H
PBDE049	NA	0.21	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.98	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.7	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H
Sample ID: 31957-R1 SWHB-26-CH California Halibut, whole, Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D-NCI Batch ID: O-7114 Prepared: 27-May-15 Analyzed: 11-Jun-15						
(DFPBDE)	NA	95			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	5.81	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	0.24	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE100	NA	0.69	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.5	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31958-R1

SWHB-26-SP-Small Shiner perch, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	99			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	38.39	0.05	0.1	ng/dry g	H
PBDE049	NA	3.37	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	2.56	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.28	0.05	0.1	ng/dry g	H
PBDE100	NA	7.46	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	2.03	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31959-R1

SWHB-26-SP-Large Shiner perch, muscl

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	95			% Recovery	
(FTBDE)	NA	96			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	11.41	0.05	0.1	ng/dry g	H
PBDE049	NA	1.07	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	0.77	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.14	0.05	0.1	ng/dry g	H
PBDE100	NA	1.79	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.6	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31960-R1

SWHB-26-BP Black perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	98			% Recovery	
(FTBDE)	NA	112			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	16.01	0.05	0.1	ng/dry g	H
PBDE049	NA	1	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	1.18	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	8.14	0.05	0.1	ng/dry g	H
PBDE100	NA	2.48	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	1.06	0.05	0.1	ng/dry g	H
PBDE154	NA	1.25	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31961-R1

SWHB-26-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	110			% Recovery	
(FTBDE)	NA	85			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	2.13	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31962-R1

SWHB-26-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	110			% Recovery	
(FTBDE)	NA	103			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.24	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE099	NA	3.14	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31963-R1

SWHB-26-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	110			% Recovery	
(FTBDE)	NA	89			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.95	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	2.24	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31964-R1

WHB-26-FC Brown shrimp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	100			% Recovery	
(FTBDE)	NA	86			% Recovery	



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	9.2	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.9	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.44	0.05	0.1	ng/dry g	H
PBDE154	NA	0.63	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31965-R1

SWHB-26-ZP Plankton

Matrix: Tissue

Sampled: 08-May-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	93			% Recovery	
(FTBDE)	NA	100			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	49.74	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	17.5	0.05	0.1	ng/dry g	H
PBDE100	NA	8.61	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE190	NA	27.19	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31966-R1

SWHB-27-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	108			% Recovery	
(FTBDE)	NA	93			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.12	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.31	0.05	0.1	ng/dry g	H
PBDE100	NA	0.94	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.28	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31967-R1

SWHB-27-CH California halibut, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	106			% Recovery	
(FTBDE)	NA	84			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	8.15	0.05	0.1	ng/dry g	H
PBDE049	NA	0.3	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	1.46	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.62	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31968-R1

SWHB-27-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	115			% Recovery	
(FTBDE)	NA	105			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	24.28	0.05	0.1	ng/dry g	H
PBDE049	NA	1.29	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	1.2	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	5.73	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.74	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31969-R1

SWHB-27-P Polychaetes

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	95			% Recovery	
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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(FTBDE)	NA	79			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	4.44	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	2.1	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.8	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31970-R1

SWHB-27-M Mollusks

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	89			% Recovery	
(FTBDE)	NA	81			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.22	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31971-R1

SWHB-27-ZP Plankton

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	101			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	3.2	0.05	0.1	ng/dry g	H
PBDE047	NA	26.86	0.05	0.1	ng/dry g	H
PBDE049	NA	13.3	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	7.26	0.05	0.1	ng/dry g	H
PBDE100	NA	5.67	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	131.35	0.05	0.1	ng/dry g	H

Sample ID: 31972-R1

SWHB-30-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	95			% Recovery	
(FTBDE)	NA	89			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	10.13	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.77	0.05	0.1	ng/dry g	H
PBDE100	NA	2.77	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.26	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31973-R1

SWHB-30-CH California halibut, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	92			% Recovery	
(FTBDE)	NA	83			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.57	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.26	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31974-R1

SWHB-30-BP Black perch, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(DFPBDE)	NA	102			% Recovery	
(FTBDE)	NA	83			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	11.22	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	1.9	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31975-R1

SWHB-30-C Crustacea

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(DFPBDE)	NA	105			% Recovery	
(FTBDE)	NA	98			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	1.67	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	0.73	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 31976-R1

SWHB-30-P Polychaetes

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	102			% Recovery	
(FTBDE)	NA	98			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	3.17	0.05	0.1	ng/dry g	H
PBDE047	NA	4.93	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	4.49	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	5.35	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31977-R1

SWHB-30-M Mollusks

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	107			% Recovery	
(FTBDE)	NA	95			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	4	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 31978-R1

SWHB-30-Crabs Crabs

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	105			% Recovery	
(FTBDE)	NA	105			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	9.04	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	2.11	0.05	0.1	ng/dry g	H
PBDE100	NA	2.05	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31979-R1

SWHB-30-ZP Plankton

Matrix: Tissue

Sampled: 12-May-14

Received: 21-May-15



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D-NCI		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 30-Jun-15
(DFPBDE)	NA	94			% Recovery	
(FTBDE)	NA	103			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	4.43	0.05	0.1	ng/dry g	H
PBDE047	NA	16.07	0.05	0.1	ng/dry g	H
PBDE049	NA	3.11	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	11.73	0.05	0.1	ng/dry g	H
PBDE100	NA	4.23	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	24.77	0.05	0.1	ng/dry g	H

Sample ID: 31980-R1

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	74			% Recovery	
(FTBDE)	NA	106			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.42	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE153	NA	0.38	0.05	0.1	ng/dry g	H
PBDE154	NA	0.66	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31981-R1

SWHB-01-CH California halibut, whole, c

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	91			% Recovery	
(FTBDE)	NA	93			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.98	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	0.46	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.62	0.05	0.1	ng/dry g	H
PBDE100	NA	1.26	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.13	0.05	0.1	ng/dry g	H
PBDE154	NA	0.28	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31982-R1

SWHB-01-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	96			% Recovery	
(FTBDE)	NA	89			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	41.42	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE049	NA	2.98	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	2.18	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.65	0.05	0.1	ng/dry g	H
PBDE100	NA	5.63	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.2	0.05	0.1	ng/dry g	H
PBDE154	NA	1.21	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31983-R1

SWHB-01-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	106			% Recovery	
(FTBDE)	NA	102			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	11.96	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	4.59	0.05	0.1	ng/dry g	H
PBDE100	NA	2.71	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31984-R1 SWHB-01-P Polychaetes Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D-NCI Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 30-Jun-15						
(DFPBDE)	NA	103			% Recovery	
(FTBDE)	NA	97			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	6.11	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	2.42	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H
Sample ID: 31985-R1 SWHB-01-M Mollusks Matrix: Tissue Sampled: 22-Apr-14 Received: 21-May-15 Method: EPA 8270D-NCI Batch ID: O-7120 Prepared: 03-Jun-15 Analyzed: 30-Jun-15						
(DFPBDE)	NA	98			% Recovery	
(FTBDE)	NA	108			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.17	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.43	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31986-R1

SWHB-01-FC Brown Shrimp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	93			% Recovery	
(FTBDE)	NA	111			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.02	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.8	0.05	0.1	ng/dry g	H
PBDE100	NA	0.5	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31987-R1

SWHB-01-ZP Plankton

Matrix: Tissue

Sampled: 08-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	92			% Recovery	
(FTBDE)	NA	104			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	33.77	0.05	0.1	ng/dry g	H
PBDE049	NA	12.9	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	13.6	0.05	0.1	ng/dry g	H
PBDE100	NA	19.73	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31988-R1

SWHB-06-SBB Spotted sand bass, whol

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	110			% Recovery	
(FTBDE)	NA	112			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	3.12	0.05	0.1	ng/dry g	H
PBDE049	NA	0.36	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	1.12	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.2	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31989-R1

SWHB-06-CH-Small California halibut, w

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	105			% Recovery	
(FTBDE)	NA	84			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.21	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31990-R1

SWHB-06-CH-Large California halibut, w

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	111			% Recovery	
(FTBDE)	NA	87			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.95	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.36	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31991-R1

SWHB-06-P Polychaetes

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	98			% Recovery	
(FTBDE)	NA	110			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	6.76	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31992-R1

SWHB-06-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	92			% Recovery	
(FTBDE)	NA	94			% Recovery	



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.15	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.5	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31993-R1

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	103			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	28.47	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	3.53	0.05	0.1	ng/dry g	H
PBDE100	NA	9.18	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31994-R1

SWHB-40-SBB Spotted sand bass, whol

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	59			% Recovery	
(FTBDE)	NA	91			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.06	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31995-R1

SWHB-40-CH California halibut, whole,

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	92			% Recovery	
(FTBDE)	NA	105			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	5.08	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	1.16	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.55	0.05	0.1	ng/dry g	H
PBDE154	NA	0.7	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31996-R1

SWHB-40-SP Shiner perch, whole, comp

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	95			% Recovery	
(FTBDE)	NA	101			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	30.3	0.05	0.1	ng/dry g	H
PBDE049	NA	1.99	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	1.93	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	4.45	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	1.01	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31997-R1

SWHB-40-C Crustacea

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	105			% Recovery	
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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(FTBDE)	NA	97			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.84	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.55	0.05	0.1	ng/dry g	H
PBDE100	NA	2.25	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31998-R1

SWHB-40-P Polychaetes
Method: EPA 8270D-NCI

Matrix: Tissue
Batch ID: O-7120

Sampled: 22-Apr-14
Prepared: 03-Jun-15

Received: 21-May-15
Analyzed: 30-Jun-15

(DFPBDE)	NA	110			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	4.39	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	4.75	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 31999-R1

SWHB-40-M Mollusks

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	112			% Recovery	
(FTBDE)	NA	104			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	0.89	0.05	0.1	ng/dry g	H
PBDE049	NA	2.23	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.27	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32000-R1

SWHB-40-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	107			% Recovery	
(FTBDE)	NA	97			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	10.94	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	9.38	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32001-R1

SWHB-15-SBB Spotted sand bass, whole, Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	103			% Recovery	
(FTBDE)	NA	100			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.48	0.05	0.1	ng/dry g	H
PBDE049	NA	0.36	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	0.4	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	1.34	0.05	0.1	ng/dry g	H
PBDE100	NA	1.7	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.33	0.05	0.1	ng/dry g	H
PBDE154	NA	0.34	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32002-R1

SWHB-15-CH California halibut, whole, c Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(DFPBDE)	NA	102			% Recovery	
(FTBDE)	NA	103			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.06	0.05	0.1	ng/dry g	H
PBDE049	NA	0.19	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	0.74	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32003-R1

SWHB-15-SA-small Slough anchovy, who

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
(DFPBDE)	NA	108			% Recovery	
(FTBDE)	NA	92			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	4.9	0.05	0.1	ng/dry g	H
PBDE049	NA	0.35	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	0.52	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	1.33	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	0.24	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE154	NA	0.57	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32004-R1

SWHB-15-C Crustacea

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	84			% Recovery	
(FTBDE)	NA	104			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32005-R1

SWHB-15-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	93			% Recovery	
(FTBDE)	NA	93			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	2.96	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32006-R1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	95			% Recovery	
(FTBDE)	NA	86			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.21	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	0.68	0.05	0.1	ng/dry g	H

Sample ID: 32007-R1

SWHB-15-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Method: EPA 8270D-NCl		Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 02-Jul-15
(DFPBDE)	NA	86			% Recovery	
(FTBDE)	NA	113			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	4.2	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	19.73	0.05	0.1	ng/dry g	H

Sample ID: 32008-R1

SWHB-21-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCl

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	105			% Recovery	
(FTBDE)	NA	123			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	2.6	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.74	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.4	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32009-R1

SWHB-21-CH-small California halibut, w

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	93			% Recovery	
(FTBDE)	NA	99			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	5.06	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.92	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32010-R1

SWHB-21-CH-large California halibut, wh

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	101			% Recovery	
(FTBDE)	NA	104			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	0.59	0.05	0.1	ng/dry g	H
PBDE047	NA	5.65	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.83	0.05	0.1	ng/dry g	H
PBDE100	NA	0.83	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.28	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32011-R1

SWHB-21-C Crustacea

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	83			% Recovery	
(FTBDE)	NA	95			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	37.74	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	45.37	0.05	0.1	ng/wet g	H,N
PBDE100	NA	8.84	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	5.55	0.05	0.1	ng/wet g	H,N
PBDE154	NA	1.95	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32012-R1		SWHB-21-P Polychaetes		Matrix: Tissue		Sampled: 21-Apr-14
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
						Analyzed: 02-Jul-15
(DFPBDE)	NA	102			% Recovery	
(FTBDE)	NA	98			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	1.83	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	2.34	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N
Sample ID: 32013-R1		SWHB-21-B Mollusks		Matrix: Tissue		Sampled: 21-Apr-14
Method: EPA 8270D-NCI		Batch ID: O-7122		Prepared: 01-Jun-15		Received: 21-May-15
						Analyzed: 02-Jul-15
(DFPBDE)	NA	98			% Recovery	
(FTBDE)	NA	95			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	ND	0.05	0.1	ng/wet g	H,N



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32014-R1

SWHB-21-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	90			% Recovery	
(FTBDE)	NA	102			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	44.41	0.05	0.1	ng/dry g	H

Sample ID: 32015-R1

SWHB-22-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	79			% Recovery	
(FTBDE)	NA	95			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.31	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.41	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32016-R1

SWHB-22-CH California halibut, whole, c

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	64			% Recovery	
(FTBDE)	NA	104			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	1.64	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H



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PolyBrominated Diphenyl Ethers

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32017-R1

SWHB-22-SP Shiner perch, whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	109			% Recovery	
(FTBDE)	NA	89			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	10.28	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	ND	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.64	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32018-R1

SWHB-22-P Polychaetes

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	106			% Recovery	
(FTBDE)	NA	94			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE099	NA	4.75	0.05	0.1	ng/dry g	H
PBDE100	NA	7.3	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	ND	0.05	0.1	ng/dry g	H

Sample ID: 32019-R1

SWHB-22-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	100			% Recovery	
(FTBDE)	NA	92			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	0.66	0.05	0.1	ng/dry g	H
PBDE100	NA	ND	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	0.21	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	3.15	0.05	0.1	ng/dry g	H

Sample ID: 32020-R1

SWHB-22-ZP Plankton

Matrix: Tissue

Sampled: 07-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	96			% Recovery	
(FTBDE)	NA	99			% Recovery	



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE017	NA	ND	0.05	0.1	ng/dry g	H
PBDE028	NA	ND	0.05	0.1	ng/dry g	H
PBDE047	NA	ND	0.05	0.1	ng/dry g	H
PBDE049	NA	ND	0.05	0.1	ng/dry g	H
PBDE066	NA	ND	0.05	0.1	ng/dry g	H
PBDE071	NA	ND	0.05	0.1	ng/dry g	H
PBDE085	NA	ND	0.05	0.1	ng/dry g	H
PBDE099	NA	4.7	0.05	0.1	ng/dry g	H
PBDE100	NA	2.3	0.05	0.1	ng/dry g	H
PBDE138	NA	ND	0.05	0.1	ng/dry g	H
PBDE153	NA	ND	0.05	0.1	ng/dry g	H
PBDE154	NA	ND	0.05	0.1	ng/dry g	H
PBDE183	NA	ND	0.05	0.1	ng/dry g	H
PBDE190	NA	ND	0.05	0.1	ng/dry g	H
PBDE209	NA	8.34	0.05	0.1	ng/dry g	H

Sample ID: 32029-R1

SWHB-26-27-Goby Goby sp., whole
Method: EPA 8270D-NCI

Matrix: Tissue
Batch ID: O-7122

Sampled: 22-Apr-14
Prepared: 01-Jun-15

Received: 21-May-15
Analyzed: 02-Jul-15

(DFPBDE)	NA	100			% Recovery	
(FTBDE)	NA	97			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE047	NA	2.25	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	1.5	0.05	0.1	ng/wet g	H,N
PBDE100	NA	0.84	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	0.38	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32030-R1

SWHB-01-06-40-Goby Goby sp., whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	104			% Recovery	
(FTBDE)	NA	94			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	0.25	0.05	0.1	ng/wet g	H,N
PBDE047	NA	1.73	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N

Sample ID: 32031-R1

SWHB-15-22-Goby Goby sp., whole

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	93			% Recovery	
(FTBDE)	NA	94			% Recovery	
PBDE017	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE028	NA	0.42	0.05	0.1	ng/wet g	H,N
PBDE047	NA	0.91	0.05	0.1	ng/wet g	H,N
PBDE049	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE066	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE071	NA	ND	0.05	0.1	ng/wet g	H,N



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
PBDE085	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE099	NA	0.72	0.05	0.1	ng/wet g	H,N
PBDE100	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE138	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE153	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE154	NA	0.15	0.05	0.1	ng/wet g	H,N
PBDE183	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE190	NA	ND	0.05	0.1	ng/wet g	H,N
PBDE209	NA	ND	0.05	0.1	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31956-R1	SWHB-26-SBB Spotted sand bass, whole	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7114			Prepared: 27-May-15	Analyzed: 09-Jun-15
(d10-Acenaphthene)	NA	72			% Recovery	
(d10-Phenanthrene)	NA	74			% Recovery	
(d12-Chrysene)	NA	69			% Recovery	
(d8-Naphthalene)	NA	58			% Recovery	
1-Methylnaphthalene	NA	1.6	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	2	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	4.7	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.6	1	5	ng/dry g	H
2-Methylnaphthalene	NA	5.1	1	5	ng/dry g	H
Acenaphthene	NA	4.1	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.7	1	5	ng/dry g	J,H
Anthracene	NA	6.7	1	5	ng/dry g	H
Benz[a]anthracene	NA	12.8	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.4	1	5	ng/dry g	J,H
Chrysene	NA	1.4	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.1	1	5	ng/dry g	H
Fluoranthene	NA	2.4	1	5	ng/dry g	J,H
Fluorene	NA	5.1	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	4.1	1	5	ng/dry g	J,H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	11.1	1	5	ng/dry g	H
Pyrene	NA	1.2	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31957-R1	SWHB-26-CH California Halibut, whole, Method: EPA 8270D	Matrix: Tissue Batch ID: O-7114			Sampled: 22-Apr-14 Prepared: 27-May-15	Received: 21-May-15 Analyzed: 10-Jun-15
(d10-Acenaphthene)	NA	75			% Recovery	
(d10-Phenanthrene)	NA	76			% Recovery	
(d12-Chrysene)	NA	59			% Recovery	
(d8-Naphthalene)	NA	61			% Recovery	
1-Methylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	2.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	6.1	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	7.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	2.2	1	5	ng/dry g	J,H
Acenaphthene	NA	2.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.3	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.3	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.5	1	5	ng/dry g	H
Fluoranthene	NA	1.7	1	5	ng/dry g	J,H
Fluorene	NA	3.9	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	12.6	1	5	ng/dry g	H
Pyrene	NA	1.9	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31958-R1	SWHB-26-SP-Small Shiner perch, whole,	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	74			% Recovery	
(d10-Phenanthrene)	NA	76			% Recovery	
(d12-Chrysene)	NA	67			% Recovery	
(d8-Naphthalene)	NA	64			% Recovery	
1-Methylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	3.5	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	5.8	1	5	ng/dry g	H
Acenaphthene	NA	8.5	1	5	ng/dry g	H
Acenaphthylene	NA	3.3	1	5	ng/dry g	J,H
Anthracene	NA	4.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	28	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.2	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.8	1	5	ng/dry g	H
Fluoranthene	NA	6.7	1	5	ng/dry g	H
Fluorene	NA	6.3	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	16.7	1	5	ng/dry g	H
Pyrene	NA	3.2	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31959-R1	SWHB-26-SP-Large Shiner perch, muscl	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7114			Prepared: 27-May-15	Analyzed: 10-Jun-15
(d10-Acenaphthene)	NA	75			% Recovery	
(d10-Phenanthrene)	NA	78			% Recovery	
(d12-Chrysene)	NA	71			% Recovery	
(d8-Naphthalene)	NA	62			% Recovery	
1-Methylnaphthalene	NA	3.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.6	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	2.8	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	2.6	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	5.5	1	5	ng/dry g	H
Acenaphthene	NA	4.8	1	5	ng/dry g	J,H
Acenaphthylene	NA	2.5	1	5	ng/dry g	J,H
Anthracene	NA	3.5	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	20.9	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.8	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	6.7	1	5	ng/dry g	H
Fluoranthene	NA	8.9	1	5	ng/dry g	H
Fluorene	NA	5.6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.8	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	21.2	1	5	ng/dry g	H
Pyrene	NA	3.7	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31960-R1	SWHB-26-BP Black perch, whole, comp	Matrix: Tissue			Sampled: 22-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7114			Prepared: 27-May-15	Analyzed: 10-Jun-15
(d10-Acenaphthene)	NA	82			% Recovery	
(d10-Phenanthrene)	NA	81			% Recovery	
(d12-Chrysene)	NA	77			% Recovery	
(d8-Naphthalene)	NA	70			% Recovery	
1-Methylnaphthalene	NA	3.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.7	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	9.5	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	6.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	7.7	1	5	ng/dry g	H
Acenaphthene	NA	11.3	1	5	ng/dry g	H
Acenaphthylene	NA	4.5	1	5	ng/dry g	J,H
Anthracene	NA	4.6	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	48.1	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	4	1	5	ng/dry g	J,H
Chrysene	NA	3	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	7.1	1	5	ng/dry g	H
Fluoranthene	NA	7.2	1	5	ng/dry g	H
Fluorene	NA	7.2	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	7.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	21.5	1	5	ng/dry g	H
Pyrene	NA	3.7	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31961-R1	SWHB-26-C Crustacea	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 12-Jun-15	
(d10-Acenaphthene)	NA	108			% Recovery	
(d10-Phenanthrene)	NA	140			% Recovery	
(d12-Chrysene)	NA	98			% Recovery	
(d8-Naphthalene)	NA	2			% Recovery	1
1-Methylnaphthalene	NA	3.9	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	10.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	7.9	1	5	ng/dry g	H
Acenaphthene	NA	6.6	1	5	ng/dry g	H
Acenaphthylene	NA	2.3	1	5	ng/dry g	J,H
Anthracene	NA	6.1	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	8.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	8	1	5	ng/dry g	H
Benzo[e]pyrene	NA	13	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	20.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	4.2	1	5	ng/dry g	J,H
Biphenyl	NA	4.2	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	15.8	1	5	ng/dry g	H
Fluorene	NA	5.5	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	20.9	1	5	ng/dry g	H
Perylene	NA	2.4	1	5	ng/dry g	J,H
Phenanthrene	NA	27.7	1	5	ng/dry g	H
Pyrene	NA	8.2	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31962-R1	SWHB-26-P Polychaetes	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	104			% Recovery	
(d10-Phenanthrene)	NA	100			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	90			% Recovery	
1-Methylnaphthalene	NA	3	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	15.1	1	5	ng/dry g	H
2-Methylnaphthalene	NA	20.5	1	5	ng/dry g	H
Acenaphthene	NA	5.9	1	5	ng/dry g	H
Acenaphthylene	NA	9.2	1	5	ng/dry g	H
Anthracene	NA	20.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	7.7	1	5	ng/dry g	H
Benzo[a]pyrene	NA	20.1	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	42.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	29.9	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	57.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	13.9	1	5	ng/dry g	H
Biphenyl	NA	3.3	1	5	ng/dry g	J,H
Chrysene	NA	17.6	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	15.5	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	39.3	1	5	ng/dry g	H
Fluorene	NA	6.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	40.2	1	5	ng/dry g	H
Naphthalene	NA	25.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	35.3	1	5	ng/dry g	H
Pyrene	NA	37.1	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31963-R1	SWHB-26-M Mollusks	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	99			% Recovery	
(d10-Phenanthrene)	NA	98			% Recovery	
(d12-Chrysene)	NA	74			% Recovery	
(d8-Naphthalene)	NA	85			% Recovery	
1-Methylnaphthalene	NA	6.1	1	5	ng/dry g	H
1-Methylphenanthrene	NA	7.3	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	16.3	1	5	ng/dry g	H
2-Methylnaphthalene	NA	16	1	5	ng/dry g	H
Acenaphthene	NA	7.4	1	5	ng/dry g	H
Acenaphthylene	NA	19.7	1	5	ng/dry g	H
Anthracene	NA	43.6	1	5	ng/dry g	H
Benz[a]anthracene	NA	24.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	42.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	62.5	1	5	ng/dry g	H
Benzo[e]pyrene	NA	45.7	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	82.9	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	45.6	1	5	ng/dry g	H
Biphenyl	NA	4	1	5	ng/dry g	J,H
Chrysene	NA	36.3	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	12.4	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	77.6	1	5	ng/dry g	H
Fluorene	NA	5.6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	80.5	1	5	ng/dry g	H
Naphthalene	NA	19.5	1	5	ng/dry g	H
Perylene	NA	9.7	1	5	ng/dry g	H
Phenanthrene	NA	45.4	1	5	ng/dry g	H
Pyrene	NA	68.1	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31964-R1	WHB-26-FC Brown shrimp	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7118				
				Sampled: 22-Apr-14		Received: 21-May-15
				Prepared: 29-May-15		Analyzed: 14-Jun-15
(d10-Acenaphthene)	NA	91			% Recovery	
(d10-Phenanthrene)	NA	90			% Recovery	
(d12-Chrysene)	NA	61			% Recovery	
(d8-Naphthalene)	NA	84			% Recovery	
1-Methylnaphthalene	NA	6.5	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	10	1	5	ng/dry g	H
2-Methylnaphthalene	NA	13.4	1	5	ng/dry g	H
Acenaphthene	NA	4.4	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	7.2	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	6.1	1	5	ng/dry g	H
Chrysene	NA	1.9	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	12.9	1	5	ng/dry g	H
Fluorene	NA	11.2	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	14.7	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	62.3	1	5	ng/dry g	H
Pyrene	NA	14.7	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31965-R1	SWHB-26-ZP Plankton	Matrix: Tissue	Sampled: 08-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	69			% Recovery	
(d10-Phenanthrene)	NA	72			% Recovery	
(d12-Chrysene)	NA	58			% Recovery	
(d8-Naphthalene)	NA	57			% Recovery	
1-Methylnaphthalene	NA	76.9	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	98.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	162.3	1	5	ng/dry g	H
Acenaphthene	NA	31.7	1	5	ng/dry g	H
Acenaphthylene	NA	11.7	1	5	ng/dry g	H
Anthracene	NA	66.1	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	97.6	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	91.5	1	5	ng/dry g	H
Fluorene	NA	138.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	282.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	545.6	1	5	ng/dry g	H
Pyrene	NA	94.8	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31966-R1	SWHB-27-SBB Spotted sand bass, whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7118				
				Sampled: 23-Apr-14		Received: 21-May-15
				Prepared: 29-May-15		Analyzed: 13-Jun-15
(d10-Acenaphthene)	NA	101			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	82			% Recovery	
(d8-Naphthalene)	NA	97			% Recovery	
1-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	7.3	1	5	ng/dry g	H
Acenaphthene	NA	7	1	5	ng/dry g	H
Acenaphthylene	NA	3	1	5	ng/dry g	J,H
Anthracene	NA	6.8	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	1	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.2	1	5	ng/dry g	J,H
Chrysene	NA	2.3	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	6.5	1	5	ng/dry g	H
Fluorene	NA	3.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	10.8	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	13	1	5	ng/dry g	H
Pyrene	NA	4.5	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31967-R1	SWHB-27-CH California halibut, whole	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	105			% Recovery	
(d10-Phenanthrene)	NA	100			% Recovery	
(d12-Chrysene)	NA	66			% Recovery	
(d8-Naphthalene)	NA	98			% Recovery	
1-Methylnaphthalene	NA	2.2	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	2.8	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	7.5	1	5	ng/dry g	H
Acenaphthene	NA	4.1	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2.3	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	5.9	1	5	ng/dry g	H
Fluorene	NA	2.7	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	9.6	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	11.3	1	5	ng/dry g	H
Pyrene	NA	2.4	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31968-R1	SWHB-27-SP Shiner perch, whole, comp	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	83			% Recovery	
(d10-Phenanthrene)	NA	85			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	68			% Recovery	
1-Methylnaphthalene	NA	2.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.6	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	4.1	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.7	1	5	ng/dry g	H
2-Methylnaphthalene	NA	7.6	1	5	ng/dry g	H
Acenaphthene	NA	8.1	1	5	ng/dry g	H
Acenaphthylene	NA	3	1	5	ng/dry g	J,H
Anthracene	NA	4.2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	12.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	3.5	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	1.9	1	5	ng/dry g	J,H
Biphenyl	NA	2.1	1	5	ng/dry g	J,H
Chrysene	NA	1.1	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.7	1	5	ng/dry g	H
Fluoranthene	NA	4.6	1	5	ng/dry g	J,H
Fluorene	NA	9.7	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	17.5	1	5	ng/dry g	H
Pyrene	NA	3.2	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31969-R1	SWHB-27-P Polychaetes	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	90			% Recovery	
(d10-Phenanthrene)	NA	87			% Recovery	
(d12-Chrysene)	NA	64			% Recovery	
(d8-Naphthalene)	NA	80			% Recovery	
1-Methylnaphthalene	NA	14.2	1	5	ng/dry g	H
1-Methylphenanthrene	NA	53.2	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	19.8	1	5	ng/dry g	H
2-Methylnaphthalene	NA	34.5	1	5	ng/dry g	H
Acenaphthene	NA	33.9	1	5	ng/dry g	H
Acenaphthylene	NA	168.6	1	5	ng/dry g	H
Anthracene	NA	722.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	1224.3	1	5	ng/dry g	H
Benzo[a]pyrene	NA	4428.13	10	50	ng/dry g	H
Benzo[b]fluoranthene	NA	12605.4	10	50	ng/dry g	H
Benzo[e]pyrene	NA	7137.24	10	50	ng/dry g	H
Benzo[g,h,i]perylene	NA	1943.3	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	4539.08	10	50	ng/dry g	H
Biphenyl	NA	11.9	1	5	ng/dry g	H
Chrysene	NA	19653.86	10	50	ng/dry g	H
Dibenz[a,h]anthracene	NA	987.5	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	401.4	1	5	ng/dry g	H
Fluorene	NA	165.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	2338.7	1	5	ng/dry g	H
Naphthalene	NA	31.7	1	5	ng/dry g	H
Perylene	NA	550	1	5	ng/dry g	H
Phenanthrene	NA	434.3	1	5	ng/dry g	H
Pyrene	NA	690	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31970-R1	SWHB-27-M Mollusks	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 14-Jun-15	
(d10-Acenaphthene)	NA	92			% Recovery	
(d10-Phenanthrene)	NA	92			% Recovery	
(d12-Chrysene)	NA	71			% Recovery	
(d8-Naphthalene)	NA	78			% Recovery	
1-Methylnaphthalene	NA	33.9	1	5	ng/dry g	H
1-Methylphenanthrene	NA	19.4	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	35.3	1	5	ng/dry g	H
2-Methylnaphthalene	NA	62.6	1	5	ng/dry g	H
Acenaphthene	NA	22.9	1	5	ng/dry g	H
Acenaphthylene	NA	17.1	1	5	ng/dry g	H
Anthracene	NA	72.3	1	5	ng/dry g	H
Benz[a]anthracene	NA	58.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	81.8	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	125.8	1	5	ng/dry g	H
Benzo[e]pyrene	NA	111.8	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	51.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	37	1	5	ng/dry g	H
Biphenyl	NA	36.2	1	5	ng/dry g	H
Chrysene	NA	59.8	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	241.4	1	5	ng/dry g	H
Fluorene	NA	64	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	81.3	1	5	ng/dry g	H
Perylene	NA	33.3	1	5	ng/dry g	H
Phenanthrene	NA	340.6	1	5	ng/dry g	H
Pyrene	NA	139.8	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31971-R1	SWHB-27-ZP Plankton	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	70			% Recovery	
(d10-Phenanthrene)	NA	73			% Recovery	
(d12-Chrysene)	NA	67			% Recovery	
(d8-Naphthalene)	NA	53			% Recovery	
1-Methylnaphthalene	NA	18.9	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	15	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	16.6	1	5	ng/dry g	H
2-Methylnaphthalene	NA	37	1	5	ng/dry g	H
Acenaphthene	NA	15.3	1	5	ng/dry g	H
Acenaphthylene	NA	20.3	1	5	ng/dry g	H
Anthracene	NA	89.1	1	5	ng/dry g	H
Benz[a]anthracene	NA	79.1	1	5	ng/dry g	H
Benzo[a]pyrene	NA	157.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	365.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	272.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	199.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	152.6	1	5	ng/dry g	H
Biphenyl	NA	14.5	1	5	ng/dry g	H
Chrysene	NA	1248.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	84.8	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	363	1	5	ng/dry g	H
Fluorene	NA	58.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	179.4	1	5	ng/dry g	H
Naphthalene	NA	35.7	1	5	ng/dry g	H
Perylene	NA	22.1	1	5	ng/dry g	H
Phenanthrene	NA	219	1	5	ng/dry g	H
Pyrene	NA	196.7	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31972-R1	SWHB-30-SBB Spotted sand bass, whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7118				
				Sampled: 23-Apr-14		Received: 21-May-15
				Prepared: 29-May-15		Analyzed: 13-Jun-15
(d10-Acenaphthene)	NA	106			% Recovery	
(d10-Phenanthrene)	NA	99			% Recovery	
(d12-Chrysene)	NA	73			% Recovery	
(d8-Naphthalene)	NA	95			% Recovery	
1-Methylnaphthalene	NA	2.7	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	2.7	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	6.1	1	5	ng/dry g	H
Acenaphthene	NA	1.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2.7	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	2.4	1	5	ng/dry g	J,H
Fluorene	NA	2	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	7.7	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	10.3	1	5	ng/dry g	H
Pyrene	NA	3.6	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31973-R1	SWHB-30-CH California halibut, whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7118				
				Sampled: 23-Apr-14		Received: 21-May-15
				Prepared: 29-May-15		Analyzed: 13-Jun-15
(d10-Acenaphthene)	NA	87			% Recovery	
(d10-Phenanthrene)	NA	89			% Recovery	
(d12-Chrysene)	NA	65			% Recovery	
(d8-Naphthalene)	NA	72			% Recovery	
1-Methylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	6	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2.1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.7	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	2.9	1	5	ng/dry g	J,H
Fluorene	NA	1.7	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	8.7	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	10.1	1	5	ng/dry g	H
Pyrene	NA	2.8	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31974-R1	SWHB-30-BP Black perch, whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7118				
						Sampled: 23-Apr-14
						Received: 21-May-15
						Prepared: 29-May-15
						Analyzed: 13-Jun-15
(d10-Acenaphthene)	NA	103			% Recovery	
(d10-Phenanthrene)	NA	99			% Recovery	
(d12-Chrysene)	NA	77			% Recovery	
(d8-Naphthalene)	NA	91			% Recovery	
1-Methylnaphthalene	NA	4.7	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	14.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	6.4	1	5	ng/dry g	H
Acenaphthene	NA	3.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	1	1	5	ng/dry g	J,H
Anthracene	NA	1.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	3.8	1	5	ng/dry g	J,H
Fluorene	NA	3.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	10.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	12.5	1	5	ng/dry g	H
Pyrene	NA	3.3	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31975-R1	SWHB-30-C Crustacea	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	97			% Recovery	
(d10-Phenanthrene)	NA	98			% Recovery	
(d12-Chrysene)	NA	87			% Recovery	
(d8-Naphthalene)	NA	79			% Recovery	
1-Methylnaphthalene	NA	3.1	1	5	ng/wet g	J,H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	3.4	1	5	ng/wet g	J,H,N
2,6-Dimethylnaphthalene	NA	9.8	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	6.4	1	5	ng/wet g	H,N
Acenaphthene	NA	3.7	1	5	ng/wet g	J,H,N
Acenaphthylene	NA	1.2	1	5	ng/wet g	J,H,N
Anthracene	NA	2.4	1	5	ng/wet g	J,H,N
Benz[a]anthracene	NA	ND	1	5	ng/wet g	H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	3.4	1	5	ng/wet g	J,H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	3.9	1	5	ng/wet g	J,H,N
Fluorene	NA	7.5	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	8.7	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	25.7	1	5	ng/wet g	H,N
Pyrene	NA	8	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31976-R1	SWHB-30-P Polychaetes	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	96			% Recovery	
(d10-Phenanthrene)	NA	96			% Recovery	
(d12-Chrysene)	NA	85			% Recovery	
(d8-Naphthalene)	NA	84			% Recovery	
1-Methylnaphthalene	NA	12.6	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	15.9	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	27.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	24	1	5	ng/dry g	H
Acenaphthene	NA	14.1	1	5	ng/dry g	H
Acenaphthylene	NA	3	1	5	ng/dry g	J,H
Anthracene	NA	17.8	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	16.8	1	5	ng/dry g	H
Chrysene	NA	8.2	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	27.6	1	5	ng/dry g	H
Fluorene	NA	34.4	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	28.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	112.9	1	5	ng/dry g	H
Pyrene	NA	35.8	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31977-R1	SWHB-30-M Mollusks	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	67			% Recovery	
(d10-Phenanthrene)	NA	73			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	59			% Recovery	
1-Methylnaphthalene	NA	4.8	1	5	ng/wet g	J,H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	6.6	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	8.7	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	11.5	1	5	ng/wet g	H,N
Acenaphthene	NA	8	1	5	ng/wet g	H,N
Acenaphthylene	NA	ND	1	5	ng/wet g	H,N
Anthracene	NA	6.2	1	5	ng/wet g	H,N
Benz[a]anthracene	NA	ND	1	5	ng/wet g	H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	8	1	5	ng/wet g	H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	13.4	1	5	ng/wet g	H,N
Fluorene	NA	11.4	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	19.3	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	45.1	1	5	ng/wet g	H,N
Pyrene	NA	15.4	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31978-R1	SWHB-30-Crabs Crabs	Matrix: Tissue	Sampled: 23-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	66			% Recovery	
(d10-Phenanthrene)	NA	71			% Recovery	
(d12-Chrysene)	NA	68			% Recovery	
(d8-Naphthalene)	NA	56			% Recovery	
1-Methylnaphthalene	NA	8.8	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	3.5	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	11.8	1	5	ng/dry g	H
2-Methylnaphthalene	NA	18.3	1	5	ng/dry g	H
Acenaphthene	NA	4.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.2	1	5	ng/dry g	J,H
Anthracene	NA	6	1	5	ng/dry g	H
Benz[a]anthracene	NA	15.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	11.7	1	5	ng/dry g	H
Chrysene	NA	47.8	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	7.6	1	5	ng/dry g	H
Fluorene	NA	18.2	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	23.3	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	68.6	1	5	ng/dry g	H
Pyrene	NA	17	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31979-R1	SWHB-30-ZP Plankton	Matrix: Tissue	Sampled: 12-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	81			% Recovery	
(d10-Phenanthrene)	NA	82			% Recovery	
(d12-Chrysene)	NA	79			% Recovery	
(d8-Naphthalene)	NA	73			% Recovery	
1-Methylnaphthalene	NA	13.4	1	5	ng/dry g	H
1-Methylphenanthrene	NA	14.2	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	3.8	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	20.5	1	5	ng/dry g	H
2-Methylnaphthalene	NA	25	1	5	ng/dry g	H
Acenaphthene	NA	8.8	1	5	ng/dry g	H
Acenaphthylene	NA	7.1	1	5	ng/dry g	H
Anthracene	NA	10.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	13.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	14.8	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	12.2	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	27.5	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	12.9	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	36	1	5	ng/dry g	H
Fluorene	NA	18.2	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	24.5	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	68.1	1	5	ng/dry g	H
Pyrene	NA	39.3	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31980-R1	SWHB-01-SBB Spotted sand bass, whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7114				
				Sampled: 22-Apr-14		Received: 21-May-15
				Prepared: 27-May-15		Analyzed: 09-Jun-15
(d10-Acenaphthene)	NA	73			% Recovery	
(d10-Phenanthrene)	NA	77			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	56			% Recovery	
1-Methylnaphthalene	NA	2.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.8	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	8	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.6	1	5	ng/dry g	J,H
Acenaphthene	NA	2.7	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.9	1	5	ng/dry g	J,H
Anthracene	NA	6.7	1	5	ng/dry g	H
Benz[a]anthracene	NA	16.9	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.7	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.9	1	5	ng/dry g	H
Fluoranthene	NA	3.6	1	5	ng/dry g	J,H
Fluorene	NA	5.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.7	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	17	1	5	ng/dry g	H
Pyrene	NA	3.6	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31981-R1	SWHB-01-CH California halibut, whole, c	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	69			% Recovery	
(d10-Phenanthrene)	NA	74			% Recovery	
(d12-Chrysene)	NA	51			% Recovery	
(d8-Naphthalene)	NA	54			% Recovery	
1-Methylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	2.6	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	3.9	1	5	ng/dry g	J,H
Acenaphthene	NA	2.5	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.8	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.9	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.8	1	5	ng/dry g	H
Fluoranthene	NA	4.2	1	5	ng/dry g	J,H
Fluorene	NA	4.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	7.6	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	17.3	1	5	ng/dry g	H
Pyrene	NA	2.6	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31982-R1	SWHB-01-SP Shiner perch, whole, comp	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	75			% Recovery	
(d10-Phenanthrene)	NA	76			% Recovery	
(d12-Chrysene)	NA	56			% Recovery	
(d8-Naphthalene)	NA	60			% Recovery	
1-Methylnaphthalene	NA	2.5	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.5	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	3.1	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	8.2	1	5	ng/dry g	H
2-Methylnaphthalene	NA	4.8	1	5	ng/dry g	J,H
Acenaphthene	NA	7	1	5	ng/dry g	H
Acenaphthylene	NA	3	1	5	ng/dry g	J,H
Anthracene	NA	5.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	31	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2	1	5	ng/dry g	J,H
Chrysene	NA	1.6	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	6.6	1	5	ng/dry g	H
Fluoranthene	NA	8.6	1	5	ng/dry g	H
Fluorene	NA	9	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	23.6	1	5	ng/dry g	H
Pyrene	NA	3.3	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31983-R1	SWHB-01-C Crustacea	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	60			% Recovery	
(d10-Phenanthrene)	NA	64			% Recovery	
(d12-Chrysene)	NA	63			% Recovery	
(d8-Naphthalene)	NA	52			% Recovery	
1-Methylnaphthalene	NA	15.6	1	5	ng/dry g	H
1-Methylphenanthrene	NA	17	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	12.4	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	17.7	1	5	ng/dry g	H
2-Methylnaphthalene	NA	21.5	1	5	ng/dry g	H
Acenaphthene	NA	17.8	1	5	ng/dry g	H
Acenaphthylene	NA	1.9	1	5	ng/dry g	J,H
Anthracene	NA	4.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	12.6	1	5	ng/dry g	H
Chrysene	NA	22.4	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	20.6	1	5	ng/dry g	H
Fluorene	NA	24.1	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	23.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	110.7	1	5	ng/dry g	H
Pyrene	NA	28.2	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31984-R1	SWHB-01-P Polychaetes	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7120				
				Sampled: 22-Apr-14		Received: 21-May-15
				Prepared: 03-Jun-15		Analyzed: 26-Jun-15
(d10-Acenaphthene)	NA	71			% Recovery	
(d10-Phenanthrene)	NA	76			% Recovery	
(d12-Chrysene)	NA	75			% Recovery	
(d8-Naphthalene)	NA	61			% Recovery	
1-Methylnaphthalene	NA	14.5	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	11.6	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	21.1	1	5	ng/dry g	H
2-Methylnaphthalene	NA	23.2	1	5	ng/dry g	H
Acenaphthene	NA	8.3	1	5	ng/dry g	H
Acenaphthylene	NA	17.1	1	5	ng/dry g	H
Anthracene	NA	32.2	1	5	ng/dry g	H
Benz[a]anthracene	NA	7.8	1	5	ng/dry g	H
Benzo[a]pyrene	NA	22.7	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	85.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	40.3	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	62.9	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	35	1	5	ng/dry g	H
Biphenyl	NA	12.4	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	32.1	1	5	ng/dry g	H
Fluorene	NA	25.5	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	23.2	1	5	ng/dry g	H
Perylene	NA	11.3	1	5	ng/dry g	H
Phenanthrene	NA	97.6	1	5	ng/dry g	H
Pyrene	NA	32.8	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31985-R1	SWHB-01-M Mollusks	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	87			% Recovery	
(d10-Phenanthrene)	NA	87			% Recovery	
(d12-Chrysene)	NA	85			% Recovery	
(d8-Naphthalene)	NA	77			% Recovery	
1-Methylnaphthalene	NA	4.4	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	10.5	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	4.6	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	18	1	5	ng/dry g	H
2-Methylnaphthalene	NA	7.4	1	5	ng/dry g	H
Acenaphthene	NA	6.4	1	5	ng/dry g	H
Acenaphthylene	NA	42.2	1	5	ng/dry g	H
Anthracene	NA	75.5	1	5	ng/dry g	H
Benz[a]anthracene	NA	14.7	1	5	ng/dry g	H
Benzo[a]pyrene	NA	26.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	94.2	1	5	ng/dry g	H
Benzo[e]pyrene	NA	76	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	43.2	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	32.1	1	5	ng/dry g	H
Biphenyl	NA	4	1	5	ng/dry g	J,H
Chrysene	NA	15.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	69.2	1	5	ng/dry g	H
Fluorene	NA	13.8	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	11	1	5	ng/dry g	H
Perylene	NA	12.1	1	5	ng/dry g	H
Phenanthrene	NA	41.8	1	5	ng/dry g	H
Pyrene	NA	39.9	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31986-R1	SWHB-01-FC Brown Shrimp	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	96			% Recovery	
(d10-Phenanthrene)	NA	98			% Recovery	
(d12-Chrysene)	NA	88			% Recovery	
(d8-Naphthalene)	NA	83			% Recovery	
1-Methylnaphthalene	NA	4.3	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	5.9	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	1.3	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	7.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	4.9	1	5	ng/dry g	J,H
Acenaphthene	NA	2.8	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.8	1	5	ng/dry g	J,H
Anthracene	NA	1.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.7	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	1.7	1	5	ng/dry g	J,H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.7	1	5	ng/dry g	J,H
Chrysene	NA	14.2	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	6.6	1	5	ng/dry g	H
Fluorene	NA	5.4	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	8.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	28.9	1	5	ng/dry g	H
Pyrene	NA	9	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31987-R1	SWHB-01-ZP Plankton	Matrix: Tissue	Sampled: 08-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	93			% Recovery	
(d10-Phenanthrene)	NA	96			% Recovery	
(d12-Chrysene)	NA	84			% Recovery	
(d8-Naphthalene)	NA	78			% Recovery	
1-Methylnaphthalene	NA	93.3	1	5	ng/dry g	H
1-Methylphenanthrene	NA	189.5	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	95	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	93.5	1	5	ng/dry g	H
2-Methylnaphthalene	NA	149.7	1	5	ng/dry g	H
Acenaphthene	NA	95.9	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	81.1	1	5	ng/dry g	H
Benz[a]anthracene	NA	26.4	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	34.4	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	96.4	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	246.7	1	5	ng/dry g	H
Fluorene	NA	191	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	165.6	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	811.8	1	5	ng/dry g	H
Pyrene	NA	200.6	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31988-R1	SWHB-06-SBB Spotted sand bass, whol	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	110			% Recovery	
(d10-Phenanthrene)	NA	107			% Recovery	
(d12-Chrysene)	NA	80			% Recovery	
(d8-Naphthalene)	NA	102			% Recovery	
1-Methylnaphthalene	NA	2.8	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	5.1	1	5	ng/dry g	H
Acenaphthene	NA	4	1	5	ng/dry g	J,H
Acenaphthylene	NA	3.1	1	5	ng/dry g	J,H
Anthracene	NA	6.2	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.5	1	5	ng/dry g	J,H
Chrysene	NA	1	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	5.6	1	5	ng/dry g	H
Fluorene	NA	4.2	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.7	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	9.2	1	5	ng/dry g	H
Pyrene	NA	3.1	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31989-R1	SWHB-06-CH-Small California halibut, w	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	97			% Recovery	
(d10-Phenanthrene)	NA	94			% Recovery	
(d12-Chrysene)	NA	66			% Recovery	
(d8-Naphthalene)	NA	91			% Recovery	
1-Methylnaphthalene	NA	3.6	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	1	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	2.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	7.6	1	5	ng/dry g	H
Acenaphthene	NA	1.6	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.1	1	5	ng/dry g	J,H
Anthracene	NA	2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.3	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	3.4	1	5	ng/dry g	J,H
Fluorene	NA	3.5	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	10.9	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	10.9	1	5	ng/dry g	H
Pyrene	NA	2.3	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31990-R1	SWHB-06-CH-Large California halibut, w	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 13-Jun-15	
(d10-Acenaphthene)	NA	103			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	95			% Recovery	
1-Methylnaphthalene	NA	2	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.6	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	6.4	1	5	ng/dry g	H
Acenaphthene	NA	1.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	1.1	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.6	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	2.3	1	5	ng/dry g	J,H
Fluorene	NA	2.5	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	8.5	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	10.2	1	5	ng/dry g	H
Pyrene	NA	1.5	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31991-R1	SWHB-06-P Polychaetes	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 14-Jun-15	
(d10-Acenaphthene)	NA	92			% Recovery	
(d10-Phenanthrene)	NA	91			% Recovery	
(d12-Chrysene)	NA	63			% Recovery	
(d8-Naphthalene)	NA	83			% Recovery	
1-Methylnaphthalene	NA	2.8	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	4.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	8.2	1	5	ng/dry g	H
Acenaphthene	NA	3.4	1	5	ng/dry g	J,H
Acenaphthylene	NA	1	1	5	ng/dry g	J,H
Anthracene	NA	4.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	1.2	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	2.5	1	5	ng/dry g	J,H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	3.4	1	5	ng/dry g	J,H
Chrysene	NA	1.9	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	8.4	1	5	ng/dry g	H
Fluorene	NA	6.3	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	11	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	30.2	1	5	ng/dry g	H
Pyrene	NA	8.4	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31992-R1	SWHB-06-M Mollusks	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 14-Jun-15	
(d10-Acenaphthene)	NA	105			% Recovery	
(d10-Phenanthrene)	NA	100			% Recovery	
(d12-Chrysene)	NA	58			% Recovery	
(d8-Naphthalene)	NA	90			% Recovery	
1-Methylnaphthalene	NA	5.5	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	4.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	12.6	1	5	ng/dry g	H
Acenaphthene	NA	4.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	3.5	1	5	ng/dry g	J,H
Anthracene	NA	13.4	1	5	ng/dry g	H
Benz[a]anthracene	NA	2	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	4.9	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	8.4	1	5	ng/dry g	H
Benzo[e]pyrene	NA	5.7	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	11.2	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	3.1	1	5	ng/dry g	J,H
Biphenyl	NA	5.4	1	5	ng/dry g	H
Chrysene	NA	4.7	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	14.6	1	5	ng/dry g	H
Fluorene	NA	7.5	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	19	1	5	ng/dry g	H
Perylene	NA	1.5	1	5	ng/dry g	J,H
Phenanthrene	NA	28.2	1	5	ng/dry g	H
Pyrene	NA	13.8	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31993-R1	SWHB-06-ZP Plankton	Matrix: Tissue	Sampled: 09-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	57			% Recovery	
(d10-Phenanthrene)	NA	60			% Recovery	
(d12-Chrysene)	NA	50			% Recovery	
(d8-Naphthalene)	NA	49			% Recovery	
1-Methylnaphthalene	NA	49	1	5	ng/dry g	H
1-Methylphenanthrene	NA	31.8	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	27.3	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	55.7	1	5	ng/dry g	H
2-Methylnaphthalene	NA	79.2	1	5	ng/dry g	H
Acenaphthene	NA	30.7	1	5	ng/dry g	H
Acenaphthylene	NA	21.2	1	5	ng/dry g	H
Anthracene	NA	63	1	5	ng/dry g	H
Benz[a]anthracene	NA	54.4	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	89.3	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	48.8	1	5	ng/dry g	H
Chrysene	NA	78.4	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	97.4	1	5	ng/dry g	H
Fluorene	NA	88.3	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	77.8	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	326	1	5	ng/dry g	H
Pyrene	NA	93.5	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31994-R1	SWHB-40-SBB Spotted sand bass, whol	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7114				
				Sampled: 22-Apr-14		Received: 21-May-15
				Prepared: 27-May-15		Analyzed: 09-Jun-15
(d10-Acenaphthene)	NA	64			% Recovery	
(d10-Phenanthrene)	NA	65			% Recovery	
(d12-Chrysene)	NA	52			% Recovery	
(d8-Naphthalene)	NA	54			% Recovery	
1-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	2.5	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	4	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.8	1	5	ng/dry g	J,H
Acenaphthene	NA	1.8	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	3.4	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.1	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	ND	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	4.4	1	5	ng/dry g	J,H
Fluoranthene	NA	1.8	1	5	ng/dry g	J,H
Fluorene	NA	3.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.8	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	11.4	1	5	ng/dry g	H
Pyrene	NA	1.4	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31995-R1	SWHB-40-CH California halibut, whole, Method: EPA 8270D	Matrix: Tissue Batch ID: O-7114			Sampled: 22-Apr-14 Prepared: 27-May-15	Received: 21-May-15 Analyzed: 09-Jun-15
(d10-Acenaphthene)	NA	75			% Recovery	
(d10-Phenanthrene)	NA	78			% Recovery	
(d12-Chrysene)	NA	62			% Recovery	
(d8-Naphthalene)	NA	61			% Recovery	
1-Methylnaphthalene	NA	2	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	2.7	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	11.8	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	5.7	1	5	ng/dry g	H
Acenaphthene	NA	2.3	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.3	1	5	ng/dry g	J,H
Anthracene	NA	2.1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	6.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	3.5	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	3.4	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.9	1	5	ng/dry g	H
Fluoranthene	NA	4	1	5	ng/dry g	J,H
Fluorene	NA	2.6	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	18.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	18.8	1	5	ng/dry g	H
Pyrene	NA	8	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31996-R1	SWHB-40-SP Shiner perch, whole, comp	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 09-Jun-15	
(d10-Acenaphthene)	NA	71			% Recovery	
(d10-Phenanthrene)	NA	78			% Recovery	
(d12-Chrysene)	NA	68			% Recovery	
(d8-Naphthalene)	NA	56			% Recovery	
1-Methylnaphthalene	NA	1.5	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.7	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.8	1	5	ng/dry g	H
2-Methylnaphthalene	NA	3.8	1	5	ng/dry g	J,H
Acenaphthene	NA	2.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	1	1	5	ng/dry g	J,H
Anthracene	NA	4	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	8.6	1	5	ng/dry g	H
Benzo[a]pyrene	NA	2.1	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.7	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	5.8	1	5	ng/dry g	H
Fluoranthene	NA	5.3	1	5	ng/dry g	H
Fluorene	NA	4.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	17.6	1	5	ng/dry g	H
Pyrene	NA	4.9	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31997-R1	SWHB-40-C Crustacea	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	96			% Recovery	
(d10-Phenanthrene)	NA	99			% Recovery	
(d12-Chrysene)	NA	92			% Recovery	
(d8-Naphthalene)	NA	87			% Recovery	
1-Methylnaphthalene	NA	13.3	1	5	ng/dry g	H
1-Methylphenanthrene	NA	5.8	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	8.1	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	11.5	1	5	ng/dry g	H
2-Methylnaphthalene	NA	15.3	1	5	ng/dry g	H
Acenaphthene	NA	11.6	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	11.6	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	13.1	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	13.3	1	5	ng/dry g	H
Fluorene	NA	19.5	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	25.5	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	83.5	1	5	ng/dry g	H
Pyrene	NA	16.6	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31998-R1	SWHB-40-P Polychaetes	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	64			% Recovery	
(d10-Phenanthrene)	NA	64			% Recovery	
(d12-Chrysene)	NA	53			% Recovery	
(d8-Naphthalene)	NA	54			% Recovery	
1-Methylnaphthalene	NA	12.3	1	5	ng/dry g	H
1-Methylphenanthrene	NA	8.7	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	10.1	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	20.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	22.6	1	5	ng/dry g	H
Acenaphthene	NA	10.1	1	5	ng/dry g	H
Acenaphthylene	NA	4.6	1	5	ng/dry g	J,H
Anthracene	NA	11.2	1	5	ng/dry g	H
Benz[a]anthracene	NA	4.7	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	3.8	1	5	ng/dry g	J,H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	17.6	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	57.6	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	14.8	1	5	ng/dry g	H
Chrysene	NA	5	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	20	1	5	ng/dry g	H
Fluorene	NA	22.1	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	21.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	86	1	5	ng/dry g	H
Pyrene	NA	22.3	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 31999-R1	SWHB-40-M Mollusks	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7120	Prepared: 03-Jun-15		Analyzed: 26-Jun-15	
(d10-Acenaphthene)	NA	99			% Recovery	
(d10-Phenanthrene)	NA	100			% Recovery	
(d12-Chrysene)	NA	103			% Recovery	
(d8-Naphthalene)	NA	90			% Recovery	
1-Methylnaphthalene	NA	1.9	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	3.3	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	1.6	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	4.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.6	1	5	ng/dry g	J,H
Acenaphthene	NA	2	1	5	ng/dry g	J,H
Acenaphthylene	NA	8.1	1	5	ng/dry g	H
Anthracene	NA	18.7	1	5	ng/dry g	H
Benz[a]anthracene	NA	5.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	9.4	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	31.7	1	5	ng/dry g	H
Benzo[e]pyrene	NA	25.8	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	16.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	14	1	5	ng/dry g	H
Biphenyl	NA	1.6	1	5	ng/dry g	J,H
Chrysene	NA	11.2	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	22.6	1	5	ng/dry g	H
Fluorene	NA	5.5	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	13.2	1	5	ng/dry g	H
Naphthalene	NA	5.8	1	5	ng/dry g	H
Perylene	NA	2	1	5	ng/dry g	J,H
Phenanthrene	NA	16.3	1	5	ng/dry g	H
Pyrene	NA	15	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32000-R1	SWHB-40-ZP Plankton	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7120				
				Sampled: 09-May-14		Received: 21-May-15
				Prepared: 03-Jun-15		Analyzed: 26-Jun-15
(d10-Acenaphthene)	NA	58			% Recovery	
(d10-Phenanthrene)	NA	61			% Recovery	
(d12-Chrysene)	NA	61			% Recovery	
(d8-Naphthalene)	NA	52			% Recovery	
1-Methylnaphthalene	NA	29.7	1	5	ng/dry g	H
1-Methylphenanthrene	NA	31.9	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	17.3	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	32.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	47.3	1	5	ng/dry g	H
Acenaphthene	NA	26.3	1	5	ng/dry g	H
Acenaphthylene	NA	6.8	1	5	ng/dry g	H
Anthracene	NA	22.4	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	36.9	1	5	ng/dry g	H
Chrysene	NA	13.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	67.5	1	5	ng/dry g	H
Fluorene	NA	39.6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	47.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	219	1	5	ng/dry g	H
Pyrene	NA	60	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32001-R1	SWHB-15-SBB Spotted sand bass, whole,	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	78			% Recovery	
(d10-Phenanthrene)	NA	79			% Recovery	
(d12-Chrysene)	NA	72			% Recovery	
(d8-Naphthalene)	NA	66			% Recovery	
1-Methylnaphthalene	NA	1.9	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	7.3	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.1	1	5	ng/dry g	J,H
Acenaphthene	NA	2.3	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.5	1	5	ng/dry g	J,H
Anthracene	NA	1.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	14	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.7	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	7.6	1	5	ng/dry g	H
Fluoranthene	NA	2	1	5	ng/dry g	J,H
Fluorene	NA	4.1	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	13.7	1	5	ng/dry g	H
Pyrene	NA	1.6	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32002-R1	SWHB-15-CH California halibut, whole, c	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 10-Jun-15	
(d10-Acenaphthene)	NA	79			% Recovery	
(d10-Phenanthrene)	NA	81			% Recovery	
(d12-Chrysene)	NA	55			% Recovery	
(d8-Naphthalene)	NA	62			% Recovery	
1-Methylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.8	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	3.1	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	5.2	1	5	ng/dry g	H
2-Methylnaphthalene	NA	3.2	1	5	ng/dry g	J,H
Acenaphthene	NA	1.7	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1.7	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	3.5	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.1	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	7.1	1	5	ng/dry g	H
Fluoranthene	NA	3.3	1	5	ng/dry g	J,H
Fluorene	NA	3.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	7.6	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	16	1	5	ng/dry g	H
Pyrene	NA	1.8	1	5	ng/dry g	J,H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32003-R1	SWHB-15-SA-small Slough anchovy, who	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7114			Prepared: 27-May-15	Analyzed: 10-Jun-15
(d10-Acenaphthene)	NA	76			% Recovery	
(d10-Phenanthrene)	NA	78			% Recovery	
(d12-Chrysene)	NA	71			% Recovery	
(d8-Naphthalene)	NA	60			% Recovery	
1-Methylnaphthalene	NA	2.9	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	3.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	44.8	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	2.8	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	6.3	1	5	ng/dry g	H
Acenaphthene	NA	1.9	1	5	ng/dry g	J,H
Acenaphthylene	NA	1.3	1	5	ng/dry g	J,H
Anthracene	NA	4.1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	38.3	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.9	1	5	ng/dry g	J,H
Chrysene	NA	1.1	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	6.9	1	5	ng/dry g	H
Fluoranthene	NA	3.5	1	5	ng/dry g	J,H
Fluorene	NA	6.3	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	12.4	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	15.5	1	5	ng/dry g	H
Pyrene	NA	3.5	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32004-R1	SWHB-15-C Crustacea	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 28-Jun-15	
(d10-Acenaphthene)	NA	88			% Recovery	
(d10-Phenanthrene)	NA	94			% Recovery	
(d12-Chrysene)	NA	102			% Recovery	
(d8-Naphthalene)	NA	66			% Recovery	
1-Methylnaphthalene	NA	5.2	1	5	ng/wet g	H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	10.3	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	11.8	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	ND	1	5	ng/wet g	H,N
Anthracene	NA	ND	1	5	ng/wet g	H,N
Benz[a]anthracene	NA	4.5	1	5	ng/wet g	J,H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	5.7	1	5	ng/wet g	H,N
Chrysene	NA	8.3	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	9.6	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	12	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	33.7	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32005-R1	SWHB-15-P Polychaetes	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7122			Prepared: 01-Jun-15	Analyzed: 28-Jun-15
(d10-Acenaphthene)	NA	76			% Recovery	
(d10-Phenanthrene)	NA	86			% Recovery	
(d12-Chrysene)	NA	102			% Recovery	
(d8-Naphthalene)	NA	62			% Recovery	
1-Methylnaphthalene	NA	6.3	1	5	ng/wet g	H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	18.8	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	18.1	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	2.6	1	5	ng/wet g	J,H,N
Anthracene	NA	7.1	1	5	ng/wet g	H,N
Benz[a]anthracene	NA	1.4	1	5	ng/wet g	J,H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	8.9	1	5	ng/wet g	H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	10	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	22.6	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	41.3	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32006-R1	SWHB-15-M Mollusks	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 28-Jun-15	
(d10-Acenaphthene)	NA	75			% Recovery	
(d10-Phenanthrene)	NA	85			% Recovery	
(d12-Chrysene)	NA	98			% Recovery	
(d8-Naphthalene)	NA	52			% Recovery	
1-Methylnaphthalene	NA	2.9	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	1.7	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	4.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	8.5	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2.8	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.2	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	11.5	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	6.1	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	11.1	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.9	1	5	ng/dry g	J,H
Chrysene	NA	8.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.1	1	5	ng/dry g	H
Perylene	NA	4	1	5	ng/dry g	J,H
Phenanthrene	NA	21.6	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32007-R1	SWHB-15-ZP Plankton	Matrix: Tissue	Sampled: 07-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 28-Jun-15	
(d10-Acenaphthene)	NA	73			% Recovery	
(d10-Phenanthrene)	NA	86			% Recovery	
(d12-Chrysene)	NA	95			% Recovery	
(d8-Naphthalene)	NA	57			% Recovery	
1-Methylnaphthalene	NA	18.7	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	32.7	1	5	ng/dry g	H
2-Methylnaphthalene	NA	69.7	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	20.8	1	5	ng/dry g	H
Benz[a]anthracene	NA	7.7	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	21.4	1	5	ng/dry g	H
Chrysene	NA	16.7	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	55.7	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	47.4	1	5	ng/dry g	H
Perylene	NA	15	1	5	ng/dry g	H
Phenanthrene	NA	156.4	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32008-R1	SWHB-21-SBB Spotted sand bass, whole	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 28-Jun-15	
(d10-Acenaphthene)	NA	102			% Recovery	
(d10-Phenanthrene)	NA	103			% Recovery	
(d12-Chrysene)	NA	110			% Recovery	
(d8-Naphthalene)	NA	88			% Recovery	
1-Methylnaphthalene	NA	3.2	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	2.4	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	4.2	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	7.7	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.3	1	5	ng/dry g	J,H
Anthracene	NA	4.1	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	3.4	1	5	ng/dry g	J,H
Chrysene	NA	11.1	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	5.3	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	11.6	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32009-R1	SWHB-21-CH-small California halibut, w	Matrix: Tissue			Sampled: 21-Apr-14	Received: 21-May-15
	Method: EPA 8270D	Batch ID: O-7122			Prepared: 01-Jun-15	Analyzed: 28-Jun-15
(d10-Acenaphthene)	NA	89			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	100			% Recovery	
(d8-Naphthalene)	NA	73			% Recovery	
1-Methylnaphthalene	NA	5	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	4.2	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	10.3	1	5	ng/dry g	H
2-Methylnaphthalene	NA	11.7	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	5.5	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	5.3	1	5	ng/dry g	H
Chrysene	NA	13.2	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	11.9	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	12.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	29.8	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32010-R1	SWHB-21-CH-large California halibut, wh	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	91			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	101			% Recovery	
(d8-Naphthalene)	NA	66			% Recovery	
1-Methylnaphthalene	NA	1.8	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	3.9	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	4.9	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	5.5	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	1.9	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.4	1	5	ng/dry g	J,H
Chrysene	NA	2.8	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	3.9	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	13.7	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32011-R1	SWHB-21-C Crustacea	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	59			% Recovery	
(d10-Phenanthrene)	NA	78			% Recovery	
(d12-Chrysene)	NA	95			% Recovery	
(d8-Naphthalene)	NA	32			% Recovery	
1-Methylnaphthalene	NA	12.4	1	5	ng/wet g	H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	11.8	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	33.1	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	4	1	5	ng/wet g	J,H,N
Anthracene	NA	9.5	1	5	ng/wet g	H,N
Benz[a]anthracene	NA	4.7	1	5	ng/wet g	J,H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	16.5	1	5	ng/wet g	H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	15.1	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	30.7	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	97.7	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32012-R1	SWHB-21-P Polychaetes	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	79			% Recovery	
(d10-Phenanthrene)	NA	91			% Recovery	
(d12-Chrysene)	NA	104			% Recovery	
(d8-Naphthalene)	NA	58			% Recovery	
1-Methylnaphthalene	NA	8.3	1	5	ng/wet g	H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	6.3	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	12	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	6.1	1	5	ng/wet g	H,N
Anthracene	NA	11	1	5	ng/wet g	H,N
Benz[a]anthracene	NA	ND	1	5	ng/wet g	H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	7.1	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	8	1	5	ng/wet g	H,N
Chrysene	NA	6.1	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	11.7	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	12.6	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	42.5	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32013-R1	SWHB-21-B Mollusks	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	86			% Recovery	
(d10-Phenanthrene)	NA	94			% Recovery	
(d12-Chrysene)	NA	101			% Recovery	
(d8-Naphthalene)	NA	73			% Recovery	
1-Methylnaphthalene	NA	3	1	5	ng/wet g	J,H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	2.5	1	5	ng/wet g	J,H,N
2-Methylnaphthalene	NA	4.5	1	5	ng/wet g	J,H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	1.9	1	5	ng/wet g	J,H,N
Anthracene	NA	4.8	1	5	ng/wet g	J,H,N
Benz[a]anthracene	NA	2.3	1	5	ng/wet g	J,H,N
Benzo[a]pyrene	NA	7.9	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	7.3	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	2.5	1	5	ng/wet g	J,H,N
Chrysene	NA	4.5	1	5	ng/wet g	J,H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	4.2	1	5	ng/wet g	J,H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	5.1	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	13.8	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32014-R1	SWHB-21-ZP Plankton	Matrix: Tissue	Sampled: 07-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	76			% Recovery	
(d10-Phenanthrene)	NA	93			% Recovery	
(d12-Chrysene)	NA	100			% Recovery	
(d8-Naphthalene)	NA	46			% Recovery	
1-Methylnaphthalene	NA	59.9	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2-Methylnaphthalene	NA	106.1	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	11.1	1	5	ng/dry g	H
Anthracene	NA	44.9	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	25.4	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	41.5	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	97.4	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	58	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	405.7	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32015-R1	SWHB-22-SBB Spotted sand bass, whole	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 09-Jun-15	
(d10-Acenaphthene)	NA	69			% Recovery	
(d10-Phenanthrene)	NA	71			% Recovery	
(d12-Chrysene)	NA	64			% Recovery	
(d8-Naphthalene)	NA	58			% Recovery	
1-Methylnaphthalene	NA	1.1	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	4	1	5	ng/dry g	J,H
2,6-Dimethylnaphthalene	NA	3.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	4.6	1	5	ng/dry g	J,H
Acenaphthene	NA	2.8	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	3.5	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	10.4	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.7	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	7.3	1	5	ng/dry g	H
Fluoranthene	NA	2.2	1	5	ng/dry g	J,H
Fluorene	NA	5.2	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	6.1	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	11.7	1	5	ng/dry g	H
Pyrene	NA	1.8	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32016-R1	SWHB-22-CH California halibut, whole, c	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7114	Prepared: 27-May-15		Analyzed: 09-Jun-15	
(d10-Acenaphthene)	NA	71			% Recovery	
(d10-Phenanthrene)	NA	75			% Recovery	
(d12-Chrysene)	NA	63			% Recovery	
(d8-Naphthalene)	NA	60			% Recovery	
1-Methylnaphthalene	NA	1.4	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	1.7	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	6.7	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	4.3	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
Acenaphthene	NA	2.2	1	5	ng/dry g	J,H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	2	1	5	ng/dry g	J,H
Benz[a]anthracene	NA	4.2	1	5	ng/dry g	J,H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	1.3	1	5	ng/dry g	J,H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	4.7	1	5	ng/dry g	J,H
Fluoranthene	NA	2.2	1	5	ng/dry g	J,H
Fluorene	NA	2.4	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	5.2	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	14.4	1	5	ng/dry g	H
Pyrene	NA	2	1	5	ng/dry g	J,H



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ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32017-R1	SWHB-22-SP Shiner perch, whole	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7118	Prepared: 29-May-15		Analyzed: 14-Jun-15	
(d10-Acenaphthene)	NA	101			% Recovery	
(d10-Phenanthrene)	NA	104			% Recovery	
(d12-Chrysene)	NA	83			% Recovery	
(d8-Naphthalene)	NA	80			% Recovery	
1-Methylnaphthalene	NA	9.1	1	5	ng/dry g	H
1-Methylphenanthrene	NA	2.9	1	5	ng/dry g	J,H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	6.4	1	5	ng/dry g	H
2-Methylnaphthalene	NA	11.4	1	5	ng/dry g	H
Acenaphthene	NA	5.4	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	6.2	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	7.3	1	5	ng/dry g	H
Chrysene	NA	2.8	1	5	ng/dry g	J,H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	8.3	1	5	ng/dry g	H
Fluorene	NA	8.6	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	19.5	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	28.3	1	5	ng/dry g	H
Pyrene	NA	10.2	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32018-R1	SWHB-22-P Polychaetes	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	86			% Recovery	
(d10-Phenanthrene)	NA	92			% Recovery	
(d12-Chrysene)	NA	101			% Recovery	
(d8-Naphthalene)	NA	72			% Recovery	
1-Methylnaphthalene	NA	30.3	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	40	1	5	ng/dry g	H
2-Methylnaphthalene	NA	70.1	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	ND	1	5	ng/dry g	H
Anthracene	NA	19.3	1	5	ng/dry g	H
Benz[a]anthracene	NA	ND	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	36.8	1	5	ng/dry g	H
Chrysene	NA	39.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	58	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	73	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	175.6	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32019-R1	SWHB-22-M Mollusks	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	54			% Recovery	
(d10-Phenanthrene)	NA	75			% Recovery	
(d12-Chrysene)	NA	104			% Recovery	
(d8-Naphthalene)	NA	32			% Recovery	
1-Methylnaphthalene	NA	2.3	1	5	ng/dry g	J,H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	3.7	1	5	ng/dry g	J,H
2-Methylnaphthalene	NA	3.8	1	5	ng/dry g	J,H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	1.9	1	5	ng/dry g	J,H
Anthracene	NA	6.1	1	5	ng/dry g	H
Benz[a]anthracene	NA	5.3	1	5	ng/dry g	H
Benzo[a]pyrene	NA	15.3	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	10.9	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	14.2	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	2.1	1	5	ng/dry g	J,H
Chrysene	NA	7.9	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	3.8	1	5	ng/dry g	J,H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	4.4	1	5	ng/dry g	J,H
Perylene	NA	3.5	1	5	ng/dry g	J,H
Phenanthrene	NA	15.6	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32020-R1	SWHB-22-ZP Plankton	Matrix: Tissue	Sampled: 07-May-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	89			% Recovery	
(d10-Phenanthrene)	NA	96			% Recovery	
(d12-Chrysene)	NA	100			% Recovery	
(d8-Naphthalene)	NA	74			% Recovery	
1-Methylnaphthalene	NA	28.9	1	5	ng/dry g	H
1-Methylphenanthrene	NA	ND	1	5	ng/dry g	H
2,3,5-Trimethylnaphthalene	NA	13.4	1	5	ng/dry g	H
2,6-Dimethylnaphthalene	NA	26.9	1	5	ng/dry g	H
2-Methylnaphthalene	NA	48.2	1	5	ng/dry g	H
Acenaphthene	NA	ND	1	5	ng/dry g	H
Acenaphthylene	NA	4.3	1	5	ng/dry g	J,H
Anthracene	NA	19.4	1	5	ng/dry g	H
Benz[a]anthracene	NA	7.5	1	5	ng/dry g	H
Benzo[a]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g	H
Benzo[e]pyrene	NA	ND	1	5	ng/dry g	H
Benzo[g,h,i]perylene	NA	32	1	5	ng/dry g	H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g	H
Biphenyl	NA	19.9	1	5	ng/dry g	H
Chrysene	NA	ND	1	5	ng/dry g	H
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g	H
Dibenzothiophene	NA	ND	1	5	ng/dry g	H
Fluoranthene	NA	ND	1	5	ng/dry g	H
Fluorene	NA	33.4	1	5	ng/dry g	H
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g	H
Naphthalene	NA	32.9	1	5	ng/dry g	H
Perylene	NA	ND	1	5	ng/dry g	H
Phenanthrene	NA	132.5	1	5	ng/dry g	H
Pyrene	NA	ND	1	5	ng/dry g	H



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32029-R1	SWHB-26-27-Goby Goby sp., whole	Matrix: Tissue				
	Method: EPA 8270D	Batch ID: O-7122				
				Sampled: 22-Apr-14		Received: 21-May-15
				Prepared: 01-Jun-15		Analyzed: 29-Jun-15
(d10-Acenaphthene)	NA	94			% Recovery	
(d10-Phenanthrene)	NA	98			% Recovery	
(d12-Chrysene)	NA	107			% Recovery	
(d8-Naphthalene)	NA	83			% Recovery	
1-Methylnaphthalene	NA	7.3	1	5	ng/wet g	H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	2.4	1	5	ng/wet g	J,H,N
2,6-Dimethylnaphthalene	NA	5.9	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	8.9	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	1.4	1	5	ng/wet g	J,H,N
Anthracene	NA	4.7	1	5	ng/wet g	J,H,N
Benz[a]anthracene	NA	1	1	5	ng/wet g	J,H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	6.1	1	5	ng/wet g	H,N
Chrysene	NA	2.3	1	5	ng/wet g	J,H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	9.2	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	10.2	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	32.4	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32030-R1	SWHB-01-06-40-Goby Goby sp., whole	Matrix: Tissue	Sampled: 22-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	91			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	106			% Recovery	
(d8-Naphthalene)	NA	78			% Recovery	
1-Methylnaphthalene	NA	3.2	1	5	ng/wet g	J,H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	3.8	1	5	ng/wet g	J,H,N
2-Methylnaphthalene	NA	6.3	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	ND	1	5	ng/wet g	H,N
Anthracene	NA	3.1	1	5	ng/wet g	J,H,N
Benz[a]anthracene	NA	ND	1	5	ng/wet g	H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	2.9	1	5	ng/wet g	J,H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	5.1	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	8	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	18.5	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N



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CA ELAP #2769

Polynuclear Aromatic Hydrocarbons

ANALYTICAL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	QA CODE
Sample ID: 32031-R1	SWHB-15-22-Goby Goby sp., whole	Matrix: Tissue	Sampled: 21-Apr-14		Received: 21-May-15	
	Method: EPA 8270D	Batch ID: O-7122	Prepared: 01-Jun-15		Analyzed: 29-Jun-15	
(d10-Acenaphthene)	NA	92			% Recovery	
(d10-Phenanthrene)	NA	97			% Recovery	
(d12-Chrysene)	NA	103			% Recovery	
(d8-Naphthalene)	NA	77			% Recovery	
1-Methylnaphthalene	NA	3.4	1	5	ng/wet g	J,H,N
1-Methylphenanthrene	NA	ND	1	5	ng/wet g	H,N
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/wet g	H,N
2,6-Dimethylnaphthalene	NA	7.1	1	5	ng/wet g	H,N
2-Methylnaphthalene	NA	6.4	1	5	ng/wet g	H,N
Acenaphthene	NA	ND	1	5	ng/wet g	H,N
Acenaphthylene	NA	ND	1	5	ng/wet g	H,N
Anthracene	NA	1.6	1	5	ng/wet g	J,H,N
Benz[a]anthracene	NA	ND	1	5	ng/wet g	H,N
Benzo[a]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[b]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Benzo[e]pyrene	NA	ND	1	5	ng/wet g	H,N
Benzo[g,h,i]perylene	NA	ND	1	5	ng/wet g	H,N
Benzo[k]fluoranthene	NA	ND	1	5	ng/wet g	H,N
Biphenyl	NA	4.1	1	5	ng/wet g	J,H,N
Chrysene	NA	ND	1	5	ng/wet g	H,N
Dibenz[a,h]anthracene	NA	ND	1	5	ng/wet g	H,N
Dibenzothiophene	NA	ND	1	5	ng/wet g	H,N
Fluoranthene	NA	ND	1	5	ng/wet g	H,N
Fluorene	NA	5.8	1	5	ng/wet g	H,N
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/wet g	H,N
Naphthalene	NA	6.5	1	5	ng/wet g	H,N
Perylene	NA	ND	1	5	ng/wet g	H,N
Phenanthrene	NA	23.3	1	5	ng/wet g	H,N
Pyrene	NA	ND	1	5	ng/wet g	H,N

PHYSICS

QUALITY CONTROL

REPORT

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CA ELAP #2769

Conventionals

QUALITY CONTROL REPORT

SAMPLE ID	BATCH ID	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	LIMITS	PRECISION %	LIMITS	QA CODE
Percent Lipids		Method: Gravimetric			Fraction: NA		Prepared: 01-Jun-15			Analyzed: 01-Jun-15		
31944-B1	QAQC Procedural Blank	C-22091	ND	0.01	0.05	% Dry Weight						
31952-CRM1	QAQC CRM - SRM 1947	C-22091	10.32	0.01	0.05	% Wet Weight	10.4	99	80 - 120% PASS			
31980-R2	SWHB-01-SBB	C-22091	6.89	0.01	0.05	% Dry Weight				14	25	PASS H
31945-B1	QAQC Procedural Blank	C-22093	ND	0.01	0.05	% Dry Weight						
31953-CRM1	QAQC CRM - SRM 1947	C-22093	11.72	0.01	0.05	% Wet Weight	10.4	113	80 - 120% PASS			
31966-R2	SWHB-27-SBB	C-22093	8.06	0.01	0.05	% Dry Weight				6	25	PASS H
31946-B1	QAQC Procedural Blank	C-22099	ND	0.01	0.05	% Dry Weight						
31954-CRM1	QAQC CRM - SRM 1947	C-22099	10.15	0.01	0.05	% Wet Weight	10.4	98	80 - 120% PASS			
31993-R2	SWHB-06-ZP	C-22099	6.44	0.01	0.05	% Dry Weight				25	25	PASS H
31947-B1	QAQC Procedural Blank	C-22104	ND	0.01	0.05	% Dry Weight						
31955-CRM1	QAQC CRM - SRM 1947	C-22104	10.7	0.01	0.05	% Wet Weight	10.4	103	80 - 120% PASS			
32006-R2	SWHB-15-M	C-22104	1.2	0.01	0.05	% Dry Weight				9	25	PASS H
Percent Solids		Method: SM 2540 B			Fraction: NA		Prepared: 29-May-15			Analyzed: 29-May-15		
31945-B1	QAQC Procedural Blank	C-22090	ND	0.1	0.1	% Dry Weight						
31966-R2	SWHB-27-SBB	C-22090	23	0.1	0.1	% Dry Weight				0	25	PASS H
31947-B1	QAQC Procedural Blank	C-22092	ND	0.1	0.1	% Dry Weight						
32006-R2	SWHB-15-M	C-22092	57.8	0.1	0.1	% Dry Weight				2	25	PASS H
32020-R2	SWHB-22-ZP	C-22092	11.4	0.1	0.1	% Dry Weight				10	25	PASS H
31946-B1	QAQC Procedural Blank	C-22094	ND	0.1	0.1	% Dry Weight						
31986-R2	SWHB-01-FC	C-22094	25.8	0.1	0.1	% Dry Weight				1	25	PASS H
31998-R2	SWHB-40-P	C-22094	21.4	0.1	0.1	% Dry Weight				2	25	PASS H
31944-B1	QAQC Procedural Blank	SM-2540B	ND	0.1	0.1	% Dry Weight						
31980-R2	SWHB-01-SBB	SM-2540B	22.3	0.1	0.1	% Dry Weight				5	25	PASS H



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CA ELAP #2769

Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31944-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

(PCB030)	NA	69			% Recovery	100		69 50 - 150%	PASS	
(PCB112)	NA	88			% Recovery	100		88 50 - 150%	PASS	
(PCB198)	NA	95			% Recovery	100		95 50 - 150%	PASS	
(TCMX)	NA	72			% Recovery	100		72 50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

Toxaphene	NA	ND	10	50	ng/dry g					
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Sample ID: 31944-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

(PCB030)	NA	65			% Recovery	100	0	65 50 - 150%	PASS	
(PCB112)	NA	80			% Recovery	100	0	80 50 - 150%	PASS	
(PCB198)	NA	87			% Recovery	100	0	87 50 - 150%	PASS	
(TCMX)	NA	61			% Recovery	100	0	61 50 - 150%	PASS	
2,4'-DDD	NA	468.09	0.05	0.1	ng/dry g	500	0	94 70 - 130%	PASS	
2,4'-DDE	NA	399.45	0.05	0.1	ng/dry g	500	0	80 70 - 130%	PASS	
2,4'-DDT	NA	478.53	0.05	0.1	ng/dry g	500	0	96 70 - 130%	PASS	
4,4'-DDD	NA	566.41	0.05	0.1	ng/dry g	500	0	113 70 - 130%	PASS	



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
4,4'-DDE	NA	400.45	0.05	0.1	ng/dry g	500	0	80	70 - 130%	PASS		
4,4'-DDMU	NA	443.37	0.05	0.1	ng/dry g	500	0	89	70 - 130%	PASS		
4,4'-DDT	NA	638.45	0.05	0.1	ng/dry g	500	0	128	70 - 130%	PASS		
Chlordane-alpha	NA	394.52	0.05	0.1	ng/dry g	500	0	79	70 - 130%	PASS		
Chlordane-gamma	NA	425.15	0.05	0.1	ng/dry g	500	0	85	70 - 130%	PASS		
cis-Nonachlor	NA	405.28	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS		
Oxychlordane	NA	382.35	0.05	0.1	ng/dry g	500	0	76	70 - 130%	PASS		
trans-Nonachlor	NA	406.81	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS		

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

Toxaphene	NA	5719.64	10	50	ng/dry g	5000	0	114	70 - 130%	PASS		
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Sample ID: 31944-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

(PCB030)	NA	63			% Recovery	100	0	63	50 - 150%	PASS	3	30	PASS	
(PCB112)	NA	82			% Recovery	100	0	82	50 - 150%	PASS	2	30	PASS	
(PCB198)	NA	93			% Recovery	100	0	93	50 - 150%	PASS	7	30	PASS	
(TCMX)	NA	61			% Recovery	100	0	61	50 - 150%	PASS	0	30	PASS	
2,4'-DDD	NA	471.86	0.05	0.1	ng/dry g	500	0	94	70 - 130%	PASS	0	25	PASS	
2,4'-DDE	NA	404.39	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS	1	25	PASS	
2,4'-DDT	NA	490.36	0.05	0.1	ng/dry g	500	0	98	70 - 130%	PASS	2	25	PASS	
4,4'-DDD	NA	576.35	0.05	0.1	ng/dry g	500	0	115	70 - 130%	PASS	2	25	PASS	
4,4'-DDE	NA	416.41	0.05	0.1	ng/dry g	500	0	83	70 - 130%	PASS	4	25	PASS	
4,4'-DDMU	NA	464.3	0.05	0.1	ng/dry g	500	0	93	70 - 130%	PASS	4	25	PASS	
4,4'-DDT	NA	683.45	0.05	0.1	ng/dry g	500	0	137	50 - 150%	PASS	7	30	PASS	Q
Chlordane-alpha	NA	406.24	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS	2	25	PASS	
Chlordane-gamma	NA	430.11	0.05	0.1	ng/dry g	500	0	86	70 - 130%	PASS	1	25	PASS	
cis-Nonachlor	NA	410.16	0.05	0.1	ng/dry g	500	0	82	70 - 130%	PASS	1	25	PASS	
Oxychlordane	NA	340.92	0.05	0.1	ng/dry g	500	0	68	50 - 150%	PASS	11	30	PASS	Q
trans-Nonachlor	NA	418.63	0.05	0.1	ng/dry g	500	0	84	70 - 130%	PASS	4	25	PASS	

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

Toxaphene	NA	5945.74	10	50	ng/dry g	5000	0	119	70 - 130%	PASS	4	25	PASS	
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31945-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 12-Jun-15	
(PCB030)	NA	67			% Recovery	100	67	50 - 150%	PASS	
(PCB112)	NA	78			% Recovery	100	78	50 - 150%	PASS	
(PCB198)	NA	92			% Recovery	100	92	50 - 150%	PASS	
(TCMX)	NA	65			% Recovery	100	65	50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
		Method: EPA 8270D-NCI			Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 17-Jun-15	
Toxaphene	NA	ND	10	50	ng/dry g					

Sample ID: 31945-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 12-Jun-15	
(PCB030)	NA	78			% Recovery	100	0	78	50 - 150%	PASS
(PCB112)	NA	83			% Recovery	100	0	83	50 - 150%	PASS
(PCB198)	NA	96			% Recovery	100	0	96	50 - 150%	PASS
(TCMX)	NA	75			% Recovery	100	0	75	50 - 150%	PASS
2,4'-DDD	NA	458.55	0.05	0.1	ng/dry g	500	0	92	70 - 130%	PASS
2,4'-DDE	NA	402.99	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS
2,4'-DDT	NA	510.83	0.05	0.1	ng/dry g	500	0	102	70 - 130%	PASS
4,4'-DDD	NA	551.19	0.05	0.1	ng/dry g	500	0	110	70 - 130%	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
4,4'-DDE	NA	392.41	0.05	0.1	ng/dry g	500	0	78	70 - 130%	PASS		
4,4'-DDMU	NA	437.07	0.05	0.1	ng/dry g	500	0	87	70 - 130%	PASS		
4,4'-DDT	NA	679.48	0.05	0.1	ng/dry g	500	0	136	50 - 150%	PASS	Q	
Chlordane-alpha	NA	411.07	0.05	0.1	ng/dry g	500	0	82	70 - 130%	PASS		
Chlordane-gamma	NA	437.2	0.05	0.1	ng/dry g	500	0	87	70 - 130%	PASS		
cis-Nonachlor	NA	419.29	0.05	0.1	ng/dry g	500	0	84	70 - 130%	PASS		
Oxychlordane	NA	445.63	0.05	0.1	ng/dry g	500	0	89	70 - 130%	PASS		
trans-Nonachlor	NA	428.07	0.05	0.1	ng/dry g	500	0	86	70 - 130%	PASS		

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

Toxaphene	NA	5238.22	10	50	ng/dry g	5000	0	105	70 - 130%	PASS	
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Sample ID: 31945-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

(PCB030)	NA	61			% Recovery	100	0	61	50 - 150%	PASS	24	30	PASS
(PCB112)	NA	75			% Recovery	100	0	75	50 - 150%	PASS	10	30	PASS
(PCB198)	NA	91			% Recovery	100	0	91	50 - 150%	PASS	5	30	PASS
(TCMX)	NA	58			% Recovery	100	0	58	50 - 150%	PASS	26	30	PASS
2,4'-DDD	NA	428.45	0.05	0.1	ng/dry g	500	0	86	70 - 130%	PASS	7	25	PASS
2,4'-DDE	NA	366.86	0.05	0.1	ng/dry g	500	0	73	70 - 130%	PASS	10	25	PASS
2,4'-DDT	NA	465.86	0.05	0.1	ng/dry g	500	0	93	70 - 130%	PASS	9	25	PASS
4,4'-DDD	NA	522.39	0.05	0.1	ng/dry g	500	0	104	70 - 130%	PASS	6	25	PASS
4,4'-DDE	NA	366.08	0.05	0.1	ng/dry g	500	0	73	70 - 130%	PASS	7	25	PASS
4,4'-DDMU	NA	393.05	0.05	0.1	ng/dry g	500	0	79	70 - 130%	PASS	10	25	PASS
4,4'-DDT	NA	644.57	0.05	0.1	ng/dry g	500	0	129	70 - 130%	PASS	5	25	PASS
Chlordane-alpha	NA	375.13	0.05	0.1	ng/dry g	500	0	75	70 - 130%	PASS	9	25	PASS
Chlordane-gamma	NA	373.37	0.05	0.1	ng/dry g	500	0	75	70 - 130%	PASS	15	25	PASS
cis-Nonachlor	NA	389.54	0.05	0.1	ng/dry g	500	0	78	70 - 130%	PASS	7	25	PASS
Oxychlordane	NA	403.41	0.05	0.1	ng/dry g	500	0	81	70 - 130%	PASS	9	25	PASS
trans-Nonachlor	NA	380.47	0.05	0.1	ng/dry g	500	0	76	70 - 130%	PASS	12	25	PASS

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

Toxaphene	NA	4542.42	10	50	ng/dry g	5000	0	91	70 - 130%	PASS	14	25	PASS
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31946-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 24-Jun-15	
(PCB030)	NA	100			% Recovery	100	100	50 - 150%	PASS	
(PCB112)	NA	114			% Recovery	100	114	50 - 150%	PASS	
(PCB198)	NA	141			% Recovery	100	141	50 - 150%	PASS	
(TCMX)	NA	96			% Recovery	100	96	50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
		Method: EPA 8270D-NCI			Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 02-Jul-15	
Toxaphene	NA	ND	10	50	ng/dry g					

Sample ID: 31946-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 24-Jun-15	
(PCB030)	NA	93			% Recovery	100	0	93	50 - 150%	PASS
(PCB112)	NA	99			% Recovery	100	0	99	50 - 150%	PASS
(PCB198)	NA	126			% Recovery	100	0	126	50 - 150%	PASS
(TCMX)	NA	89			% Recovery	100	0	89	50 - 150%	PASS
2,4'-DDD	NA	515.55	0.05	0.1	ng/dry g	500	0	103	70 - 130%	PASS
2,4'-DDE	NA	496.69	0.05	0.1	ng/dry g	500	0	99	70 - 130%	PASS
2,4'-DDT	NA	579.92	0.05	0.1	ng/dry g	500	0	116	70 - 130%	PASS
4,4'-DDD	NA	543.27	0.05	0.1	ng/dry g	500	0	109	70 - 130%	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
4,4'-DDE	NA	498.34	0.05	0.1	ng/dry g	500	0	100	70 - 130%	PASS		
4,4'-DDMU	NA	612.45	0.05	0.1	ng/dry g	500	0	122	70 - 130%	PASS		
4,4'-DDT	NA	647	0.05	0.1	ng/dry g	500	0	129	70 - 130%	PASS		
Chlordane-alpha	NA	490.7	0.05	0.1	ng/dry g	500	0	98	70 - 130%	PASS		
Chlordane-gamma	NA	491.67	0.05	0.1	ng/dry g	500	0	98	70 - 130%	PASS		
cis-Nonachlor	NA	551.53	0.05	0.1	ng/dry g	500	0	110	70 - 130%	PASS		
Oxychlordane	NA	470.74	0.05	0.1	ng/dry g	500	0	94	70 - 130%	PASS		
trans-Nonachlor	NA	516.82	0.05	0.1	ng/dry g	500	0	103	70 - 130%	PASS		

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	5499	10	50	ng/dry g	5000	0	110	70 - 130%	PASS	
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Sample ID: 31946-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 24-Jun-15

(PCB030)	NA	100			% Recovery	100	0	100	50 - 150%	PASS	7	30	PASS
(PCB112)	NA	111			% Recovery	100	0	111	50 - 150%	PASS	11	30	PASS
(PCB198)	NA	146			% Recovery	100	0	146	50 - 150%	PASS	15	30	PASS
(TCMX)	NA	96			% Recovery	100	0	96	50 - 150%	PASS	8	30	PASS
2,4'-DDD	NA	553.61	0.05	0.1	ng/dry g	500	0	111	70 - 130%	PASS	7	25	PASS
2,4'-DDE	NA	532.41	0.05	0.1	ng/dry g	500	0	106	70 - 130%	PASS	7	25	PASS
2,4'-DDT	NA	598.23	0.05	0.1	ng/dry g	500	0	120	70 - 130%	PASS	3	25	PASS
4,4'-DDD	NA	581.64	0.05	0.1	ng/dry g	500	0	116	70 - 130%	PASS	6	25	PASS
4,4'-DDE	NA	558.55	0.05	0.1	ng/dry g	500	0	112	70 - 130%	PASS	11	25	PASS
4,4'-DDMU	NA	650	0.05	0.1	ng/dry g	500	0	130	70 - 130%	PASS	6	25	PASS
4,4'-DDT	NA	649	0.05	0.1	ng/dry g	500	0	130	70 - 130%	PASS	1	25	PASS
Chlordane-alpha	NA	536.47	0.05	0.1	ng/dry g	500	0	107	70 - 130%	PASS	9	25	PASS
Chlordane-gamma	NA	541.25	0.05	0.1	ng/dry g	500	0	108	70 - 130%	PASS	10	25	PASS
cis-Nonachlor	NA	595.75	0.05	0.1	ng/dry g	500	0	119	70 - 130%	PASS	8	25	PASS
Oxychlordane	NA	568.54	0.05	0.1	ng/dry g	500	0	114	70 - 130%	PASS	19	25	PASS
trans-Nonachlor	NA	539.39	0.05	0.1	ng/dry g	500	0	108	70 - 130%	PASS	5	25	PASS

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	6105.48	10	50	ng/dry g	5000	0	122	70 - 130%	PASS	10	25	PASS
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31947-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 27-Jun-15	
(PCB030)	NA	98			% Recovery	100	98	50 - 150%	PASS	
(PCB112)	NA	105			% Recovery	100	105	50 - 150%	PASS	
(PCB198)	NA	132			% Recovery	100	132	50 - 150%	PASS	
(TCMX)	NA	91			% Recovery	100	91	50 - 150%	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDE	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g					
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g					
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g					
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g					
		Method: EPA 8270D-NCI			Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 03-Jul-15	
Toxaphene	NA	ND	10	50	ng/dry g					

Sample ID: 31947-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 8270D			Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 27-Jun-15	
(PCB030)	NA	105			% Recovery	100	0	105	50 - 150%	PASS
(PCB112)	NA	114			% Recovery	100	0	114	50 - 150%	PASS
(PCB198)	NA	123			% Recovery	100	0	123	50 - 150%	PASS
(TCMX)	NA	102			% Recovery	100	0	102	50 - 150%	PASS
2,4'-DDD	NA	542.28	0.05	0.1	ng/dry g	500	0	108	70 - 130%	PASS
2,4'-DDE	NA	532.01	0.05	0.1	ng/dry g	500	0	106	70 - 130%	PASS
2,4'-DDT	NA	647	0.05	0.1	ng/dry g	500	0	129	70 - 130%	PASS
4,4'-DDD	NA	562.64	0.05	0.1	ng/dry g	500	0	113	70 - 130%	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
4,4'-DDE	NA	540.92	0.05	0.1	ng/dry g	500	0	108	70 - 130%	PASS		
4,4'-DDMU	NA	597.75	0.05	0.1	ng/dry g	500	0	120	70 - 130%	PASS		
4,4'-DDT	NA	643	0.05	0.1	ng/dry g	500	0	129	70 - 130%	PASS		
Chlordane-alpha	NA	523.04	0.05	0.1	ng/dry g	500	0	105	70 - 130%	PASS		
Chlordane-gamma	NA	551.16	0.05	0.1	ng/dry g	500	0	110	70 - 130%	PASS		
cis-Nonachlor	NA	574.94	0.05	0.1	ng/dry g	500	0	115	70 - 130%	PASS		
Oxychlordane	NA	554.3	0.05	0.1	ng/dry g	500	0	111	70 - 130%	PASS		
trans-Nonachlor	NA	552.65	0.05	0.1	ng/dry g	500	0	111	70 - 130%	PASS		

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	5761.6	10	50	ng/dry g	5000	0	115	70 - 130%	PASS		
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Sample ID: 31947-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	91			% Recovery	100	0	91	50 - 150%	PASS	14	30	PASS
(PCB112)	NA	96			% Recovery	100	0	96	50 - 150%	PASS	17	30	PASS
(PCB198)	NA	130			% Recovery	100	0	130	50 - 150%	PASS	6	30	PASS
(TCMX)	NA	80			% Recovery	100	0	80	50 - 150%	PASS	24	30	PASS
2,4'-DDD	NA	487.56	0.05	0.1	ng/dry g	500	0	98	70 - 130%	PASS	10	25	PASS
2,4'-DDE	NA	480.43	0.05	0.1	ng/dry g	500	0	96	70 - 130%	PASS	10	25	PASS
2,4'-DDT	NA	600.05	0.05	0.1	ng/dry g	500	0	120	70 - 130%	PASS	7	25	PASS
4,4'-DDD	NA	513.96	0.05	0.1	ng/dry g	500	0	103	70 - 130%	PASS	9	25	PASS
4,4'-DDE	NA	498.14	0.05	0.1	ng/dry g	500	0	100	70 - 130%	PASS	8	25	PASS
4,4'-DDMU	NA	549.61	0.05	0.1	ng/dry g	500	0	110	70 - 130%	PASS	9	25	PASS
4,4'-DDT	NA	618	0.05	0.1	ng/dry g	500	0	124	70 - 130%	PASS	4	25	PASS
Chlordane-alpha	NA	475.76	0.05	0.1	ng/dry g	500	0	95	70 - 130%	PASS	10	25	PASS
Chlordane-gamma	NA	517.62	0.05	0.1	ng/dry g	500	0	104	70 - 130%	PASS	6	25	PASS
cis-Nonachlor	NA	532.41	0.05	0.1	ng/dry g	500	0	106	70 - 130%	PASS	8	25	PASS
Oxychlordane	NA	512.89	0.05	0.1	ng/dry g	500	0	103	70 - 130%	PASS	7	25	PASS
trans-Nonachlor	NA	492.24	0.05	0.1	ng/dry g	500	0	98	70 - 130%	PASS	12	25	PASS

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 03-Jul-15

Toxaphene	NA	5256.21	10	50	ng/dry g	5000	0	105	70 - 130%	PASS	9	25	PASS
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31952-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	56			% Recovery	100		56 50 - 150%	PASS	
(PCB112)	NA	70			% Recovery	100		70 50 - 150%	PASS	
(PCB198)	NA	52			% Recovery	100		52 50 - 150%	PASS	
(TCMX)	NA	62			% Recovery	100		62 50 - 150%	PASS	
2,4'-DDD	NA	2.55	0.05	0.1	ng/wet g	3.31		77 60 - 140%	PASS	
2,4'-DDE	NA	2.86	0.05	0.1	ng/wet g	3.39		84 60 - 140%	PASS	
2,4'-DDT	NA	13.78	0.05	0.1	ng/wet g	15.7		88 60 - 140%	PASS	
4,4'-DDD	NA	52.29	0.05	0.1	ng/wet g	45.9		114 60 - 140%	PASS	
4,4'-DDE	NA	475.04	0.05	0.1	ng/wet g	720		66 60 - 140%	PASS	
4,4'-DDT	NA	51.22	0.05	0.1	ng/wet g	59.5		86 60 - 140%	PASS	
Chlordane-alpha	NA	38.01	0.05	0.1	ng/wet g	49		78 60 - 140%	PASS	
Chlordane-gamma	NA	9.02	0.05	0.1	ng/wet g	12.8		70 60 - 140%	PASS	
cis-Nonachlor	NA	37.92	0.05	0.1	ng/wet g	54.1		70 60 - 140%	PASS	
Oxychlordane	NA	14.84	0.05	0.1	ng/wet g	23.6		63 60 - 140%	PASS	
trans-Nonachlor	NA	95.83	0.05	0.1	ng/wet g	127		75 60 - 140%	PASS	

Sample ID: 31953-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

(PCB030)	NA	89			% Recovery	100		89 50 - 150%	PASS	
(PCB112)	NA	108			% Recovery	100		108 50 - 150%	PASS	
(PCB198)	NA	75			% Recovery	100		75 50 - 150%	PASS	
(TCMX)	NA	98			% Recovery	100		98 50 - 150%	PASS	
2,4'-DDD	NA	3.79	0.05	0.1	ng/wet g	3.31		115 60 - 140%	PASS	
2,4'-DDE	NA	4.43	0.05	0.1	ng/wet g	3.39		131 60 - 140%	PASS	
2,4'-DDT	NA	21.68	0.05	0.1	ng/wet g	15.7		138 60 - 140%	PASS	
4,4'-DDD	NA	43.91	0.05	0.1	ng/wet g	45.9		96 60 - 140%	PASS	
4,4'-DDE	NA	718.72	0.05	0.1	ng/wet g	720		100 60 - 140%	PASS	
4,4'-DDT	NA	71.41	0.05	0.1	ng/wet g	59.5		120 60 - 140%	PASS	
Chlordane-alpha	NA	53.32	0.05	0.1	ng/wet g	49		109 60 - 140%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Chlordane-gamma	NA	13.64	0.05	0.1	ng/wet g	12.8		107	60 - 140%	PASS		
cis-Nonachlor	NA	56.9	0.05	0.1	ng/wet g	54.1		105	60 - 140%	PASS		
Oxychlordane	NA	29.26	0.05	0.1	ng/wet g	23.6		124	60 - 140%	PASS		
trans-Nonachlor	NA	142.93	0.05	0.1	ng/wet g	127		113	60 - 140%	PASS		

Sample ID: 31954-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

(PCB030)	NA	116			% Recovery	100		116	50 - 150%	PASS		
(PCB112)	NA	138			% Recovery	100		138	50 - 150%	PASS		
(PCB198)	NA	98			% Recovery	100		98	50 - 150%	PASS		
(TCMX)	NA	117			% Recovery	100		117	50 - 150%	PASS		
2,4'-DDD	NA	3.08	0.05	0.1	ng/wet g	3.31		93	60 - 140%	PASS		
2,4'-DDE	NA	4.87	0.05	0.1	ng/wet g	3.39		144	60 - 140%	FAIL		R
2,4'-DDT	NA	18.39	0.05	0.1	ng/wet g	15.7		117	60 - 140%	PASS		
4,4'-DDD	NA	43.83	0.05	0.1	ng/wet g	45.9		95	60 - 140%	PASS		
4,4'-DDE	NA	944.17	0.05	0.1	ng/wet g	720		131	60 - 140%	PASS		
4,4'-DDT	NA	82.4	0.05	0.1	ng/wet g	59.5		138	60 - 140%	PASS		
Chlordane-alpha	NA	64.58	0.05	0.1	ng/wet g	49		132	60 - 140%	PASS		
Chlordane-gamma	NA	17.05	0.05	0.1	ng/wet g	12.8		133	60 - 140%	PASS		
cis-Nonachlor	NA	70.47	0.05	0.1	ng/wet g	54.1		130	60 - 140%	PASS		
Oxychlordane	NA	19.44	0.05	0.1	ng/wet g	23.6		82	60 - 140%	PASS		
trans-Nonachlor	NA	175.98	0.05	0.1	ng/wet g	127		139	60 - 140%	PASS		

Sample ID: 31955-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	114			% Recovery	100		114	50 - 150%	PASS		
(PCB112)	NA	134			% Recovery	100		134	50 - 150%	PASS		
(PCB198)	NA	9			% Recovery	100		9	50 - 150%	FAIL		R
(TCMX)	NA	120			% Recovery	100		120	50 - 150%	PASS		
2,4'-DDD	NA	3.97	0.05	0.1	ng/wet g	3.31		120	60 - 140%	PASS		
2,4'-DDE	NA	4.6	0.05	0.1	ng/wet g	3.39		136	60 - 140%	PASS		
2,4'-DDT	NA	19.33	0.05	0.1	ng/wet g	15.7		123	60 - 140%	PASS		



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
4,4'-DDD	NA	31.84	0.05	0.1	ng/wet g	45.9		69	60 - 140%	PASS		
4,4'-DDE	NA	963.1	0.05	0.1	ng/wet g	720		134	60 - 140%	PASS		
4,4'-DDT	NA	82.37	0.05	0.1	ng/wet g	59.5		138	60 - 140%	PASS		
Chlordane-alpha	NA	66.36	0.05	0.1	ng/wet g	49		135	60 - 140%	PASS		
Chlordane-gamma	NA	17.58	0.05	0.1	ng/wet g	12.8		137	60 - 140%	PASS		
cis-Nonachlor	NA	72.09	0.05	0.1	ng/wet g	54.1		133	60 - 140%	PASS		
Oxychlordane	NA	17.87	0.05	0.1	ng/wet g	23.6		76	60 - 140%	PASS		
trans-Nonachlor	NA	175.95	0.05	0.1	ng/wet g	127		139	60 - 140%	PASS		

Sample ID: 31966-MS1

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

(PCB030)	NA	87			% Recovery	100	0	87	50 - 150%	PASS	
(PCB112)	NA	98			% Recovery	100	0	98	50 - 150%	PASS	
(PCB198)	NA	84			% Recovery	100	0	84	50 - 150%	PASS	
(TCMX)	NA	93			% Recovery	100	0	93	50 - 150%	PASS	
2,4'-DDD	NA	217.2	0.05	0.1	ng/dry g	200.2	10.13	103	50 - 150%	PASS	
2,4'-DDE	NA	193.66	0.05	0.1	ng/dry g	200.2	3.08	95	50 - 150%	PASS	
2,4'-DDT	NA	214.34	0.05	0.1	ng/dry g	200.2	0	107	50 - 150%	PASS	
4,4'-DDD	NA	237.38	0.05	0.1	ng/dry g	200.2	0	119	50 - 150%	PASS	
4,4'-DDE	NA	220.01	0.05	0.1	ng/dry g	200.2	35.51	92	50 - 150%	PASS	
4,4'-DDMU	NA	204.53	0.05	0.1	ng/dry g	200.2	30.48	87	50 - 150%	PASS	
4,4'-DDT	NA	287.67	0.05	0.1	ng/dry g	200.2	0	144	50 - 150%	PASS	
Chlordane-alpha	NA	205.09	0.05	0.1	ng/dry g	200.2	0.25	102	50 - 150%	PASS	
Chlordane-gamma	NA	192.26	0.05	0.1	ng/dry g	200.2	0	96	50 - 150%	PASS	
cis-Nonachlor	NA	186.78	0.05	0.1	ng/dry g	200.2	7.35	90	50 - 150%	PASS	
Oxychlordane	NA	161.61	0.05	0.1	ng/dry g	200.2	0	81	50 - 150%	PASS	
trans-Nonachlor	NA	208.82	0.05	0.1	ng/dry g	200.2	6.94	101	50 - 150%	PASS	

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

Toxaphene	NA	2885.46	10	50	ng/dry g	2002	0	144	50 - 150%	PASS	
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Sample ID: 31966-MS2

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
(PCB030)	NA	82			% Recovery	100	0	82	50 - 150%	PASS	6	30	PASS
(PCB112)	NA	94			% Recovery	100	0	94	50 - 150%	PASS	4	30	PASS
(PCB198)	NA	79			% Recovery	100	0	79	50 - 150%	PASS	6	30	PASS
(TCMX)	NA	81			% Recovery	100	0	81	50 - 150%	PASS	14	30	PASS
2,4'-DDD	NA	221.01	0.05	0.1	ng/dry g	204.1	10.13	103	50 - 150%	PASS	0	25	PASS
2,4'-DDE	NA	196.41	0.05	0.1	ng/dry g	204.1	3.08	95	50 - 150%	PASS	0	25	PASS
2,4'-DDT	NA	217.46	0.05	0.1	ng/dry g	204.1	0	107	50 - 150%	PASS	0	25	PASS
4,4'-DDD	NA	236.06	0.05	0.1	ng/dry g	204.1	0	116	50 - 150%	PASS	3	25	PASS
4,4'-DDE	NA	223.8	0.05	0.1	ng/dry g	204.1	35.51	92	50 - 150%	PASS	0	25	PASS
4,4'-DDMU	NA	194.47	0.05	0.1	ng/dry g	204.1	30.48	80	50 - 150%	PASS	8	25	PASS
4,4'-DDT	NA	289.43	0.05	0.1	ng/dry g	204.1	0	142	50 - 150%	PASS	1	25	PASS
Chlordane-alpha	NA	191.89	0.05	0.1	ng/dry g	204.1	0.25	94	50 - 150%	PASS	8	25	PASS
Chlordane-gamma	NA	175.13	0.05	0.1	ng/dry g	204.1	0	86	50 - 150%	PASS	11	25	PASS
cis-Nonachlor	NA	176.77	0.05	0.1	ng/dry g	204.1	7.35	83	50 - 150%	PASS	8	25	PASS
Oxychlordane	NA	162.5	0.05	0.1	ng/dry g	204.1	0	80	50 - 150%	PASS	1	25	PASS
trans-Nonachlor	NA	206.02	0.05	0.1	ng/dry g	204.1	6.94	98	50 - 150%	PASS	3	25	PASS
		Method: EPA 8270D-NCI			Batch ID: O-7118			Prepared: 29-May-15			Analyzed: 17-Jun-15		
Toxaphene	NA	2872.02	10	50	ng/dry g	2041	0	141	50 - 150%	PASS	2	25	PASS

Sample ID: 31966-R2

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

(PCB030)	NA	85			% Recovery	100		85	50 - 150%	PASS	1	30	PASS	
(PCB112)	NA	99			% Recovery	100		99	50 - 150%	PASS	1	30	PASS	
(PCB198)	NA	94			% Recovery	100		94	50 - 150%	PASS	4	30	PASS	
(TCMX)	NA	93			% Recovery	100		93	50 - 150%	PASS	6	30	PASS	
2,4'-DDD	NA	11.45	0.05	0.1	ng/dry g						26	30	PASS	H,Q
2,4'-DDE	NA	4.08	0.05	0.1	ng/dry g						65	25	FAIL	H,NH
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDE	NA	37.37	0.05	0.1	ng/dry g						10	25	PASS	H
4,4'-DDMU	NA	30.56	0.05	0.1	ng/dry g						1	25	PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE	
								LIMITS	LIMITS		
Chlordane-alpha	NA	0.5	0.05	0.1	ng/dry g				164 25	FAIL H,SL	
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g				0 25	PASS H	
cis-Nonachlor	NA	7.78	0.05	0.1	ng/dry g				12 25	PASS H	
Oxychlordane	NA	ND	0.05	0.1	ng/dry g				0 25	PASS H	
trans-Nonachlor	NA	7.21	0.05	0.1	ng/dry g				8 25	PASS H	
		Method: EPA 8270D-NCI			Batch ID: O-7118			Prepared: 29-May-15		Analyzed: 18-Jun-15	
Toxaphene	NA	ND	10	50	ng/dry g				0 25	PASS H	

Sample ID: 31980-MS1

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	80			% Recovery	100	0	80	50 - 150%	PASS	
(PCB112)	NA	95			% Recovery	100	0	95	50 - 150%	PASS	
(PCB198)	NA	78			% Recovery	100	0	78	50 - 150%	PASS	
(TCMX)	NA	83			% Recovery	100	0	83	50 - 150%	PASS	
2,4'-DDD	NA	237.84	0.05	0.1	ng/dry g	213.2	6.37	109	50 - 150%	PASS	
2,4'-DDE	NA	211.49	0.05	0.1	ng/dry g	213.2	0	99	50 - 150%	PASS	
2,4'-DDT	NA	204.26	0.05	0.1	ng/dry g	213.2	0	96	50 - 150%	PASS	
4,4'-DDD	NA	241.19	0.05	0.1	ng/dry g	213.2	5.01	111	50 - 150%	PASS	
4,4'-DDE	NA	247.89	0.05	0.1	ng/dry g	213.2	37.6	99	50 - 150%	PASS	
4,4'-DDMU	NA	235.58	0.05	0.1	ng/dry g	213.2	31.77	96	50 - 150%	PASS	
4,4'-DDT	NA	254.8	0.05	0.1	ng/dry g	213.2	0	120	50 - 150%	PASS	
Chlordane-alpha	NA	214.03	0.05	0.1	ng/dry g	213.2	0	100	50 - 150%	PASS	
Chlordane-gamma	NA	217.28	0.05	0.1	ng/dry g	213.2	0	102	50 - 150%	PASS	
cis-Nonachlor	NA	181.76	0.05	0.1	ng/dry g	213.2	6.92	82	50 - 150%	PASS	
Oxychlordane	NA	149.22	0.05	0.1	ng/dry g	213.2	0	70	50 - 150%	PASS	
trans-Nonachlor	NA	211.7	0.05	0.1	ng/dry g	213.2	6.69	96	50 - 150%	PASS	
		Method: EPA 8270D-NCI			Batch ID: O-7114			Prepared: 27-May-15		Analyzed: 11-Jun-15	
Toxaphene	NA	2787.08	10	50	ng/dry g	2132	0	131	50 - 150%	PASS	

Sample ID: 31980-MS2

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	81			% Recovery	100	0	81	50 - 150%	PASS	1 30	PASS
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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
(PCB112)	NA	95			% Recovery	100	0	95	50 - 150%	PASS	0	30	PASS
(PCB198)	NA	83			% Recovery	100	0	83	50 - 150%	PASS	6	30	PASS
(TCMX)	NA	86			% Recovery	100	0	86	50 - 150%	PASS	4	30	PASS
2,4'-DDD	NA	235.8	0.05	0.1	ng/dry g	217.2	6.37	106	50 - 150%	PASS	3	25	PASS
2,4'-DDE	NA	211.84	0.05	0.1	ng/dry g	217.2	0	98	50 - 150%	PASS	1	25	PASS
2,4'-DDT	NA	228.61	0.05	0.1	ng/dry g	217.2	0	105	50 - 150%	PASS	9	25	PASS
4,4'-DDD	NA	264.45	0.05	0.1	ng/dry g	217.2	5.01	119	50 - 150%	PASS	7	25	PASS
4,4'-DDE	NA	227.41	0.05	0.1	ng/dry g	217.2	37.6	87	50 - 150%	PASS	13	25	PASS
4,4'-DDMU	NA	221.43	0.05	0.1	ng/dry g	217.2	31.77	87	50 - 150%	PASS	10	25	PASS
4,4'-DDT	NA	294.7	0.05	0.1	ng/dry g	217.2	0	136	50 - 150%	PASS	12	25	PASS
Chlordane-alpha	NA	213.76	0.05	0.1	ng/dry g	217.2	0	98	50 - 150%	PASS	2	25	PASS
Chlordane-gamma	NA	228.79	0.05	0.1	ng/dry g	217.2	0	105	50 - 150%	PASS	3	25	PASS
cis-Nonachlor	NA	186.15	0.05	0.1	ng/dry g	217.2	6.92	83	50 - 150%	PASS	1	25	PASS
Oxychlordane	NA	160.01	0.05	0.1	ng/dry g	217.2	0	74	50 - 150%	PASS	6	25	PASS
trans-Nonachlor	NA	221.22	0.05	0.1	ng/dry g	217.2	6.69	99	50 - 150%	PASS	3	25	PASS
		Method: EPA 8270D-NCI			Batch ID: O-7114			Prepared: 27-May-15			Analyzed: 11-Jun-15		
Toxaphene	NA	2899.14	10	50	ng/dry g	2172	0	133	50 - 150%	PASS	2	25	PASS

Sample ID: 31980-R2

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

(PCB030)	NA	91			% Recovery	100		91	50 - 150%	PASS	13	30	PASS	
(PCB112)	NA	110			% Recovery	100		110	50 - 150%	PASS	13	30	PASS	
(PCB198)	NA	96			% Recovery	100		96	50 - 150%	PASS	9	30	PASS	
(TCMX)	NA	95			% Recovery	100		95	50 - 150%	PASS	10	30	PASS	
2,4'-DDD	NA	6.28	0.05	0.1	ng/dry g						3	25	PASS	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDD	NA	5.76	0.05	0.1	ng/dry g						30	30	PASS	H,Q
4,4'-DDE	NA	38.43	0.05	0.1	ng/dry g						4	25	PASS	H
4,4'-DDMU	NA	30.91	0.05	0.1	ng/dry g						5	25	PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
cis-Nonachlor	NA	6.85	0.05	0.1	ng/dry g					2	25	PASS	H
Oxychlordane	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
trans-Nonachlor	NA	7.33	0.05	0.1	ng/dry g					19	25	PASS	H
		Method: EPA 8270D-NCI			Batch ID: O-7114			Prepared: 27-May-15		Analyzed: 11-Jun-15			
Toxaphene	NA	ND	10	50	ng/dry g					0	25	PASS	H

Sample ID: 31993-MS1		SWHB-06-ZP Plankton			Matrix: Tissue		Sampled: 09-May-14			Received: 21-May-15		
		Method: EPA 8270D			Batch ID: O-7120		Prepared: 03-Jun-15			Analyzed: 25-Jun-15		
(PCB030)	NA	101			% Recovery	100	0	101	50 - 150%	PASS		
(PCB112)	NA	106			% Recovery	100	0	106	50 - 150%	PASS		
(PCB198)	NA	132			% Recovery	100	0	132	50 - 150%	PASS		
(TCMX)	NA	96			% Recovery	100	0	96	50 - 150%	PASS		
2,4'-DDD	NA	7703.51	0.05	0.1	ng/dry g	6966.55	0	111	50 - 150%	PASS		
2,4'-DDE	NA	7377.74	0.05	0.1	ng/dry g	6966.55	0	106	50 - 150%	PASS		
2,4'-DDT	NA	8571.84	0.05	0.1	ng/dry g	6966.55	0	123	50 - 150%	PASS		
4,4'-DDD	NA	8089.53	0.05	0.1	ng/dry g	6966.55	0	116	50 - 150%	PASS		
4,4'-DDE	NA	7559.46	0.05	0.1	ng/dry g	6966.55	32.36	108	50 - 150%	PASS		
4,4'-DDMU	NA	8954.81	0.05	0.1	ng/dry g	6966.55	0	129	50 - 150%	PASS		
4,4'-DDT	NA	10242.67	0.05	0.1	ng/dry g	6966.55	0	147	50 - 150%	PASS		
Chlordane-alpha	NA	7248.68	0.05	0.1	ng/dry g	6966.55	0	104	50 - 150%	PASS		
Chlordane-gamma	NA	7148.92	0.05	0.1	ng/dry g	6966.55	0	103	50 - 150%	PASS		
cis-Nonachlor	NA	7856.76	0.05	0.1	ng/dry g	6966.55	0	113	50 - 150%	PASS		
Oxychlordane	NA	7998.02	0.05	0.1	ng/dry g	6966.55	0	115	50 - 150%	PASS		
trans-Nonachlor	NA	7525.64	0.05	0.1	ng/dry g	6966.55	2.44	108	50 - 150%	PASS		
		Method: EPA 8270D-NCI			Batch ID: O-7120			Prepared: 03-Jun-15		Analyzed: 03-Jul-15		
Toxaphene	NA	76792.6	10	50	ng/dry g	69665.5	0	110	50 - 150%	PASS		

Sample ID: 31993-MS2		SWHB-06-ZP Plankton			Matrix: Tissue		Sampled: 09-May-14			Received: 21-May-15			
		Method: EPA 8270D			Batch ID: O-7120		Prepared: 03-Jun-15			Analyzed: 25-Jun-15			
(PCB030)	NA	105			% Recovery	100	0	105	50 - 150%	PASS	4	30	PASS
(PCB112)	NA	110			% Recovery	100	0	110	50 - 150%	PASS	4	30	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
(PCB198)	NA	138			% Recovery	100	0	138	50 - 150%	PASS	4	30	PASS
(TCMX)	NA	101			% Recovery	100	0	101	50 - 150%	PASS	5	30	PASS
2,4'-DDD	NA	6613.98	0.05	0.1	ng/dry g	6054.55	0	109	50 - 150%	PASS	2	25	PASS
2,4'-DDE	NA	6307.89	0.05	0.1	ng/dry g	6054.55	0	104	50 - 150%	PASS	2	25	PASS
2,4'-DDT	NA	7616.32	0.05	0.1	ng/dry g	6054.55	0	126	50 - 150%	PASS	2	25	PASS
4,4'-DDD	NA	6916.36	0.05	0.1	ng/dry g	6054.55	0	114	50 - 150%	PASS	2	25	PASS
4,4'-DDE	NA	6501.13	0.05	0.1	ng/dry g	6054.55	32.36	107	50 - 150%	PASS	1	25	PASS
4,4'-DDMU	NA	7808.23	0.05	0.1	ng/dry g	6054.55	0	129	50 - 150%	PASS	0	25	PASS
4,4'-DDT	NA	8668.63	0.05	0.1	ng/dry g	6054.55	0	143	50 - 150%	PASS	3	25	PASS
Chlordane-alpha	NA	6348.14	0.05	0.1	ng/dry g	6054.55	0	105	50 - 150%	PASS	1	25	PASS
Chlordane-gamma	NA	6525.23	0.05	0.1	ng/dry g	6054.55	0	108	50 - 150%	PASS	5	25	PASS
cis-Nonachlor	NA	6654.47	0.05	0.1	ng/dry g	6054.55	0	110	50 - 150%	PASS	3	25	PASS
Oxychlordane	NA	7503.43	0.05	0.1	ng/dry g	6054.55	0	124	50 - 150%	PASS	8	25	PASS
trans-Nonachlor	NA	6692.64	0.05	0.1	ng/dry g	6054.55	2.44	110	50 - 150%	PASS	2	25	PASS
		Method: EPA 8270D-NCI			Batch ID: O-7120			Prepared: 03-Jun-15			Analyzed: 03-Jul-15		
Toxaphene	NA	67584.81	10	50	ng/dry g	60545.5	0	112	50 - 150%	PASS	2	25	PASS

Sample ID: 31993-R2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

(PCB030)	NA	113			% Recovery	100		113	50 - 150%	PASS	2	30	PASS	
(PCB112)	NA	124			% Recovery	100		124	50 - 150%	PASS	2	30	PASS	
(PCB198)	NA	121			% Recovery	100		121	50 - 150%	PASS	3	30	PASS	
(TCMX)	NA	109			% Recovery	100		109	50 - 150%	PASS	2	30	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDE	NA	28.83	0.05	0.1	ng/dry g						22	25	PASS	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
Oxychlorane	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
trans-Nonachlor	NA	4.87	0.05	0.1	ng/dry g					196	25	FAIL	H,SL
		Method: EPA 8270D-NCI			Batch ID: O-7120			Prepared: 03-Jun-15		Analyzed: 03-Jul-15			
Toxaphene	NA	ND	10	50	ng/dry g					0	25	PASS	H

Sample ID: 32006-MS1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	99			% Recovery	100	0	99	50 - 150%	PASS		
(PCB112)	NA	103			% Recovery	100	0	103	50 - 150%	PASS		
(PCB198)	NA	142			% Recovery	100	0	142	50 - 150%	PASS		
(TCMX)	NA	90			% Recovery	100	0	90	50 - 150%	PASS		
2,4'-DDD	NA	440.63	0.05	0.1	ng/dry g	412.3	0	107	50 - 150%	PASS		
2,4'-DDE	NA	432.99	0.05	0.1	ng/dry g	412.3	0	105	50 - 150%	PASS		
2,4'-DDT	NA	527.79	0.05	0.1	ng/dry g	412.3	0	128	50 - 150%	PASS		
4,4'-DDD	NA	475.6	0.05	0.1	ng/dry g	412.3	0	115	50 - 150%	PASS		
4,4'-DDE	NA	454.61	0.05	0.1	ng/dry g	412.3	5.52	109	50 - 150%	PASS		
4,4'-DDMU	NA	493	0.05	0.1	ng/dry g	412.3	0	120	50 - 150%	PASS		
4,4'-DDT	NA	632.83	0.05	0.1	ng/dry g	412.3	0	153	50 - 150%	FAIL		M
Chlordane-alpha	NA	418.57	0.05	0.1	ng/dry g	412.3	0	102	50 - 150%	PASS		
Chlordane-gamma	NA	428.56	0.05	0.1	ng/dry g	412.3	0	104	50 - 150%	PASS		
cis-Nonachlor	NA	474.24	0.05	0.1	ng/dry g	412.3	0	115	50 - 150%	PASS		
Oxychlorane	NA	466.16	0.05	0.1	ng/dry g	412.3	0	113	50 - 150%	PASS		
trans-Nonachlor	NA	448.39	0.05	0.1	ng/dry g	412.3	0	109	50 - 150%	PASS		
		Method: EPA 8270D-NCI			Batch ID: O-7122			Prepared: 01-Jun-15		Analyzed: 03-Jul-15		
Toxaphene	NA	4850.56	10	50	ng/dry g	4123	0	118	50 - 150%	PASS		

Sample ID: 32006-MS2

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	105			% Recovery	100	0	105	50 - 150%	PASS	6	30	PASS
(PCB112)	NA	112			% Recovery	100	0	112	50 - 150%	PASS	8	30	PASS
(PCB198)	NA	131			% Recovery	100	0	131	50 - 150%	PASS	8	30	PASS



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE		
								%	LIMITS	%	LIMITS			
(TCMX)	NA	99			% Recovery	100	0	99	50 - 150%	PASS	10	30	PASS	
2,4'-DDD	NA	417.47	0.05	0.1	ng/dry g	377.2	0	111	50 - 150%	PASS	4	25	PASS	
2,4'-DDE	NA	399.74	0.05	0.1	ng/dry g	377.2	0	106	50 - 150%	PASS	1	25	PASS	
2,4'-DDT	NA	499.02	0.05	0.1	ng/dry g	377.2	0	132	50 - 150%	PASS	3	25	PASS	
4,4'-DDD	NA	461.23	0.05	0.1	ng/dry g	377.2	0	122	50 - 150%	PASS	6	25	PASS	
4,4'-DDE	NA	425.56	0.05	0.1	ng/dry g	377.2	5.52	111	50 - 150%	PASS	2	25	PASS	
4,4'-DDMU	NA	463.53	0.05	0.1	ng/dry g	377.2	0	123	50 - 150%	PASS	2	25	PASS	
4,4'-DDT	NA	581.39	0.05	0.1	ng/dry g	377.2	0	154	50 - 150%	FAIL	1	25	PASS	M
Chlordane-alpha	NA	419.96	0.05	0.1	ng/dry g	377.2	0	111	50 - 150%	PASS	8	25	PASS	
Chlordane-gamma	NA	426.53	0.05	0.1	ng/dry g	377.2	0	113	50 - 150%	PASS	8	25	PASS	
cis-Nonachlor	NA	463.67	0.05	0.1	ng/dry g	377.2	0	123	50 - 150%	PASS	7	25	PASS	
Oxychlordane	NA	442.9	0.05	0.1	ng/dry g	377.2	0	117	50 - 150%	PASS	3	25	PASS	
trans-Nonachlor	NA	420.32	0.05	0.1	ng/dry g	377.2	0	111	50 - 150%	PASS	2	25	PASS	
		Method: EPA 8270D-NCI			Batch ID: O-7122			Prepared: 01-Jun-15			Analyzed: 03-Jul-15			
Toxaphene	NA	4246.91	10	50	ng/dry g	3772	0	113	50 - 150%	PASS	4	25	PASS	

Sample ID: 32006-R2

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

(PCB030)	NA	103			% Recovery	100		103	50 - 150%	PASS	12	30	PASS	
(PCB112)	NA	112			% Recovery	100		112	50 - 150%	PASS	10	30	PASS	
(PCB198)	NA	133			% Recovery	100		133	50 - 150%	PASS	10	30	PASS	
(TCMX)	NA	98			% Recovery	100		98	50 - 150%	PASS	17	30	PASS	
2,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
2,4'-DDE	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
2,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDD	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDE	NA	5.69	0.05	0.1	ng/dry g						6	25	PASS	H
4,4'-DDMU	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
4,4'-DDT	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
Chlordane-alpha	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
Chlordane-gamma	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
cis-Nonachlor	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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Chlorinated Pesticides

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Oxychlorane	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
trans-Nonachlor	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
		Method: EPA 8270D-NCI			Batch ID: O-7122			Prepared: 01-Jun-15		Analyzed: 03-Jul-15		
Toxaphene	NA	ND	10	50	ng/dry g			0	25	PASS	H	



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Elements

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
Sample ID: 31944-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15			
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g							
		Method: EPA 6020			Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g							
Sample ID: 31944-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15			
Mercury (Hg)	NA	1130	0.00001	0.00002	µg/dry g	1000	0	113	75 - 125%	PASS		
		Method: EPA 6020			Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	2.056	0.025	0.05	µg/dry g	2	0	103	75 - 125%	PASS		
Sample ID: 31944-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15			
Mercury (Hg)	NA	1120	0.00001	0.00002	µg/dry g	1000	0	112	75 - 125%	PASS	1	25 PASS
		Method: EPA 6020			Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	2.044	0.025	0.05	µg/dry g	2	0	102	75 - 125%	PASS	1	25 PASS
Sample ID: 31945-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g							
		Method: EPA 6020			Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g							
Sample ID: 31945-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	1080	0.00001	0.00002	µg/dry g	1000	0	108	75 - 125%	PASS		
		Method: EPA 6020			Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 11-Jun-15			
Selenium (Se)	NA	2.017	0.025	0.05	µg/dry g	2	0	101	75 - 125%	PASS		
Sample ID: 31945-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:			
		Method: EPA 245.7			Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	1060	0.00001	0.00002	µg/dry g	1000	0	106	75 - 125%	PASS	2	25 PASS



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
		Method: EPA 6020			Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 11-Jun-15	
Selenium (Se)	NA	1.995	0.025	0.05	µg/dry g	2	0	100 75 - 125% PASS	1 25 PASS	
Sample ID: 31946-B1		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g					
		Method: EPA 6020			Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g					
Sample ID: 31946-BS1		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1130	0.00001	0.00002	µg/dry g	1000	0	113 75 - 125% PASS		
		Method: EPA 6020			Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.095	0.025	0.05	µg/dry g	2	0	105 75 - 125% PASS		
Sample ID: 31946-BS2		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1110	0.00001	0.00002	µg/dry g	1000	0	111 75 - 125% PASS	2 25 PASS	
		Method: EPA 6020			Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.049	0.025	0.05	µg/dry g	2	0	102 75 - 125% PASS	3 25 PASS	
Sample ID: 31947-B1		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g					
		Method: EPA 6020			Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g					
Sample ID: 31947-BS1		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		
		Method: EPA 245.7			Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1140	0.00001	0.00002	µg/dry g	1000	0	114 75 - 125% PASS		
		Method: EPA 6020			Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.342	0.025	0.05	µg/dry g	2	0	117 75 - 125% PASS		
Sample ID: 31947-BS2		QAQC Procedural Blank		Matrix: DI Water		Sampled:		Received:		



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
		Method: EPA 245.7			Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1120	0.00001	0.00002	µg/dry g	1000	0	112 75 - 125% PASS	2 25 PASS	
		Method: EPA 6020			Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.363	0.025	0.05	µg/dry g	2	0	118 75 - 125% PASS	1 25 PASS	
Sample ID: 31948-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15	
Mercury (Hg)	NA	0.0319	0.00001	0.00002	µg/dry g	0.0371		86 80 - 120% PASS		
		Method: EPA 6020			Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15	
Selenium (Se)	NA	1.879	0.025	0.05	µg/dry g	2.06		91 80 - 120% PASS		
Sample ID: 31949-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	0.0337	0.00001	0.00002	µg/dry g	0.0371		91 80 - 120% PASS		
		Method: EPA 6020			Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15	
Selenium (Se)	NA	1.908	0.025	0.05	µg/dry g	2.06		93 80 - 120% PASS		
Sample ID: 31950-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	0.0353	0.00001	0.00002	µg/dry g	0.0371		95 80 - 120% PASS		
		Method: EPA 6020			Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	1.992	0.025	0.05	µg/dry g	2.06		97 80 - 120% PASS		
Sample ID: 31951-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue		Sampled:		Received:	
		Method: EPA 245.7			Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	0.0315	0.00001	0.00002	µg/dry g	0.0371		85 80 - 120% PASS		
		Method: EPA 6020			Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.142	0.025	0.05	µg/dry g	2.06		104 80 - 120% PASS		
Sample ID: 31956-MS1		SWHB-26-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15	
		Method: EPA 245.7			Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15	
Mercury (Hg)	NA	1.18544	0.00001	0.00002	µg/dry g	0.7599	0.26395	121 75 - 125% PASS		
		Method: EPA 6020			Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	LIMITS	QA CODE
Selenium (Se)	NA	66.324	0.025	0.05	µg/dry g	60.79	1.641	106	75 - 125%	PASS	
Sample ID: 31956-MS2		SWHB-26-SBB Spotted sand bass, whole		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15			
Mercury (Hg)	NA	1.18544	0.00001	0.00002	µg/dry g	0.7599	0.26395	121	75 - 125%	PASS	0 25 PASS
		Method: EPA 6020		Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	66.791	0.025	0.05	µg/dry g	60.79	1.641	107	75 - 125%	PASS	1 25 PASS
Sample ID: 31956-R2		SWHB-26-SBB Spotted sand bass, whole		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6128		Prepared: 04-Jun-15		Analyzed: 15-Jun-15			
Mercury (Hg)	NA	0.268	0.00001	0.00002	µg/dry g						3 25 PASS H
		Method: EPA 6020		Batch ID: E-8086		Prepared: 04-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	1.668	0.025	0.05	µg/dry g						3 25 PASS H
Sample ID: 31964-MS1		WHB-26-FC Brown shrimp		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	0.68279	0.00001	0.00002	µg/dry g	0.5419	0.12465	103	75 - 125%	PASS	
		Method: EPA 6020		Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	51.729	0.025	0.05	µg/dry g	43.356	1.336	116	75 - 125%	PASS	
Sample ID: 31964-MS2		WHB-26-FC Brown shrimp		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	0.69905	0.00001	0.00002	µg/dry g	0.5419	0.12465	106	75 - 125%	PASS	3 25 PASS
		Method: EPA 6020		Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	51.96	0.025	0.05	µg/dry g	43.356	1.336	117	75 - 125%	PASS	1 25 PASS
Sample ID: 31964-R2		WHB-26-FC Brown shrimp		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6130		Prepared: 05-Jun-15		Analyzed: 16-Jun-15			
Mercury (Hg)	NA	0.1219	0.00001	0.00002	µg/dry g						4 25 PASS H
		Method: EPA 6020		Batch ID: E-8088		Prepared: 05-Jun-15		Analyzed: 10-Jun-15			
Selenium (Se)	NA	1.321	0.025	0.05	µg/dry g						2 25 PASS H
Sample ID: 31984-MS1		SWHB-01-P Polychaetes		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15			
		Method: EPA 245.7		Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15			



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Mercury (Hg)	NA	1.711	0.00001	0.00002	µg/dry g	0.59	1.02215	117	75 - 125%	PASS	
		Method: EPA 6020				Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	49.115	0.025	0.05	µg/dry g	47.17	2.43	99	75 - 125%	PASS	
Sample ID: 31984-MS2		SWHB-01-P Polychaetes			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7				Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1.711	0.00001	0.00002	µg/dry g	0.59	1.02215	117	75 - 125%	PASS	0 25 PASS
		Method: EPA 6020				Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	49.175	0.025	0.05	µg/dry g	47.17	2.43	99	75 - 125%	PASS	0 25 PASS
Sample ID: 31984-R2		SWHB-01-P Polychaetes			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7				Batch ID: E-6135		Prepared: 24-Jun-15		Analyzed: 24-Jun-15	
Mercury (Hg)	NA	1.0243	0.00001	0.00002	µg/dry g						0 25 PASS H
		Method: EPA 6020				Batch ID: E-8090		Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.43	0.025	0.05	µg/dry g						0 25 PASS H
Sample ID: 31990-MS1		SWHB-06-CH-Large California halibut, w			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7				Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	0.98822	0.00001	0.00002	µg/dry g	0.7161	0.20415	109	75 - 125%	PASS	
		Method: EPA 6020				Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	62.084	0.025	0.05	µg/dry g	57.29	1.335	106	75 - 125%	PASS	
Sample ID: 31990-MS2		SWHB-06-CH-Large California halibut, w			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7				Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	0.98822	0.00001	0.00002	µg/dry g	0.7161	0.20415	109	75 - 125%	PASS	0 25 PASS
		Method: EPA 6020				Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	62.833	0.025	0.05	µg/dry g	57.29	1.335	107	75 - 125%	PASS	1 25 PASS
Sample ID: 31990-R2		SWHB-06-CH-Large California halibut, w			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7				Batch ID: E-6131		Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	0.2035	0.00001	0.00002	µg/dry g						1 25 PASS H
		Method: EPA 6020				Batch ID: E-8089		Prepared: 05-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	1.32	0.025	0.05	µg/dry g						2 25 PASS H



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31995-MS1		SWHB-40-CH California halibut, whole,		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15		
Mercury (Hg)	NA	1.05376	0.00001	0.00002	µg/dry g	0.6586	0.24865	122 75 - 125% PASS		
		Method: EPA 6020		Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15		
Selenium (Se)	NA	58.106	0.025	0.05	µg/dry g	52.688	1.548	107 75 - 125% PASS		
Sample ID: 31995-MS2		SWHB-40-CH California halibut, whole,		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15		
Mercury (Hg)	NA	1.06035	0.00001	0.00002	µg/dry g	0.6586	0.24865	123 75 - 125% PASS	1 25 PASS	
		Method: EPA 6020		Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15		
Selenium (Se)	NA	59.611	0.025	0.05	µg/dry g	52.688	1.548	110 75 - 125% PASS	3 25 PASS	
Sample ID: 31995-R2		SWHB-40-CH California halibut, whole,		Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6129		Prepared: 04-Jun-15		Analyzed: 15-Jun-15		
Mercury (Hg)	NA	0.2457	0.00001	0.00002	µg/dry g				2 25 PASS	H
		Method: EPA 6020		Batch ID: E-8087		Prepared: 04-Jun-15		Analyzed: 10-Jun-15		
Selenium (Se)	NA	1.503	0.025	0.05	µg/dry g				6 25 PASS	H
Sample ID: 32006-MS1		SWHB-15-M Mollusks		Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15		
Mercury (Hg)	NA	0.3799	0.00001	0.00002	µg/dry g	0.29	0.074	105 75 - 125% PASS		
		Method: EPA 6020		Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15		
Selenium (Se)	NA	24.434	0.025	0.05	µg/dry g	23.174	0.827	102 75 - 125% PASS		
Sample ID: 32006-MS2		SWHB-15-M Mollusks		Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15		
Mercury (Hg)	NA	0.3741	0.00001	0.00002	µg/dry g	0.29	0.074	103 75 - 125% PASS	2 25 PASS	
		Method: EPA 6020		Batch ID: E-8091		Prepared: 08-Jun-15		Analyzed: 12-Jun-15		
Selenium (Se)	NA	24.531	0.025	0.05	µg/dry g	23.174	0.827	102 75 - 125% PASS	0 25 PASS	
Sample ID: 32006-R2		SWHB-15-M Mollusks		Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
		Method: EPA 245.7		Batch ID: E-6136		Prepared: 24-Jun-15		Analyzed: 24-Jun-15		
Mercury (Hg)	NA	0.0709	0.00001	0.00002	µg/dry g				8 25 PASS	H



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
		Method: EPA 6020				Batch ID: E-8091	Prepared: 08-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	0.757	0.025	0.05	µg/dry g				17 25 PASS	H
Sample ID: 32023-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7				Batch ID: E-6129	Prepared: 04-Jun-15		Analyzed: 15-Jun-15	
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g					
		Method: EPA 6020				Batch ID: E-8087	Prepared: 04-Jun-15		Analyzed: 10-Jun-15	
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g					
Sample ID: 32023-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7				Batch ID: E-6129	Prepared: 04-Jun-15		Analyzed: 15-Jun-15	
Mercury (Hg)	NA	1080	0.00001	0.00002	µg/dry g	1000	0	108 75 - 125% PASS		
		Method: EPA 6020				Batch ID: E-8087	Prepared: 04-Jun-15		Analyzed: 10-Jun-15	
Selenium (Se)	NA	2.127	0.025	0.05	µg/dry g	2	0	106 75 - 125% PASS		
Sample ID: 32023-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7				Batch ID: E-6129	Prepared: 04-Jun-15		Analyzed: 15-Jun-15	
Mercury (Hg)	NA	1090	0.00001	0.00002	µg/dry g	1000	0	109 75 - 125% PASS	1 25 PASS	
		Method: EPA 6020				Batch ID: E-8087	Prepared: 04-Jun-15		Analyzed: 10-Jun-15	
Selenium (Se)	NA	2.119	0.025	0.05	µg/dry g	2	0	106 75 - 125% PASS	0 25 PASS	
Sample ID: 32024-B1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7				Batch ID: E-6131	Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	ND	0.00001	0.00002	µg/dry g					
		Method: EPA 6020				Batch ID: E-8089	Prepared: 05-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	ND	0.025	0.05	µg/dry g					
Sample ID: 32024-BS1		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	
		Method: EPA 245.7				Batch ID: E-6131	Prepared: 05-Jun-15		Analyzed: 16-Jun-15	
Mercury (Hg)	NA	1040	0.00001	0.00002	µg/dry g	1000	0	104 75 - 125% PASS		
		Method: EPA 6020				Batch ID: E-8089	Prepared: 05-Jun-15		Analyzed: 12-Jun-15	
Selenium (Se)	NA	2.11	0.025	0.05	µg/dry g	2	0	105 75 - 125% PASS		
Sample ID: 32024-BS2		QAQC Procedural Blank			Matrix: DI Water		Sampled:		Received:	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY			PRECISION		QA CODE
								%	LIMITS	PASS	%	LIMITS	
		Method: EPA 245.7				Batch ID: E-6131		Prepared: 05-Jun-15			Analyzed: 16-Jun-15		
Mercury (Hg)	NA	1030	0.00001	0.00002	µg/dry g	1000	0	103	75 - 125%	PASS	1	25	PASS
		Method: EPA 6020				Batch ID: E-8089		Prepared: 05-Jun-15			Analyzed: 12-Jun-15		
Selenium (Se)	NA	2.109	0.025	0.05	µg/dry g	2	0	105	75 - 125%	PASS	0	25	PASS
Sample ID: 32026-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue			Sampled:			Received:		
		Method: EPA 245.7				Batch ID: E-6131		Prepared: 05-Jun-15			Analyzed: 16-Jun-15		
Mercury (Hg)	NA	0.032	0.00001	0.00002	µg/dry g	0.0371		86	80 - 120%	PASS			
		Method: EPA 6020				Batch ID: E-8089		Prepared: 05-Jun-15			Analyzed: 12-Jun-15		
Selenium (Se)	NA	1.998	0.025	0.05	µg/dry g	2.06		97	80 - 120%	PASS			
Sample ID: 32027-CRM1		QAQC CRM - SRM 1566b			Matrix: Tissue			Sampled:			Received:		
		Method: EPA 245.7				Batch ID: E-6129		Prepared: 04-Jun-15			Analyzed: 15-Jun-15		
Mercury (Hg)	NA	0.0316	0.00001	0.00002	µg/dry g	0.0371		85	80 - 120%	PASS			
		Method: EPA 6020				Batch ID: E-8087		Prepared: 04-Jun-15			Analyzed: 10-Jun-15		
Selenium (Se)	NA	1.977	0.025	0.05	µg/dry g	2.06		96	80 - 120%	PASS			



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31944-B1

QAQC Procedural Blank
Method: EPA 8270D

Matrix: DI Water
Batch ID: O-7114

Sampled:
Prepared: 27-May-15

Received:
Analyzed: 08-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g					
PCB028	NA	ND	0.05	0.1	ng/dry g					
PCB037	NA	ND	0.05	0.1	ng/dry g					
PCB044	NA	ND	0.05	0.1	ng/dry g					
PCB049	NA	ND	0.05	0.1	ng/dry g					
PCB052	NA	ND	0.05	0.1	ng/dry g					
PCB066	NA	ND	0.05	0.1	ng/dry g					
PCB070	NA	ND	0.05	0.1	ng/dry g					
PCB074	NA	ND	0.05	0.1	ng/dry g					
PCB077	NA	ND	0.05	0.1	ng/dry g					
PCB081	NA	ND	0.05	0.1	ng/dry g					
PCB087	NA	ND	0.05	0.1	ng/dry g					
PCB099	NA	ND	0.05	0.1	ng/dry g					
PCB101	NA	ND	0.05	0.1	ng/dry g					
PCB105	NA	ND	0.05	0.1	ng/dry g					
PCB110	NA	ND	0.05	0.1	ng/dry g					
PCB114	NA	ND	0.05	0.1	ng/dry g					
PCB118	NA	ND	0.05	0.1	ng/dry g					
PCB119	NA	ND	0.05	0.1	ng/dry g					
PCB123	NA	ND	0.05	0.1	ng/dry g					
PCB126	NA	ND	0.05	0.1	ng/dry g					
PCB128	NA	ND	0.05	0.1	ng/dry g					
PCB138	NA	ND	0.05	0.1	ng/dry g					
PCB149	NA	ND	0.05	0.1	ng/dry g					
PCB151	NA	ND	0.05	0.1	ng/dry g					
PCB153	NA	ND	0.05	0.1	ng/dry g					
PCB156	NA	ND	0.05	0.1	ng/dry g					
PCB157	NA	ND	0.05	0.1	ng/dry g					
PCB158	NA	ND	0.05	0.1	ng/dry g					



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	
PCB167	NA	ND	0.05	0.1	ng/dry g					
PCB168+132	NA	ND	0.1	0.2	ng/dry g					
PCB169	NA	ND	0.05	0.1	ng/dry g					
PCB170	NA	ND	0.05	0.1	ng/dry g					
PCB177	NA	ND	0.05	0.1	ng/dry g					
PCB180	NA	ND	0.05	0.1	ng/dry g					
PCB183	NA	ND	0.05	0.1	ng/dry g					
PCB187	NA	ND	0.05	0.1	ng/dry g					
PCB189	NA	ND	0.05	0.1	ng/dry g					
PCB194	NA	ND	0.05	0.1	ng/dry g					
PCB201	NA	ND	0.05	0.1	ng/dry g					
PCB206	NA	ND	0.05	0.1	ng/dry g					

Sample ID: 31944-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

PCB018	NA	64.02	0.05	0.1	ng/dry g	100	0	64	50 - 150%	PASS	Q
PCB028	NA	75	0.05	0.1	ng/dry g	100	0	75	70 - 130%	PASS	
PCB037	NA	92.45	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	
PCB044	NA	80.19	0.05	0.1	ng/dry g	100	0	80	70 - 130%	PASS	
PCB049	NA	82.75	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS	
PCB052	NA	79.93	0.05	0.1	ng/dry g	100	0	80	70 - 130%	PASS	
PCB066	NA	87.94	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS	
PCB070	NA	89.51	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	
PCB074	NA	87.52	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS	
PCB077	NA	99.4	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS	
PCB081	NA	94.19	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS	
PCB087	NA	85.47	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS	
PCB099	NA	85.53	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS	
PCB101	NA	84.33	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	
PCB105	NA	93.93	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS	
PCB110	NA	82.02	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	
PCB114	NA	97.34	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB118	NA	88.29	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS		
PCB119	NA	78.6	0.05	0.1	ng/dry g	100	0	79	70 - 130%	PASS		
PCB123	NA	89.87	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS		
PCB126	NA	131.01	0.05	0.1	ng/dry g	100	0	131	50 - 150%	PASS		Q
PCB128	NA	122.12	0.05	0.1	ng/dry g	100	0	122	70 - 130%	PASS		
PCB138	NA	99.38	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS		
PCB149	NA	80.75	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS		
PCB151	NA	86.38	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS		
PCB153	NA	106.91	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS		
PCB156	NA	123.09	0.05	0.1	ng/dry g	100	0	123	70 - 130%	PASS		
PCB157	NA	95.95	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS		
PCB158	NA	104.22	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS		
PCB167	NA	108.66	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS		
PCB168+132	NA	168.6	0.1	0.2	ng/dry g	200	0	84	70 - 130%	PASS		
PCB169	NA	159.39	0.05	0.1	ng/dry g	100	0	159	70 - 130%	FAIL		3
PCB170	NA	116.96	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS		
PCB177	NA	99.7	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS		
PCB180	NA	114.84	0.05	0.1	ng/dry g	100	0	115	70 - 130%	PASS		
PCB183	NA	102.06	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS		
PCB187	NA	102.39	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS		
PCB189	NA	146.76	0.05	0.1	ng/dry g	100	0	147	50 - 150%	PASS		Q
PCB194	NA	127.41	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS		
PCB201	NA	99.34	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS		
PCB206	NA	138.74	0.05	0.1	ng/dry g	100	0	139	50 - 150%	PASS		Q

Sample ID: 31944-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

PCB018	NA	61.53	0.05	0.1	ng/dry g	100	0	62	50 - 150%	PASS	3	30	PASS	Q
PCB028	NA	61	0.05	0.1	ng/dry g	100	0	61	50 - 150%	PASS	21	30	PASS	Q
PCB037	NA	86.76	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS	6	25	PASS	
PCB044	NA	76.07	0.05	0.1	ng/dry g	100	0	76	70 - 130%	PASS	5	25	PASS	
PCB049	NA	80.31	0.05	0.1	ng/dry g	100	0	80	70 - 130%	PASS	4	25	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB052	NA	81.19	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS	1	25	PASS
PCB066	NA	82.16	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	7	25	PASS
PCB070	NA	85.11	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS	6	25	PASS
PCB074	NA	84.28	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	5	25	PASS
PCB077	NA	96.02	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS	3	25	PASS
PCB081	NA	90.82	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS	3	25	PASS
PCB087	NA	81.25	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS	5	25	PASS
PCB099	NA	83.85	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	2	25	PASS
PCB101	NA	87.44	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS	4	25	PASS
PCB105	NA	96.26	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS	2	25	PASS
PCB110	NA	82.6	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS	1	25	PASS
PCB114	NA	92.44	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	5	25	PASS
PCB118	NA	91.67	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	4	25	PASS
PCB119	NA	79.99	0.05	0.1	ng/dry g	100	0	80	70 - 130%	PASS	1	25	PASS
PCB123	NA	89.83	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	0	25	PASS
PCB126	NA	120.86	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS	8	25	PASS
PCB128	NA	110.75	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	9	25	PASS
PCB138	NA	101	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS	2	25	PASS
PCB149	NA	84.46	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	4	25	PASS
PCB151	NA	89.88	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	5	25	PASS
PCB153	NA	96.3	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS	11	25	PASS
PCB156	NA	121.28	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS	2	25	PASS
PCB157	NA	90.75	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS	5	25	PASS
PCB158	NA	101.6	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	2	25	PASS
PCB167	NA	102.13	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	7	25	PASS
PCB168+132	NA	180.6	0.1	0.2	ng/dry g	200	0	90	70 - 130%	PASS	7	25	PASS
PCB169	NA	159.91	0.05	0.1	ng/dry g	100	0	160	70 - 130%	FAIL	1	25	PASS
PCB170	NA	105.2	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS	11	25	PASS
PCB177	NA	96.01	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS	4	25	PASS
PCB180	NA	100.56	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS	13	25	PASS
PCB183	NA	102.55	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	1	25	PASS



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB187	NA	98.18	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS	4 25	PASS
PCB189	NA	131.2	0.05	0.1	ng/dry g	100	0	131	50 - 150%	PASS	12 30	PASS Q
PCB194	NA	114.89	0.05	0.1	ng/dry g	100	0	115	70 - 130%	PASS	10 25	PASS
PCB201	NA	103	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	4 25	PASS
PCB206	NA	121.84	0.05	0.1	ng/dry g	100	0	122	70 - 130%	PASS	13 25	PASS

Sample ID: 31945-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g							
PCB028	NA	ND	0.05	0.1	ng/dry g							
PCB037	NA	ND	0.05	0.1	ng/dry g							
PCB044	NA	ND	0.05	0.1	ng/dry g							
PCB049	NA	ND	0.05	0.1	ng/dry g							
PCB052	NA	ND	0.05	0.1	ng/dry g							
PCB066	NA	ND	0.05	0.1	ng/dry g							
PCB070	NA	ND	0.05	0.1	ng/dry g							
PCB074	NA	ND	0.05	0.1	ng/dry g							
PCB077	NA	ND	0.05	0.1	ng/dry g							
PCB081	NA	ND	0.05	0.1	ng/dry g							
PCB087	NA	ND	0.05	0.1	ng/dry g							
PCB099	NA	ND	0.05	0.1	ng/dry g							
PCB101	NA	ND	0.05	0.1	ng/dry g							
PCB105	NA	ND	0.05	0.1	ng/dry g							
PCB110	NA	ND	0.05	0.1	ng/dry g							
PCB114	NA	ND	0.05	0.1	ng/dry g							
PCB118	NA	ND	0.05	0.1	ng/dry g							
PCB119	NA	ND	0.05	0.1	ng/dry g							
PCB123	NA	ND	0.05	0.1	ng/dry g							
PCB126	NA	ND	0.05	0.1	ng/dry g							
PCB128	NA	ND	0.05	0.1	ng/dry g							
PCB138	NA	ND	0.05	0.1	ng/dry g							
PCB149	NA	ND	0.05	0.1	ng/dry g							



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB151	NA	ND	0.05	0.1	ng/dry g							
PCB153	NA	ND	0.05	0.1	ng/dry g							
PCB156	NA	ND	0.05	0.1	ng/dry g							
PCB157	NA	ND	0.05	0.1	ng/dry g							
PCB158	NA	ND	0.05	0.1	ng/dry g							
PCB167	NA	ND	0.05	0.1	ng/dry g							
PCB168+132	NA	ND	0.1	0.2	ng/dry g							
PCB169	NA	ND	0.05	0.1	ng/dry g							
PCB170	NA	ND	0.05	0.1	ng/dry g							
PCB177	NA	ND	0.05	0.1	ng/dry g							
PCB180	NA	ND	0.05	0.1	ng/dry g							
PCB183	NA	ND	0.05	0.1	ng/dry g							
PCB187	NA	ND	0.05	0.1	ng/dry g							
PCB189	NA	ND	0.05	0.1	ng/dry g							
PCB194	NA	ND	0.05	0.1	ng/dry g							
PCB201	NA	ND	0.05	0.1	ng/dry g							
PCB206	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31945-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	83.08	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS
PCB028	NA	81.46	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS
PCB037	NA	91.15	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS
PCB044	NA	101.76	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS
PCB049	NA	92.71	0.05	0.1	ng/dry g	100	0	93	70 - 130%	PASS
PCB052	NA	91.59	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS
PCB066	NA	88.2	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS
PCB070	NA	93.18	0.05	0.1	ng/dry g	100	0	93	70 - 130%	PASS
PCB074	NA	86.65	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS
PCB077	NA	102.62	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS
PCB081	NA	104.31	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS
PCB087	NA	89.84	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB099	NA	95.15	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS		
PCB101	NA	88.06	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS		
PCB105	NA	96.88	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS		
PCB110	NA	91.48	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS		
PCB114	NA	97.96	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS		
PCB118	NA	96.58	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS		
PCB119	NA	91.33	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS		
PCB123	NA	94.49	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS		
PCB126	NA	127.67	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		
PCB128	NA	109.31	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS		
PCB138	NA	102.19	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS		
PCB149	NA	92	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS		
PCB151	NA	100.14	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS		
PCB153	NA	103.5	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS		
PCB156	NA	126.53	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS		
PCB157	NA	97.72	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS		
PCB158	NA	97.57	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS		
PCB167	NA	107.41	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS		
PCB168+132	NA	174.2	0.1	0.2	ng/dry g	200	0	87	70 - 130%	PASS		
PCB169	NA	122.22	0.05	0.1	ng/dry g	100	0	122	70 - 130%	PASS		
PCB170	NA	118.36	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB177	NA	114.72	0.05	0.1	ng/dry g	100	0	115	70 - 130%	PASS		
PCB180	NA	114.43	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS		
PCB183	NA	105.93	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS		
PCB187	NA	102.68	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS		
PCB189	NA	122.04	0.05	0.1	ng/dry g	100	0	122	70 - 130%	PASS		
PCB194	NA	117.1	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS		
PCB201	NA	108.04	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS		
PCB206	NA	127.02	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS		

Sample ID: 31945-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION			QA CODE	
								%	LIMITS	%	LIMITS			
PCB018	NA	60.71	0.05	0.1	ng/dry g	100	0	61	50 - 150%	PASS	31	30	FAIL	Q,R
PCB028	NA	59.88	0.05	0.1	ng/dry g	100	0	60	50 - 150%	PASS	30	30	PASS	Q
PCB037	NA	78.23	0.05	0.1	ng/dry g	100	0	78	70 - 130%	PASS	15	25	PASS	
PCB044	NA	77.47	0.05	0.1	ng/dry g	100	0	77	50 - 150%	PASS	28	30	PASS	Q
PCB049	NA	75.15	0.05	0.1	ng/dry g	100	0	75	70 - 130%	PASS	21	25	PASS	
PCB052	NA	78.24	0.05	0.1	ng/dry g	100	0	78	70 - 130%	PASS	16	25	PASS	
PCB066	NA	75.57	0.05	0.1	ng/dry g	100	0	76	70 - 130%	PASS	15	25	PASS	
PCB070	NA	80.98	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS	14	25	PASS	
PCB074	NA	78.18	0.05	0.1	ng/dry g	100	0	78	70 - 130%	PASS	11	25	PASS	
PCB077	NA	95.12	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS	8	25	PASS	
PCB081	NA	91.61	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	12	25	PASS	
PCB087	NA	82.62	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS	8	25	PASS	
PCB099	NA	83.09	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS	13	25	PASS	
PCB101	NA	81.21	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS	8	25	PASS	
PCB105	NA	85.4	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS	13	25	PASS	
PCB110	NA	83.53	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	8	25	PASS	
PCB114	NA	85.45	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS	14	25	PASS	
PCB118	NA	89.06	0.05	0.1	ng/dry g	100	0	89	70 - 130%	PASS	9	25	PASS	
PCB119	NA	81.92	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	10	25	PASS	
PCB123	NA	90	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	4	25	PASS	
PCB126	NA	122.97	0.05	0.1	ng/dry g	100	0	123	70 - 130%	PASS	4	25	PASS	
PCB128	NA	109.05	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS	0	25	PASS	
PCB138	NA	100.13	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	2	25	PASS	
PCB149	NA	82.08	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	11	25	PASS	
PCB151	NA	95.43	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS	5	25	PASS	
PCB153	NA	99.25	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS	5	25	PASS	
PCB156	NA	126.47	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS	1	25	PASS	
PCB157	NA	95.98	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS	2	25	PASS	
PCB158	NA	98.27	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS	0	25	PASS	
PCB167	NA	110.91	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	4	25	PASS	
PCB168+132	NA	163.4	0.1	0.2	ng/dry g	200	0	82	70 - 130%	PASS	6	25	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB169	NA	124.68	0.05	0.1	ng/dry g	100	0	125	70 - 130%	PASS	2	25	PASS
PCB170	NA	123.93	0.05	0.1	ng/dry g	100	0	124	70 - 130%	PASS	5	25	PASS
PCB177	NA	100.72	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS	13	25	PASS
PCB180	NA	117.75	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS	3	25	PASS
PCB183	NA	93.75	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS	12	25	PASS
PCB187	NA	96.81	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS	6	25	PASS
PCB189	NA	121.43	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS	1	25	PASS
PCB194	NA	109.68	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS	6	25	PASS
PCB201	NA	112.71	0.05	0.1	ng/dry g	100	0	113	70 - 130%	PASS	5	25	PASS
PCB206	NA	128.74	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS	2	25	PASS

Sample ID: 31946-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 24-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g								
PCB028	NA	ND	0.05	0.1	ng/dry g								
PCB037	NA	ND	0.05	0.1	ng/dry g								
PCB044	NA	ND	0.05	0.1	ng/dry g								
PCB049	NA	ND	0.05	0.1	ng/dry g								
PCB052	NA	ND	0.05	0.1	ng/dry g								
PCB066	NA	ND	0.05	0.1	ng/dry g								
PCB070	NA	ND	0.05	0.1	ng/dry g								
PCB074	NA	ND	0.05	0.1	ng/dry g								
PCB077	NA	ND	0.05	0.1	ng/dry g								
PCB081	NA	ND	0.05	0.1	ng/dry g								
PCB087	NA	ND	0.05	0.1	ng/dry g								
PCB099	NA	ND	0.05	0.1	ng/dry g								
PCB101	NA	ND	0.05	0.1	ng/dry g								
PCB105	NA	ND	0.05	0.1	ng/dry g								
PCB110	NA	ND	0.05	0.1	ng/dry g								
PCB114	NA	ND	0.05	0.1	ng/dry g								
PCB118	NA	ND	0.05	0.1	ng/dry g								
PCB119	NA	ND	0.05	0.1	ng/dry g								



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY		PRECISION		QA CODE
						LEVEL	RESULT	%	LIMITS	%	LIMITS	
PCB123	NA	ND	0.05	0.1	ng/dry g							
PCB126	NA	ND	0.05	0.1	ng/dry g							
PCB128	NA	ND	0.05	0.1	ng/dry g							
PCB138	NA	ND	0.05	0.1	ng/dry g							
PCB149	NA	ND	0.05	0.1	ng/dry g							
PCB151	NA	ND	0.05	0.1	ng/dry g							
PCB153	NA	ND	0.05	0.1	ng/dry g							
PCB156	NA	ND	0.05	0.1	ng/dry g							
PCB157	NA	ND	0.05	0.1	ng/dry g							
PCB158	NA	ND	0.05	0.1	ng/dry g							
PCB167	NA	ND	0.05	0.1	ng/dry g							
PCB168+132	NA	ND	0.1	0.2	ng/dry g							
PCB169	NA	ND	0.05	0.1	ng/dry g							
PCB170	NA	ND	0.05	0.1	ng/dry g							
PCB177	NA	ND	0.05	0.1	ng/dry g							
PCB180	NA	ND	0.05	0.1	ng/dry g							
PCB183	NA	ND	0.05	0.1	ng/dry g							
PCB187	NA	ND	0.05	0.1	ng/dry g							
PCB189	NA	ND	0.05	0.1	ng/dry g							
PCB194	NA	ND	0.05	0.1	ng/dry g							
PCB201	NA	ND	0.05	0.1	ng/dry g							
PCB206	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31946-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 24-Jun-15

PCB018	NA	93.24	0.05	0.1	ng/dry g	100	0	93	70 - 130%	PASS
PCB028	NA	81.35	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS
PCB037	NA	101.93	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS
PCB044	NA	98.99	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS
PCB049	NA	101.1	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS
PCB052	NA	95.17	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS
PCB066	NA	104.87	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB070	NA	108.51	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS		
PCB074	NA	99.7	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS		
PCB077	NA	102.87	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS		
PCB081	NA	94.6	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS		
PCB087	NA	109.58	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS		
PCB099	NA	104.41	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS		
PCB101	NA	111.23	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS		
PCB105	NA	97.14	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS		
PCB110	NA	107.37	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS		
PCB114	NA	109.73	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS		
PCB118	NA	106.75	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS		
PCB119	NA	105.82	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS		
PCB123	NA	108.7	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS		
PCB126	NA	115.98	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS		
PCB128	NA	109.36	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS		
PCB138	NA	117.55	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB149	NA	107.51	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS		
PCB151	NA	110.76	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS		
PCB153	NA	117.55	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB156	NA	117.92	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB157	NA	126.82	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS		
PCB158	NA	113.83	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS		
PCB167	NA	113.23	0.05	0.1	ng/dry g	100	0	113	70 - 130%	PASS		
PCB168+132	NA	200.2	0.1	0.2	ng/dry g	200	0	100	70 - 130%	PASS		
PCB169	NA	120.1	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS		
PCB170	NA	119.94	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS		
PCB177	NA	128.17	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		
PCB180	NA	123.6	0.05	0.1	ng/dry g	100	0	124	70 - 130%	PASS		
PCB183	NA	129.35	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB187	NA	123.07	0.05	0.1	ng/dry g	100	0	123	70 - 130%	PASS		
PCB189	NA	127.81	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB194	NA	128	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		
PCB201	NA	120.92	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS		
PCB206	NA	128	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		

Sample ID: 31946-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 24-Jun-15

PCB018	NA	100.17	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	7	25	PASS
PCB028	NA	90.49	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	11	25	PASS
PCB037	NA	115	0.05	0.1	ng/dry g	100	0	115	70 - 130%	PASS	12	25	PASS
PCB044	NA	110.67	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	11	25	PASS
PCB049	NA	110.91	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	9	25	PASS
PCB052	NA	96.63	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS	2	25	PASS
PCB066	NA	117.07	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS	11	25	PASS
PCB070	NA	119.59	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS	10	25	PASS
PCB074	NA	113.99	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS	13	25	PASS
PCB077	NA	113.95	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS	10	25	PASS
PCB081	NA	106.32	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS	11	25	PASS
PCB087	NA	110.65	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	1	25	PASS
PCB099	NA	117.24	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS	12	25	PASS
PCB101	NA	115.01	0.05	0.1	ng/dry g	100	0	115	70 - 130%	PASS	4	25	PASS
PCB105	NA	101.73	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	5	25	PASS
PCB110	NA	112.32	0.05	0.1	ng/dry g	100	0	112	70 - 130%	PASS	5	25	PASS
PCB114	NA	120.62	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS	10	25	PASS
PCB118	NA	107.96	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS	1	25	PASS
PCB119	NA	108.44	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS	2	25	PASS
PCB123	NA	117.69	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS	8	25	PASS
PCB126	NA	126.75	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS	9	25	PASS
PCB128	NA	117.62	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS	8	25	PASS
PCB138	NA	111.08	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	6	25	PASS
PCB149	NA	119.98	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS	11	25	PASS
PCB151	NA	117.83	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS	6	25	PASS
PCB153	NA	117.72	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS	0	25	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB156	NA	126	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS	7 25	PASS
PCB157	NA	132.8	0.05	0.1	ng/dry g	100	0	133	50 - 150%	PASS	5 30	PASS
PCB158	NA	120.25	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS	5 25	PASS
PCB167	NA	105.42	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS	7 25	PASS
PCB168+132	NA	223.1	0.1	0.2	ng/dry g	200	0	112	70 - 130%	PASS	11 25	PASS
PCB169	NA	129.84	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS	8 25	PASS
PCB170	NA	124	0.05	0.1	ng/dry g	100	0	124	70 - 130%	PASS	3 25	PASS
PCB177	NA	124.55	0.05	0.1	ng/dry g	100	0	125	70 - 130%	PASS	2 25	PASS
PCB180	NA	129	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS	4 25	PASS
PCB183	NA	125.67	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS	2 25	PASS
PCB187	NA	128	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS	4 25	PASS
PCB189	NA	129	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS	1 25	PASS
PCB194	NA	130	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS	2 25	PASS
PCB201	NA	126.59	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS	5 25	PASS
PCB206	NA	127	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS	1 25	PASS

Sample ID: 31947-B1

QAQC Procedural Blank
Method: EPA 8270D

Matrix: DI Water
Batch ID: O-7122

Sampled:
Prepared: 01-Jun-15

Received:
Analyzed: 27-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g							
PCB028	NA	ND	0.05	0.1	ng/dry g							
PCB037	NA	ND	0.05	0.1	ng/dry g							
PCB044	NA	ND	0.05	0.1	ng/dry g							
PCB049	NA	ND	0.05	0.1	ng/dry g							
PCB052	NA	ND	0.05	0.1	ng/dry g							
PCB066	NA	ND	0.05	0.1	ng/dry g							
PCB070	NA	ND	0.05	0.1	ng/dry g							
PCB074	NA	ND	0.05	0.1	ng/dry g							
PCB077	NA	ND	0.05	0.1	ng/dry g							
PCB081	NA	ND	0.05	0.1	ng/dry g							
PCB087	NA	ND	0.05	0.1	ng/dry g							
PCB099	NA	ND	0.05	0.1	ng/dry g							
PCB101	NA	ND	0.05	0.1	ng/dry g							



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB105	NA	ND	0.05	0.1	ng/dry g							
PCB110	NA	ND	0.05	0.1	ng/dry g							
PCB114	NA	ND	0.05	0.1	ng/dry g							
PCB118	NA	ND	0.05	0.1	ng/dry g							
PCB119	NA	ND	0.05	0.1	ng/dry g							
PCB123	NA	ND	0.05	0.1	ng/dry g							
PCB126	NA	ND	0.05	0.1	ng/dry g							
PCB128	NA	ND	0.05	0.1	ng/dry g							
PCB138	NA	ND	0.05	0.1	ng/dry g							
PCB149	NA	ND	0.05	0.1	ng/dry g							
PCB151	NA	ND	0.05	0.1	ng/dry g							
PCB153	NA	ND	0.05	0.1	ng/dry g							
PCB156	NA	ND	0.05	0.1	ng/dry g							
PCB157	NA	ND	0.05	0.1	ng/dry g							
PCB158	NA	ND	0.05	0.1	ng/dry g							
PCB167	NA	ND	0.05	0.1	ng/dry g							
PCB168+132	NA	ND	0.1	0.2	ng/dry g							
PCB169	NA	ND	0.05	0.1	ng/dry g							
PCB170	NA	ND	0.05	0.1	ng/dry g							
PCB177	NA	ND	0.05	0.1	ng/dry g							
PCB180	NA	ND	0.05	0.1	ng/dry g							
PCB183	NA	ND	0.05	0.1	ng/dry g							
PCB187	NA	ND	0.05	0.1	ng/dry g							
PCB189	NA	ND	0.05	0.1	ng/dry g							
PCB194	NA	ND	0.05	0.1	ng/dry g							
PCB201	NA	ND	0.05	0.1	ng/dry g							
PCB206	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31947-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 27-Jun-15

PCB018	NA	83.83	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS
PCB028	NA	90.13	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB037	NA	98.83	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS		
PCB044	NA	107.62	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS		
PCB049	NA	110.63	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS		
PCB052	NA	81.94	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS		
PCB066	NA	118.89	0.05	0.1	ng/dry g	100	0	119	70 - 130%	PASS		
PCB070	NA	117.98	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB074	NA	119.24	0.05	0.1	ng/dry g	100	0	119	70 - 130%	PASS		
PCB077	NA	116.17	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS		
PCB081	NA	120.81	0.05	0.1	ng/dry g	100	0	121	70 - 130%	PASS		
PCB087	NA	128.51	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB099	NA	119.29	0.05	0.1	ng/dry g	100	0	119	70 - 130%	PASS		
PCB101	NA	118.37	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB105	NA	99.84	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS		
PCB110	NA	116.16	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS		
PCB114	NA	129.88	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS		
PCB118	NA	129	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB119	NA	119.52	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS		
PCB123	NA	129	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB126	NA	128.77	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB128	NA	129.21	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB138	NA	118.5	0.05	0.1	ng/dry g	100	0	118	70 - 130%	PASS		
PCB149	NA	122.24	0.05	0.1	ng/dry g	100	0	122	70 - 130%	PASS		
PCB151	NA	127	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS		
PCB153	NA	119.58	0.05	0.1	ng/dry g	100	0	120	70 - 130%	PASS		
PCB156	NA	126	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS		
PCB157	NA	110.25	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS		
PCB158	NA	116.11	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS		
PCB167	NA	128	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		
PCB168+132	NA	191.9	0.1	0.2	ng/dry g	200	0	96	70 - 130%	PASS		
PCB169	NA	167.84	0.05	0.1	ng/dry g	100	0	168	70 - 130%	FAIL	3	
PCB170	NA	141.89	0.05	0.1	ng/dry g	100	0	142	50 - 150%	PASS	Q	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB177	NA	128.19	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS		
PCB180	NA	123.6	0.05	0.1	ng/dry g	100	0	124	70 - 130%	PASS		
PCB183	NA	142.29	0.05	0.1	ng/dry g	100	0	142	50 - 150%	PASS		Q
PCB187	NA	129.13	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS		
PCB189	NA	160.25	0.05	0.1	ng/dry g	100	0	160	70 - 130%	FAIL		3
PCB194	NA	161.03	0.05	0.1	ng/dry g	100	0	161	70 - 130%	FAIL		3
PCB201	NA	133.75	0.05	0.1	ng/dry g	100	0	134	50 - 150%	PASS		Q
PCB206	NA	156.79	0.05	0.1	ng/dry g	100	0	157	70 - 130%	FAIL		3

Sample ID: 31947-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	78.29	0.05	0.1	ng/dry g	100	0	78	70 - 130%	PASS	7	25	PASS
PCB028	NA	78.68	0.05	0.1	ng/dry g	100	0	79	70 - 130%	PASS	13	25	PASS
PCB037	NA	86.37	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS	14	25	PASS
PCB044	NA	103.18	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	5	25	PASS
PCB049	NA	107.23	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS	4	25	PASS
PCB052	NA	74.99	0.05	0.1	ng/dry g	100	0	75	70 - 130%	PASS	9	25	PASS
PCB066	NA	117.45	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS	2	25	PASS
PCB070	NA	110.89	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	6	25	PASS
PCB074	NA	110.27	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS	8	25	PASS
PCB077	NA	110.14	0.05	0.1	ng/dry g	100	0	110	70 - 130%	PASS	5	25	PASS
PCB081	NA	106.35	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS	13	25	PASS
PCB087	NA	117.34	0.05	0.1	ng/dry g	100	0	117	70 - 130%	PASS	10	25	PASS
PCB099	NA	110.64	0.05	0.1	ng/dry g	100	0	111	70 - 130%	PASS	7	25	PASS
PCB101	NA	114.22	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS	3	25	PASS
PCB105	NA	93.05	0.05	0.1	ng/dry g	100	0	93	70 - 130%	PASS	7	25	PASS
PCB110	NA	116.49	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS	0	25	PASS
PCB114	NA	130.03	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS	0	25	PASS
PCB118	NA	129.73	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS	1	25	PASS
PCB119	NA	113.23	0.05	0.1	ng/dry g	100	0	113	70 - 130%	PASS	6	25	PASS
PCB123	NA	129.32	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS	0	25	PASS
PCB126	NA	127.03	0.05	0.1	ng/dry g	100	0	127	70 - 130%	PASS	2	25	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE		
								%	LIMITS	%	LIMITS			
PCB128	NA	126.4	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS	2	25	PASS	
PCB138	NA	116.22	0.05	0.1	ng/dry g	100	0	116	70 - 130%	PASS	2	25	PASS	
PCB149	NA	105.4	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS	15	25	PASS	
PCB151	NA	128	0.05	0.1	ng/dry g	100	0	128	70 - 130%	PASS	1	25	PASS	
PCB153	NA	105.31	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS	13	25	PASS	
PCB156	NA	129	0.05	0.1	ng/dry g	100	0	129	70 - 130%	PASS	2	25	PASS	
PCB157	NA	107.38	0.05	0.1	ng/dry g	100	0	107	70 - 130%	PASS	3	25	PASS	
PCB158	NA	111.5	0.05	0.1	ng/dry g	100	0	112	70 - 130%	PASS	4	25	PASS	
PCB167	NA	122.71	0.05	0.1	ng/dry g	100	0	123	70 - 130%	PASS	4	25	PASS	
PCB168+132	NA	181.2	0.1	0.2	ng/dry g	200	0	91	70 - 130%	PASS	5	25	PASS	
PCB169	NA	164.13	0.05	0.1	ng/dry g	100	0	164	70 - 130%	FAIL	2	25	PASS	3
PCB170	NA	140.3	0.05	0.1	ng/dry g	100	0	140	50 - 150%	PASS	1	30	PASS	Q
PCB177	NA	124.67	0.05	0.1	ng/dry g	100	0	125	70 - 130%	PASS	2	25	PASS	
PCB180	NA	126.05	0.05	0.1	ng/dry g	100	0	126	70 - 130%	PASS	2	25	PASS	
PCB183	NA	130	0.05	0.1	ng/dry g	100	0	130	70 - 130%	PASS	9	25	PASS	
PCB187	NA	113.94	0.05	0.1	ng/dry g	100	0	114	70 - 130%	PASS	12	25	PASS	
PCB189	NA	157.85	0.05	0.1	ng/dry g	100	0	158	70 - 130%	FAIL	1	25	PASS	3
PCB194	NA	152.03	0.05	0.1	ng/dry g	100	0	152	70 - 130%	FAIL	6	25	PASS	3
PCB201	NA	130.73	0.05	0.1	ng/dry g	100	0	131	50 - 150%	PASS	2	30	PASS	Q
PCB206	NA	153.74	0.05	0.1	ng/dry g	100	0	154	70 - 130%	FAIL	2	25	PASS	3

Sample ID: 31952-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	1.59	0.05	0.1	ng/wet g	2.72	58	60 - 140%	FAIL				4
PCB028	NA	11.95	0.05	0.1	ng/wet g	14.1	85	60 - 140%	PASS				
PCB044	NA	18.27	0.05	0.1	ng/wet g	20.4	90	60 - 140%	PASS				
PCB049	NA	23.12	0.05	0.1	ng/wet g	27.3	85	60 - 140%	PASS				
PCB052	NA	35.29	0.05	0.1	ng/wet g	36.4	97	60 - 140%	PASS				
PCB066	NA	71.54	0.05	0.1	ng/wet g	69.4	103	60 - 140%	PASS				
PCB070	NA	58.13	0.05	0.1	ng/wet g	50	116	60 - 140%	PASS				
PCB074	NA	27.53	0.05	0.1	ng/wet g	33.7	82	60 - 140%	PASS				
PCB087	NA	32.33	0.05	0.1	ng/wet g	27.9	116	60 - 140%	PASS				



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB099	NA	66.47	0.05	0.1	ng/wet g	78		85	60 - 140%	PASS		
PCB101	NA	72.91	0.05	0.1	ng/wet g	90.8		80	60 - 140%	PASS		
PCB105	NA	55.3	0.05	0.1	ng/wet g	50.3		110	60 - 140%	PASS		
PCB110	NA	67.84	0.05	0.1	ng/wet g	94.6		72	60 - 140%	PASS		
PCB118	NA	88.01	0.05	0.1	ng/wet g	112		79	60 - 140%	PASS		
PCB128	NA	42.64	0.05	0.1	ng/wet g	31.6		135	60 - 140%	PASS		
PCB138	NA	219.1	0.05	0.1	ng/wet g	162		135	60 - 140%	PASS		
PCB149	NA	50.3	0.05	0.1	ng/wet g	67.1		75	60 - 140%	PASS		
PCB151	NA	16.16	0.05	0.1	ng/wet g	23.3		69	60 - 140%	PASS		
PCB153	NA	226.46	0.05	0.1	ng/wet g	201		113	60 - 140%	PASS		
PCB156	NA	16.78	0.05	0.1	ng/wet g	13.3		126	60 - 140%	PASS		
PCB157	NA	3.85	0.05	0.1	ng/wet g	4.08		94	60 - 140%	PASS		
PCB158	NA	11.34	0.05	0.1	ng/wet g	11.3		100	60 - 140%	PASS		
PCB170	NA	30.48	0.05	0.1	ng/wet g	29.2		104	60 - 140%	PASS		
PCB180	NA	78.06	0.05	0.1	ng/wet g	80.8		97	60 - 140%	PASS		
PCB183	NA	22.9	0.05	0.1	ng/wet g	23.3		98	60 - 140%	PASS		
PCB187	NA	58.12	0.05	0.1	ng/wet g	54.8		106	60 - 140%	PASS		
PCB194	NA	14.16	0.05	0.1	ng/wet g	13.2		107	60 - 140%	PASS		
PCB201	NA	9.48	0.05	0.1	ng/wet g	3.59		264	60 - 140%	FAIL		4
PCB206	NA	6.87	0.05	0.1	ng/wet g	6.24		110	60 - 140%	PASS		

Sample ID: 31953-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	1.6	0.05	0.1	ng/wet g	2.72		59	60 - 140%	FAIL		4
PCB028	NA	12.55	0.05	0.1	ng/wet g	14.1		89	60 - 140%	PASS		
PCB044	NA	16.7	0.05	0.1	ng/wet g	20.4		82	60 - 140%	PASS		
PCB049	NA	25.66	0.05	0.1	ng/wet g	27.3		94	60 - 140%	PASS		
PCB052	NA	34.31	0.05	0.1	ng/wet g	36.4		94	60 - 140%	PASS		
PCB066	NA	60.43	0.05	0.1	ng/wet g	69.4		87	60 - 140%	PASS		
PCB070	NA	56.01	0.05	0.1	ng/wet g	50		112	60 - 140%	PASS		
PCB074	NA	28.93	0.05	0.1	ng/wet g	33.7		86	60 - 140%	PASS		
PCB087	NA	31.12	0.05	0.1	ng/wet g	27.9		112	60 - 140%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB099	NA	60.52	0.05	0.1	ng/wet g	78		78	60 - 140%	PASS		
PCB101	NA	78.3	0.05	0.1	ng/wet g	90.8		86	60 - 140%	PASS		
PCB105	NA	53.83	0.05	0.1	ng/wet g	50.3		107	60 - 140%	PASS		
PCB110	NA	62.97	0.05	0.1	ng/wet g	94.6		67	60 - 140%	PASS		
PCB118	NA	83.4	0.05	0.1	ng/wet g	112		74	60 - 140%	PASS		
PCB128	NA	40.09	0.05	0.1	ng/wet g	31.6		127	60 - 140%	PASS		
PCB138	NA	222.01	0.05	0.1	ng/wet g	162		137	60 - 140%	PASS		
PCB149	NA	49.54	0.05	0.1	ng/wet g	67.1		74	60 - 140%	PASS		
PCB151	NA	16.92	0.05	0.1	ng/wet g	23.3		73	60 - 140%	PASS		
PCB153	NA	208.64	0.05	0.1	ng/wet g	201		104	60 - 140%	PASS		
PCB156	NA	16.32	0.05	0.1	ng/wet g	13.3		123	60 - 140%	PASS		
PCB157	NA	4.1	0.05	0.1	ng/wet g	4.08		100	60 - 140%	PASS		
PCB158	NA	14.26	0.05	0.1	ng/wet g	11.3		126	60 - 140%	PASS		
PCB170	NA	30.72	0.05	0.1	ng/wet g	29.2		105	60 - 140%	PASS		
PCB180	NA	91.29	0.05	0.1	ng/wet g	80.8		113	60 - 140%	PASS		
PCB183	NA	25.42	0.05	0.1	ng/wet g	23.3		109	60 - 140%	PASS		
PCB187	NA	66.68	0.05	0.1	ng/wet g	54.8		122	60 - 140%	PASS		
PCB194	NA	11.72	0.05	0.1	ng/wet g	13.2		89	60 - 140%	PASS		
PCB201	NA	3.84	0.05	0.1	ng/wet g	3.59		107	60 - 140%	PASS		
PCB206	NA	6.32	0.05	0.1	ng/wet g	6.24		101	60 - 140%	PASS		

Sample ID: 31954-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	2.6	0.05	0.1	ng/wet g	2.72		96	60 - 140%	PASS		
PCB028	NA	13.5	0.05	0.1	ng/wet g	14.1		96	60 - 140%	PASS		
PCB044	NA	16.41	0.05	0.1	ng/wet g	20.4		80	60 - 140%	PASS		
PCB049	NA	28.4	0.05	0.1	ng/wet g	27.3		104	60 - 140%	PASS		
PCB052	NA	38.21	0.05	0.1	ng/wet g	36.4		105	60 - 140%	PASS		
PCB066	NA	69.06	0.05	0.1	ng/wet g	69.4		100	60 - 140%	PASS		
PCB070	NA	53.23	0.05	0.1	ng/wet g	50		106	60 - 140%	PASS		
PCB074	NA	34.76	0.05	0.1	ng/wet g	33.7		103	60 - 140%	PASS		
PCB087	NA	27.06	0.05	0.1	ng/wet g	27.9		97	60 - 140%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB099	NA	70.48	0.05	0.1	ng/wet g	78		90	60 - 140%	PASS		
PCB101	NA	92.2	0.05	0.1	ng/wet g	90.8		102	60 - 140%	PASS		
PCB105	NA	62.39	0.05	0.1	ng/wet g	50.3		124	60 - 140%	PASS		
PCB110	NA	80.67	0.05	0.1	ng/wet g	94.6		85	60 - 140%	PASS		
PCB118	NA	106	0.05	0.1	ng/wet g	112		95	60 - 140%	PASS		
PCB128	NA	37.77	0.05	0.1	ng/wet g	31.6		120	60 - 140%	PASS		
PCB138	NA	222.67	0.05	0.1	ng/wet g	162		137	60 - 140%	PASS		
PCB149	NA	70.58	0.05	0.1	ng/wet g	67.1		105	60 - 140%	PASS		
PCB151	NA	19.27	0.05	0.1	ng/wet g	23.3		83	60 - 140%	PASS		
PCB153	NA	253.42	0.05	0.1	ng/wet g	201		126	60 - 140%	PASS		
PCB156	NA	14.58	0.05	0.1	ng/wet g	13.3		110	60 - 140%	PASS		
PCB157	NA	5.15	0.05	0.1	ng/wet g	4.08		126	60 - 140%	PASS		
PCB158	NA	12.6	0.05	0.1	ng/wet g	11.3		112	60 - 140%	PASS		
PCB170	NA	36.94	0.05	0.1	ng/wet g	29.2		127	60 - 140%	PASS		
PCB180	NA	88.77	0.05	0.1	ng/wet g	80.8		110	60 - 140%	PASS		
PCB183	NA	25.51	0.05	0.1	ng/wet g	23.3		109	60 - 140%	PASS		
PCB187	NA	68.63	0.05	0.1	ng/wet g	54.8		125	60 - 140%	PASS		
PCB194	NA	14.9	0.05	0.1	ng/wet g	13.2		113	60 - 140%	PASS		
PCB201	NA	10.77	0.05	0.1	ng/wet g	3.59		300	60 - 140%	FAIL		4
PCB206	NA	5.16	0.05	0.1	ng/wet g	6.24		83	60 - 140%	PASS		

Sample ID: 31955-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	2.11	0.05	0.1	ng/wet g	2.72		78	60 - 140%	PASS		
PCB028	NA	14.48	0.05	0.1	ng/wet g	14.1		103	60 - 140%	PASS		
PCB044	NA	21.67	0.05	0.1	ng/wet g	20.4		106	60 - 140%	PASS		
PCB049	NA	28.85	0.05	0.1	ng/wet g	27.3		106	60 - 140%	PASS		
PCB052	NA	31.81	0.05	0.1	ng/wet g	36.4		87	60 - 140%	PASS		
PCB066	NA	78.14	0.05	0.1	ng/wet g	69.4		113	60 - 140%	PASS		
PCB070	NA	56.74	0.05	0.1	ng/wet g	50		113	60 - 140%	PASS		
PCB074	NA	36.65	0.05	0.1	ng/wet g	33.7		109	60 - 140%	PASS		
PCB087	NA	37.39	0.05	0.1	ng/wet g	27.9		134	60 - 140%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB099	NA	74.53	0.05	0.1	ng/wet g	78		96	60 - 140%	PASS		
PCB101	NA	92.8	0.05	0.1	ng/wet g	90.8		102	60 - 140%	PASS		
PCB105	NA	55.84	0.05	0.1	ng/wet g	50.3		111	60 - 140%	PASS		
PCB110	NA	83.7	0.05	0.1	ng/wet g	94.6		88	60 - 140%	PASS		
PCB118	NA	120.63	0.05	0.1	ng/wet g	112		108	60 - 140%	PASS		
PCB128	NA	44.03	0.05	0.1	ng/wet g	31.6		139	60 - 140%	PASS		
PCB138	NA	259.52	0.05	0.1	ng/wet g	162		160	60 - 140%	FAIL		4
PCB149	NA	66.01	0.05	0.1	ng/wet g	67.1		98	60 - 140%	PASS		
PCB151	NA	21.21	0.05	0.1	ng/wet g	23.3		91	60 - 140%	PASS		
PCB153	NA	269.49	0.05	0.1	ng/wet g	201		134	60 - 140%	PASS		
PCB156	NA	17.74	0.05	0.1	ng/wet g	13.3		133	60 - 140%	PASS		
PCB157	NA	4.31	0.05	0.1	ng/wet g	4.08		106	60 - 140%	PASS		
PCB158	NA	15.78	0.05	0.1	ng/wet g	11.3		140	60 - 140%	PASS		
PCB170	NA	40	0.05	0.1	ng/wet g	29.2		137	60 - 140%	PASS		
PCB180	NA	103.4	0.05	0.1	ng/wet g	80.8		128	60 - 140%	PASS		
PCB183	NA	30.17	0.05	0.1	ng/wet g	23.3		129	60 - 140%	PASS		
PCB187	NA	76.33	0.05	0.1	ng/wet g	54.8		139	60 - 140%	PASS		
PCB194	NA	16.82	0.05	0.1	ng/wet g	13.2		127	60 - 140%	PASS		
PCB201	NA	10.1	0.05	0.1	ng/wet g	3.59		281	60 - 140%	FAIL		4
PCB206	NA	8.59	0.05	0.1	ng/wet g	6.24		138	60 - 140%	PASS		

Sample ID: 31966-MS1

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	66.51	0.05	0.1	ng/dry g	40.04	0	166	50 - 150%	FAIL		M
PCB028	NA	36.75	0.05	0.1	ng/dry g	40.04	5.02	79	50 - 150%	PASS		
PCB037	NA	40.44	0.05	0.1	ng/dry g	40.04	0	101	50 - 150%	PASS		
PCB044	NA	37.65	0.05	0.1	ng/dry g	40.04	3.09	86	50 - 150%	PASS		
PCB049	NA	52.8	0.05	0.1	ng/dry g	40.04	18.06	87	50 - 150%	PASS		
PCB052	NA	54.18	0.05	0.1	ng/dry g	40.04	20.22	85	50 - 150%	PASS		
PCB066	NA	59.81	0.05	0.1	ng/dry g	40.04	24.17	89	50 - 150%	PASS		
PCB070	NA	38.6	0.05	0.1	ng/dry g	40.04	2.5	90	50 - 150%	PASS		
PCB074	NA	46.98	0.05	0.1	ng/dry g	40.04	12.71	86	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB077	NA	38.73	0.05	0.1	ng/dry g	40.04	0	97	50 - 150%	PASS		
PCB081	NA	36.76	0.05	0.1	ng/dry g	40.04	0	92	50 - 150%	PASS		
PCB087	NA	43.7	0.05	0.1	ng/dry g	40.04	15.59	70	50 - 150%	PASS		
PCB099	NA	102.47	0.05	0.1	ng/dry g	40.04	75.83	67	50 - 150%	PASS		
PCB101	NA	96.52	0.05	0.1	ng/dry g	40.04	69.8	67	50 - 150%	PASS		
PCB105	NA	58.58	0.05	0.1	ng/dry g	40.04	22.83	89	50 - 150%	PASS		
PCB110	NA	50.53	0.05	0.1	ng/dry g	40.04	21.95	71	50 - 150%	PASS		
PCB114	NA	32.61	0.05	0.1	ng/dry g	40.04	0	81	50 - 150%	PASS		
PCB118	NA	99.84	0.05	0.1	ng/dry g	40.04	75.9	60	50 - 150%	PASS		
PCB119	NA	37.8	0.05	0.1	ng/dry g	40.04	0	94	50 - 150%	PASS		
PCB123	NA	35.09	0.05	0.1	ng/dry g	40.04	2.41	82	50 - 150%	PASS		
PCB126	NA	53.07	0.05	0.1	ng/dry g	40.04	0	133	50 - 150%	PASS		
PCB128	NA	65.32	0.05	0.1	ng/dry g	40.04	32.59	82	50 - 150%	PASS		
PCB138	NA	195.73	0.05	0.1	ng/dry g	40.04	172.11	59	50 - 150%	PASS		
PCB149	NA	64.39	0.05	0.1	ng/dry g	40.04	38.07	66	50 - 150%	PASS		
PCB151	NA	46.84	0.05	0.1	ng/dry g	40.04	14.75	80	50 - 150%	PASS		
PCB153	NA	258.82	0.05	0.1	ng/dry g	40.04	245.47	33	50 - 150%	FAIL		SH
PCB156	NA	59.53	0.05	0.1	ng/dry g	40.04	13.59	115	50 - 150%	PASS		
PCB157	NA	36.45	0.05	0.1	ng/dry g	40.04	3.16	83	50 - 150%	PASS		
PCB158	NA	50.53	0.05	0.1	ng/dry g	40.04	11.18	98	50 - 150%	PASS		
PCB167	NA	46.35	0.05	0.1	ng/dry g	40.04	8.68	94	50 - 150%	PASS		
PCB168+132	NA	83.9	0.1	0.2	ng/dry g	80.1	0	105	50 - 150%	PASS		
PCB169	NA	51.51	0.05	0.1	ng/dry g	40.04	0	129	50 - 150%	PASS		
PCB170	NA	64.23	0.05	0.1	ng/dry g	40.04	26.73	94	50 - 150%	PASS		
PCB177	NA	54.21	0.05	0.1	ng/dry g	40.04	15.22	97	50 - 150%	PASS		
PCB180	NA	88.81	0.05	0.1	ng/dry g	40.04	63.11	64	50 - 150%	PASS		
PCB183	NA	60.99	0.05	0.1	ng/dry g	40.04	21.82	98	50 - 150%	PASS		
PCB187	NA	108.4	0.05	0.1	ng/dry g	40.04	71.48	92	50 - 150%	PASS		
PCB189	NA	49.44	0.05	0.1	ng/dry g	40.04	0	123	50 - 150%	PASS		
PCB194	NA	50.79	0.05	0.1	ng/dry g	40.04	12.07	97	50 - 150%	PASS		
PCB201	NA	45.86	0.05	0.1	ng/dry g	40.04	13.35	81	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB206	NA	47.56	0.05	0.1	ng/dry g	40.04	7.41	100	50 - 150%	PASS		

Sample ID: 31966-MS2

SWHB-27-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

PCB018	NA	102.09	0.05	0.1	ng/dry g	40.82	0	250	50 - 150%	FAIL	40	25	FAIL	M
PCB028	NA	37.47	0.05	0.1	ng/dry g	40.82	5.02	79	50 - 150%	PASS	0	25	PASS	
PCB037	NA	39.12	0.05	0.1	ng/dry g	40.82	0	96	50 - 150%	PASS	5	25	PASS	
PCB044	NA	35.59	0.05	0.1	ng/dry g	40.82	3.09	80	50 - 150%	PASS	7	25	PASS	
PCB049	NA	56.94	0.05	0.1	ng/dry g	40.82	18.06	95	50 - 150%	PASS	9	25	PASS	
PCB052	NA	58.63	0.05	0.1	ng/dry g	40.82	20.22	94	50 - 150%	PASS	10	25	PASS	
PCB066	NA	59.54	0.05	0.1	ng/dry g	40.82	24.17	87	50 - 150%	PASS	2	25	PASS	
PCB070	NA	37.69	0.05	0.1	ng/dry g	40.82	2.5	86	50 - 150%	PASS	5	25	PASS	
PCB074	NA	50.67	0.05	0.1	ng/dry g	40.82	12.71	93	50 - 150%	PASS	8	25	PASS	
PCB077	NA	38.03	0.05	0.1	ng/dry g	40.82	0	93	50 - 150%	PASS	4	25	PASS	
PCB081	NA	35.46	0.05	0.1	ng/dry g	40.82	0	87	50 - 150%	PASS	6	25	PASS	
PCB087	NA	44.11	0.05	0.1	ng/dry g	40.82	15.59	70	50 - 150%	PASS	0	25	PASS	
PCB099	NA	117.57	0.05	0.1	ng/dry g	40.82	75.83	102	50 - 150%	PASS	41	25	FAIL	M
PCB101	NA	106.15	0.05	0.1	ng/dry g	40.82	69.8	89	50 - 150%	PASS	28	30	PASS	Q
PCB105	NA	63.57	0.05	0.1	ng/dry g	40.82	22.83	100	50 - 150%	PASS	12	25	PASS	
PCB110	NA	52.92	0.05	0.1	ng/dry g	40.82	21.95	76	50 - 150%	PASS	7	25	PASS	
PCB114	NA	31.97	0.05	0.1	ng/dry g	40.82	0	78	50 - 150%	PASS	4	25	PASS	
PCB118	NA	117.17	0.05	0.1	ng/dry g	40.82	75.9	101	50 - 150%	PASS	51	25	FAIL	M
PCB119	NA	38.76	0.05	0.1	ng/dry g	40.82	0	95	50 - 150%	PASS	1	25	PASS	
PCB123	NA	36.24	0.05	0.1	ng/dry g	40.82	2.41	83	50 - 150%	PASS	1	25	PASS	
PCB126	NA	56.24	0.05	0.1	ng/dry g	40.82	0	138	50 - 150%	PASS	4	25	PASS	
PCB128	NA	77.16	0.05	0.1	ng/dry g	40.82	32.59	109	50 - 150%	PASS	28	30	PASS	Q
PCB138	NA	233.2	0.05	0.1	ng/dry g	40.82	172.11	150	50 - 150%	PASS	87	25	FAIL	SH
PCB149	NA	71.41	0.05	0.1	ng/dry g	40.82	38.07	82	50 - 150%	PASS	22	25	PASS	
PCB151	NA	47.77	0.05	0.1	ng/dry g	40.82	14.75	81	50 - 150%	PASS	1	25	PASS	
PCB153	NA	308.69	0.05	0.1	ng/dry g	40.82	245.47	155	50 - 150%	FAIL	130	25	FAIL	SH
PCB156	NA	58.63	0.05	0.1	ng/dry g	40.82	13.59	110	50 - 150%	PASS	4	25	PASS	
PCB157	NA	41.17	0.05	0.1	ng/dry g	40.82	3.16	93	50 - 150%	PASS	11	25	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB158	NA	51	0.05	0.1	ng/dry g	40.82	11.18	98	50 - 150%	PASS	0	25	PASS
PCB167	NA	51.14	0.05	0.1	ng/dry g	40.82	8.68	104	50 - 150%	PASS	10	25	PASS
PCB168+132	NA	69	0.1	0.2	ng/dry g	81.6	0	85	50 - 150%	PASS	21	25	PASS
PCB169	NA	52.31	0.05	0.1	ng/dry g	40.82	0	128	50 - 150%	PASS	1	25	PASS
PCB170	NA	71.59	0.05	0.1	ng/dry g	40.82	26.73	110	50 - 150%	PASS	16	25	PASS
PCB177	NA	50.11	0.05	0.1	ng/dry g	40.82	15.22	85	50 - 150%	PASS	13	25	PASS
PCB180	NA	102.46	0.05	0.1	ng/dry g	40.82	63.11	96	50 - 150%	PASS	40	25	FAIL M
PCB183	NA	61.99	0.05	0.1	ng/dry g	40.82	21.82	98	50 - 150%	PASS	0	25	PASS
PCB187	NA	115.77	0.05	0.1	ng/dry g	40.82	71.48	109	50 - 150%	PASS	17	25	PASS
PCB189	NA	45.9	0.05	0.1	ng/dry g	40.82	0	112	50 - 150%	PASS	9	25	PASS
PCB194	NA	53.9	0.05	0.1	ng/dry g	40.82	12.07	102	50 - 150%	PASS	5	25	PASS
PCB201	NA	45.63	0.05	0.1	ng/dry g	40.82	13.35	79	50 - 150%	PASS	2	25	PASS
PCB206	NA	39.11	0.05	0.1	ng/dry g	40.82	7.41	78	50 - 150%	PASS	25	25	PASS

Sample ID: 31966-R2

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 13-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB028	NA	5.73	0.05	0.1	ng/dry g						29	30	PASS	H,Q
PCB037	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB044	NA	2.46	0.05	0.1	ng/dry g						41	25	FAIL	H,NH
PCB049	NA	17.97	0.05	0.1	ng/dry g						1	25	PASS	H
PCB052	NA	21.03	0.05	0.1	ng/dry g						8	25	PASS	H
PCB066	NA	24.22	0.05	0.1	ng/dry g						0	25	PASS	H
PCB070	NA	2.17	0.05	0.1	ng/dry g						26	30	PASS	H,Q
PCB074	NA	11.75	0.05	0.1	ng/dry g						15	25	PASS	H
PCB077	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB081	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB087	NA	14.41	0.05	0.1	ng/dry g						15	25	PASS	H
PCB099	NA	78.54	0.05	0.1	ng/dry g						7	25	PASS	H
PCB101	NA	72.82	0.05	0.1	ng/dry g						9	25	PASS	H
PCB105	NA	23.41	0.05	0.1	ng/dry g						5	25	PASS	H
PCB110	NA	23.07	0.05	0.1	ng/dry g						10	25	PASS	H



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB114	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB118	NA	79.72	0.05	0.1	ng/dry g					10	25	PASS	H
PCB119	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB123	NA	2.27	0.05	0.1	ng/dry g					12	25	PASS	H
PCB126	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB128	NA	34.58	0.05	0.1	ng/dry g					12	25	PASS	H
PCB138	NA	180.5	0.05	0.1	ng/dry g					10	25	PASS	H
PCB149	NA	39.34	0.05	0.1	ng/dry g					7	25	PASS	H
PCB151	NA	16.17	0.05	0.1	ng/dry g					19	25	PASS	H
PCB153	NA	249.56	0.05	0.1	ng/dry g					3	25	PASS	H
PCB156	NA	13.87	0.05	0.1	ng/dry g					4	25	PASS	H
PCB157	NA	2.98	0.05	0.1	ng/dry g					11	25	PASS	H
PCB158	NA	11.25	0.05	0.1	ng/dry g					1	25	PASS	H
PCB167	NA	8.56	0.05	0.1	ng/dry g					3	25	PASS	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g					0	25	PASS	H
PCB169	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB170	NA	27.21	0.05	0.1	ng/dry g					4	25	PASS	H
PCB177	NA	15.54	0.05	0.1	ng/dry g					4	25	PASS	H
PCB180	NA	62.76	0.05	0.1	ng/dry g					1	25	PASS	H
PCB183	NA	21.24	0.05	0.1	ng/dry g					5	25	PASS	H
PCB187	NA	74.55	0.05	0.1	ng/dry g					9	25	PASS	H
PCB189	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB194	NA	12.33	0.05	0.1	ng/dry g					4	25	PASS	H
PCB201	NA	13.03	0.05	0.1	ng/dry g					5	25	PASS	H
PCB206	NA	7.65	0.05	0.1	ng/dry g					6	25	PASS	H

Sample ID: 31980-MS1

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	36.33	0.05	0.1	ng/dry g	42.64	0	85	50 - 150%	PASS	
PCB028	NA	36.3	0.05	0.1	ng/dry g	42.64	2.12	80	50 - 150%	PASS	
PCB037	NA	46.9	0.05	0.1	ng/dry g	42.64	0	110	50 - 150%	PASS	
PCB044	NA	38.11	0.05	0.1	ng/dry g	42.64	1.44	86	50 - 150%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB049	NA	57.93	0.05	0.1	ng/dry g	42.64	22.32	84	50 - 150%	PASS		
PCB052	NA	55.32	0.05	0.1	ng/dry g	42.64	21.76	79	50 - 150%	PASS		
PCB066	NA	68.29	0.05	0.1	ng/dry g	42.64	35.07	78	50 - 150%	PASS		
PCB070	NA	37.13	0.05	0.1	ng/dry g	42.64	0	87	50 - 150%	PASS		
PCB074	NA	47.78	0.05	0.1	ng/dry g	42.64	10.96	86	50 - 150%	PASS		
PCB077	NA	41.68	0.05	0.1	ng/dry g	42.64	0	98	50 - 150%	PASS		
PCB081	NA	36.53	0.05	0.1	ng/dry g	42.64	0	86	50 - 150%	PASS		
PCB087	NA	42.01	0.05	0.1	ng/dry g	42.64	12.8	69	50 - 150%	PASS		
PCB099	NA	136.49	0.05	0.1	ng/dry g	42.64	108.89	65	50 - 150%	PASS		
PCB101	NA	111.36	0.05	0.1	ng/dry g	42.64	89.57	51	50 - 150%	PASS		
PCB105	NA	62.05	0.05	0.1	ng/dry g	42.64	24.31	89	50 - 150%	PASS		
PCB110	NA	48.42	0.05	0.1	ng/dry g	42.64	18.27	71	50 - 150%	PASS		
PCB114	NA	34.37	0.05	0.1	ng/dry g	42.64	0	81	50 - 150%	PASS		
PCB118	NA	133.3	0.05	0.1	ng/dry g	42.64	102.98	71	50 - 150%	PASS		
PCB119	NA	36.15	0.05	0.1	ng/dry g	42.64	4.15	75	50 - 150%	PASS		
PCB123	NA	37.18	0.05	0.1	ng/dry g	42.64	4.27	77	50 - 150%	PASS		
PCB126	NA	58.15	0.05	0.1	ng/dry g	42.64	0	136	50 - 150%	PASS		
PCB128	NA	82.93	0.05	0.1	ng/dry g	42.64	41.41	97	50 - 150%	PASS		
PCB138	NA	281	0.05	0.1	ng/dry g	42.64	252.63	67	50 - 150%	PASS		
PCB149	NA	79.99	0.05	0.1	ng/dry g	42.64	50.76	69	50 - 150%	PASS		
PCB151	NA	48.92	0.05	0.1	ng/dry g	42.64	15.54	78	50 - 150%	PASS		
PCB153	NA	448.83	0.05	0.1	ng/dry g	42.64	389.95	138	50 - 150%	PASS		
PCB156	NA	59.71	0.05	0.1	ng/dry g	42.64	14.99	105	50 - 150%	PASS		
PCB157	NA	40.61	0.05	0.1	ng/dry g	42.64	5.94	81	50 - 150%	PASS		
PCB158	NA	54.55	0.05	0.1	ng/dry g	42.64	14.62	94	50 - 150%	PASS		
PCB167	NA	50.74	0.05	0.1	ng/dry g	42.64	11.21	93	50 - 150%	PASS		
PCB168+132	NA	49.1	0.1	0.2	ng/dry g	85.3	0	58	50 - 150%	PASS		
PCB169	NA	52.46	0.05	0.1	ng/dry g	42.64	0	123	50 - 150%	PASS		
PCB170	NA	75.87	0.05	0.1	ng/dry g	42.64	30.75	106	50 - 150%	PASS		
PCB177	NA	60.66	0.05	0.1	ng/dry g	42.64	18.18	100	50 - 150%	PASS		
PCB180	NA	112.52	0.05	0.1	ng/dry g	42.64	73.97	90	50 - 150%	PASS		



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB183	NA	73.26	0.05	0.1	ng/dry g	42.64	29.8	102	50 - 150%	PASS		
PCB187	NA	148.5	0.05	0.1	ng/dry g	42.64	117.95	72	50 - 150%	PASS		
PCB189	NA	61.21	0.05	0.1	ng/dry g	42.64	0	144	50 - 150%	PASS		
PCB194	NA	54	0.05	0.1	ng/dry g	42.64	20.72	78	50 - 150%	PASS		
PCB201	NA	49.48	0.05	0.1	ng/dry g	42.64	20.6	68	50 - 150%	PASS		
PCB206	NA	45.48	0.05	0.1	ng/dry g	42.64	6.83	91	50 - 150%	PASS		

Sample ID: 31980-MS2

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	39.88	0.05	0.1	ng/dry g	43.44	0	92	50 - 150%	PASS	8	25	PASS	
PCB028	NA	36.73	0.05	0.1	ng/dry g	43.44	2.12	80	50 - 150%	PASS	0	25	PASS	
PCB037	NA	42.86	0.05	0.1	ng/dry g	43.44	0	99	50 - 150%	PASS	11	25	PASS	
PCB044	NA	38.54	0.05	0.1	ng/dry g	43.44	1.44	85	50 - 150%	PASS	1	25	PASS	
PCB049	NA	54.97	0.05	0.1	ng/dry g	43.44	22.32	75	50 - 150%	PASS	11	25	PASS	
PCB052	NA	56.16	0.05	0.1	ng/dry g	43.44	21.76	79	50 - 150%	PASS	0	25	PASS	
PCB066	NA	63.52	0.05	0.1	ng/dry g	43.44	35.07	65	50 - 150%	PASS	18	25	PASS	
PCB070	NA	38.28	0.05	0.1	ng/dry g	43.44	0	88	50 - 150%	PASS	1	25	PASS	
PCB074	NA	46.08	0.05	0.1	ng/dry g	43.44	10.96	81	50 - 150%	PASS	6	25	PASS	
PCB077	NA	41.38	0.05	0.1	ng/dry g	43.44	0	95	50 - 150%	PASS	3	25	PASS	
PCB081	NA	39.32	0.05	0.1	ng/dry g	43.44	0	91	50 - 150%	PASS	6	25	PASS	
PCB087	NA	43.9	0.05	0.1	ng/dry g	43.44	12.8	72	50 - 150%	PASS	4	25	PASS	
PCB099	NA	135.79	0.05	0.1	ng/dry g	43.44	108.89	62	50 - 150%	PASS	5	25	PASS	
PCB101	NA	110.93	0.05	0.1	ng/dry g	43.44	89.57	49	50 - 150%	FAIL	4	25	PASS	M
PCB105	NA	66.16	0.05	0.1	ng/dry g	43.44	24.31	96	50 - 150%	PASS	8	25	PASS	
PCB110	NA	48.41	0.05	0.1	ng/dry g	43.44	18.27	69	50 - 150%	PASS	3	25	PASS	
PCB114	NA	34.16	0.05	0.1	ng/dry g	43.44	0	79	50 - 150%	PASS	2	25	PASS	
PCB118	NA	126.17	0.05	0.1	ng/dry g	43.44	102.98	53	50 - 150%	PASS	29	30	PASS	Q
PCB119	NA	38.52	0.05	0.1	ng/dry g	43.44	4.15	79	50 - 150%	PASS	5	25	PASS	
PCB123	NA	38.02	0.05	0.1	ng/dry g	43.44	4.27	78	50 - 150%	PASS	1	25	PASS	
PCB126	NA	60.09	0.05	0.1	ng/dry g	43.44	0	138	50 - 150%	PASS	1	25	PASS	
PCB128	NA	84.1	0.05	0.1	ng/dry g	43.44	41.41	98	50 - 150%	PASS	1	25	PASS	
PCB138	NA	274.38	0.05	0.1	ng/dry g	43.44	252.63	50	50 - 150%	PASS	29	30	PASS	Q



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE		
								%	LIMITS	%	LIMITS			
PCB149	NA	75.96	0.05	0.1	ng/dry g	43.44	50.76	58	50 - 150%	PASS	17	25	PASS	
PCB151	NA	49.99	0.05	0.1	ng/dry g	43.44	15.54	79	50 - 150%	PASS	1	25	PASS	
PCB153	NA	432.9	0.05	0.1	ng/dry g	43.44	389.95	99	50 - 150%	PASS	33	25	FAIL	SH
PCB156	NA	65.28	0.05	0.1	ng/dry g	43.44	14.99	116	50 - 150%	PASS	10	25	PASS	
PCB157	NA	42.61	0.05	0.1	ng/dry g	43.44	5.94	84	50 - 150%	PASS	4	25	PASS	
PCB158	NA	56.18	0.05	0.1	ng/dry g	43.44	14.62	96	50 - 150%	PASS	2	25	PASS	
PCB167	NA	56.14	0.05	0.1	ng/dry g	43.44	11.21	103	50 - 150%	PASS	10	25	PASS	
PCB168+132	NA	52.5	0.1	0.2	ng/dry g	86.9	0	60	50 - 150%	PASS	3	25	PASS	
PCB169	NA	55.95	0.05	0.1	ng/dry g	43.44	0	129	50 - 150%	PASS	5	25	PASS	
PCB170	NA	67.33	0.05	0.1	ng/dry g	43.44	30.75	84	50 - 150%	PASS	23	25	PASS	
PCB177	NA	58.46	0.05	0.1	ng/dry g	43.44	18.18	93	50 - 150%	PASS	7	25	PASS	
PCB180	NA	111.85	0.05	0.1	ng/dry g	43.44	73.97	87	50 - 150%	PASS	3	25	PASS	
PCB183	NA	75.76	0.05	0.1	ng/dry g	43.44	29.8	106	50 - 150%	PASS	4	25	PASS	
PCB187	NA	146.88	0.05	0.1	ng/dry g	43.44	117.95	67	50 - 150%	PASS	7	25	PASS	
PCB189	NA	56.5	0.05	0.1	ng/dry g	43.44	0	130	50 - 150%	PASS	10	25	PASS	
PCB194	NA	55.81	0.05	0.1	ng/dry g	43.44	20.72	81	50 - 150%	PASS	4	25	PASS	
PCB201	NA	56.87	0.05	0.1	ng/dry g	43.44	20.6	83	50 - 150%	PASS	20	25	PASS	
PCB206	NA	49.68	0.05	0.1	ng/dry g	43.44	6.83	99	50 - 150%	PASS	8	25	PASS	

Sample ID: 31980-R2

SWHB-01-SBB Spotted sand bass, whole

Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 09-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB028	NA	2.14	0.05	0.1	ng/dry g						2	25	PASS	H
PCB037	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB044	NA	1.51	0.05	0.1	ng/dry g						10	25	PASS	H
PCB049	NA	24.48	0.05	0.1	ng/dry g						19	25	PASS	H
PCB052	NA	22.46	0.05	0.1	ng/dry g						6	25	PASS	H
PCB066	NA	33.72	0.05	0.1	ng/dry g						8	25	PASS	H
PCB070	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB074	NA	10.67	0.05	0.1	ng/dry g						5	25	PASS	H
PCB077	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PCB081	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB087	NA	13.85	0.05	0.1	ng/dry g					16	25	PASS	H
PCB099	NA	108.39	0.05	0.1	ng/dry g					1	25	PASS	H
PCB101	NA	87.54	0.05	0.1	ng/dry g					5	25	PASS	H
PCB105	NA	23.51	0.05	0.1	ng/dry g					7	25	PASS	H
PCB110	NA	18.21	0.05	0.1	ng/dry g					1	25	PASS	H
PCB114	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB118	NA	102.36	0.05	0.1	ng/dry g					1	25	PASS	H
PCB119	NA	3.92	0.05	0.1	ng/dry g					11	25	PASS	H
PCB123	NA	4.58	0.05	0.1	ng/dry g					15	25	PASS	H
PCB126	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB128	NA	41.47	0.05	0.1	ng/dry g					0	25	PASS	H
PCB138	NA	251.1	0.05	0.1	ng/dry g					1	25	PASS	H
PCB149	NA	49.38	0.05	0.1	ng/dry g					5	25	PASS	H
PCB151	NA	15.28	0.05	0.1	ng/dry g					3	25	PASS	H
PCB153	NA	384.29	0.05	0.1	ng/dry g					3	25	PASS	H
PCB156	NA	15.01	0.05	0.1	ng/dry g					0	25	PASS	H
PCB157	NA	6	0.05	0.1	ng/dry g					2	25	PASS	H
PCB158	NA	15.05	0.05	0.1	ng/dry g					6	25	PASS	H
PCB167	NA	11.26	0.05	0.1	ng/dry g					1	25	PASS	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g					0	25	PASS	H
PCB169	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB170	NA	26.12	0.05	0.1	ng/dry g					30	30	PASS	H,Q
PCB177	NA	18.28	0.05	0.1	ng/dry g					1	25	PASS	H
PCB180	NA	70.99	0.05	0.1	ng/dry g					8	25	PASS	H
PCB183	NA	30.82	0.05	0.1	ng/dry g					7	25	PASS	H
PCB187	NA	117.75	0.05	0.1	ng/dry g					0	25	PASS	H
PCB189	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB194	NA	20.75	0.05	0.1	ng/dry g					0	25	PASS	H
PCB201	NA	18.03	0.05	0.1	ng/dry g					25	25	PASS	H
PCB206	NA	5.67	0.05	0.1	ng/dry g					34	25	FAIL	H,NH

Sample ID: 31993-MS1

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
		LIMITS				LIMITS				
		Method: EPA 8270D		Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 25-Jun-15		
PCB018	NA	1344.89	0.05	0.1	ng/dry g	1393.31	0	97	50 - 150%	PASS
PCB028	NA	1373.74	0.05	0.1	ng/dry g	1393.31	0	99	50 - 150%	PASS
PCB037	NA	1425.49	0.05	0.1	ng/dry g	1393.31	0	102	50 - 150%	PASS
PCB044	NA	1458.94	0.05	0.1	ng/dry g	1393.31	21.5	103	50 - 150%	PASS
PCB049	NA	1410.88	0.05	0.1	ng/dry g	1393.31	37.39	99	50 - 150%	PASS
PCB052	NA	1457.8	0.05	0.1	ng/dry g	1393.31	88.14	98	50 - 150%	PASS
PCB066	NA	1616.52	0.05	0.1	ng/dry g	1393.31	25.29	114	50 - 150%	PASS
PCB070	NA	1700.83	0.05	0.1	ng/dry g	1393.31	38.39	119	50 - 150%	PASS
PCB074	NA	1476.12	0.05	0.1	ng/dry g	1393.31	0	106	50 - 150%	PASS
PCB077	NA	1577.26	0.05	0.1	ng/dry g	1393.31	0	113	50 - 150%	PASS
PCB081	NA	1467.36	0.05	0.1	ng/dry g	1393.31	0	105	50 - 150%	PASS
PCB087	NA	1559.77	0.05	0.1	ng/dry g	1393.31	0	112	50 - 150%	PASS
PCB099	NA	1641.37	0.05	0.1	ng/dry g	1393.31	89.68	111	50 - 150%	PASS
PCB101	NA	1593.13	0.05	0.1	ng/dry g	1393.31	172.56	102	50 - 150%	PASS
PCB105	NA	1503.02	0.05	0.1	ng/dry g	1393.31	51.27	104	50 - 150%	PASS
PCB110	NA	1615.53	0.05	0.1	ng/dry g	1393.31	126.45	107	50 - 150%	PASS
PCB114	NA	1626.07	0.05	0.1	ng/dry g	1393.31	0	117	50 - 150%	PASS
PCB118	NA	1560.93	0.05	0.1	ng/dry g	1393.31	100.47	105	50 - 150%	PASS
PCB119	NA	1496.5	0.05	0.1	ng/dry g	1393.31	0	107	50 - 150%	PASS
PCB123	NA	1597.38	0.05	0.1	ng/dry g	1393.31	0	115	50 - 150%	PASS
PCB126	NA	1699.82	0.05	0.1	ng/dry g	1393.31	0	122	50 - 150%	PASS
PCB128	NA	1630.32	0.05	0.1	ng/dry g	1393.31	29.11	115	50 - 150%	PASS
PCB138	NA	1654.59	0.05	0.1	ng/dry g	1393.31	210.63	104	50 - 150%	PASS
PCB149	NA	1619.35	0.05	0.1	ng/dry g	1393.31	107.45	109	50 - 150%	PASS
PCB151	NA	1612.18	0.05	0.1	ng/dry g	1393.31	17.76	114	50 - 150%	PASS
PCB153	NA	1995.82	0.05	0.1	ng/dry g	1393.31	202	129	50 - 150%	PASS
PCB156	NA	1879.58	0.05	0.1	ng/dry g	1393.31	0	135	50 - 150%	PASS
PCB157	NA	1842.14	0.05	0.1	ng/dry g	1393.31	0	132	50 - 150%	PASS
PCB158	NA	1687.62	0.05	0.1	ng/dry g	1393.31	0	121	50 - 150%	PASS
PCB167	NA	1643.5	0.05	0.1	ng/dry g	1393.31	20.1	117	50 - 150%	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB168+132	NA	2915.3	0.1	0.2	ng/dry g	2786.6	20.3	104	50 - 150%	PASS		
PCB169	NA	1690.9	0.05	0.1	ng/dry g	1393.31	0	121	50 - 150%	PASS		
PCB170	NA	1803.96	0.05	0.1	ng/dry g	1393.31	15.54	128	50 - 150%	PASS		
PCB177	NA	1735.75	0.05	0.1	ng/dry g	1393.31	6.58	124	50 - 150%	PASS		
PCB180	NA	1837.08	0.05	0.1	ng/dry g	1393.31	31.87	130	50 - 150%	PASS		
PCB183	NA	1635.55	0.05	0.1	ng/dry g	1393.31	18.51	116	50 - 150%	PASS		
PCB187	NA	1894.85	0.05	0.1	ng/dry g	1393.31	42.9	133	50 - 150%	PASS		
PCB189	NA	1892.07	0.05	0.1	ng/dry g	1393.31	0	136	50 - 150%	PASS		
PCB194	NA	2018.93	0.05	0.1	ng/dry g	1393.31	0	145	50 - 150%	PASS		
PCB201	NA	1839.58	0.05	0.1	ng/dry g	1393.31	0	132	50 - 150%	PASS		
PCB206	NA	2083.64	0.05	0.1	ng/dry g	1393.31	4.25	149	50 - 150%	PASS		

Sample ID: 31993-MS2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

PCB018	NA	1286.34	0.05	0.1	ng/dry g	1210.91	0	106	50 - 150%	PASS	9	25	PASS
PCB028	NA	1212.79	0.05	0.1	ng/dry g	1210.91	0	100	50 - 150%	PASS	1	25	PASS
PCB037	NA	1367.55	0.05	0.1	ng/dry g	1210.91	0	113	50 - 150%	PASS	10	25	PASS
PCB044	NA	1383.52	0.05	0.1	ng/dry g	1210.91	21.5	112	50 - 150%	PASS	8	25	PASS
PCB049	NA	1327.58	0.05	0.1	ng/dry g	1210.91	37.39	107	50 - 150%	PASS	8	25	PASS
PCB052	NA	1384.02	0.05	0.1	ng/dry g	1210.91	88.14	107	50 - 150%	PASS	9	25	PASS
PCB066	NA	1476.14	0.05	0.1	ng/dry g	1210.91	25.29	120	50 - 150%	PASS	5	25	PASS
PCB070	NA	1430.63	0.05	0.1	ng/dry g	1210.91	38.39	115	50 - 150%	PASS	3	25	PASS
PCB074	NA	1310.85	0.05	0.1	ng/dry g	1210.91	0	108	50 - 150%	PASS	2	25	PASS
PCB077	NA	1494.16	0.05	0.1	ng/dry g	1210.91	0	123	50 - 150%	PASS	8	25	PASS
PCB081	NA	1377.45	0.05	0.1	ng/dry g	1210.91	0	114	50 - 150%	PASS	8	25	PASS
PCB087	NA	1412.07	0.05	0.1	ng/dry g	1210.91	0	117	50 - 150%	PASS	4	25	PASS
PCB099	NA	1449.55	0.05	0.1	ng/dry g	1210.91	89.68	112	50 - 150%	PASS	1	25	PASS
PCB101	NA	1483.24	0.05	0.1	ng/dry g	1210.91	172.56	108	50 - 150%	PASS	6	25	PASS
PCB105	NA	1276.14	0.05	0.1	ng/dry g	1210.91	51.27	101	50 - 150%	PASS	3	25	PASS
PCB110	NA	1346.43	0.05	0.1	ng/dry g	1210.91	126.45	101	50 - 150%	PASS	6	25	PASS
PCB114	NA	1443.99	0.05	0.1	ng/dry g	1210.91	0	119	50 - 150%	PASS	2	25	PASS
PCB118	NA	1325.67	0.05	0.1	ng/dry g	1210.91	100.47	101	50 - 150%	PASS	4	25	PASS



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB119	NA	1280.08	0.05	0.1	ng/dry g	1210.91	0	106	50 - 150%	PASS	1 25	PASS
PCB123	NA	1514.66	0.05	0.1	ng/dry g	1210.91	0	125	50 - 150%	PASS	8 25	PASS
PCB126	NA	1530.07	0.05	0.1	ng/dry g	1210.91	0	126	50 - 150%	PASS	3 25	PASS
PCB128	NA	1503.05	0.05	0.1	ng/dry g	1210.91	29.11	122	50 - 150%	PASS	6 25	PASS
PCB138	NA	1355.68	0.05	0.1	ng/dry g	1210.91	210.63	95	50 - 150%	PASS	9 25	PASS
PCB149	NA	1473.08	0.05	0.1	ng/dry g	1210.91	107.45	113	50 - 150%	PASS	4 25	PASS
PCB151	NA	1496.68	0.05	0.1	ng/dry g	1210.91	17.76	122	50 - 150%	PASS	7 25	PASS
PCB153	NA	1742.31	0.05	0.1	ng/dry g	1210.91	202	127	50 - 150%	PASS	2 25	PASS
PCB156	NA	1526.47	0.05	0.1	ng/dry g	1210.91	0	126	50 - 150%	PASS	7 25	PASS
PCB157	NA	1584.34	0.05	0.1	ng/dry g	1210.91	0	131	50 - 150%	PASS	1 25	PASS
PCB158	NA	1487.39	0.05	0.1	ng/dry g	1210.91	0	123	50 - 150%	PASS	2 25	PASS
PCB167	NA	1407.21	0.05	0.1	ng/dry g	1210.91	20.1	115	50 - 150%	PASS	2 25	PASS
PCB168+132	NA	2663.5	0.1	0.2	ng/dry g	2421.8	20.3	109	50 - 150%	PASS	5 25	PASS
PCB169	NA	1669.17	0.05	0.1	ng/dry g	1210.91	0	138	50 - 150%	PASS	13 25	PASS
PCB170	NA	1513.56	0.05	0.1	ng/dry g	1210.91	15.54	124	50 - 150%	PASS	3 25	PASS
PCB177	NA	1487.82	0.05	0.1	ng/dry g	1210.91	6.58	122	50 - 150%	PASS	2 25	PASS
PCB180	NA	1602.29	0.05	0.1	ng/dry g	1210.91	31.87	130	50 - 150%	PASS	0 25	PASS
PCB183	NA	1510.32	0.05	0.1	ng/dry g	1210.91	18.51	123	50 - 150%	PASS	6 25	PASS
PCB187	NA	1572.03	0.05	0.1	ng/dry g	1210.91	42.9	126	50 - 150%	PASS	5 25	PASS
PCB189	NA	1675.69	0.05	0.1	ng/dry g	1210.91	0	138	50 - 150%	PASS	1 25	PASS
PCB194	NA	1714.41	0.05	0.1	ng/dry g	1210.91	0	142	50 - 150%	PASS	2 25	PASS
PCB201	NA	1637.68	0.05	0.1	ng/dry g	1210.91	0	135	50 - 150%	PASS	2 25	PASS
PCB206	NA	1816.36	0.05	0.1	ng/dry g	1210.91	4.25	150	50 - 150%	PASS	1 25	PASS

Sample ID: 31993-R2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 26-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g						0 25	PASS	H
PCB028	NA	ND	0.05	0.1	ng/dry g						0 25	PASS	H
PCB037	NA	ND	0.05	0.1	ng/dry g						0 25	PASS	H
PCB044	NA	25.4	0.05	0.1	ng/dry g						36 25	FAIL	H,NH
PCB049	NA	26.78	0.05	0.1	ng/dry g						57 25	FAIL	H,NH
PCB052	NA	114.02	0.05	0.1	ng/dry g						59 25	FAIL	H,NH



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB066	NA	31.24	0.05	0.1	ng/dry g					47	25	FAIL	H,NH
PCB070	NA	57.96	0.05	0.1	ng/dry g					102	25	FAIL	H,NH
PCB074	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB077	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB081	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB087	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB099	NA	107.03	0.05	0.1	ng/dry g					39	25	FAIL	H,NH
PCB101	NA	240.9	0.05	0.1	ng/dry g					79	25	FAIL	H,NH
PCB105	NA	59.92	0.05	0.1	ng/dry g					34	25	FAIL	H,NH
PCB110	NA	173.15	0.05	0.1	ng/dry g					74	25	FAIL	H,NH
PCB114	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB118	NA	141.11	0.05	0.1	ng/dry g					81	25	FAIL	H,NH
PCB119	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB123	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB126	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB128	NA	58.22	0.05	0.1	ng/dry g					200	25	FAIL	H,NH
PCB138	NA	281.39	0.05	0.1	ng/dry g					67	25	FAIL	H,NH
PCB149	NA	129.51	0.05	0.1	ng/dry g					41	25	FAIL	H,NH
PCB151	NA	30.07	0.05	0.1	ng/dry g					139	25	FAIL	H,NH
PCB153	NA	254.04	0.05	0.1	ng/dry g					52	25	FAIL	H,NH
PCB156	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB157	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB158	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB167	NA	ND	0.05	0.1	ng/dry g					200	25	FAIL	H,SL
PCB168+132	NA	40.6	0.1	0.2	ng/dry g					199	25	FAIL	H,SL
PCB169	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB170	NA	31.07	0.05	0.1	ng/dry g					199	25	FAIL	H,SL
PCB177	NA	13.16	0.05	0.1	ng/dry g					198	25	FAIL	H,SL
PCB180	NA	63.74	0.05	0.1	ng/dry g					200	25	FAIL	H,SL
PCB183	NA	9.83	0.05	0.1	ng/dry g					94	25	FAIL	H,NH
PCB187	NA	50.77	0.05	0.1	ng/dry g					37	25	FAIL	H,NH



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB189	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB194	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB201	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB206	NA	8.51	0.05	0.1	ng/dry g			198	25	FAIL	H,SL	

Sample ID: 32006-MS1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	68.76	0.05	0.1	ng/dry g	82.46	0	83	50 - 150%	PASS	
PCB028	NA	75.68	0.05	0.1	ng/dry g	82.46	0	92	50 - 150%	PASS	
PCB037	NA	79.62	0.05	0.1	ng/dry g	82.46	0	97	50 - 150%	PASS	
PCB044	NA	82.05	0.05	0.1	ng/dry g	82.46	0	100	50 - 150%	PASS	
PCB049	NA	90.91	0.05	0.1	ng/dry g	82.46	1.02	109	50 - 150%	PASS	
PCB052	NA	69.29	0.05	0.1	ng/dry g	82.46	0	84	50 - 150%	PASS	
PCB066	NA	95.01	0.05	0.1	ng/dry g	82.46	0	115	50 - 150%	PASS	
PCB070	NA	94.54	0.05	0.1	ng/dry g	82.46	0	115	50 - 150%	PASS	
PCB074	NA	105.93	0.05	0.1	ng/dry g	82.46	0	128	50 - 150%	PASS	
PCB077	NA	86.85	0.05	0.1	ng/dry g	82.46	0	105	50 - 150%	PASS	
PCB081	NA	97.05	0.05	0.1	ng/dry g	82.46	0	118	50 - 150%	PASS	
PCB087	NA	101.77	0.05	0.1	ng/dry g	82.46	0	123	50 - 150%	PASS	
PCB099	NA	101.06	0.05	0.1	ng/dry g	82.46	1.52	121	50 - 150%	PASS	
PCB101	NA	98.43	0.05	0.1	ng/dry g	82.46	1.53	118	50 - 150%	PASS	
PCB105	NA	83.11	0.05	0.1	ng/dry g	82.46	0	101	50 - 150%	PASS	
PCB110	NA	94.22	0.05	0.1	ng/dry g	82.46	1.9	112	50 - 150%	PASS	
PCB114	NA	108.03	0.05	0.1	ng/dry g	82.46	0	131	50 - 150%	PASS	
PCB118	NA	120.16	0.05	0.1	ng/dry g	82.46	1.82	144	50 - 150%	PASS	
PCB119	NA	103.72	0.05	0.1	ng/dry g	82.46	0	126	50 - 150%	PASS	
PCB123	NA	105.1	0.05	0.1	ng/dry g	82.46	0	127	50 - 150%	PASS	
PCB126	NA	111.89	0.05	0.1	ng/dry g	82.46	0	136	50 - 150%	PASS	
PCB128	NA	107.27	0.05	0.1	ng/dry g	82.46	0	130	50 - 150%	PASS	
PCB138	NA	102.74	0.05	0.1	ng/dry g	82.46	2.9	121	50 - 150%	PASS	
PCB149	NA	95.04	0.05	0.1	ng/dry g	82.46	1.61	113	50 - 150%	PASS	
PCB151	NA	119.98	0.05	0.1	ng/dry g	82.46	0	146	50 - 150%	PASS	



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB153	NA	114.23	0.05	0.1	ng/dry g	82.46	3.96	134	50 - 150%	PASS		
PCB156	NA	122.04	0.05	0.1	ng/dry g	82.46	0	148	50 - 150%	PASS		
PCB157	NA	97.99	0.05	0.1	ng/dry g	82.46	0	119	50 - 150%	PASS		
PCB158	NA	96.62	0.05	0.1	ng/dry g	82.46	0	117	50 - 150%	PASS		
PCB167	NA	111.02	0.05	0.1	ng/dry g	82.46	0	135	50 - 150%	PASS		
PCB168+132	NA	185.3	0.1	0.2	ng/dry g	164.9	0	112	50 - 150%	PASS		
PCB169	NA	119.57	0.05	0.1	ng/dry g	82.46	0	145	50 - 150%	PASS		
PCB170	NA	123.61	0.05	0.1	ng/dry g	82.46	0	150	50 - 150%	PASS		
PCB177	NA	112.47	0.05	0.1	ng/dry g	82.46	0	136	50 - 150%	PASS		
PCB180	NA	121.02	0.05	0.1	ng/dry g	82.46	0	147	50 - 150%	PASS		
PCB183	NA	112.17	0.05	0.1	ng/dry g	82.46	0	136	50 - 150%	PASS		
PCB187	NA	115.67	0.05	0.1	ng/dry g	82.46	0	140	50 - 150%	PASS		
PCB189	NA	148.84	0.05	0.1	ng/dry g	82.46	0	180	50 - 150%	FAIL		M
PCB194	NA	139.95	0.05	0.1	ng/dry g	82.46	0	170	50 - 150%	FAIL		M
PCB201	NA	116.67	0.05	0.1	ng/dry g	82.46	0	141	50 - 150%	PASS		
PCB206	NA	150.95	0.05	0.1	ng/dry g	82.46	0	183	50 - 150%	FAIL		M

Sample ID: 32006-MS2

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	64.63	0.05	0.1	ng/dry g	75.44	0	86	50 - 150%	PASS	4	25	PASS
PCB028	NA	77.54	0.05	0.1	ng/dry g	75.44	0	103	50 - 150%	PASS	11	25	PASS
PCB037	NA	74.28	0.05	0.1	ng/dry g	75.44	0	98	50 - 150%	PASS	1	25	PASS
PCB044	NA	83.04	0.05	0.1	ng/dry g	75.44	0	110	50 - 150%	PASS	10	25	PASS
PCB049	NA	80.24	0.05	0.1	ng/dry g	75.44	1.02	105	50 - 150%	PASS	4	25	PASS
PCB052	NA	60.46	0.05	0.1	ng/dry g	75.44	0	80	50 - 150%	PASS	5	25	PASS
PCB066	NA	90.18	0.05	0.1	ng/dry g	75.44	0	120	50 - 150%	PASS	4	25	PASS
PCB070	NA	91.53	0.05	0.1	ng/dry g	75.44	0	121	50 - 150%	PASS	5	25	PASS
PCB074	NA	84.57	0.05	0.1	ng/dry g	75.44	0	112	50 - 150%	PASS	13	25	PASS
PCB077	NA	86.66	0.05	0.1	ng/dry g	75.44	0	115	50 - 150%	PASS	9	25	PASS
PCB081	NA	92.51	0.05	0.1	ng/dry g	75.44	0	123	50 - 150%	PASS	4	25	PASS
PCB087	NA	94.72	0.05	0.1	ng/dry g	75.44	0	126	50 - 150%	PASS	2	25	PASS
PCB099	NA	92.08	0.05	0.1	ng/dry g	75.44	1.52	120	50 - 150%	PASS	1	25	PASS



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CA ELAP #2769

PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB101	NA	92.82	0.05	0.1	ng/dry g	75.44	1.53	121	50 - 150%	PASS	3 25	PASS
PCB105	NA	75.39	0.05	0.1	ng/dry g	75.44	0	100	50 - 150%	PASS	1 25	PASS
PCB110	NA	94.6	0.05	0.1	ng/dry g	75.44	1.9	123	50 - 150%	PASS	9 25	PASS
PCB114	NA	101.62	0.05	0.1	ng/dry g	75.44	0	135	50 - 150%	PASS	3 25	PASS
PCB118	NA	108.13	0.05	0.1	ng/dry g	75.44	1.82	141	50 - 150%	PASS	2 25	PASS
PCB119	NA	89.38	0.05	0.1	ng/dry g	75.44	0	118	50 - 150%	PASS	7 25	PASS
PCB123	NA	106.76	0.05	0.1	ng/dry g	75.44	0	142	50 - 150%	PASS	11 25	PASS
PCB126	NA	94.4	0.05	0.1	ng/dry g	75.44	0	125	50 - 150%	PASS	8 25	PASS
PCB128	NA	98.88	0.05	0.1	ng/dry g	75.44	0	131	50 - 150%	PASS	1 25	PASS
PCB138	NA	99.66	0.05	0.1	ng/dry g	75.44	2.9	128	50 - 150%	PASS	6 25	PASS
PCB149	NA	92.96	0.05	0.1	ng/dry g	75.44	1.61	121	50 - 150%	PASS	7 25	PASS
PCB151	NA	107.12	0.05	0.1	ng/dry g	75.44	0	142	50 - 150%	PASS	3 25	PASS
PCB153	NA	95.57	0.05	0.1	ng/dry g	75.44	3.96	121	50 - 150%	PASS	10 25	PASS
PCB156	NA	112.96	0.05	0.1	ng/dry g	75.44	0	150	50 - 150%	PASS	1 25	PASS
PCB157	NA	83.79	0.05	0.1	ng/dry g	75.44	0	111	50 - 150%	PASS	7 25	PASS
PCB158	NA	89.6	0.05	0.1	ng/dry g	75.44	0	119	50 - 150%	PASS	2 25	PASS
PCB167	NA	100.9	0.05	0.1	ng/dry g	75.44	0	134	50 - 150%	PASS	1 25	PASS
PCB168+132	NA	146.4	0.1	0.2	ng/dry g	150.9	0	97	50 - 150%	PASS	14 25	PASS
PCB169	NA	111.65	0.05	0.1	ng/dry g	75.44	0	148	50 - 150%	PASS	2 25	PASS
PCB170	NA	101.9	0.05	0.1	ng/dry g	75.44	0	135	50 - 150%	PASS	11 25	PASS
PCB177	NA	105.46	0.05	0.1	ng/dry g	75.44	0	140	50 - 150%	PASS	3 25	PASS
PCB180	NA	116.25	0.05	0.1	ng/dry g	75.44	0	154	50 - 150%	FAIL	5 25	PASS M
PCB183	NA	102.73	0.05	0.1	ng/dry g	75.44	0	136	50 - 150%	PASS	0 25	PASS
PCB187	NA	95.45	0.05	0.1	ng/dry g	75.44	0	127	50 - 150%	PASS	10 25	PASS
PCB189	NA	133.79	0.05	0.1	ng/dry g	75.44	0	177	50 - 150%	FAIL	2 25	PASS M
PCB194	NA	130.83	0.05	0.1	ng/dry g	75.44	0	173	50 - 150%	FAIL	2 25	PASS M
PCB201	NA	106.2	0.05	0.1	ng/dry g	75.44	0	141	50 - 150%	PASS	0 25	PASS
PCB206	NA	128.9	0.05	0.1	ng/dry g	75.44	0	171	50 - 150%	FAIL	7 25	PASS M

Sample ID: 32006-R2

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 28-Jun-15

PCB018	NA	ND	0.05	0.1	ng/dry g						0 25	PASS	H
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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PCB028	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB037	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB044	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB049	NA	2.05	0.05	0.1	ng/dry g					190	25	FAIL	H,SL
PCB052	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB066	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB070	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB074	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB077	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB081	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB087	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB099	NA	1.86	0.05	0.1	ng/dry g					45	25	FAIL	H,NH
PCB101	NA	1.78	0.05	0.1	ng/dry g					33	25	FAIL	H,NH
PCB105	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB110	NA	1.7	0.05	0.1	ng/dry g					22	25	PASS	H
PCB114	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB118	NA	1.21	0.05	0.1	ng/dry g					67	25	FAIL	H,NH
PCB119	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB123	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB126	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB128	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB138	NA	2.6	0.05	0.1	ng/dry g					20	25	PASS	H
PCB149	NA	1.86	0.05	0.1	ng/dry g					30	30	PASS	H,Q
PCB151	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB153	NA	4.88	0.05	0.1	ng/dry g					46	25	FAIL	H,NH
PCB156	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB157	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB158	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB167	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H
PCB168+132	NA	ND	0.1	0.2	ng/dry g					0	25	PASS	H
PCB169	NA	ND	0.05	0.1	ng/dry g					0	25	PASS	H



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PCB Congeners

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PCB170	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB177	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB180	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB183	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB187	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB189	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB194	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB201	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	
PCB206	NA	ND	0.05	0.1	ng/dry g			0	25	PASS	H	



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31944-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(DFPBDE)	NA	89			% Recovery	100		89	50 - 150%	PASS	
(FTBDE)	NA	93			% Recovery	100		93	50 - 150%	PASS	
PBDE017	NA	ND	0.05	0.1	ng/dry g						
PBDE028	NA	ND	0.05	0.1	ng/dry g						
PBDE047	NA	ND	0.05	0.1	ng/dry g						
PBDE049	NA	ND	0.05	0.1	ng/dry g						
PBDE066	NA	ND	0.05	0.1	ng/dry g						
PBDE071	NA	ND	0.05	0.1	ng/dry g						
PBDE085	NA	ND	0.05	0.1	ng/dry g						
PBDE099	NA	ND	0.05	0.1	ng/dry g						
PBDE100	NA	ND	0.05	0.1	ng/dry g						
PBDE138	NA	ND	0.05	0.1	ng/dry g						
PBDE153	NA	ND	0.05	0.1	ng/dry g						
PBDE154	NA	ND	0.05	0.1	ng/dry g						
PBDE183	NA	ND	0.05	0.1	ng/dry g						
PBDE190	NA	ND	0.05	0.1	ng/dry g						
PBDE209	NA	ND	0.05	0.1	ng/dry g						

Sample ID: 31944-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(DFPBDE)	NA	93			% Recovery	100	0	93	50 - 150%	PASS	
(FTBDE)	NA	68			% Recovery	100	0	68	50 - 150%	PASS	
PBDE017	NA	68.48	0.05	0.1	ng/dry g	100	0	68	50 - 150%	PASS	Q
PBDE028	NA	85.02	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS	
PBDE047	NA	85.6	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS	
PBDE049	NA	88.95	0.05	0.1	ng/dry g	100	0	89	70 - 130%	PASS	
PBDE066	NA	92	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	
PBDE071	NA	102.28	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	
PBDE085	NA	87.01	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS	



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE099	NA	88.62	0.05	0.1	ng/dry g	100	0	89	70 - 130%	PASS		
PBDE100	NA	96.09	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS		
PBDE138	NA	81.04	0.05	0.1	ng/dry g	100	0	81	70 - 130%	PASS		
PBDE153	NA	83.55	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS		
PBDE154	NA	88.87	0.05	0.1	ng/dry g	100	0	89	70 - 130%	PASS		
PBDE183	NA	79.39	0.05	0.1	ng/dry g	100	0	79	70 - 130%	PASS		
PBDE190	NA	75.17	0.05	0.1	ng/dry g	100	0	75	70 - 130%	PASS		
PBDE209	NA	345	0.05	0.1	ng/dry g	500	0	69	50 - 150%	PASS		Q

Sample ID: 31944-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 10-Jun-15

(DFPBDE)	NA	103			% Recovery	100	0	103	50 - 150%	PASS	10	30	PASS	
(FTBDE)	NA	68			% Recovery	100	0	68	50 - 150%	PASS	0	30	PASS	
PBDE017	NA	67.93	0.05	0.1	ng/dry g	100	0	68	50 - 150%	PASS	0	30	PASS	Q
PBDE028	NA	73.86	0.05	0.1	ng/dry g	100	0	74	70 - 130%	PASS	14	25	PASS	
PBDE047	NA	100.12	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	15	25	PASS	
PBDE049	NA	85.53	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS	3	25	PASS	
PBDE066	NA	94.25	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS	2	25	PASS	
PBDE071	NA	91.67	0.05	0.1	ng/dry g	100	0	92	70 - 130%	PASS	10	25	PASS	
PBDE085	NA	101.87	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	16	25	PASS	
PBDE099	NA	102.97	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	15	25	PASS	
PBDE100	NA	103.05	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	7	25	PASS	
PBDE138	NA	96.83	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS	18	25	PASS	
PBDE153	NA	100.48	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	17	25	PASS	
PBDE154	NA	102.99	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	15	25	PASS	
PBDE183	NA	98.05	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS	21	25	PASS	
PBDE190	NA	101.2	0.05	0.1	ng/dry g	100	0	101	50 - 150%	PASS	30	30	PASS	Q
PBDE209	NA	387.3	0.05	0.1	ng/dry g	500	0	77	70 - 130%	PASS	11	25	PASS	

Sample ID: 31945-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

(DFPBDE)	NA	115			% Recovery	100		115	50 - 150%	PASS				
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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(FTBDE)	NA	84			% Recovery	100		84	50 - 150%	PASS		
PBDE017	NA	ND	0.05	0.1	ng/dry g							
PBDE028	NA	ND	0.05	0.1	ng/dry g							
PBDE047	NA	ND	0.05	0.1	ng/dry g							
PBDE049	NA	ND	0.05	0.1	ng/dry g							
PBDE066	NA	ND	0.05	0.1	ng/dry g							
PBDE071	NA	ND	0.05	0.1	ng/dry g							
PBDE085	NA	ND	0.05	0.1	ng/dry g							
PBDE099	NA	ND	0.05	0.1	ng/dry g							
PBDE100	NA	ND	0.05	0.1	ng/dry g							
PBDE138	NA	ND	0.05	0.1	ng/dry g							
PBDE153	NA	ND	0.05	0.1	ng/dry g							
PBDE154	NA	ND	0.05	0.1	ng/dry g							
PBDE183	NA	ND	0.05	0.1	ng/dry g							
PBDE190	NA	ND	0.05	0.1	ng/dry g							
PBDE209	NA	ND	0.05	0.1	ng/dry g							

Sample ID: 31945-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

(DFPBDE)	NA	105			% Recovery	100	0	105	50 - 150%	PASS		
(FTBDE)	NA	69			% Recovery	100	0	69	50 - 150%	PASS		
PBDE017	NA	58.79	0.05	0.1	ng/dry g	100	0	59	50 - 150%	PASS		Q
PBDE028	NA	75.03	0.05	0.1	ng/dry g	100	0	75	70 - 130%	PASS		
PBDE047	NA	98.38	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS		
PBDE049	NA	87.57	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS		
PBDE066	NA	95.86	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS		
PBDE071	NA	88.73	0.05	0.1	ng/dry g	100	0	89	70 - 130%	PASS		
PBDE085	NA	96.39	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS		
PBDE099	NA	105.4	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS		
PBDE100	NA	95.48	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS		
PBDE138	NA	83.21	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS		
PBDE153	NA	87.32	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS		



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE154	NA	90.75	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS		
PBDE183	NA	87.61	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS		
PBDE190	NA	79.43	0.05	0.1	ng/dry g	100	0	79	70 - 130%	PASS		
PBDE209	NA	418.69	0.05	0.1	ng/dry g	500	0	84	70 - 130%	PASS		

Sample ID: 31945-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

(DFPBDE)	NA	86			% Recovery	100	0	86	50 - 150%	PASS	20	30	PASS	
(FTBDE)	NA	66			% Recovery	100	0	66	50 - 150%	PASS	4	30	PASS	
PBDE017	NA	61.65	0.05	0.1	ng/dry g	100	0	62	50 - 150%	PASS	5	30	PASS	Q
PBDE028	NA	74.4	0.05	0.1	ng/dry g	100	0	74	70 - 130%	PASS	1	25	PASS	
PBDE047	NA	89.98	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	9	25	PASS	
PBDE049	NA	89.89	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS	2	25	PASS	
PBDE066	NA	83.16	0.05	0.1	ng/dry g	100	0	83	70 - 130%	PASS	15	25	PASS	
PBDE071	NA	87.53	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS	1	25	PASS	
PBDE085	NA	86.03	0.05	0.1	ng/dry g	100	0	86	70 - 130%	PASS	11	25	PASS	
PBDE099	NA	81.76	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	25	25	PASS	
PBDE100	NA	86.6	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS	9	25	PASS	
PBDE138	NA	82.4	0.05	0.1	ng/dry g	100	0	82	70 - 130%	PASS	1	25	PASS	
PBDE153	NA	80.47	0.05	0.1	ng/dry g	100	0	80	70 - 130%	PASS	8	25	PASS	
PBDE154	NA	87.76	0.05	0.1	ng/dry g	100	0	88	70 - 130%	PASS	3	25	PASS	
PBDE183	NA	84.16	0.05	0.1	ng/dry g	100	0	84	70 - 130%	PASS	5	25	PASS	
PBDE190	NA	79.08	0.05	0.1	ng/dry g	100	0	79	70 - 130%	PASS	0	25	PASS	
PBDE209	NA	385.64	0.05	0.1	ng/dry g	500	0	77	70 - 130%	PASS	9	25	PASS	

Sample ID: 31946-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 29-Jun-15

(DFPBDE)	NA	109			% Recovery	100		109	50 - 150%	PASS			
(FTBDE)	NA	101			% Recovery	100		101	50 - 150%	PASS			
PBDE017	NA	ND	0.05	0.1	ng/dry g								
PBDE028	NA	ND	0.05	0.1	ng/dry g								
PBDE047	NA	ND	0.05	0.1	ng/dry g								



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	
PBDE049	NA	ND	0.05	0.1	ng/dry g					
PBDE066	NA	ND	0.05	0.1	ng/dry g					
PBDE071	NA	ND	0.05	0.1	ng/dry g					
PBDE085	NA	ND	0.05	0.1	ng/dry g					
PBDE099	NA	ND	0.05	0.1	ng/dry g					
PBDE100	NA	ND	0.05	0.1	ng/dry g					
PBDE138	NA	ND	0.05	0.1	ng/dry g					
PBDE153	NA	ND	0.05	0.1	ng/dry g					
PBDE154	NA	ND	0.05	0.1	ng/dry g					
PBDE183	NA	ND	0.05	0.1	ng/dry g					
PBDE190	NA	ND	0.05	0.1	ng/dry g					
PBDE209	NA	ND	0.05	0.1	ng/dry g					

Sample ID: 31946-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 29-Jun-15

(DFPBDE)	NA	102			% Recovery	100	0	102	50 - 150%	PASS
(FTBDE)	NA	81			% Recovery	100	0	81	50 - 150%	PASS
PBDE017	NA	90.2	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS
PBDE028	NA	90.7	0.05	0.1	ng/dry g	100	0	91	70 - 130%	PASS
PBDE047	NA	96.5	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS
PBDE049	NA	100.3	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS
PBDE066	NA	95.66	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS
PBDE071	NA	106.46	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS
PBDE085	NA	92.97	0.05	0.1	ng/dry g	100	0	93	70 - 130%	PASS
PBDE099	NA	94.6	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS
PBDE100	NA	97.8	0.05	0.1	ng/dry g	100	0	98	70 - 130%	PASS
PBDE138	NA	95.99	0.05	0.1	ng/dry g	100	0	96	70 - 130%	PASS
PBDE153	NA	94.06	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS
PBDE154	NA	94.91	0.05	0.1	ng/dry g	100	0	95	70 - 130%	PASS
PBDE183	NA	94.26	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS
PBDE190	NA	84.97	0.05	0.1	ng/dry g	100	0	85	70 - 130%	PASS
PBDE209	NA	357.02	0.05	0.1	ng/dry g	500	0	71	70 - 130%	PASS



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31946-BS2		QAQC Procedural Blank			Matrix: DI Water			Sampled:			Received:		
		Method: EPA 8270D-NCI			Batch ID: O-7120			Prepared: 03-Jun-15			Analyzed: 29-Jun-15		
(DFPBDE)	NA	105			% Recovery	100	0	105	50 - 150%	PASS	3	30	PASS
(FTBDE)	NA	85			% Recovery	100	0	85	50 - 150%	PASS	5	30	PASS
PBDE017	NA	99.87	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	11	25	PASS
PBDE028	NA	101.72	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	11	25	PASS
PBDE047	NA	102.62	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	7	25	PASS
PBDE049	NA	94.31	0.05	0.1	ng/dry g	100	0	94	70 - 130%	PASS	6	25	PASS
PBDE066	NA	104.17	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS	8	25	PASS
PBDE071	NA	107.86	0.05	0.1	ng/dry g	100	0	108	70 - 130%	PASS	2	25	PASS
PBDE085	NA	102.22	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	9	25	PASS
PBDE099	NA	104.52	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS	10	25	PASS
PBDE100	NA	108.53	0.05	0.1	ng/dry g	100	0	109	70 - 130%	PASS	11	25	PASS
PBDE138	NA	102.05	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS	6	25	PASS
PBDE153	NA	99.26	0.05	0.1	ng/dry g	100	0	99	70 - 130%	PASS	5	25	PASS
PBDE154	NA	103.6	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS	9	25	PASS
PBDE183	NA	102.82	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS	9	25	PASS
PBDE190	NA	100.32	0.05	0.1	ng/dry g	100	0	100	70 - 130%	PASS	16	25	PASS
PBDE209	NA	467.35	0.05	0.1	ng/dry g	500	0	93	50 - 150%	PASS	27	30	PASS

Sample ID: 31947-B1		QAQC Procedural Blank			Matrix: DI Water			Sampled:			Received:		
		Method: EPA 8270D-NCI			Batch ID: O-7122			Prepared: 01-Jun-15			Analyzed: 01-Jul-15		
(DFPBDE)	NA	114			% Recovery	100		114	50 - 150%	PASS			
(FTBDE)	NA	97			% Recovery	100		97	50 - 150%	PASS			
PBDE017	NA	ND	0.05	0.1	ng/dry g								
PBDE028	NA	ND	0.05	0.1	ng/dry g								
PBDE047	NA	ND	0.05	0.1	ng/dry g								
PBDE049	NA	ND	0.05	0.1	ng/dry g								
PBDE066	NA	ND	0.05	0.1	ng/dry g								
PBDE071	NA	ND	0.05	0.1	ng/dry g								
PBDE085	NA	ND	0.05	0.1	ng/dry g								



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	
PBDE099	NA	ND	0.05	0.1	ng/dry g					
PBDE100	NA	ND	0.05	0.1	ng/dry g					
PBDE138	NA	ND	0.05	0.1	ng/dry g					
PBDE153	NA	ND	0.05	0.1	ng/dry g					
PBDE154	NA	ND	0.05	0.1	ng/dry g					
PBDE183	NA	ND	0.05	0.1	ng/dry g					
PBDE190	NA	ND	0.05	0.1	ng/dry g					
PBDE209	NA	ND	0.05	0.1	ng/dry g					

Sample ID: 31947-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 01-Jul-15

(DFPBDE)	NA	103			% Recovery	100	0	103	50 - 150%	PASS
(FTBDE)	NA	87			% Recovery	100	0	87	50 - 150%	PASS
PBDE017	NA	101.23	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS
PBDE028	NA	103.46	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS
PBDE047	NA	97.48	0.05	0.1	ng/dry g	100	0	97	70 - 130%	PASS
PBDE049	NA	86.82	0.05	0.1	ng/dry g	100	0	87	70 - 130%	PASS
PBDE066	NA	102.94	0.05	0.1	ng/dry g	100	0	103	70 - 130%	PASS
PBDE071	NA	106.1	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS
PBDE085	NA	106.24	0.05	0.1	ng/dry g	100	0	106	70 - 130%	PASS
PBDE099	NA	103.69	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS
PBDE100	NA	103.59	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS
PBDE138	NA	101.77	0.05	0.1	ng/dry g	100	0	102	70 - 130%	PASS
PBDE153	NA	104.91	0.05	0.1	ng/dry g	100	0	105	70 - 130%	PASS
PBDE154	NA	100.76	0.05	0.1	ng/dry g	100	0	101	70 - 130%	PASS
PBDE183	NA	89.92	0.05	0.1	ng/dry g	100	0	90	70 - 130%	PASS
PBDE190	NA	104.04	0.05	0.1	ng/dry g	100	0	104	70 - 130%	PASS
PBDE209	NA	547.89	0.05	0.1	ng/dry g	500	0	110	70 - 130%	PASS

Sample ID: 31947-BS2

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 01-Jul-15

(DFPBDE)	NA	102			% Recovery	100	0	102	50 - 150%	PASS	1	30	PASS
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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(FTBDE)	NA	77			% Recovery	100	0	77	50 - 150%	PASS	12 30	PASS
PBDE017	NA	47.8	0.05	0.1	ng/dry g	50	0	96	70 - 130%	PASS	5 25	PASS
PBDE028	NA	49.38	0.05	0.1	ng/dry g	50	0	99	70 - 130%	PASS	4 25	PASS
PBDE047	NA	48.55	0.05	0.1	ng/dry g	50	0	97	70 - 130%	PASS	0 25	PASS
PBDE049	NA	64.9	0.05	0.1	ng/dry g	50	0	130	70 - 130%	PASS	40 25	FAIL R
PBDE066	NA	53.49	0.05	0.1	ng/dry g	50	0	107	70 - 130%	PASS	4 25	PASS
PBDE071	NA	64.2	0.05	0.1	ng/dry g	50	0	128	70 - 130%	PASS	19 25	PASS
PBDE085	NA	56.56	0.05	0.1	ng/dry g	50	0	113	70 - 130%	PASS	6 25	PASS
PBDE099	NA	51.23	0.05	0.1	ng/dry g	50	0	102	70 - 130%	PASS	2 25	PASS
PBDE100	NA	53.36	0.05	0.1	ng/dry g	50	0	107	70 - 130%	PASS	3 25	PASS
PBDE138	NA	52.77	0.05	0.1	ng/dry g	50	0	106	70 - 130%	PASS	4 25	PASS
PBDE153	NA	58.6	0.05	0.1	ng/dry g	50	0	117	70 - 130%	PASS	11 25	PASS
PBDE154	NA	53.77	0.05	0.1	ng/dry g	50	0	108	70 - 130%	PASS	7 25	PASS
PBDE183	NA	52.43	0.05	0.1	ng/dry g	50	0	105	70 - 130%	PASS	15 25	PASS
PBDE190	NA	53.92	0.05	0.1	ng/dry g	50	0	108	70 - 130%	PASS	4 25	PASS
PBDE209	NA	322.08	0.05	0.1	ng/dry g	250	0	129	70 - 130%	PASS	16 25	PASS

Sample ID: 31952-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D-NCl

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	62			% Recovery	100		62	50 - 150%	PASS		
(FTBDE)	NA	67			% Recovery	100		67	50 - 150%	PASS		
PBDE028	NA	2.17	0.05	0.1	ng/wet g	2.26		96	60 - 140%	PASS		
PBDE047	NA	66.94	0.05	0.1	ng/wet g	73.3		91	60 - 140%	PASS		
PBDE049	NA	3.48	0.05	0.1	ng/wet g	4.01		87	60 - 140%	PASS		
PBDE066	NA	1.36	0.05	0.1	ng/wet g	1.85		74	60 - 140%	PASS		
PBDE099	NA	17.7	0.05	0.1	ng/wet g	19.2		92	60 - 140%	PASS		
PBDE100	NA	12.29	0.05	0.1	ng/wet g	17.1		72	60 - 140%	PASS		
PBDE153	NA	2.39	0.05	0.1	ng/wet g	3.83		62	60 - 140%	PASS		
PBDE154	NA	5.5	0.05	0.1	ng/wet g	6.88		80	60 - 140%	PASS		

Sample ID: 31953-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D-NCl

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(DFPBDE)	NA	118			% Recovery	100		118	50 - 150%	PASS		
(FTBDE)	NA	73			% Recovery	100		73	50 - 150%	PASS		
PBDE028	NA	1.51	0.05	0.1	ng/wet g	2.26		67	60 - 140%	PASS		
PBDE047	NA	88.35	0.05	0.1	ng/wet g	73.3		121	60 - 140%	PASS		
PBDE049	NA	3.67	0.05	0.1	ng/wet g	4.01		92	60 - 140%	PASS		
PBDE066	NA	1.67	0.05	0.1	ng/wet g	1.85		90	60 - 140%	PASS		
PBDE099	NA	23.34	0.05	0.1	ng/wet g	19.2		122	60 - 140%	PASS		
PBDE100	NA	16.38	0.05	0.1	ng/wet g	17.1		96	60 - 140%	PASS		
PBDE153	NA	2.74	0.05	0.1	ng/wet g	3.83		72	60 - 140%	PASS		
PBDE154	NA	8.42	0.05	0.1	ng/wet g	6.88		122	60 - 140%	PASS		

Sample ID: 31954-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 29-Jun-15

(DFPBDE)	NA	53			% Recovery	100		53	50 - 150%	PASS		
(FTBDE)	NA	177			% Recovery	100		177	50 - 150%	FAIL		R
PBDE028	NA	1.47	0.05	0.1	ng/wet g	2.26		65	60 - 140%	PASS		
PBDE047	NA	52.11	0.05	0.1	ng/wet g	73.3		71	60 - 140%	PASS		
PBDE049	NA	3.42	0.05	0.1	ng/wet g	4.01		85	60 - 140%	PASS		
PBDE066	NA	1.51	0.05	0.1	ng/wet g	1.85		82	60 - 140%	PASS		
PBDE099	NA	11.6	0.05	0.1	ng/wet g	19.2		60	60 - 140%	PASS		
PBDE100	NA	10.3	0.05	0.1	ng/wet g	17.1		60	60 - 140%	PASS		
PBDE153	NA	2.44	0.05	0.1	ng/wet g	3.83		64	60 - 140%	PASS		
PBDE154	NA	4.85	0.05	0.1	ng/wet g	6.88		70	60 - 140%	PASS		

Sample ID: 31955-CRM1

QAQC CRM - SRM 1947

Matrix: Tissue

Sampled:

Received:

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 01-Jul-15

(DFPBDE)	NA	69			% Recovery	100		69	50 - 150%	PASS		
(FTBDE)	NA	128			% Recovery	100		128	50 - 150%	PASS		
PBDE028	NA	1.65	0.05	0.1	ng/wet g	2.26		73	60 - 140%	PASS		
PBDE047	NA	64.44	0.05	0.1	ng/wet g	73.3		88	60 - 140%	PASS		
PBDE049	NA	3.63	0.05	0.1	ng/wet g	4.01		91	60 - 140%	PASS		
PBDE066	NA	1.41	0.05	0.1	ng/wet g	1.85		76	60 - 140%	PASS		



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	
PBDE099	NA	13.67	0.05	0.1	ng/wet g	19.2		71 60 - 140%	PASS	
PBDE100	NA	11.92	0.05	0.1	ng/wet g	17.1		70 60 - 140%	PASS	
PBDE153	NA	2.83	0.05	0.1	ng/wet g	3.83		74 60 - 140%	PASS	
PBDE154	NA	6.31	0.05	0.1	ng/wet g	6.88		92 60 - 140%	PASS	

Sample ID: 31966-MS1

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 17-Jun-15

(DFPBDE)	NA	114			% Recovery	100	0	114 50 - 150%	PASS	
(FTBDE)	NA	80			% Recovery	100	0	80 50 - 150%	PASS	
PBDE017	NA	31.05	0.05	0.1	ng/dry g	40.04	0	78 50 - 150%	PASS	
PBDE028	NA	38.59	0.05	0.1	ng/dry g	40.04	0	96 50 - 150%	PASS	
PBDE047	NA	46.88	0.05	0.1	ng/dry g	40.04	2.5	111 50 - 150%	PASS	
PBDE049	NA	44.71	0.05	0.1	ng/dry g	40.04	0	112 50 - 150%	PASS	
PBDE066	NA	47.9	0.05	0.1	ng/dry g	40.04	0	120 50 - 150%	PASS	
PBDE071	NA	40.12	0.05	0.1	ng/dry g	40.04	0	100 50 - 150%	PASS	
PBDE085	NA	50.15	0.05	0.1	ng/dry g	40.04	0	125 50 - 150%	PASS	
PBDE099	NA	48.47	0.05	0.1	ng/dry g	40.04	1.21	118 50 - 150%	PASS	
PBDE100	NA	49.65	0.05	0.1	ng/dry g	40.04	0.74	122 50 - 150%	PASS	
PBDE138	NA	49.83	0.05	0.1	ng/dry g	40.04	0	124 50 - 150%	PASS	
PBDE153	NA	48.72	0.05	0.1	ng/dry g	40.04	0.24	121 50 - 150%	PASS	
PBDE154	NA	45.93	0.05	0.1	ng/dry g	40.04	0	115 50 - 150%	PASS	
PBDE183	NA	49.65	0.05	0.1	ng/dry g	40.04	0	124 50 - 150%	PASS	
PBDE190	NA	44.73	0.05	0.1	ng/dry g	40.04	0	112 50 - 150%	PASS	
PBDE209	NA	158.45	0.05	0.1	ng/dry g	200.2	0	79 50 - 150%	PASS	

Sample ID: 31966-MS2

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 02-Jul-15

(DFPBDE)	NA	111			% Recovery	100	0	111 50 - 150%	PASS	3 30 PASS
(FTBDE)	NA	103			% Recovery	100	0	103 50 - 150%	PASS	25 30 PASS
PBDE017	NA	36.85	0.05	0.1	ng/dry g	40.82	0	90 50 - 150%	PASS	14 25 PASS
PBDE028	NA	43.28	0.05	0.1	ng/dry g	40.82	0	106 50 - 150%	PASS	10 25 PASS
PBDE047	NA	52.41	0.05	0.1	ng/dry g	40.82	2.5	122 50 - 150%	PASS	9 25 PASS



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE	
								%	LIMITS	%	LIMITS		
PBDE049	NA	45.73	0.05	0.1	ng/dry g	40.82	0	112	50 - 150%	PASS	0	25	PASS
PBDE066	NA	47.75	0.05	0.1	ng/dry g	40.82	0	117	50 - 150%	PASS	3	25	PASS
PBDE071	NA	35.95	0.05	0.1	ng/dry g	40.82	0	88	50 - 150%	PASS	13	25	PASS
PBDE085	NA	50.8	0.05	0.1	ng/dry g	40.82	0	124	50 - 150%	PASS	1	25	PASS
PBDE099	NA	51.04	0.05	0.1	ng/dry g	40.82	1.21	122	50 - 150%	PASS	3	25	PASS
PBDE100	NA	47.24	0.05	0.1	ng/dry g	40.82	0.74	114	50 - 150%	PASS	7	25	PASS
PBDE138	NA	48.92	0.05	0.1	ng/dry g	40.82	0	120	50 - 150%	PASS	3	25	PASS
PBDE153	NA	48.65	0.05	0.1	ng/dry g	40.82	0.24	119	50 - 150%	PASS	2	25	PASS
PBDE154	NA	49.59	0.05	0.1	ng/dry g	40.82	0	121	50 - 150%	PASS	5	25	PASS
PBDE183	NA	44.06	0.05	0.1	ng/dry g	40.82	0	108	50 - 150%	PASS	14	25	PASS
PBDE190	NA	41.28	0.05	0.1	ng/dry g	40.82	0	101	50 - 150%	PASS	10	25	PASS
PBDE209	NA	142.41	0.05	0.1	ng/dry g	204.1	0	70	50 - 150%	PASS	12	25	PASS

Sample ID: 31966-R2

SWHB-27-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 23-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 18-Jun-15

(DFPBDE)	NA	100			% Recovery	100		100	50 - 150%	PASS	8	30	PASS	
(FTBDE)	NA	97			% Recovery	100		97	50 - 150%	PASS	4	30	PASS	
PBDE017	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE028	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE047	NA	2.88	0.05	0.1	ng/dry g						30	30	PASS	H,Q
PBDE049	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE066	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE071	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE085	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE099	NA	1.12	0.05	0.1	ng/dry g						16	25	PASS	H
PBDE100	NA	0.54	0.05	0.1	ng/dry g						54	25	FAIL	H,NH
PBDE138	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE153	NA	0.2	0.05	0.1	ng/dry g						33	25	FAIL	H,SL
PBDE154	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE183	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE190	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H
PBDE209	NA	ND	0.05	0.1	ng/dry g						0	25	PASS	H



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CA ELAP #2769

PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31980-MS1

SWHB-01-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	83			% Recovery	100	0	83	50 - 150%	PASS	
(FTBDE)	NA	94			% Recovery	100	0	94	50 - 150%	PASS	
PBDE017	NA	40.97	0.05	0.1	ng/dry g	42.64	0	96	50 - 150%	PASS	
PBDE028	NA	38.47	0.05	0.1	ng/dry g	42.64	0	90	50 - 150%	PASS	
PBDE047	NA	39.48	0.05	0.1	ng/dry g	42.64	1.33	89	50 - 150%	PASS	
PBDE049	NA	35.42	0.05	0.1	ng/dry g	42.64	0	83	50 - 150%	PASS	
PBDE066	NA	39.59	0.05	0.1	ng/dry g	42.64	0	93	50 - 150%	PASS	
PBDE071	NA	41.7	0.05	0.1	ng/dry g	42.64	0	98	50 - 150%	PASS	
PBDE085	NA	33.16	0.05	0.1	ng/dry g	42.64	0	78	50 - 150%	PASS	
PBDE099	NA	35.38	0.05	0.1	ng/dry g	42.64	0	83	50 - 150%	PASS	
PBDE100	NA	35.12	0.05	0.1	ng/dry g	42.64	0	82	50 - 150%	PASS	
PBDE138	NA	26.53	0.05	0.1	ng/dry g	42.64	0	62	50 - 150%	PASS	
PBDE153	NA	27.55	0.05	0.1	ng/dry g	42.64	0.34	64	50 - 150%	PASS	
PBDE154	NA	30.47	0.05	0.1	ng/dry g	42.64	0.53	70	50 - 150%	PASS	
PBDE183	NA	23.4	0.05	0.1	ng/dry g	42.64	0	55	50 - 150%	PASS	
PBDE190	NA	21.33	0.05	0.1	ng/dry g	42.64	0	50	50 - 150%	PASS	
PBDE209	NA	47.01	0.05	0.1	ng/dry g	213.2	0	22	50 - 150%	FAIL	M

Sample ID: 31980-MS2

SWHB-01-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	106			% Recovery	100	0	106	50 - 150%	PASS	24	30	PASS
(FTBDE)	NA	102			% Recovery	100	0	102	50 - 150%	PASS	8	30	PASS
PBDE017	NA	38.76	0.05	0.1	ng/dry g	43.44	0	89	50 - 150%	PASS	8	25	PASS
PBDE028	NA	40.58	0.05	0.1	ng/dry g	43.44	0	93	50 - 150%	PASS	3	25	PASS
PBDE047	NA	44.14	0.05	0.1	ng/dry g	43.44	1.33	99	50 - 150%	PASS	11	25	PASS
PBDE049	NA	42.19	0.05	0.1	ng/dry g	43.44	0	97	50 - 150%	PASS	16	25	PASS
PBDE066	NA	47.35	0.05	0.1	ng/dry g	43.44	0	109	50 - 150%	PASS	16	25	PASS
PBDE071	NA	43	0.05	0.1	ng/dry g	43.44	0	99	50 - 150%	PASS	1	25	PASS
PBDE085	NA	41.45	0.05	0.1	ng/dry g	43.44	0	95	50 - 150%	PASS	20	25	PASS



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE099	NA	43.6	0.05	0.1	ng/dry g	43.44	0	100	50 - 150%	PASS	19 25	PASS
PBDE100	NA	41.78	0.05	0.1	ng/dry g	43.44	0	96	50 - 150%	PASS	16 25	PASS
PBDE138	NA	32.65	0.05	0.1	ng/dry g	43.44	0	75	50 - 150%	PASS	19 25	PASS
PBDE153	NA	33.93	0.05	0.1	ng/dry g	43.44	0.34	77	50 - 150%	PASS	18 25	PASS
PBDE154	NA	38.78	0.05	0.1	ng/dry g	43.44	0.53	88	50 - 150%	PASS	23 25	PASS
PBDE183	NA	28.28	0.05	0.1	ng/dry g	43.44	0	65	50 - 150%	PASS	17 25	PASS
PBDE190	NA	26.64	0.05	0.1	ng/dry g	43.44	0	61	50 - 150%	PASS	20 25	PASS
PBDE209	NA	85.95	0.05	0.1	ng/dry g	217.2	0	40	50 - 150%	FAIL	58 25	FAIL M

Sample ID: 31980-R2

SWHB-01-SBB Spotted sand bass, whole Matrix: Tissue

Sampled: 22-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 11-Jun-15

(DFPBDE)	NA	78			% Recovery	100		78	50 - 150%	PASS	5 30	PASS
(FTBDE)	NA	120			% Recovery	100		120	50 - 150%	PASS	12 30	PASS
PBDE017	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE028	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE047	NA	1.24	0.05	0.1	ng/dry g						14 25	PASS H
PBDE049	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE066	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE071	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE085	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE099	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE100	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE138	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE153	NA	0.3	0.05	0.1	ng/dry g						24 25	PASS H
PBDE154	NA	0.41	0.05	0.1	ng/dry g						47 25	FAIL H,SL
PBDE183	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE190	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE209	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H

Sample ID: 31993-MS1

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 29-Jun-15

(DFPBDE)	NA	109			% Recovery	100	0	109	50 - 150%	PASS		
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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
(FTBDE)	NA	84			% Recovery	100	0	84	50 - 150%	PASS		
PBDE017	NA	1344.51	0.05	0.1	ng/dry g	1393.31	0	96	50 - 150%	PASS		
PBDE028	NA	1380.26	0.05	0.1	ng/dry g	1393.31	0	99	50 - 150%	PASS		
PBDE047	NA	1441.83	0.05	0.1	ng/dry g	1393.31	20.57	102	50 - 150%	PASS		
PBDE049	NA	1295.33	0.05	0.1	ng/dry g	1393.31	0	93	50 - 150%	PASS		
PBDE066	NA	1473.97	0.05	0.1	ng/dry g	1393.31	0	106	50 - 150%	PASS		
PBDE071	NA	1492.85	0.05	0.1	ng/dry g	1393.31	0	107	50 - 150%	PASS		
PBDE085	NA	1456.1	0.05	0.1	ng/dry g	1393.31	0	105	50 - 150%	PASS		
PBDE099	NA	1501.21	0.05	0.1	ng/dry g	1393.31	3.19	108	50 - 150%	PASS		
PBDE100	NA	1513.32	0.05	0.1	ng/dry g	1393.31	8.64	108	50 - 150%	PASS		
PBDE138	NA	1455.48	0.05	0.1	ng/dry g	1393.31	0	104	50 - 150%	PASS		
PBDE153	NA	1447.64	0.05	0.1	ng/dry g	1393.31	0	104	50 - 150%	PASS		
PBDE154	NA	1484.77	0.05	0.1	ng/dry g	1393.31	0	107	50 - 150%	PASS		
PBDE183	NA	1401.02	0.05	0.1	ng/dry g	1393.31	0	101	50 - 150%	PASS		
PBDE190	NA	1367.43	0.05	0.1	ng/dry g	1393.31	0	98	50 - 150%	PASS		
PBDE209	NA	7576.93	0.05	0.1	ng/dry g	6966.55	0	109	50 - 150%	PASS		

Sample ID: 31993-MS2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 29-Jun-15

(DFPBDE)	NA	114			% Recovery	100	0	114	50 - 150%	PASS	4	30	PASS
(FTBDE)	NA	83			% Recovery	100	0	83	50 - 150%	PASS	1	30	PASS
PBDE017	NA	1195.75	0.05	0.1	ng/dry g	1210.91	0	99	50 - 150%	PASS	3	25	PASS
PBDE028	NA	1203.26	0.05	0.1	ng/dry g	1210.91	0	99	50 - 150%	PASS	0	25	PASS
PBDE047	NA	1264.29	0.05	0.1	ng/dry g	1210.91	20.57	103	50 - 150%	PASS	1	25	PASS
PBDE049	NA	1154.83	0.05	0.1	ng/dry g	1210.91	0	95	50 - 150%	PASS	2	25	PASS
PBDE066	NA	1297.69	0.05	0.1	ng/dry g	1210.91	0	107	50 - 150%	PASS	1	25	PASS
PBDE071	NA	1347.59	0.05	0.1	ng/dry g	1210.91	0	111	50 - 150%	PASS	4	25	PASS
PBDE085	NA	1394.9	0.05	0.1	ng/dry g	1210.91	0	115	50 - 150%	PASS	9	25	PASS
PBDE099	NA	1323.01	0.05	0.1	ng/dry g	1210.91	3.19	109	50 - 150%	PASS	1	25	PASS
PBDE100	NA	1371.22	0.05	0.1	ng/dry g	1210.91	8.64	113	50 - 150%	PASS	5	25	PASS
PBDE138	NA	1457.16	0.05	0.1	ng/dry g	1210.91	0	120	50 - 150%	PASS	14	25	PASS
PBDE153	NA	1386.92	0.05	0.1	ng/dry g	1210.91	0	115	50 - 150%	PASS	10	25	PASS



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE154	NA	1362.76	0.05	0.1	ng/dry g	1210.91	0	113	50 - 150%	PASS	5 25	PASS
PBDE183	NA	1375.52	0.05	0.1	ng/dry g	1210.91	0	114	50 - 150%	PASS	12 25	PASS
PBDE190	NA	1388.6	0.05	0.1	ng/dry g	1210.91	0	115	50 - 150%	PASS	16 25	PASS
PBDE209	NA	8205.63	0.05	0.1	ng/dry g	6054.55	0	136	50 - 150%	PASS	22 25	PASS

Sample ID: 31993-R2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 30-Jun-15

(DFPBDE)	NA	108			% Recovery	100		108	50 - 150%	PASS	5 30	PASS
(FTBDE)	NA	98			% Recovery	100		98	50 - 150%	PASS	1 30	PASS
PBDE017	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE028	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE047	NA	12.68	0.05	0.1	ng/dry g						77 25	FAIL H,NH
PBDE049	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE066	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE071	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE085	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE099	NA	2.85	0.05	0.1	ng/dry g						21 25	PASS H
PBDE100	NA	8.09	0.05	0.1	ng/dry g						13 25	PASS H
PBDE138	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE153	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE154	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE183	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE190	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H
PBDE209	NA	ND	0.05	0.1	ng/dry g						0 25	PASS H

Sample ID: 32006-MS1

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 01-Jul-15

(DFPBDE)	NA	94			% Recovery	100	0	94	50 - 150%	PASS		
(FTBDE)	NA	79			% Recovery	100	0	79	50 - 150%	PASS		
PBDE017	NA	43.33	0.05	0.1	ng/dry g	41.23	0	105	50 - 150%	PASS		
PBDE028	NA	44.93	0.05	0.1	ng/dry g	41.23	0	109	50 - 150%	PASS		
PBDE047	NA	42.45	0.05	0.1	ng/dry g	41.23	0	103	50 - 150%	PASS		



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE
								%	LIMITS	%	LIMITS	
PBDE049	NA	58.17	0.05	0.1	ng/dry g	41.23	0	141	50 - 150%	PASS		
PBDE066	NA	44.94	0.05	0.1	ng/dry g	41.23	0	109	50 - 150%	PASS		
PBDE071	NA	50.22	0.05	0.1	ng/dry g	41.23	0	122	50 - 150%	PASS		
PBDE085	NA	47.33	0.05	0.1	ng/dry g	41.23	0	115	50 - 150%	PASS		
PBDE099	NA	43.41	0.05	0.1	ng/dry g	41.23	0.26	105	50 - 150%	PASS		
PBDE100	NA	43.88	0.05	0.1	ng/dry g	41.23	0	106	50 - 150%	PASS		
PBDE138	NA	49.11	0.05	0.1	ng/dry g	41.23	0	119	50 - 150%	PASS		
PBDE153	NA	46.23	0.05	0.1	ng/dry g	41.23	0	112	50 - 150%	PASS		
PBDE154	NA	44.71	0.05	0.1	ng/dry g	41.23	0	108	50 - 150%	PASS		
PBDE183	NA	40.55	0.05	0.1	ng/dry g	41.23	0	98	50 - 150%	PASS		
PBDE190	NA	38.49	0.05	0.1	ng/dry g	41.23	0	93	50 - 150%	PASS		
PBDE209	NA	248.16	0.05	0.1	ng/dry g	206.15	1.44	120	50 - 150%	PASS		

Sample ID: 32006-MS2

SWHB-15-M Mollusks

Matrix: Tissue

Sampled: 21-Apr-14

Received: 21-May-15

Method: EPA 8270D-NCI

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 01-Jul-15

(DFPBDE)	NA	102			% Recovery	100	0	102	50 - 150%	PASS	8	30	PASS	
(FTBDE)	NA	86			% Recovery	100	0	86	50 - 150%	PASS	8	30	PASS	
PBDE017	NA	41.75	0.05	0.1	ng/dry g	37.72	0	111	50 - 150%	PASS	6	25	PASS	
PBDE028	NA	42.18	0.05	0.1	ng/dry g	37.72	0	112	50 - 150%	PASS	3	25	PASS	
PBDE047	NA	41.67	0.05	0.1	ng/dry g	37.72	0	110	50 - 150%	PASS	7	25	PASS	
PBDE049	NA	63.24	0.05	0.1	ng/dry g	37.72	0	168	50 - 150%	FAIL	17	25	PASS	M
PBDE066	NA	46.1	0.05	0.1	ng/dry g	37.72	0	122	50 - 150%	PASS	11	25	PASS	
PBDE071	NA	52.38	0.05	0.1	ng/dry g	37.72	0	139	50 - 150%	PASS	13	25	PASS	
PBDE085	NA	47.25	0.05	0.1	ng/dry g	37.72	0	125	50 - 150%	PASS	8	25	PASS	
PBDE099	NA	45.55	0.05	0.1	ng/dry g	37.72	0.26	120	50 - 150%	PASS	13	25	PASS	
PBDE100	NA	47.27	0.05	0.1	ng/dry g	37.72	0	125	50 - 150%	PASS	16	25	PASS	
PBDE138	NA	47.36	0.05	0.1	ng/dry g	37.72	0	126	50 - 150%	PASS	6	25	PASS	
PBDE153	NA	45.55	0.05	0.1	ng/dry g	37.72	0	121	50 - 150%	PASS	8	25	PASS	
PBDE154	NA	48.15	0.05	0.1	ng/dry g	37.72	0	128	50 - 150%	PASS	17	25	PASS	
PBDE183	NA	47.12	0.05	0.1	ng/dry g	37.72	0	125	50 - 150%	PASS	24	25	PASS	
PBDE190	NA	47.56	0.05	0.1	ng/dry g	37.72	0	126	50 - 150%	PASS	30	30	PASS	Q
PBDE209	NA	235.88	0.05	0.1	ng/dry g	188.6	1.44	124	50 - 150%	PASS	3	25	PASS	



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PolyBrominated Diphenyl Ethers

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE	
Sample ID: 32006-R2		SWHB-15-M Mollusks			Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
		Method: EPA 8270D-NCI			Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 02-Jul-15		
(DFPBDE)	NA	106			% Recovery	100		106 50 - 150% PASS	11 30 PASS		
(FTBDE)	NA	94			% Recovery	100		94 50 - 150% PASS	9 30 PASS		
PBDE017	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE028	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE047	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE049	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE066	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE071	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE085	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE099	NA	0.31	0.05	0.1	ng/dry g				38 25 FAIL	H,SL	
PBDE100	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE138	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE153	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE154	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE183	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE190	NA	ND	0.05	0.1	ng/dry g				0 25 PASS	H	
PBDE209	NA	2.19	0.05	0.1	ng/dry g				105 25 FAIL	H,NH	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31944-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7114

Prepared: 27-May-15

Analyzed: 08-Jun-15

(d10-Acenaphthene)	NA	58			% Recovery	100		58 50 - 150%	PASS	
(d10-Phenanthrene)	NA	65			% Recovery	100		65 50 - 150%	PASS	
(d12-Chrysene)	NA	78			% Recovery	100		78 50 - 150%	PASS	
(d8-Naphthalene)	NA	49			% Recovery	100		49 25 - 125%	PASS	
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31944-BS1		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:
Method: EPA 8270D		Batch ID: O-7114			Prepared: 27-May-15		Analyzed: 08-Jun-15			
(d10-Acenaphthene)	NA	52			% Recovery	100	0	52 50 - 150%	PASS	
(d10-Phenanthrene)	NA	64			% Recovery	100	0	64 50 - 150%	PASS	
(d12-Chrysene)	NA	88			% Recovery	100	0	88 50 - 150%	PASS	
(d8-Naphthalene)	NA	40			% Recovery	100	0	40 25 - 125%	PASS	
1-Methylnaphthalene	NA	528.1	1	5	ng/dry g	500	0	106 70 - 130%	PASS	
1-Methylphenanthrene	NA	501.3	1	5	ng/dry g	500	0	100 70 - 130%	PASS	
2,3,5-Trimethylnaphthalene	NA	380	1	5	ng/dry g	500	0	76 70 - 130%	PASS	
2,6-Dimethylnaphthalene	NA	332	1	5	ng/dry g	500	0	66 50 - 150%	PASS	Q
2-Methylnaphthalene	NA	303.1	1	5	ng/dry g	500	0	61 50 - 150%	PASS	Q
Acenaphthene	NA	331.2	1	5	ng/dry g	500	0	66 50 - 150%	PASS	Q
Acenaphthylene	NA	357	1	5	ng/dry g	500	0	71 70 - 130%	PASS	
Anthracene	NA	416	1	5	ng/dry g	500	0	83 70 - 130%	PASS	
Benz[a]anthracene	NA	682.1	1	5	ng/dry g	500	0	136 50 - 150%	PASS	Q
Benzo[a]pyrene	NA	655.8	1	5	ng/dry g	500	0	131 50 - 150%	PASS	Q
Benzo[b]fluoranthene	NA	734.5	1	5	ng/dry g	500	0	147 50 - 150%	PASS	Q
Benzo[e]pyrene	NA	560.8	1	5	ng/dry g	500	0	112 70 - 130%	PASS	
Benzo[g,h,i]perylene	NA	520	1	5	ng/dry g	500	0	104 70 - 130%	PASS	
Benzo[k]fluoranthene	NA	541	1	5	ng/dry g	500	0	108 70 - 130%	PASS	
Biphenyl	NA	315.3	1	5	ng/dry g	500	0	63 50 - 150%	PASS	Q
Chrysene	NA	523.5	1	5	ng/dry g	500	0	105 70 - 130%	PASS	
Dibenz[a,h]anthracene	NA	446	1	5	ng/dry g	500	0	89 70 - 130%	PASS	
Dibenzothiophene	NA	392	1	5	ng/dry g	500	0	78 70 - 130%	PASS	
Fluoranthene	NA	520.7	1	5	ng/dry g	500	0	104 70 - 130%	PASS	
Fluorene	NA	388.3	1	5	ng/dry g	500	0	78 70 - 130%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	401	1	5	ng/dry g	500	0	80 70 - 130%	PASS	
Naphthalene	NA	251.8	1	5	ng/dry g	500	0	50 25 - 125%	PASS	Q
Perylene	NA	541.3	1	5	ng/dry g	500	0	108 70 - 130%	PASS	
Phenanthrene	NA	424.8	1	5	ng/dry g	500	0	85 70 - 130%	PASS	
Pyrene	NA	525.6	1	5	ng/dry g	500	0	105 70 - 130%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31944-BS2	QAQC Procedural Blank			Matrix: DI Water			Sampled:			Received:				
	Method: EPA 8270D			Batch ID: O-7114			Prepared: 27-May-15			Analyzed: 08-Jun-15				
(d10-Acenaphthene)	NA	51			% Recovery	100	0	51	50 - 150%	PASS	2	30	PASS	
(d10-Phenanthrene)	NA	64			% Recovery	100	0	64	50 - 150%	PASS	0	30	PASS	
(d12-Chrysene)	NA	90			% Recovery	100	0	90	50 - 150%	PASS	2	30	PASS	
(d8-Naphthalene)	NA	40			% Recovery	100	0	40	25 - 125%	PASS	0	30	PASS	
1-Methylnaphthalene	NA	478	1	5	ng/dry g	500	0	96	70 - 130%	PASS	10	25	PASS	
1-Methylphenanthrene	NA	506.7	1	5	ng/dry g	500	0	101	70 - 130%	PASS	1	25	PASS	
2,3,5-Trimethylnaphthalene	NA	375.2	1	5	ng/dry g	500	0	75	70 - 130%	PASS	1	25	PASS	
2,6-Dimethylnaphthalene	NA	331.7	1	5	ng/dry g	500	0	66	50 - 150%	PASS	0	30	PASS	Q
2-Methylnaphthalene	NA	300.7	1	5	ng/dry g	500	0	60	50 - 150%	PASS	2	30	PASS	Q
Acenaphthene	NA	325.2	1	5	ng/dry g	500	0	65	50 - 150%	PASS	2	30	PASS	Q
Acenaphthylene	NA	356	1	5	ng/dry g	500	0	71	70 - 130%	PASS	0	25	PASS	
Anthracene	NA	422	1	5	ng/dry g	500	0	84	70 - 130%	PASS	1	25	PASS	
Benz[a]anthracene	NA	691	1	5	ng/dry g	500	0	138	50 - 150%	PASS	1	30	PASS	Q
Benzo[a]pyrene	NA	634.7	1	5	ng/dry g	500	0	127	70 - 130%	PASS	3	25	PASS	
Benzo[b]fluoranthene	NA	749.4	1	5	ng/dry g	500	0	150	50 - 150%	PASS	2	30	PASS	Q
Benzo[e]pyrene	NA	584.1	1	5	ng/dry g	500	0	117	70 - 130%	PASS	4	25	PASS	
Benzo[g,h,i]perylene	NA	518.2	1	5	ng/dry g	500	0	104	70 - 130%	PASS	0	25	PASS	
Benzo[k]fluoranthene	NA	546.4	1	5	ng/dry g	500	0	109	70 - 130%	PASS	1	25	PASS	
Biphenyl	NA	310	1	5	ng/dry g	500	0	62	50 - 150%	PASS	2	30	PASS	Q
Chrysene	NA	537.5	1	5	ng/dry g	500	0	108	70 - 130%	PASS	3	25	PASS	
Dibenz[a,h]anthracene	NA	448	1	5	ng/dry g	500	0	90	70 - 130%	PASS	1	25	PASS	
Dibenzothiophene	NA	398.6	1	5	ng/dry g	500	0	80	70 - 130%	PASS	3	25	PASS	
Fluoranthene	NA	525.8	1	5	ng/dry g	500	0	105	70 - 130%	PASS	1	25	PASS	
Fluorene	NA	391.3	1	5	ng/dry g	500	0	78	70 - 130%	PASS	0	25	PASS	
Indeno[1,2,3-c,d]pyrene	NA	397	1	5	ng/dry g	500	0	79	70 - 130%	PASS	1	25	PASS	
Naphthalene	NA	243.5	1	5	ng/dry g	500	0	49	25 - 125%	PASS	2	30	PASS	Q
Perylene	NA	542.7	1	5	ng/dry g	500	0	109	70 - 130%	PASS	1	25	PASS	
Phenanthrene	NA	419.9	1	5	ng/dry g	500	0	84	70 - 130%	PASS	1	25	PASS	
Pyrene	NA	539.5	1	5	ng/dry g	500	0	108	70 - 130%	PASS	3	25	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY	PRECISION	QA CODE
						LEVEL	RESULT	% LIMITS	% LIMITS	

Sample ID: 31945-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7118

Prepared: 29-May-15

Analyzed: 12-Jun-15

(d10-Acenaphthene)	NA	68			% Recovery	100	68	50 - 150%	PASS	
(d10-Phenanthrene)	NA	76			% Recovery	100	76	50 - 150%	PASS	
(d12-Chrysene)	NA	91			% Recovery	100	91	50 - 150%	PASS	
(d8-Naphthalene)	NA	55			% Recovery	100	55	25 - 125%	PASS	
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31945-BS1		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:
		Method: EPA 8270D			Batch ID: O-7118			Prepared: 29-May-15		Analyzed: 12-Jun-15
(d10-Acenaphthene)	NA	95			% Recovery	100	0	95 50 - 150%	PASS	
(d10-Phenanthrene)	NA	97			% Recovery	100	0	97 50 - 150%	PASS	
(d12-Chrysene)	NA	111			% Recovery	100	0	111 50 - 150%	PASS	
(d8-Naphthalene)	NA	89			% Recovery	100	0	89 25 - 125%	PASS	
1-Methylnaphthalene	NA	266	1	5	ng/dry g	500	0	53 50 - 150%	PASS	Q
1-Methylphenanthrene	NA	496.8	1	5	ng/dry g	500	0	99 70 - 130%	PASS	
2,3,5-Trimethylnaphthalene	NA	465.3	1	5	ng/dry g	500	0	93 70 - 130%	PASS	
2,6-Dimethylnaphthalene	NA	454.6	1	5	ng/dry g	500	0	91 70 - 130%	PASS	
2-Methylnaphthalene	NA	441.6	1	5	ng/dry g	500	0	88 70 - 130%	PASS	
Acenaphthene	NA	467.9	1	5	ng/dry g	500	0	94 70 - 130%	PASS	
Acenaphthylene	NA	454.8	1	5	ng/dry g	500	0	91 70 - 130%	PASS	
Anthracene	NA	483.8	1	5	ng/dry g	500	0	97 70 - 130%	PASS	
Benz[a]anthracene	NA	533.4	1	5	ng/dry g	500	0	107 70 - 130%	PASS	
Benzo[a]pyrene	NA	551.3	1	5	ng/dry g	500	0	110 70 - 130%	PASS	
Benzo[b]fluoranthene	NA	544.4	1	5	ng/dry g	500	0	109 70 - 130%	PASS	
Benzo[e]pyrene	NA	545.6	1	5	ng/dry g	500	0	109 70 - 130%	PASS	
Benzo[g,h,i]perylene	NA	493.3	1	5	ng/dry g	500	0	99 70 - 130%	PASS	
Benzo[k]fluoranthene	NA	552.6	1	5	ng/dry g	500	0	111 70 - 130%	PASS	
Biphenyl	NA	455.1	1	5	ng/dry g	500	0	91 70 - 130%	PASS	
Chrysene	NA	533.9	1	5	ng/dry g	500	0	107 70 - 130%	PASS	
Dibenz[a,h]anthracene	NA	510.3	1	5	ng/dry g	500	0	102 70 - 130%	PASS	
Dibenzothiophene	NA	485.9	1	5	ng/dry g	500	0	97 70 - 130%	PASS	
Fluoranthene	NA	502.8	1	5	ng/dry g	500	0	101 70 - 130%	PASS	
Fluorene	NA	473.7	1	5	ng/dry g	500	0	95 70 - 130%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	480.2	1	5	ng/dry g	500	0	96 70 - 130%	PASS	
Naphthalene	NA	445.8	1	5	ng/dry g	500	0	89 70 - 130%	PASS	
Perylene	NA	550.5	1	5	ng/dry g	500	0	110 70 - 130%	PASS	
Phenanthrene	NA	489.4	1	5	ng/dry g	500	0	98 70 - 130%	PASS	
Pyrene	NA	510.8	1	5	ng/dry g	500	0	102 70 - 130%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE		
								LIMITS	LIMITS			
Sample ID: 31945-BS2		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:		
		Method: EPA 8270D			Batch ID: O-7118			Prepared: 29-May-15		Analyzed: 12-Jun-15		
(d10-Acenaphthene)	NA	58			% Recovery	100	0	58 50 - 150%	PASS	48 30	FAIL	2
(d10-Phenanthrene)	NA	64			% Recovery	100	0	64 50 - 150%	PASS	41 30	FAIL	2
(d12-Chrysene)	NA	90			% Recovery	100	0	90 50 - 150%	PASS	21 30	PASS	
(d8-Naphthalene)	NA	50			% Recovery	100	0	50 25 - 125%	PASS	56 30	FAIL	2
1-Methylnaphthalene	NA	256.8	1	5	ng/dry g	500	0	51 50 - 150%	PASS	4 30	PASS	Q
1-Methylphenanthrene	NA	353.3	1	5	ng/dry g	500	0	71 70 - 130%	PASS	33 25	FAIL	2
2,3,5-Trimethylnaphthalene	NA	296.6	1	5	ng/dry g	500	0	59 50 - 150%	PASS	45 30	FAIL	Q,2
2,6-Dimethylnaphthalene	NA	273.6	1	5	ng/dry g	500	0	55 50 - 150%	PASS	49 30	FAIL	Q,2
2-Methylnaphthalene	NA	261.8	1	5	ng/dry g	500	0	52 50 - 150%	PASS	51 30	FAIL	Q,2
Acenaphthene	NA	282.2	1	5	ng/dry g	500	0	56 50 - 150%	PASS	51 30	FAIL	Q,2
Acenaphthylene	NA	277.6	1	5	ng/dry g	500	0	56 50 - 150%	PASS	48 30	FAIL	Q,2
Anthracene	NA	329.6	1	5	ng/dry g	500	0	66 50 - 150%	PASS	38 30	FAIL	Q,2
Benz[a]anthracene	NA	435.6	1	5	ng/dry g	500	0	87 70 - 130%	PASS	21 25	PASS	
Benzo[a]pyrene	NA	448.9	1	5	ng/dry g	500	0	90 70 - 130%	PASS	20 25	PASS	
Benzo[b]fluoranthene	NA	461.6	1	5	ng/dry g	500	0	92 70 - 130%	PASS	17 25	PASS	
Benzo[e]pyrene	NA	458.1	1	5	ng/dry g	500	0	92 70 - 130%	PASS	17 25	PASS	
Benzo[g,h,i]perylene	NA	485	1	5	ng/dry g	500	0	97 70 - 130%	PASS	2 25	PASS	
Benzo[k]fluoranthene	NA	472.2	1	5	ng/dry g	500	0	94 70 - 130%	PASS	17 25	PASS	
Biphenyl	NA	277	1	5	ng/dry g	500	0	55 50 - 150%	PASS	49 30	FAIL	Q,2
Chrysene	NA	435.5	1	5	ng/dry g	500	0	87 70 - 130%	PASS	21 25	PASS	
Dibenz[a,h]anthracene	NA	496.1	1	5	ng/dry g	500	0	99 70 - 130%	PASS	3 25	PASS	
Dibenzothiophene	NA	306.7	1	5	ng/dry g	500	0	61 50 - 150%	PASS	46 30	FAIL	Q,2
Fluoranthene	NA	374.4	1	5	ng/dry g	500	0	75 50 - 150%	PASS	30 30	PASS	Q
Fluorene	NA	296.4	1	5	ng/dry g	500	0	59 50 - 150%	PASS	47 30	FAIL	Q,2
Indeno[1,2,3-c,d]pyrene	NA	474.3	1	5	ng/dry g	500	0	95 70 - 130%	PASS	1 25	PASS	
Naphthalene	NA	248.9	1	5	ng/dry g	500	0	50 25 - 125%	PASS	56 30	FAIL	Q,2
Perylene	NA	445.7	1	5	ng/dry g	500	0	89 70 - 130%	PASS	21 25	PASS	
Phenanthrene	NA	328.3	1	5	ng/dry g	500	0	66 50 - 150%	PASS	39 30	FAIL	Q,2
Pyrene	NA	378.3	1	5	ng/dry g	500	0	76 50 - 150%	PASS	29 30	PASS	Q



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY	PRECISION	QA CODE
						LEVEL	RESULT	% LIMITS	% LIMITS	

Sample ID: 31946-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 24-Jun-15

(d10-Acenaphthene)	NA	53			% Recovery	100	53	50 - 150%	PASS	
(d10-Phenanthrene)	NA	58			% Recovery	100	58	50 - 150%	PASS	
(d12-Chrysene)	NA	73			% Recovery	100	73	50 - 150%	PASS	
(d8-Naphthalene)	NA	47			% Recovery	100	47	25 - 125%	PASS	
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31946-BS1		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:
		Method: EPA 8270D			Batch ID: O-7120			Prepared: 03-Jun-15		Analyzed: 24-Jun-15
(d10-Acenaphthene)	NA	80			% Recovery	100	0	80 50 - 150%	PASS	
(d10-Phenanthrene)	NA	84			% Recovery	100	0	84 50 - 150%	PASS	
(d12-Chrysene)	NA	93			% Recovery	100	0	93 50 - 150%	PASS	
(d8-Naphthalene)	NA	71			% Recovery	100	0	71 25 - 125%	PASS	
1-Methylnaphthalene	NA	376.9	1	5	ng/dry g	500	0	75 70 - 130%	PASS	
1-Methylphenanthrene	NA	459.7	1	5	ng/dry g	500	0	92 70 - 130%	PASS	
2,3,5-Trimethylnaphthalene	NA	419.2	1	5	ng/dry g	500	0	84 70 - 130%	PASS	
2,6-Dimethylnaphthalene	NA	397.8	1	5	ng/dry g	500	0	80 70 - 130%	PASS	
2-Methylnaphthalene	NA	382.3	1	5	ng/dry g	500	0	76 70 - 130%	PASS	
Acenaphthene	NA	397.2	1	5	ng/dry g	500	0	79 70 - 130%	PASS	
Acenaphthylene	NA	418.8	1	5	ng/dry g	500	0	84 70 - 130%	PASS	
Anthracene	NA	399.5	1	5	ng/dry g	500	0	80 70 - 130%	PASS	
Benz[a]anthracene	NA	444.2	1	5	ng/dry g	500	0	89 70 - 130%	PASS	
Benzo[a]pyrene	NA	441.5	1	5	ng/dry g	500	0	88 70 - 130%	PASS	
Benzo[b]fluoranthene	NA	505.9	1	5	ng/dry g	500	0	101 70 - 130%	PASS	
Benzo[e]pyrene	NA	512.5	1	5	ng/dry g	500	0	102 70 - 130%	PASS	
Benzo[g,h,i]perylene	NA	465.9	1	5	ng/dry g	500	0	93 70 - 130%	PASS	
Benzo[k]fluoranthene	NA	498.4	1	5	ng/dry g	500	0	100 70 - 130%	PASS	
Biphenyl	NA	386.5	1	5	ng/dry g	500	0	77 70 - 130%	PASS	
Chrysene	NA	426	1	5	ng/dry g	500	0	85 70 - 130%	PASS	
Dibenz[a,h]anthracene	NA	503.7	1	5	ng/dry g	500	0	101 70 - 130%	PASS	
Dibenzothiophene	NA	414	1	5	ng/dry g	500	0	83 70 - 130%	PASS	
Fluoranthene	NA	449	1	5	ng/dry g	500	0	90 70 - 130%	PASS	
Fluorene	NA	415	1	5	ng/dry g	500	0	83 70 - 130%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	476.4	1	5	ng/dry g	500	0	95 70 - 130%	PASS	
Naphthalene	NA	363.2	1	5	ng/dry g	500	0	73 70 - 130%	PASS	
Perylene	NA	490.2	1	5	ng/dry g	500	0	98 70 - 130%	PASS	
Phenanthrene	NA	432.4	1	5	ng/dry g	500	0	86 70 - 130%	PASS	
Pyrene	NA	444.2	1	5	ng/dry g	500	0	89 70 - 130%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODE		
								%	LIMITS	%	LIMITS			
Sample ID: 31946-BS2		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:				
		Method: EPA 8270D			Batch ID: O-7120			Prepared: 03-Jun-15		Analyzed: 24-Jun-15				
(d10-Acenaphthene)	NA	85			% Recovery	100	0	85	50 - 150%	PASS	6	30	PASS	
(d10-Phenanthrene)	NA	90			% Recovery	100	0	90	50 - 150%	PASS	7	30	PASS	
(d12-Chrysene)	NA	116			% Recovery	100	0	116	50 - 150%	PASS	22	30	PASS	
(d8-Naphthalene)	NA	79			% Recovery	100	0	79	25 - 125%	PASS	11	30	PASS	
1-Methylnaphthalene	NA	418.9	1	5	ng/dry g	500	0	84	70 - 130%	PASS	11	25	PASS	
1-Methylphenanthrene	NA	487.6	1	5	ng/dry g	500	0	98	70 - 130%	PASS	6	25	PASS	
2,3,5-Trimethylnaphthalene	NA	455.5	1	5	ng/dry g	500	0	91	70 - 130%	PASS	8	25	PASS	
2,6-Dimethylnaphthalene	NA	433.5	1	5	ng/dry g	500	0	87	70 - 130%	PASS	8	25	PASS	
2-Methylnaphthalene	NA	421.2	1	5	ng/dry g	500	0	84	70 - 130%	PASS	10	25	PASS	
Acenaphthene	NA	430.2	1	5	ng/dry g	500	0	86	70 - 130%	PASS	8	25	PASS	
Acenaphthylene	NA	458.6	1	5	ng/dry g	500	0	92	70 - 130%	PASS	9	25	PASS	
Anthracene	NA	446.2	1	5	ng/dry g	500	0	89	70 - 130%	PASS	11	25	PASS	
Benzo[a]anthracene	NA	568.3	1	5	ng/dry g	500	0	114	70 - 130%	PASS	25	25	PASS	
Benzo[a]pyrene	NA	650	1	5	ng/dry g	500	0	130	70 - 130%	PASS	39	25	FAIL	2
Benzo[b]fluoranthene	NA	647	1	5	ng/dry g	500	0	129	70 - 130%	PASS	24	25	PASS	
Benzo[e]pyrene	NA	645	1	5	ng/dry g	500	0	129	70 - 130%	PASS	23	25	PASS	
Benzo[g,h,i]perylene	NA	484	1	5	ng/dry g	500	0	97	70 - 130%	PASS	4	25	PASS	
Benzo[k]fluoranthene	NA	641	1	5	ng/dry g	500	0	128	70 - 130%	PASS	25	25	PASS	
Biphenyl	NA	422.4	1	5	ng/dry g	500	0	84	70 - 130%	PASS	9	25	PASS	
Chrysene	NA	537.2	1	5	ng/dry g	500	0	107	70 - 130%	PASS	23	25	PASS	
Dibenz[a,h]anthracene	NA	515.1	1	5	ng/dry g	500	0	103	70 - 130%	PASS	2	25	PASS	
Dibenzothiophene	NA	435.4	1	5	ng/dry g	500	0	87	70 - 130%	PASS	5	25	PASS	
Fluoranthene	NA	501.6	1	5	ng/dry g	500	0	100	70 - 130%	PASS	11	25	PASS	
Fluorene	NA	447.2	1	5	ng/dry g	500	0	89	70 - 130%	PASS	7	25	PASS	
Indeno[1,2,3-c,d]pyrene	NA	494.8	1	5	ng/dry g	500	0	99	70 - 130%	PASS	4	25	PASS	
Naphthalene	NA	400.3	1	5	ng/dry g	500	0	80	70 - 130%	PASS	9	25	PASS	
Perylene	NA	631.7	1	5	ng/dry g	500	0	126	70 - 130%	PASS	25	25	PASS	
Phenanthrene	NA	469.6	1	5	ng/dry g	500	0	94	70 - 130%	PASS	9	25	PASS	
Pyrene	NA	501	1	5	ng/dry g	500	0	100	70 - 130%	PASS	12	25	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31947-B1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 27-Jun-15

(d10-Acenaphthene)	NA	82			% Recovery	100		82 50 - 150%	PASS	
(d10-Phenanthrene)	NA	92			% Recovery	100		92 50 - 150%	PASS	
(d12-Chrysene)	NA	120			% Recovery	100		120 50 - 150%	PASS	
(d8-Naphthalene)	NA	61			% Recovery	100		61 25 - 125%	PASS	
1-Methylnaphthalene	NA	ND	1	5	ng/dry g					
1-Methylphenanthrene	NA	ND	1	5	ng/dry g					
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g					
2,6-Dimethylnaphthalene	NA	ND	1	5	ng/dry g					
2-Methylnaphthalene	NA	ND	1	5	ng/dry g					
Acenaphthene	NA	ND	1	5	ng/dry g					
Acenaphthylene	NA	ND	1	5	ng/dry g					
Anthracene	NA	ND	1	5	ng/dry g					
Benz[a]anthracene	NA	ND	1	5	ng/dry g					
Benzo[a]pyrene	NA	ND	1	5	ng/dry g					
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g					
Benzo[e]pyrene	NA	ND	1	5	ng/dry g					
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g					
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g					
Biphenyl	NA	ND	1	5	ng/dry g					
Chrysene	NA	ND	1	5	ng/dry g					
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g					
Dibenzothiophene	NA	ND	1	5	ng/dry g					
Fluoranthene	NA	ND	1	5	ng/dry g					
Fluorene	NA	ND	1	5	ng/dry g					
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g					
Naphthalene	NA	ND	1	5	ng/dry g					
Perylene	NA	ND	1	5	ng/dry g					
Phenanthrene	NA	ND	1	5	ng/dry g					
Pyrene	NA	ND	1	5	ng/dry g					



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31947-BS1

QAQC Procedural Blank

Matrix: DI Water

Sampled:

Received:

Method: EPA 8270D

Batch ID: O-7122

Prepared: 01-Jun-15

Analyzed: 27-Jun-15

(d10-Acenaphthene)	NA	89			% Recovery	100	0	89	50 - 150%	PASS
(d10-Phenanthrene)	NA	95			% Recovery	100	0	95	50 - 150%	PASS
(d12-Chrysene)	NA	114			% Recovery	100	0	114	50 - 150%	PASS
(d8-Naphthalene)	NA	80			% Recovery	100	0	80	25 - 125%	PASS
1-Methylnaphthalene	NA	426.1	1	5	ng/dry g	500	0	85	70 - 130%	PASS
1-Methylphenanthrene	NA	485	1	5	ng/dry g	500	0	97	70 - 130%	PASS
2,3,5-Trimethylnaphthalene	NA	459.7	1	5	ng/dry g	500	0	92	70 - 130%	PASS
2,6-Dimethylnaphthalene	NA	442.7	1	5	ng/dry g	500	0	89	70 - 130%	PASS
2-Methylnaphthalene	NA	420.5	1	5	ng/dry g	500	0	84	70 - 130%	PASS
Acenaphthene	NA	445.6	1	5	ng/dry g	500	0	89	70 - 130%	PASS
Acenaphthylene	NA	454.8	1	5	ng/dry g	500	0	91	70 - 130%	PASS
Anthracene	NA	451	1	5	ng/dry g	500	0	90	70 - 130%	PASS
Benz[a]anthracene	NA	521.4	1	5	ng/dry g	500	0	104	70 - 130%	PASS
Benzo[a]pyrene	NA	631	1	5	ng/dry g	500	0	126	70 - 130%	PASS
Benzo[b]fluoranthene	NA	619	1	5	ng/dry g	500	0	124	70 - 130%	PASS
Benzo[e]pyrene	NA	638.2	1	5	ng/dry g	500	0	128	70 - 130%	PASS
Benzo[g,h,i]perylene	NA	477.6	1	5	ng/dry g	500	0	96	70 - 130%	PASS
Benzo[k]fluoranthene	NA	570.8	1	5	ng/dry g	500	0	114	70 - 130%	PASS
Biphenyl	NA	441.5	1	5	ng/dry g	500	0	88	70 - 130%	PASS
Chrysene	NA	499	1	5	ng/dry g	500	0	100	70 - 130%	PASS
Dibenz[a,h]anthracene	NA	519.1	1	5	ng/dry g	500	0	104	70 - 130%	PASS
Dibenzothiophene	NA	379.7	1	5	ng/dry g	500	0	76	70 - 130%	PASS
Fluoranthene	NA	483.8	1	5	ng/dry g	500	0	97	70 - 130%	PASS
Fluorene	NA	454.5	1	5	ng/dry g	500	0	91	70 - 130%	PASS
Indeno[1,2,3-c,d]pyrene	NA	484.8	1	5	ng/dry g	500	0	97	70 - 130%	PASS
Naphthalene	NA	405	1	5	ng/dry g	500	0	81	70 - 130%	PASS
Perylene	NA	624.2	1	5	ng/dry g	500	0	125	70 - 130%	PASS
Phenanthrene	NA	461.6	1	5	ng/dry g	500	0	92	70 - 130%	PASS
Pyrene	NA	491.2	1	5	ng/dry g	500	0	98	70 - 130%	PASS



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE	SOURCE	ACCURACY		PRECISION		QA CODE		
						LEVEL	RESULT	%	LIMITS	%	LIMITS			
Sample ID: 31947-BS2		QAQC Procedural Blank			Matrix: DI Water			Sampled:		Received:				
		Method: EPA 8270D			Batch ID: O-7122			Prepared: 01-Jun-15		Analyzed: 28-Jun-15				
(d10-Acenaphthene)	NA	73			% Recovery	100	0	73	50 - 150%	PASS	20	30	PASS	
(d10-Phenanthrene)	NA	79			% Recovery	100	0	79	50 - 150%	PASS	18	30	PASS	
(d12-Chrysene)	NA	97			% Recovery	100	0	97	50 - 150%	PASS	16	30	PASS	
(d8-Naphthalene)	NA	64			% Recovery	100	0	64	25 - 125%	PASS	22	30	PASS	
1-Methylnaphthalene	NA	353	1	5	ng/dry g	500	0	71	70 - 130%	PASS	18	25	PASS	
1-Methylphenanthrene	NA	428.1	1	5	ng/dry g	500	0	86	70 - 130%	PASS	12	25	PASS	
2,3,5-Trimethylnaphthalene	NA	410.5	1	5	ng/dry g	500	0	82	70 - 130%	PASS	11	25	PASS	
2,6-Dimethylnaphthalene	NA	360.8	1	5	ng/dry g	500	0	72	70 - 130%	PASS	21	25	PASS	
2-Methylnaphthalene	NA	351	1	5	ng/dry g	500	0	70	70 - 130%	PASS	18	25	PASS	
Acenaphthene	NA	381.8	1	5	ng/dry g	500	0	76	70 - 130%	PASS	16	25	PASS	
Acenaphthylene	NA	361.1	1	5	ng/dry g	500	0	72	70 - 130%	PASS	23	25	PASS	
Anthracene	NA	364.8	1	5	ng/dry g	500	0	73	70 - 130%	PASS	21	25	PASS	
Benz[a]anthracene	NA	438.3	1	5	ng/dry g	500	0	88	70 - 130%	PASS	17	25	PASS	
Benzo[a]pyrene	NA	518.9	1	5	ng/dry g	500	0	104	70 - 130%	PASS	19	25	PASS	
Benzo[b]fluoranthene	NA	551.5	1	5	ng/dry g	500	0	110	70 - 130%	PASS	12	25	PASS	
Benzo[e]pyrene	NA	559.5	1	5	ng/dry g	500	0	112	70 - 130%	PASS	13	25	PASS	
Benzo[g,h,i]perylene	NA	468.1	1	5	ng/dry g	500	0	94	70 - 130%	PASS	2	25	PASS	
Benzo[k]fluoranthene	NA	504.3	1	5	ng/dry g	500	0	101	70 - 130%	PASS	12	25	PASS	
Biphenyl	NA	353.6	1	5	ng/dry g	500	0	71	70 - 130%	PASS	21	25	PASS	
Chrysene	NA	459.3	1	5	ng/dry g	500	0	92	70 - 130%	PASS	8	25	PASS	
Dibenz[a,h]anthracene	NA	492.2	1	5	ng/dry g	500	0	98	70 - 130%	PASS	6	25	PASS	
Dibenzothiophene	NA	364.1	1	5	ng/dry g	500	0	73	70 - 130%	PASS	4	25	PASS	
Fluoranthene	NA	429.6	1	5	ng/dry g	500	0	86	70 - 130%	PASS	12	25	PASS	
Fluorene	NA	382.1	1	5	ng/dry g	500	0	76	70 - 130%	PASS	18	25	PASS	
Indeno[1,2,3-c,d]pyrene	NA	454.6	1	5	ng/dry g	500	0	91	70 - 130%	PASS	6	25	PASS	
Naphthalene	NA	321.5	1	5	ng/dry g	500	0	64	25 - 125%	PASS	23	30	PASS	Q
Perylene	NA	508.9	1	5	ng/dry g	500	0	102	70 - 130%	PASS	20	25	PASS	
Phenanthrene	NA	417.5	1	5	ng/dry g	500	0	83	70 - 130%	PASS	9	25	PASS	
Pyrene	NA	434.6	1	5	ng/dry g	500	0	87	70 - 130%	PASS	12	25	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	
Sample ID: 31966-MS1		SWHB-27-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15	
		Method: EPA 8270D			Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 12-Jun-15	
(d10-Acenaphthene)	NA	95			% Recovery	100	0	95 50 - 150%	PASS	
(d10-Phenanthrene)	NA	92			% Recovery	100	0	92 50 - 150%	PASS	
(d12-Chrysene)	NA	67			% Recovery	100	0	67 50 - 150%	PASS	
(d8-Naphthalene)	NA	89			% Recovery	100	0	89 25 - 125%	PASS	
1-Methylnaphthalene	NA	181.4	1	5	ng/dry g	200.2	2.5	89 50 - 150%	PASS	
1-Methylphenanthrene	NA	158.6	1	5	ng/dry g	200.2	0	79 50 - 150%	PASS	
2,3,5-Trimethylnaphthalene	NA	184.5	1	5	ng/dry g	200.2	0	92 50 - 150%	PASS	
2,6-Dimethylnaphthalene	NA	188.2	1	5	ng/dry g	200.2	2.7	93 50 - 150%	PASS	
2-Methylnaphthalene	NA	188.7	1	5	ng/dry g	200.2	6.7	91 50 - 150%	PASS	
Acenaphthene	NA	191.1	1	5	ng/dry g	200.2	6.5	92 50 - 150%	PASS	
Acenaphthylene	NA	186.3	1	5	ng/dry g	200.2	2.9	92 50 - 150%	PASS	
Anthracene	NA	194.6	1	5	ng/dry g	200.2	6.9	94 50 - 150%	PASS	
Benz[a]anthracene	NA	148.2	1	5	ng/dry g	200.2	0	74 50 - 150%	PASS	
Benzo[a]pyrene	NA	105.1	1	5	ng/dry g	200.2	0.5	52 50 - 150%	PASS	
Benzo[b]fluoranthene	NA	109.7	1	5	ng/dry g	200.2	0	55 50 - 150%	PASS	
Benzo[e]pyrene	NA	100.7	1	5	ng/dry g	200.2	0	50 50 - 150%	PASS	
Benzo[g,h,i]perylene	NA	192.4	1	5	ng/dry g	200.2	0	96 50 - 150%	PASS	
Benzo[k]fluoranthene	NA	114.1	1	5	ng/dry g	200.2	0	57 50 - 150%	PASS	
Biphenyl	NA	192	1	5	ng/dry g	200.2	2.2	95 50 - 150%	PASS	
Chrysene	NA	138.7	1	5	ng/dry g	200.2	2.4	68 50 - 150%	PASS	
Dibenz[a,h]anthracene	NA	203.3	1	5	ng/dry g	200.2	0	102 50 - 150%	PASS	
Dibenzothiophene	NA	186.5	1	5	ng/dry g	200.2	0	93 50 - 150%	PASS	
Fluoranthene	NA	171.5	1	5	ng/dry g	200.2	7.3	82 50 - 150%	PASS	
Fluorene	NA	191.5	1	5	ng/dry g	200.2	3.6	94 50 - 150%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	198.8	1	5	ng/dry g	200.2	0	99 50 - 150%	PASS	
Naphthalene	NA	180	1	5	ng/dry g	200.2	10	85 25 - 125%	PASS	
Perylene	NA	100.1	1	5	ng/dry g	200.2	0	50 50 - 150%	PASS	
Phenanthrene	NA	195.9	1	5	ng/dry g	200.2	12.4	92 50 - 150%	PASS	
Pyrene	NA	161.7	1	5	ng/dry g	200.2	4.2	79 50 - 150%	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE	
								LIMITS	LIMITS		
Sample ID: 31966-MS2		SWHB-27-SBB Spotted sand bass, whole				Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15	
		Method: EPA 8270D				Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 12-Jun-15	
(d10-Acenaphthene)	NA	95			% Recovery	100	0	95 50 - 150%	PASS	0 30	PASS
(d10-Phenanthrene)	NA	96			% Recovery	100	0	96 50 - 150%	PASS	4 30	PASS
(d12-Chrysene)	NA	69			% Recovery	100	0	69 50 - 150%	PASS	3 30	PASS
(d8-Naphthalene)	NA	85			% Recovery	100	0	85 25 - 125%	PASS	5 30	PASS
1-Methylnaphthalene	NA	185.4	1	5	ng/dry g	204.1	2.5	90 50 - 150%	PASS	1 25	PASS
1-Methylphenanthrene	NA	156	1	5	ng/dry g	204.1	0	76 50 - 150%	PASS	4 25	PASS
2,3,5-Trimethylnaphthalene	NA	199.9	1	5	ng/dry g	204.1	0	98 50 - 150%	PASS	6 25	PASS
2,6-Dimethylnaphthalene	NA	197.9	1	5	ng/dry g	204.1	2.7	96 50 - 150%	PASS	3 25	PASS
2-Methylnaphthalene	NA	188.4	1	5	ng/dry g	204.1	6.7	89 50 - 150%	PASS	2 25	PASS
Acenaphthene	NA	191.3	1	5	ng/dry g	204.1	6.5	91 50 - 150%	PASS	1 25	PASS
Acenaphthylene	NA	199.4	1	5	ng/dry g	204.1	2.9	96 50 - 150%	PASS	4 25	PASS
Anthracene	NA	203.4	1	5	ng/dry g	204.1	6.9	96 50 - 150%	PASS	2 25	PASS
Benz[a]anthracene	NA	159.1	1	5	ng/dry g	204.1	0	78 50 - 150%	PASS	5 25	PASS
Benzo[a]pyrene	NA	106.7	1	5	ng/dry g	204.1	0.5	52 50 - 150%	PASS	0 25	PASS
Benzo[b]fluoranthene	NA	112.5	1	5	ng/dry g	204.1	0	55 50 - 150%	PASS	0 25	PASS
Benzo[e]pyrene	NA	102.6	1	5	ng/dry g	204.1	0	50 50 - 150%	PASS	0 25	PASS
Benzo[g,h,i]perylene	NA	202.6	1	5	ng/dry g	204.1	0	99 50 - 150%	PASS	3 25	PASS
Benzo[k]fluoranthene	NA	118.4	1	5	ng/dry g	204.1	0	58 50 - 150%	PASS	2 25	PASS
Biphenyl	NA	196.7	1	5	ng/dry g	204.1	2.2	95 50 - 150%	PASS	0 25	PASS
Chrysene	NA	150	1	5	ng/dry g	204.1	2.4	72 50 - 150%	PASS	6 25	PASS
Dibenz[a,h]anthracene	NA	220	1	5	ng/dry g	204.1	0	108 50 - 150%	PASS	6 25	PASS
Dibenzothiophene	NA	183.5	1	5	ng/dry g	204.1	0	90 50 - 150%	PASS	3 25	PASS
Fluoranthene	NA	181.1	1	5	ng/dry g	204.1	7.3	85 50 - 150%	PASS	4 25	PASS
Fluorene	NA	201.9	1	5	ng/dry g	204.1	3.6	97 50 - 150%	PASS	3 25	PASS
Indeno[1,2,3-c,d]pyrene	NA	201.6	1	5	ng/dry g	204.1	0	99 50 - 150%	PASS	0 25	PASS
Naphthalene	NA	175.9	1	5	ng/dry g	204.1	10	81 25 - 125%	PASS	5 25	PASS
Perylene	NA	103.7	1	5	ng/dry g	204.1	0	51 50 - 150%	PASS	2 25	PASS
Phenanthrene	NA	204.9	1	5	ng/dry g	204.1	12.4	94 50 - 150%	PASS	2 25	PASS
Pyrene	NA	177.3	1	5	ng/dry g	204.1	4.2	85 50 - 150%	PASS	7 25	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE	
Sample ID: 31966-R2		SWHB-27-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 23-Apr-14		Received: 21-May-15		
		Method: EPA 8270D			Batch ID: O-7118		Prepared: 29-May-15		Analyzed: 13-Jun-15		
(d10-Acenaphthene)	NA	105			% Recovery	100		105 50 - 150% PASS	4 30	PASS	
(d10-Phenanthrene)	NA	102			% Recovery	100		102 50 - 150% PASS	5 30	PASS	
(d12-Chrysene)	NA	89			% Recovery	100		89 50 - 150% PASS	8 30	PASS	
(d8-Naphthalene)	NA	99			% Recovery	100		99 25 - 125% PASS	2 30	PASS	
1-Methylnaphthalene	NA	3.5	1	5	ng/dry g				80 25	FAIL J,H,SL	
1-Methylphenanthrene	NA	ND	1	5	ng/dry g				0 25	PASS H	
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g				0 25	PASS H	
2,6-Dimethylnaphthalene	NA	3.1	1	5	ng/dry g				34 25	FAIL J,H,SL	
2-Methylnaphthalene	NA	6.1	1	5	ng/dry g				18 25	PASS H	
Acenaphthene	NA	6	1	5	ng/dry g				15 25	PASS H	
Acenaphthylene	NA	2.9	1	5	ng/dry g				3 25	PASS J,H	
Anthracene	NA	7	1	5	ng/dry g				3 25	PASS H	
Benz[a]anthracene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Benzo[a]pyrene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Benzo[e]pyrene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Biphenyl	NA	2.3	1	5	ng/dry g				4 25	PASS J,H	
Chrysene	NA	2.5	1	5	ng/dry g				8 25	PASS J,H	
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Dibenzothiophene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Fluoranthene	NA	8.1	1	5	ng/dry g				22 25	PASS H	
Fluorene	NA	4	1	5	ng/dry g				25 25	PASS J,H	
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Naphthalene	NA	9.2	1	5	ng/dry g				16 25	PASS H	
Perylene	NA	ND	1	5	ng/dry g				0 25	PASS H	
Phenanthrene	NA	11.8	1	5	ng/dry g				10 25	PASS H	
Pyrene	NA	4	1	5	ng/dry g				12 25	PASS J,H	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31980-MS1		SWHB-01-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15	
		Method: EPA 8270D			Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 09-Jun-15	
(d10-Acenaphthene)	NA	72			% Recovery	100	0	72 50 - 150%	PASS	
(d10-Phenanthrene)	NA	75			% Recovery	100	0	75 50 - 150%	PASS	
(d12-Chrysene)	NA	68			% Recovery	100	0	68 50 - 150%	PASS	
(d8-Naphthalene)	NA	61			% Recovery	100	0	61 25 - 125%	PASS	
1-Methylnaphthalene	NA	176.6	1	5	ng/dry g	213.2	2	82 50 - 150%	PASS	
1-Methylphenanthrene	NA	228.5	1	5	ng/dry g	213.2	1.8	106 50 - 150%	PASS	
2,3,5-Trimethylnaphthalene	NA	214.6	1	5	ng/dry g	213.2	6.6	98 50 - 150%	PASS	
2,6-Dimethylnaphthalene	NA	204.4	1	5	ng/dry g	213.2	4.1	94 50 - 150%	PASS	
2-Methylnaphthalene	NA	193.7	1	5	ng/dry g	213.2	4.3	89 50 - 150%	PASS	
Acenaphthene	NA	199	1	5	ng/dry g	213.2	2.9	92 50 - 150%	PASS	
Acenaphthylene	NA	216.1	1	5	ng/dry g	213.2	2.1	100 50 - 150%	PASS	
Anthracene	NA	211.6	1	5	ng/dry g	213.2	6.7	96 50 - 150%	PASS	
Benz[a]anthracene	NA	213.8	1	5	ng/dry g	213.2	15	93 50 - 150%	PASS	
Benzo[a]pyrene	NA	159.7	1	5	ng/dry g	213.2	0	75 50 - 150%	PASS	
Benzo[b]fluoranthene	NA	191.2	1	5	ng/dry g	213.2	0	90 50 - 150%	PASS	
Benzo[e]pyrene	NA	132.9	1	5	ng/dry g	213.2	0	62 50 - 150%	PASS	
Benzo[g,h,i]perylene	NA	220.5	1	5	ng/dry g	213.2	0	103 50 - 150%	PASS	
Benzo[k]fluoranthene	NA	140.3	1	5	ng/dry g	213.2	0	66 50 - 150%	PASS	
Biphenyl	NA	192.2	1	5	ng/dry g	213.2	2.6	89 50 - 150%	PASS	
Chrysene	NA	170.5	1	5	ng/dry g	213.2	0.6	80 50 - 150%	PASS	
Dibenz[a,h]anthracene	NA	210.6	1	5	ng/dry g	213.2	0	99 50 - 150%	PASS	
Dibenzothiophene	NA	205.7	1	5	ng/dry g	213.2	6.4	93 50 - 150%	PASS	
Fluoranthene	NA	215.2	1	5	ng/dry g	213.2	4.2	99 50 - 150%	PASS	
Fluorene	NA	224.1	1	5	ng/dry g	213.2	5.5	103 50 - 150%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	182.9	1	5	ng/dry g	213.2	0	86 50 - 150%	PASS	
Naphthalene	NA	163	1	5	ng/dry g	213.2	6.7	73 25 - 125%	PASS	
Perylene	NA	128	1	5	ng/dry g	213.2	0	60 50 - 150%	PASS	
Phenanthrene	NA	214	1	5	ng/dry g	213.2	16.5	93 50 - 150%	PASS	
Pyrene	NA	209	1	5	ng/dry g	213.2	3.3	96 50 - 150%	PASS	



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE	
								LIMITS	LIMITS		
Sample ID: 31980-MS2		SWHB-01-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7114			Prepared: 27-May-15		Analyzed: 09-Jun-15				
(d10-Acenaphthene)	NA	75			% Recovery	100	0	75 50 - 150%	PASS	4 30	PASS
(d10-Phenanthrene)	NA	76			% Recovery	100	0	76 50 - 150%	PASS	1 30	PASS
(d12-Chrysene)	NA	69			% Recovery	100	0	69 50 - 150%	PASS	1 30	PASS
(d8-Naphthalene)	NA	65			% Recovery	100	0	65 25 - 125%	PASS	6 30	PASS
1-Methylnaphthalene	NA	187.9	1	5	ng/dry g	217.2	2	86 50 - 150%	PASS	5 25	PASS
1-Methylphenanthrene	NA	237.5	1	5	ng/dry g	217.2	1.8	109 50 - 150%	PASS	3 25	PASS
2,3,5-Trimethylnaphthalene	NA	225.4	1	5	ng/dry g	217.2	6.6	101 50 - 150%	PASS	3 25	PASS
2,6-Dimethylnaphthalene	NA	217	1	5	ng/dry g	217.2	4.1	98 50 - 150%	PASS	4 25	PASS
2-Methylnaphthalene	NA	205.7	1	5	ng/dry g	217.2	4.3	93 50 - 150%	PASS	4 25	PASS
Acenaphthene	NA	206.4	1	5	ng/dry g	217.2	2.9	94 50 - 150%	PASS	2 25	PASS
Acenaphthylene	NA	217.3	1	5	ng/dry g	217.2	2.1	99 50 - 150%	PASS	1 25	PASS
Anthracene	NA	204.5	1	5	ng/dry g	217.2	6.7	91 50 - 150%	PASS	5 25	PASS
Benz[a]anthracene	NA	231.7	1	5	ng/dry g	217.2	15	100 50 - 150%	PASS	7 25	PASS
Benzo[a]pyrene	NA	161.6	1	5	ng/dry g	217.2	0	74 50 - 150%	PASS	1 25	PASS
Benzo[b]fluoranthene	NA	199.8	1	5	ng/dry g	217.2	0	92 50 - 150%	PASS	2 25	PASS
Benzo[e]pyrene	NA	141.1	1	5	ng/dry g	217.2	0	65 50 - 150%	PASS	5 25	PASS
Benzo[g,h,i]perylene	NA	229.9	1	5	ng/dry g	217.2	0	106 50 - 150%	PASS	3 25	PASS
Benzo[k]fluoranthene	NA	146.2	1	5	ng/dry g	217.2	0	67 50 - 150%	PASS	2 25	PASS
Biphenyl	NA	200.9	1	5	ng/dry g	217.2	2.6	91 50 - 150%	PASS	2 25	PASS
Chrysene	NA	174	1	5	ng/dry g	217.2	0.6	80 50 - 150%	PASS	0 25	PASS
Dibenz[a,h]anthracene	NA	212	1	5	ng/dry g	217.2	0	98 50 - 150%	PASS	1 25	PASS
Dibenzothiophene	NA	208.2	1	5	ng/dry g	217.2	6.4	93 50 - 150%	PASS	0 25	PASS
Fluoranthene	NA	220.1	1	5	ng/dry g	217.2	4.2	99 50 - 150%	PASS	0 25	PASS
Fluorene	NA	230.9	1	5	ng/dry g	217.2	5.5	104 50 - 150%	PASS	1 25	PASS
Indeno[1,2,3-c,d]pyrene	NA	183.3	1	5	ng/dry g	217.2	0	84 50 - 150%	PASS	2 25	PASS
Naphthalene	NA	178.2	1	5	ng/dry g	217.2	6.7	79 25 - 125%	PASS	8 25	PASS
Perylene	NA	138	1	5	ng/dry g	217.2	0	64 50 - 150%	PASS	6 25	PASS
Phenanthrene	NA	222	1	5	ng/dry g	217.2	16.5	95 50 - 150%	PASS	2 25	PASS
Pyrene	NA	213.6	1	5	ng/dry g	217.2	3.3	97 50 - 150%	PASS	1 25	PASS



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QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE	
Sample ID: 31980-R2		SWHB-01-SBB Spotted sand bass, whole			Matrix: Tissue		Sampled: 22-Apr-14		Received: 21-May-15		
		Method: EPA 8270D			Batch ID: O-7114		Prepared: 27-May-15		Analyzed: 09-Jun-15		
(d10-Acenaphthene)	NA	82			% Recovery	100		82 50 - 150% PASS	12 30 PASS		
(d10-Phenanthrene)	NA	85			% Recovery	100		85 50 - 150% PASS	10 30 PASS		
(d12-Chrysene)	NA	75			% Recovery	100		75 50 - 150% PASS	4 30 PASS		
(d8-Naphthalene)	NA	61			% Recovery	100		61 25 - 125% PASS	9 30 PASS		
1-Methylnaphthalene	NA	2	1	5	ng/dry g				5 25 PASS	J,H	
1-Methylphenanthrene	NA	1.8	1	5	ng/dry g				0 25 PASS	J,H	
2,3,5-Trimethylnaphthalene	NA	5.3	1	5	ng/dry g				41 25 FAIL	H,SL	
2,6-Dimethylnaphthalene	NA	4.4	1	5	ng/dry g				17 25 PASS	J,H	
2-Methylnaphthalene	NA	5	1	5	ng/dry g				33 25 FAIL	H,SL	
Acenaphthene	NA	3	1	5	ng/dry g				11 25 PASS	J,H	
Acenaphthylene	NA	2.3	1	5	ng/dry g				19 25 PASS	J,H	
Anthracene	NA	6.7	1	5	ng/dry g				0 25 PASS	H	
Benz[a]anthracene	NA	13.1	1	5	ng/dry g				25 25 PASS	H	
Benzo[a]pyrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Benzo[e]pyrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Biphenyl	NA	2.6	1	5	ng/dry g				4 25 PASS	J,H	
Chrysene	NA	1.2	1	5	ng/dry g				18 25 PASS	J,H	
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Dibenzothiophene	NA	6.9	1	5	ng/dry g				16 25 PASS	H	
Fluoranthene	NA	4.8	1	5	ng/dry g				29 30 PASS	,H,SL,(
Fluorene	NA	5.2	1	5	ng/dry g				11 25 PASS	H	
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Naphthalene	NA	6.8	1	5	ng/dry g				1 25 PASS	H	
Perylene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Phenanthrene	NA	15.9	1	5	ng/dry g				7 25 PASS	H	
Pyrene	NA	2.9	1	5	ng/dry g				22 25 PASS	J,H	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 31993-MS1		SWHB-06-ZP Plankton			Matrix: Tissue		Sampled: 09-May-14		Received: 21-May-15	
Method: EPA 8270D					Batch ID: O-7120		Prepared: 03-Jun-15		Analyzed: 25-Jun-15	
(d10-Acenaphthene)	NA	85			% Recovery	100	0	85 50 - 150%	PASS	
(d10-Phenanthrene)	NA	93			% Recovery	100	0	93 50 - 150%	PASS	
(d12-Chrysene)	NA	114			% Recovery	100	0	114 50 - 150%	PASS	
(d8-Naphthalene)	NA	73			% Recovery	100	0	73 25 - 125%	PASS	
1-Methylnaphthalene	NA	5560.4	1	5	ng/dry g	6966.5	36	79 50 - 150%	PASS	
1-Methylphenanthrene	NA	7081.8	1	5	ng/dry g	6966.5	27.1	101 50 - 150%	PASS	
2,3,5-Trimethylnaphthalene	NA	6370.2	1	5	ng/dry g	6966.5	18.7	91 50 - 150%	PASS	
2,6-Dimethylnaphthalene	NA	6071.8	1	5	ng/dry g	6966.5	46.9	86 50 - 150%	PASS	
2-Methylnaphthalene	NA	5730.8	1	5	ng/dry g	6966.5	59.6	81 50 - 150%	PASS	
Acenaphthene	NA	6146.5	1	5	ng/dry g	6966.5	23.9	88 50 - 150%	PASS	
Acenaphthylene	NA	6226.5	1	5	ng/dry g	6966.5	14.5	89 50 - 150%	PASS	
Anthracene	NA	6461	1	5	ng/dry g	6966.5	43.1	92 50 - 150%	PASS	
Benz[a]anthracene	NA	7890.1	1	5	ng/dry g	6966.5	32	113 50 - 150%	PASS	
Benzo[a]pyrene	NA	8535.8	1	5	ng/dry g	6966.5	0	123 50 - 150%	PASS	
Benzo[b]fluoranthene	NA	9033.4	1	5	ng/dry g	6966.5	0	130 50 - 150%	PASS	
Benzo[e]pyrene	NA	9178.7	1	5	ng/dry g	6966.5	55.7	131 50 - 150%	PASS	
Benzo[g,h,i]perylene	NA	6923.6	1	5	ng/dry g	6966.5	0	99 50 - 150%	PASS	
Benzo[k]fluoranthene	NA	8831	1	5	ng/dry g	6966.5	0	127 50 - 150%	PASS	
Biphenyl	NA	5840.9	1	5	ng/dry g	6966.5	36.4	83 50 - 150%	PASS	
Chrysene	NA	7365	1	5	ng/dry g	6966.5	44.5	105 50 - 150%	PASS	
Dibenz[a,h]anthracene	NA	7309.5	1	5	ng/dry g	6966.5	0	105 50 - 150%	PASS	
Dibenzothiophene	NA	6570.7	1	5	ng/dry g	6966.5	0	94 50 - 150%	PASS	
Fluoranthene	NA	7282.8	1	5	ng/dry g	6966.5	72.4	104 50 - 150%	PASS	
Fluorene	NA	6632.3	1	5	ng/dry g	6966.5	69.5	94 50 - 150%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	7018	1	5	ng/dry g	6966.5	0	101 50 - 150%	PASS	
Naphthalene	NA	5255.1	1	5	ng/dry g	6966.5	60.3	75 25 - 125%	PASS	
Perylene	NA	8808	1	5	ng/dry g	6966.5	0	126 50 - 150%	PASS	
Phenanthrene	NA	6978	1	5	ng/dry g	6966.5	253.5	97 50 - 150%	PASS	
Pyrene	NA	7204	1	5	ng/dry g	6966.5	70.3	102 50 - 150%	PASS	



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE
								LIMITS	LIMITS	

Sample ID: 31993-MS2

SWHB-06-ZP Plankton

Matrix: Tissue

Sampled: 09-May-14

Received: 21-May-15

Method: EPA 8270D

Batch ID: O-7120

Prepared: 03-Jun-15

Analyzed: 25-Jun-15

(d10-Acenaphthene)	NA	88			% Recovery	100	0	88	50 - 150%	PASS	3	30	PASS
(d10-Phenanthrene)	NA	95			% Recovery	100	0	95	50 - 150%	PASS	2	30	PASS
(d12-Chrysene)	NA	114			% Recovery	100	0	114	50 - 150%	PASS	0	30	PASS
(d8-Naphthalene)	NA	76			% Recovery	100	0	76	25 - 125%	PASS	4	30	PASS
1-Methylnaphthalene	NA	5054.3	1	5	ng/dry g	6054.6	36	83	50 - 150%	PASS	5	25	PASS
1-Methylphenanthrene	NA	6278.1	1	5	ng/dry g	6054.6	27.1	103	50 - 150%	PASS	2	25	PASS
2,3,5-Trimethylnaphthalene	NA	5599.4	1	5	ng/dry g	6054.6	18.7	92	50 - 150%	PASS	1	25	PASS
2,6-Dimethylnaphthalene	NA	5337.3	1	5	ng/dry g	6054.6	46.9	87	50 - 150%	PASS	1	25	PASS
2-Methylnaphthalene	NA	5188.4	1	5	ng/dry g	6054.6	59.6	85	50 - 150%	PASS	5	25	PASS
Acenaphthene	NA	5448.6	1	5	ng/dry g	6054.6	23.9	90	50 - 150%	PASS	2	25	PASS
Acenaphthylene	NA	5701.9	1	5	ng/dry g	6054.6	14.5	94	50 - 150%	PASS	5	25	PASS
Anthracene	NA	6033.4	1	5	ng/dry g	6054.6	43.1	99	50 - 150%	PASS	7	25	PASS
Benz[a]anthracene	NA	6797.9	1	5	ng/dry g	6054.6	32	112	50 - 150%	PASS	1	25	PASS
Benzo[a]pyrene	NA	7785.8	1	5	ng/dry g	6054.6	0	129	50 - 150%	PASS	5	25	PASS
Benzo[b]fluoranthene	NA	7820.5	1	5	ng/dry g	6054.6	0	129	50 - 150%	PASS	1	25	PASS
Benzo[e]pyrene	NA	7874.2	1	5	ng/dry g	6054.6	55.7	129	50 - 150%	PASS	2	25	PASS
Benzo[g,h,i]perylene	NA	6017.7	1	5	ng/dry g	6054.6	0	99	50 - 150%	PASS	0	25	PASS
Benzo[k]fluoranthene	NA	7691.3	1	5	ng/dry g	6054.6	0	127	50 - 150%	PASS	0	25	PASS
Biphenyl	NA	5280.7	1	5	ng/dry g	6054.6	36.4	87	50 - 150%	PASS	5	25	PASS
Chrysene	NA	6588.6	1	5	ng/dry g	6054.6	44.5	108	50 - 150%	PASS	3	25	PASS
Dibenz[a,h]anthracene	NA	6534.1	1	5	ng/dry g	6054.6	0	108	50 - 150%	PASS	3	25	PASS
Dibenzothiophene	NA	5899.3	1	5	ng/dry g	6054.6	0	97	50 - 150%	PASS	3	25	PASS
Fluoranthene	NA	6247.4	1	5	ng/dry g	6054.6	72.4	102	50 - 150%	PASS	2	25	PASS
Fluorene	NA	5826	1	5	ng/dry g	6054.6	69.5	95	50 - 150%	PASS	1	25	PASS
Indeno[1,2,3-c,d]pyrene	NA	6152.1	1	5	ng/dry g	6054.6	0	102	50 - 150%	PASS	1	25	PASS
Naphthalene	NA	4741.3	1	5	ng/dry g	6054.6	60.3	77	25 - 125%	PASS	3	25	PASS
Perylene	NA	7724.7	1	5	ng/dry g	6054.6	0	128	50 - 150%	PASS	2	25	PASS
Phenanthrene	NA	6078.2	1	5	ng/dry g	6054.6	253.5	96	50 - 150%	PASS	1	25	PASS
Pyrene	NA	6224.7	1	5	ng/dry g	6054.6	70.3	102	50 - 150%	PASS	0	25	PASS



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Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
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Sample ID: 31993-R2	SWHB-06-ZP Plankton			Matrix: Tissue		Sampled: 09-May-14			Received: 21-May-15		
	Method: EPA 8270D			Batch ID: O-7120		Prepared: 03-Jun-15			Analyzed: 26-Jun-15		
(d10-Acenaphthene)	NA	55			% Recovery	100	55	50 - 150% PASS	4	30	PASS
(d10-Phenanthrene)	NA	59			% Recovery	100	59	50 - 150% PASS	2	30	PASS
(d12-Chrysene)	NA	51			% Recovery	100	51	50 - 150% PASS	2	30	PASS
(d8-Naphthalene)	NA	46			% Recovery	100	46	25 - 125% PASS	6	30	PASS
1-Methylnaphthalene	NA	23	1	5	ng/dry g				72	25	FAIL H,NH
1-Methylphenanthrene	NA	22.3	1	5	ng/dry g				35	25	FAIL H,NH
2,3,5-Trimethylnaphthalene	NA	10.2	1	5	ng/dry g				91	25	FAIL H,NH
2,6-Dimethylnaphthalene	NA	38.1	1	5	ng/dry g				38	25	FAIL H,NH
2-Methylnaphthalene	NA	40.1	1	5	ng/dry g				66	25	FAIL H,NH
Acenaphthene	NA	17	1	5	ng/dry g				57	25	FAIL H,NH
Acenaphthylene	NA	7.8	1	5	ng/dry g				92	25	FAIL H,SL
Anthracene	NA	23.3	1	5	ng/dry g				92	25	FAIL H,NH
Benz[a]anthracene	NA	9.6	1	5	ng/dry g				140	25	FAIL H,SL
Benzo[a]pyrene	NA	ND	1	5	ng/dry g				0	25	PASS H
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g				0	25	PASS H
Benzo[e]pyrene	NA	22.1	1	5	ng/dry g				121	25	FAIL H,NH
Benzo[g,h,i]perylene	NA	ND	1	5	ng/dry g				0	25	PASS H
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g				0	25	PASS H
Biphenyl	NA	24.1	1	5	ng/dry g				68	25	FAIL H,NH
Chrysene	NA	10.5	1	5	ng/dry g				153	25	FAIL H,NH
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g				0	25	PASS H
Dibenzothiophene	NA	ND	1	5	ng/dry g				0	25	PASS H
Fluoranthene	NA	47.4	1	5	ng/dry g				69	25	FAIL H,NH
Fluorene	NA	50.6	1	5	ng/dry g				54	25	FAIL H,NH
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g				0	25	PASS H
Naphthalene	NA	42.9	1	5	ng/dry g				58	25	FAIL H,NH
Perylene	NA	ND	1	5	ng/dry g				0	25	PASS H
Phenanthrene	NA	181.1	1	5	ng/dry g				57	25	FAIL H,NH
Pyrene	NA	47.2	1	5	ng/dry g				66	25	FAIL H,NH



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE
Sample ID: 32006-MS1		SWHB-15-M Mollusks			Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15	
Method: EPA 8270D		Batch ID: O-7122			Prepared: 01-Jun-15		Analyzed: 28-Jun-15			
(d10-Acenaphthene)	NA	82			% Recovery	100	0	82 50 - 150%	PASS	
(d10-Phenanthrene)	NA	93			% Recovery	100	0	93 50 - 150%	PASS	
(d12-Chrysene)	NA	116			% Recovery	100	0	116 50 - 150%	PASS	
(d8-Naphthalene)	NA	57			% Recovery	100	0	57 25 - 125%	PASS	
1-Methylnaphthalene	NA	285.9	1	5	ng/dry g	412.3	2.7	69 50 - 150%	PASS	
1-Methylphenanthrene	NA	427	1	5	ng/dry g	412.3	0	104 50 - 150%	PASS	
2,3,5-Trimethylnaphthalene	NA	368.6	1	5	ng/dry g	412.3	0.8	89 50 - 150%	PASS	
2,6-Dimethylnaphthalene	NA	338.1	1	5	ng/dry g	412.3	5.4	81 50 - 150%	PASS	
2-Methylnaphthalene	NA	297.3	1	5	ng/dry g	412.3	8	70 50 - 150%	PASS	
Acenaphthene	NA	345.8	1	5	ng/dry g	412.3	0	84 50 - 150%	PASS	
Acenaphthylene	NA	333.2	1	5	ng/dry g	412.3	0.6	81 50 - 150%	PASS	
Anthracene	NA	369.6	1	5	ng/dry g	412.3	3.2	89 50 - 150%	PASS	
Benz[a]anthracene	NA	474.1	1	5	ng/dry g	412.3	4	114 50 - 150%	PASS	
Benzo[a]pyrene	NA	592.8	1	5	ng/dry g	412.3	10.5	141 50 - 150%	PASS	
Benzo[b]fluoranthene	NA	579.1	1	5	ng/dry g	412.3	0	140 50 - 150%	PASS	
Benzo[e]pyrene	NA	569.3	1	5	ng/dry g	412.3	6.8	136 50 - 150%	PASS	
Benzo[g,h,i]perylene	NA	412.8	1	5	ng/dry g	412.3	10.5	98 50 - 150%	PASS	
Benzo[k]fluoranthene	NA	490.1	1	5	ng/dry g	412.3	0	119 50 - 150%	PASS	
Biphenyl	NA	322.3	1	5	ng/dry g	412.3	3	77 50 - 150%	PASS	
Chrysene	NA	456.3	1	5	ng/dry g	412.3	7.2	109 50 - 150%	PASS	
Dibenz[a,h]anthracene	NA	443.7	1	5	ng/dry g	412.3	0	108 50 - 150%	PASS	
Dibenzothiophene	NA	369	1	5	ng/dry g	412.3	0	89 50 - 150%	PASS	
Fluoranthene	NA	433.9	1	5	ng/dry g	412.3	0	105 50 - 150%	PASS	
Fluorene	NA	368.1	1	5	ng/dry g	412.3	6	88 50 - 150%	PASS	
Indeno[1,2,3-c,d]pyrene	NA	415.4	1	5	ng/dry g	412.3	0	101 50 - 150%	PASS	
Naphthalene	NA	249.6	1	5	ng/dry g	412.3	6	59 25 - 125%	PASS	
Perylene	NA	564.1	1	5	ng/dry g	412.3	2	136 50 - 150%	PASS	
Phenanthrene	NA	407.7	1	5	ng/dry g	412.3	19	94 50 - 150%	PASS	
Pyrene	NA	444.4	1	5	ng/dry g	412.3	0	108 50 - 150%	PASS	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODE	
								LIMITS	LIMITS		
Sample ID: 32006-MS2		SWHB-15-M Mollusks			Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
Method: EPA 8270D		Batch ID: O-7122			Prepared: 01-Jun-15		Analyzed: 28-Jun-15				
(d10-Acenaphthene)	NA	90			% Recovery	100	0	90 50 - 150%	9 30	PASS	
(d10-Phenanthrene)	NA	96			% Recovery	100	0	96 50 - 150%	3 30	PASS	
(d12-Chrysene)	NA	116			% Recovery	100	0	116 50 - 150%	0 30	PASS	
(d8-Naphthalene)	NA	76			% Recovery	100	0	76 25 - 125%	29 30	PASS	
1-Methylnaphthalene	NA	320.6	1	5	ng/dry g	377.2	2.7	84 50 - 150%	20 25	PASS	
1-Methylphenanthrene	NA	389.4	1	5	ng/dry g	377.2	0	103 50 - 150%	1 25	PASS	
2,3,5-Trimethylnaphthalene	NA	362.9	1	5	ng/dry g	377.2	0.8	96 50 - 150%	8 25	PASS	
2,6-Dimethylnaphthalene	NA	340.9	1	5	ng/dry g	377.2	5.4	89 50 - 150%	9 25	PASS	
2-Methylnaphthalene	NA	323	1	5	ng/dry g	377.2	8	84 50 - 150%	18 25	PASS	
Acenaphthene	NA	338.6	1	5	ng/dry g	377.2	0	90 50 - 150%	7 25	PASS	
Acenaphthylene	NA	336.6	1	5	ng/dry g	377.2	0.6	89 50 - 150%	9 25	PASS	
Anthracene	NA	344.9	1	5	ng/dry g	377.2	3.2	91 50 - 150%	2 25	PASS	
Benz[a]anthracene	NA	421.3	1	5	ng/dry g	377.2	4	111 50 - 150%	3 25	PASS	
Benzo[a]pyrene	NA	532.6	1	5	ng/dry g	377.2	10.5	138 50 - 150%	2 25	PASS	
Benzo[b]fluoranthene	NA	525.4	1	5	ng/dry g	377.2	0	139 50 - 150%	1 25	PASS	
Benzo[e]pyrene	NA	529.6	1	5	ng/dry g	377.2	6.8	139 50 - 150%	2 25	PASS	
Benzo[g,h,i]perylene	NA	379.2	1	5	ng/dry g	377.2	10.5	98 50 - 150%	0 25	PASS	
Benzo[k]fluoranthene	NA	456	1	5	ng/dry g	377.2	0	121 50 - 150%	2 25	PASS	
Biphenyl	NA	330.4	1	5	ng/dry g	377.2	3	87 50 - 150%	12 25	PASS	
Chrysene	NA	407.6	1	5	ng/dry g	377.2	7.2	106 50 - 150%	3 25	PASS	
Dibenz[a,h]anthracene	NA	398.3	1	5	ng/dry g	377.2	0	106 50 - 150%	2 25	PASS	
Dibenzothiophene	NA	346	1	5	ng/dry g	377.2	0	92 50 - 150%	3 25	PASS	
Fluoranthene	NA	398.3	1	5	ng/dry g	377.2	0	106 50 - 150%	1 25	PASS	
Fluorene	NA	357.7	1	5	ng/dry g	377.2	6	93 50 - 150%	6 25	PASS	
Indeno[1,2,3-c,d]pyrene	NA	372.9	1	5	ng/dry g	377.2	0	99 50 - 150%	2 25	PASS	
Naphthalene	NA	295.7	1	5	ng/dry g	377.2	6	77 25 - 125%	26 30	PASS Q	
Perylene	NA	534	1	5	ng/dry g	377.2	2	141 50 - 150%	4 25	PASS	
Phenanthrene	NA	382	1	5	ng/dry g	377.2	19	96 50 - 150%	2 25	PASS	
Pyrene	NA	396.8	1	5	ng/dry g	377.2	0	105 50 - 150%	3 25	PASS	



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ANALYTE	FRACTION	RESULT	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY % LIMITS	PRECISION % LIMITS	QA CODE	
Sample ID: 32006-R2		SWHB-15-M Mollusks			Matrix: Tissue		Sampled: 21-Apr-14		Received: 21-May-15		
		Method: EPA 8270D			Batch ID: O-7122		Prepared: 01-Jun-15		Analyzed: 28-Jun-15		
(d10-Acenaphthene)	NA	90			% Recovery	100		90 50 - 150% PASS	18 30 PASS		
(d10-Phenanthrene)	NA	95			% Recovery	100		95 50 - 150% PASS	11 30 PASS		
(d12-Chrysene)	NA	109			% Recovery	100		109 50 - 150% PASS	11 30 PASS		
(d8-Naphthalene)	NA	79			% Recovery	100		79 25 - 125% PASS	41 30 FAIL	1	
1-Methylnaphthalene	NA	2.6	1	5	ng/dry g				11 25 PASS	J,H	
1-Methylphenanthrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
2,3,5-Trimethylnaphthalene	NA	ND	1	5	ng/dry g				52 25 FAIL	H,SL	
2,6-Dimethylnaphthalene	NA	6.6	1	5	ng/dry g				42 25 FAIL	H,SL	
2-Methylnaphthalene	NA	7.6	1	5	ng/dry g				11 25 PASS	H	
Acenaphthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Acenaphthylene	NA	1.2	1	5	ng/dry g				18 25 PASS	J,H	
Anthracene	NA	3.6	1	5	ng/dry g				25 25 PASS	J,H	
Benz[a]anthracene	NA	3.8	1	5	ng/dry g				10 25 PASS	J,H	
Benzo[a]pyrene	NA	9.6	1	5	ng/dry g				18 25 PASS	H	
Benzo[b]fluoranthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Benzo[e]pyrene	NA	7.4	1	5	ng/dry g				19 25 PASS	H	
Benzo[g,h,i]perylene	NA	9.8	1	5	ng/dry g				12 25 PASS	H	
Benzo[k]fluoranthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Biphenyl	NA	3	1	5	ng/dry g				3 25 PASS	J,H	
Chrysene	NA	5.5	1	5	ng/dry g				47 25 FAIL	H,SL	
Dibenz[a,h]anthracene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Dibenzothiophene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Fluoranthene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Fluorene	NA	6	1	5	ng/dry g				0 25 PASS	H	
Indeno[1,2,3-c,d]pyrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	
Naphthalene	NA	6	1	5	ng/dry g				2 25 PASS	H	
Perylene	NA	ND	1	5	ng/dry g				120 25 FAIL	H,SL	
Phenanthrene	NA	16.4	1	5	ng/dry g				27 30 PASS	H,Q	
Pyrene	NA	ND	1	5	ng/dry g				0 25 PASS	H	

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1504003-002

COMPANY NAME Amec Foster Wheeler Inc.		EMAIL chris.stransky@amec.com; dorisv@sccwrp.org		PROJECT NAME / NUMBER San Diego Bay Shallow Water Habitat Tissues				COC PAGE 1 of 1							
PROJECT MANAGER Chris Stransky (Amec), Doris Vidal (SCCWRP)		FAX		PO #	PHYSIS SOS #		TYPE OF ICE USED <input type="checkbox"/> WET <input type="checkbox"/> BLUE <input type="checkbox"/> DRY								
COMPANY ADDRESS: AMEC 9210 Sky Park Court San Diego, CA		PHONE 858-300-4350; 714-755-3216 office 858-775-5547 (Chris) cell		SAMPLED BY Tyler Huff/ Jeremy Burns		SHIPPED VIA <input type="checkbox"/> FEDEX <input type="checkbox"/> UPS <input type="checkbox"/> USPS <input type="checkbox"/> Client <input type="checkbox"/> Physis <input type="checkbox"/> other									
TURNAROUND TIME <input checked="" type="checkbox"/> STANDARD (15-20 business days) <input type="checkbox"/> RUSH business days				REQUESTED ANALYSES PLEASE SEE PHYSIS SOS											
REPORT FORMAT <input checked="" type="checkbox"/> PHYSIS PDF/EDD <input type="checkbox"/> SWAMP EDD <input type="checkbox"/> other															
SPECIAL INSTRUCTIONS Project Billing to SCCWRP. Please include Chris Stransky (Amec) and Doris Vidal (SCCWRP) on all data deliverables.															
PHYSIS MATRIX CODES <u>SW</u> = seawater <u>FW</u> = freshwater <u>RW</u> = rainwater <u>WW</u> = wastewater <u>DW</u> = drinking water <u>S</u> = sediment <u>T</u> = tissue <u>E</u> = extract <u>O</u> = other (specify)				See Analyte list from Doris - SCCWRP											
SAMPLE ID	SAMPLE DESCRIPTION	SAMPLE date	SAMPLE time							physis matrix code	# of bottles				
1	Tissue Samples - See attached	Tissues	See attached									X			
2															
3															
4															
5															
6															
7															
8															
9															
10															
RELINQUISHED BY				RECEIVED BY											
print		signature		company		date & time		print		signature		company		date & time	
Tyler Huff				Amec		12:15 5/21/15		Adam Jen				Physis		12:15 5/21/15	

San Diego Bay - Shallow Water Habitat Tissue Samples for Chemical Analysis - Physis
Collected: April 2014

Sample #	Region	StationID	SampleID	Bioaccumulation SampleID	Type	Common Name	Weight (g)	No. Individuals	Processing Instructions	Comment
1	San Diego Bay North	SWHB-26	SWHB-26-SBB	SWHB-26-SSB	Fish	Spotted sand bass	Unknown	5	Combine and analyze all fish	
2	San Diego Bay North	SWHB-26	SWHB-26-CH	SWHB-26-CH	Fish	California halibut	Unknown	5	Combine and analyze all fish	
3	San Diego Bay North	SWHB-26	SWHB-26-SP-Small	SWHB-26-SP-1	Fish	Shiner perch	Unknown	5	Sub-sample: Combine and analyze the 5 smallest fish in bag	Small sub-sample for wild life analysis
	San Diego Bay North	SWHB-26	SWHB-26-SP-Large	SWHB-26-SP-2	Fish	Shiner perch	Unknown	5	Sub-sample: Combine and analyze the 5 largest fish; process for Human Health Risk Assess.	Large sub-sample to be process for human health risk
4	San Diego Bay North	SWHB-26	SWHB-26-BP	SWHB-26-BP	Fish	Black perch	Unknown	6	Combine and analyze all fish	
5	San Diego Bay North	SWHB-26	SWHB-26-C	SWHB-26-C-1	Crustacea	Crustacea	10.2	Unknown	Combine and analyze all	
6	San Diego Bay North	SWHB-26	SWHB-26-P	SWHB-26-P	Polychaetes	Polychaetes	11.2	Unknown	Combine and analyze all	
7	San Diego Bay North	SWHB-26	SWHB-26-M	SWHB-26-M	Mollusks	Mollusks	45.4	Unknown	Combine and analyze all	Small clams
8	San Diego Bay North	SWHB-26	SWHB-26-FC	SWHB-26-C-2	Crustacea	Brown shrimp	15	Unknown	Analyze single shrimp	F. Californiensis
9	San Diego Bay North	SWHB-26	SWHB-26-ZP	SWHB-26-Pik	Plankton	Plankton	9.1	Unknown	Analyze all	
10	San Diego Bay North	SWHB-27	SWHB-27-SBB	SWHB-27-SSB	Fish	Spotted sand bass	Unknown	6	Combine and analyze all fish	
11	San Diego Bay North	SWHB-27	SWHB-27-CH	SWHB-27-CH	Fish	California halibut	Unknown	6	Combine and analyze all fish	
12	San Diego Bay North	SWHB-27	SWHB-27-SP	SWHB-27-SP	Fish	Shiner perch	Unknown	6	Combine and analyze all fish	
13	San Diego Bay North	SWHB-27	SWHB-27-P	SWHB-27-P	Polychaetes	Polychaetes	5.4	Unknown	Combine and analyze all	
14	San Diego Bay North	SWHB-27	SWHB-27-M	SWHB-27-M	Mollusks	Mollusks	54.4	Unknown	Combine and analyze all	Small clams
15	San Diego Bay North	SWHB-27	SWHB-27-ZP	SWHB-27-Pik	Plankton	Plankton	12	Unknown	Analyze all	
16	San Diego Bay North	SWHB-30	SWHB-30-SBB	SWHB-30-SSB	Fish	Spotted sand bass	Unknown	5	Combine and analyze all fish	
17	San Diego Bay North	SWHB-30	SWHB-30-CH	SWHB-30-CH	Fish	California halibut	Unknown	5	Combine and analyze all fish	
18	San Diego Bay North	SWHB-30	SWHB-30-BP	SWHB-30-BP	Fish	Black perch	Unknown	5	Combine and analyze all fish	
19	San Diego Bay North	SWHB-30	SWHB-30-C	SWHB-30-C-1	Crustacea	Crustacea	8	Unknown	Combine and analyze all	
20	San Diego Bay North	SWHB-30	SWHB-30-P	SWHB-30-P	Polychaetes	Polychaetes	12.5	Unknown	Combine and analyze all	
21	San Diego Bay North	SWHB-30	SWHB-30-M	SWHB-30-M	Mollusks	Mollusks	59.2	Unknown	Combine and analyze all	Small clams
22	San Diego Bay North	SWHB-30	SWHB-30-Crabs	SWHB-30-C-2	Crustacea	Crabs	Unknown	4	Combine and analyze all	Portunis + sm. cancer crabs
23	San Diego Bay North	SWHB-30	SWHB-30-ZP	SWHB-30-Pik	Plankton	Plankton	53.6	Unknown	Analyze all	
24	San Diego Bay Central	SWHB-01	SWHB-01-SBB	SWHB-01-SSB	Fish	Spotted sand bass	Unknown	5	Combine and analyze all fish	
25	San Diego Bay Central	SWHB-01	SWHB-01-CH	SWHB-01-CH	Fish	California halibut	Unknown	5	Combine and analyze all fish	
26	San Diego Bay Central	SWHB-01	SWHB-01-SP	SWHB-01-SP	Fish	Shiner perch	Unknown	4	Combine and analyze all fish	
27	San Diego Bay Central	SWHB-01	SWHB-01-C	SWHB-01-C-1	Crustacea	Crustacea	3.3	Unknown	Combine and analyze all	
28	San Diego Bay Central	SWHB-01	SWHB-01-P	SWHB-01-P	Polychaetes	Polychaetes	13.5	Unknown	Combine and analyze all	
29	San Diego Bay Central	SWHB-01	SWHB-01-M	SWHB-01-M	Mollusks	Mollusks	52.5	Unknown	Combine and analyze all	Small clams
30	San Diego Bay Central	SWHB-01	SWHB-01-FC	SWHB-01-C-2	Crustacea	Brown shrimp	15	Unknown	Analyze brown shrimp alone; add the 4 small crabs to other infauna crustacea in SWHB-01-C	F. Californiensis
31	San Diego Bay Central	SWHB-01	SWHB-01-ZP	SWHB-01-Pik	Plankton	Plankton	10.6	Unknown	Analyze all	
32	San Diego Bay Central	SWHB-06	SWHB-06-SBB	SWHB-06-SSB	Fish	Spotted sand bass	Unknown	5	Combine and analyze all fish	
33	San Diego Bay Central	SWHB-06	SWHB-06-CH-Small	SWHB-06-CH-1	Fish	California halibut	Unknown	5	Sub-sample: Combine and analyze the 5 smallest fish in bag	Small replicate
	San Diego Bay Central	SWHB-06	SWHB-06-CH-Large	SWHB-06-CH-2	Fish	California halibut	Unknown	5	Sub-sample: Combine and analyze the 5 largest fish in bag	Large replicate
34	San Diego Bay Central	SWHB-06	SWHB-06-P	SWHB-06-P	Polychaetes	Polychaetes	8.5	Unknown	Combine and analyze all polychaetes (excluding anemones. Fresh foil, Bag and re-freeze anemones)	Delivered foil package includes anemone. DO NOT TEST anemone, only polychaete worms
35	San Diego Bay Central	SWHB-06	SWHB-06-M	SWHB-06-M	Mollusks	Mollusks	53.1	Unknown	Combine and analyze all	Small clams
36	San Diego Bay Central	SWHB-06	SWHB-06-ZP	SWHB-06-Pik	Plankton	Plankton	28.6	Unknown	Analyze all	

**San Diego Bay - Shallow Water Habitat Tissue Samples for Chemical Analysis - Physis
Collected: April 2014**

Sample #	Region	StationID	SampleID	Bioaccumulation SampleID	Type	Common Name	Weight (g)	No. Individuals	Processing Instructions	Comment
37	San Diego Bay Central	SWHB-40	SWHB-40-SBB	SWHB-40-SSB	Fish	Spotted sand bass	Unknown	6	Combine and analyze all fish	
38	San Diego Bay Central	SWHB-40	SWHB-40-CH	SWHB-40-CH	Fish	California halibut	Unknown	5	Combine and analyze all fish	
39	San Diego Bay Central	SWHB-40	SWHB-40-SP	SWHB-40-SP	Fish	Shiner perch	Unknown	6	Combine and analyze all fish	
40	San Diego Bay Central	SWHB-40	SWHB-40-C	SWHB-40-C	Crustacea	Crustacea	8	Unknown	Combine and analyze all	
41	San Diego Bay Central	SWHB-40	SWHB-40-P	SWHB-40-P	Polychaetes	Polychaetes	12.5	Unknown	Combine and analyze all	
42	San Diego Bay Central	SWHB-40	SWHB-40-M	SWHB-40-M	Mollusks	Mollusks	59.2	Unknown	Combine and analyze all	Small clams
43	San Diego Bay Central	SWHB-40	SWHB-40-ZP	SWHB-40-Pik	Plankton	Plankton	9.7	Unknown	Analyze all	
44	San Diego Bay South	SWHB-15	SWHB-15-SBB	SWHB-15-SSB	Fish	Spotted sand bass	Unknown	2	Combine and analyze both fish	
45	San Diego Bay South	SWHB-15	SWHB-15-CH	SWHB-15-CH	Fish	California halibut	Unknown	7	Combine and analyze 5 smallest fish in bag	
46	San Diego Bay South	SWHB-15	SWHB-15-SA-small	SWHB-15-SA	Fish	Slough anchovy	Unknown	10	Combine and analyze all fish	Small
47	San Diego Bay South	SWHB-15	SWHB-15-C	SWHB-15-C	Crustacea	Crustacea	2.8	Unknown	Combine and analyze all	
48	San Diego Bay South	SWHB-15	SWHB-15-P	SWHB-15-P	Polychaetes	Polychaetes	1.7	Unknown	Combine and analyze all	
49	San Diego Bay South	SWHB-15	SWHB-15-M	SWHB-15-M	Mollusks	Mollusks	5.9	Unknown	Combine and analyze all	Small clams
50	San Diego Bay South	SWHB-15	SWHB-15-ZP	SWHB-15-Pik	Plankton	Plankton	11.9	Unknown	Analyze all	
51	San Diego Bay South	SWHB-21	SWHB-21-SBB	SWHB-21-SSB	Fish	Spotted sand bass	Unknown	6	Combine and analyze all fish	
52	San Diego Bay South	SWHB-21	SWHB-21-CH-small	SWHB-21-CH-1	Fish	California halibut	Unknown	5	Sub-sample: Combine and analyze the 5 smallest fish in bag	Small replicate
	San Diego Bay South	SWHB-21	SWHB-21-CH-large	SWHB-21-CH-2	Fish	California halibut	Unknown	5	Sub-sample: Combine and analyze the 5 largest fish in bag	Large replicate
53	San Diego Bay South	SWHB-21	SWHB-21-C	SWHB-21-C	Crustacea	Crustacea	2.2	Unknown	Combine and analyze all fish	
54	San Diego Bay South	SWHB-21	SWHB-21-P	SWHB-21-P	Polychaetes	Polychaetes	3.6	Unknown	Combine and analyze all polychaetes (excluding anemones. Fresh foil, Bag and re-freeze anemones)	Delivered foil package includes anemone. DO NOT TEST anemone, only polychaete worms
55	San Diego Bay South	SWHB-21	SWHB-21-B	SWHB-21-M	Mollusks	Mollusks	17.5	Unknown	Combine and analyze all	Small clams
56	San Diego Bay South	SWHB-21	SWHB-21-ZP	SWHB-21-Pik	Plankton	Plankton	5.3	Unknown	Analyze all	
57	San Diego Bay South	SWHB-22	SWHB-22-SBB	SWHB-22-SSB	Fish	Spotted sand bass	Unknown	6	Combine and analyze all fish	
58	San Diego Bay South	SWHB-22	SWHB-22-CH	SWHB-22-CH	Fish	California halibut	Unknown	6	Combine and analyze all fish	
59	San Diego Bay South	SWHB-22	SWHB-22-SP	SWHB-22-SP	Fish	Shiner perch	Unknown	2	Combine and analyze all fish	
60	San Diego Bay South	SWHB-22	SWHB-22-P	SWHB-22-P	Polychaetes	Polychaetes	8.5	Unknown	Combine and analyze all polychaetes (excluding anemones. Fresh foil, Bag and re-freeze anemones)	Delivered foil package includes anemone. DO NOT TEST anemone, only polychaete worms
61	San Diego Bay South	SWHB-22	SWHB-22-M	SWHB-22-M	Mollusks	Mollusks	25.5	Unknown	Combine and analyze all	Small clams
62	San Diego Bay South	SWHB-22	SWHB-22-ZP	SWHB-22-Pik	Plankton	Plankton	13.8	Unknown	Analyze all	
63	San Diego Bay North	SWHB-SD-North	SWHB-26-27-Goby	SWHB-North-G	Fish	Goby sp.	Unknown	11	Combine and analyze all gobies from Sites 26 and 27	Sample composited from stations 26, 27
64	San Diego Bay Central	SWHB-SD-Centra	SWHB-01-06-40-Goby	SWHB-Central-G	Fish	Goby sp.	Unknown	12	Combine and analyze all gobies from Sites 01, 06, and 40	Sample composited from stations 01, 06, 40
65	San Diego Bay South	SWHB-SD-South	SWHB-15-22-Goby	SWHB-South-G	Fish	Goby sp.	Unknown	10	Combine and analyze all gobies from Sites 15 and 22	Sample composited from stations 15, 22

NOTE: Green shading provided only to visually differentiate different site locations in the table.

**San Diego Bay Shallow Water Habitat Benthic Trawl Collections for Bioaccumulation Tissue
(Epibenthic Invertebrates)**

San Diego Subregion	Site	Date Sampled	Assorted Arthropods	<i>Musculista senhousia</i>	<i>Bulla gouldiana</i>	<i>Brown Shrimp Farfantepenaeus californiensis</i>	Bivalve (FID: <i>Argopecten ventricosus</i>)	<i>Portunus xantusii</i> and <i>Cancer</i> sp.
North	26	4/22/14			29	1		
	27	4/23/14						
	30	4/23/14						4
Central	1	4/22/14	5	>100		1		4
	6	4/22/14			50			
	40	4/22/14		20			1	
South	15	4/21/14						
	21	4/21/14			1			
	22	4/21/14					1.0	

**San Diego Bay Shallow Water Habitat Benthic Collections for Bioaccumulation Tissue
(Invertebrates)**

SD Bay Region	Site	Date Sampled (Infauna)	Benthic Infauna Sample Weights (grams)							Trawl Sample Invertebrates - Number of individuals					
			Polychaetes	Crustacea	Mollusca- Bivalve -sm clams	Gastropoda - sm snails	Gastropoda - Bulla Snails	Goby	Comments	Assorted Arthropods	Musculista senhousia	Bulla gouldiana	Brown Shrimp <i>F.</i> <i>californiensis</i>	Bivalve	Porunus <i>xantusii</i> and Cancer sp.
North	SWHB-26	4/17/14; 4/22/14	11.2	10.2	45.4	59.8	X (unknown gram)	5 (1.2g)	---	---	---	29	1	---	---
	SWHB-27	4/18/14; 4/23/14	5.4	1.3	54.4	---	51.4	6 (1.4g)	---	---	---	---	---	---	---
	SWHB-30	4/18/14; 4/23/14	10.2	12.2	3.9	146	---	---	Sipunculid in sample= 189	---	---	---	---	---	4
TOTAL			26.8	23.7	104	206	51								
Central	SWHB-01	4/16/14; 4/22/14	13.5	3.3	52.5	4 (2.9g)	---	3 (1.0g)	Most bivalves are <i>Musculista</i>	5	>100	---	1	---	4
	SWHB-06	4/17/14; 4/22/14	8.5	0.5	53.1	17.5	---	8 (-2g)	Polychaete weight includes anemones	---	---	50	---	---	---
	SWHB-40	4/16/14; 4/22/14	12.5	8	59.2	3 (1.9g)	---	1 (1.2g)	Most bivalves are <i>Musculista</i>	---	20	---	---	1	---
TOTAL			34.5	11.8	165	17.5									
South	SWHB-15	4/15/14; 4/21/14	1.7	2.8	5.9	---	---	8 (2.5 g)	Pheronids in sample= 3.2 g	---	---	---	---	---	---
	SWHB-21	4/16/14; 4/21/14	3.6	2.2	17.5	7.5	1 (32g)	---	Polychaete weight includes anemones	---	---	1.	---	---	---
	SWHB-22	4/15/14; 4/21/14	8.5	0.7	25.5	4.5	---	2 (0.7g)	---	---	---	---	---	1	---
TOTAL			13.8	5.7	48.9	12									

ANALYSIS NOTES

Analyze brown shrimp alone, add 4 sm crabs to the infauna crustacea sample.

Recommend for analysis
Taken by Physis courier on 5/21/2015
Retained by AMEC in freezer 05/21/2015

**San Diego Bay Shallow Water Habitat Collections for Bioaccumulation
Tissue
(Zooplankton)**

San Diego Bay Subregion	Site	Date Sampled	Wet Weight (g)
North	26	5/8/14	9.07
	27	5/12/14	12
	30	5/12/14	53.6
Central	1	5/8/14	10.6
	6	5/9/14	28.6
	40	5/9/14	9.7
South	15	5/7/14	11.9
	21	5/7/14	5.3
	22	5/7/14	13.8

**San Diego Bay Shallow Water Habitat Benthic Trawl Collections for Bioaccumulation Tissue - Fish Species
and length range in mm)**

(#

San Diego Bay Subregion	Site	Date Sampled	Spotted sand bass	CA halibut	Shiner perch	Spotted turbot	Diamond turbot	Slough anchovy	Barred sand bass	Kelp Bass (Calico Bass)	Black perch	Dwarf surfperch	Bay blenny	CO turbot
North	26	4/22/14	5** (125-140)	5** (130-195)	10 * ** (95-110)				10^ (55-100)	10^ (58-87)	6** (58-60)	6^ (90-100)	8^ (68-92)	
	27	4/23/14	6** (62-108)	6** (100-150)	6** (62-108)					1^ (130)				
	30	4/23/14	3** (235-310)	5** (120-140)		3^ (75-133)				2^ (160,165)	5** (115-150)			1^ (95)
Central	1	4/22/14	5** (135-155)	5** (95-150)	4** (45-105)									
	6	4/22/14	5** (180-240)	10 * ** (65-120)		5^ (80-120)								
	40	4/22/14	6** (80-135)	5** (80-155)	6** (50-110)				6^ (85-135)					
South	15	4/21/14	2** (250,290)	7** (65-170)			5^ (80-90)	9** (45-50)						
	21	4/21/14	6** (135-150)	10 * ** (50-150)										
	22	4/21/14	6** (125-165)	6** (50-125)	2** (54,64)			1^ (51)	6^ (90-165)					

Highlighted values for recommended analysis

Benthic species
 Pelagic species

- * Split for duplicate analysis (See Sample Detail list for sub-sample split of largest 5 vs smallest 5 fish.)
- ** Taken by Physis courier 05/21/2015 for analysis
- ^ Retained by AMEC in freezer for archive 05/21/2015

SAMPLE RECEIPT SUMMARY

CLIENT: SCCWRP Date Received: May 21, 2015 Received By: AI Inspected By: AI

COURIER

PHYSIS
 CLIENT
 FEDEX
 UPS
start 09:45 end 14:15
 OTHER: _____

COOLER

COOLER
 BOX
 total #
 OTHER: _____
 3

TEMPERATURE

6 °C
 WET ICE
 BLUE ICE
 DRY ICE
 NONE

SAMPLE INTEGRITY UPON RECEIPT

1. COC(s) included and completely filled out..... **YES**
2. All sample containers arrived intact..... **YES**
3. All samples listed on COC(s) are present..... **YES**
4. Information on containers consistent with information on COC(s)..... **YES**
5. Correct containers and volume for all analyses indicated..... **YES**
6. All samples received within method holding time..... **YES**
7. Correct preservation used for all analyses indicated..... **YES**
8. Name of sampler included on COC(s)..... **YES**

NOTES

For RHMP Analytical Data
See Final Report at

<https://www.portofsandiego.org/document/environment/regional-harbor-monitoring-program/rhmp-2013.html>