

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Job ID: 580-76440-3

Client Project/Site: Portland Harbor Pre-Remedial Design
Revision: 2

For:

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Authorized for release by:
7/16/2018 4:38:22 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Job ID: 580-76440-3

Laboratory: TestAmerica Seattle

Narrative

This report was revised to include the Estimated Maximum Possible Concentrations (EMPCs) for PCB 5 and/or PCB 159 where the original values were outside the theoretical ion ratio limits and were not being adjusted to reflect the EMPC values.

This report was revised to correct results which were originally reported using zero area of one of the two masses used for quantitation.

CASE NARRATIVE

Client: AECOM

Project: Portland Harbor Pre-Remedial Design

Report Number: 580-76440-3

REVISION 1: JUNE 4, 2018

This revision was required to remove the Total PCBs from the report as the client determined that they are not required.

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

Eighteen samples were received on 4/9/2018 2:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.6° C, 4.3° C, 5.2° C, 5.3° C and 5.5° C.

A sample container was provided to be archived frozen at the TestAmerica Sacramento laboratory pending potential additional analyses.

This report contains results of PCB Congeners by Method 1668A, performed by TestAmerica Knoxville.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

POLYCHLORINATED BIPHENYLS CONGENERS (PCBS)

Samples PDI-SG-B054-BL1 (580-76440-1), PDI-SG-B059-BL1 (580-76440-2), PDI-SG-B062-BL1 (580-76440-3), PDI-SG-B063-BL1 (580-76440-4), PDI-SG-B067-BL1 (580-76440-5), PDI-SG-B068-BL1 (580-76440-6), PDI-SG-B072-BL1 (580-76440-7), PDI-SG-B064-BL1 (580-76440-8), PDI-SG-B065-BL1 (580-76440-9), PDI-SG-B066-BL1 (580-76440-10), PDI-SG-B070-BL1 (580-76440-11), PDI-SG-B071-BL1 (580-76440-12), PDI-SG-B074-BL1 (580-76440-13), PDI-SG-B041-BL1 (580-76440-14), PDI-SG-B073-BL1 (580-76440-15), PDI-SG-B075-BL1 (580-76440-16) and PDI-SG-B076-BL1 (580-76440-17) were analyzed for polychlorinated biphenyls congeners (PCBs) in accordance with EPA Method 1668A. The samples were prepared on 04/13/2018, 04/17/2018 and 04/25/2018 and analyzed on 04/24/2018, 04/25/2018, 04/26/2018 and 04/27/2018.

Polychlorinated biphenyls, Total was detected in method blank MB 140-19543/18-C at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Case Narrative

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Job ID: 580-76440-3 (Continued)

Laboratory: TestAmerica Seattle (Continued)

Several analytes were detected in method blank MB 140-19543/18-C at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Several analytes were detected in method blank MB 140-19612/15-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Several analytes were detected in method blank MB 140-19821/2-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

An ion abundance ratio is outside criteria for an Isotope Dilution Analyte (IDA) associated with the following method blank: (MB 140-19543/18-C).

Two Isotope Dilution Analyte (IDA) recoveries associated with the following sample are below the method recommended limit: PDI-SG-B066-BL1 (580-76440-10). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

An ion abundance ratio is outside criteria for the Isotope Dilution Analyte (IDA) associated with the following sample: PDI-SG-B066-BL1 (580-76440-10).

Samples PDI-SG-B062-BL1 (580-76440-3)[10X] and PDI-SG-B063-BL1 (580-76440-4)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PCB CONGENERS - Rinse Blank

Sample PDI-RB-180408 (580-76440-18) was analyzed for PCB Congeners in accordance with 1668A. The samples were prepared on 04/11/2018 and analyzed on 04/16/2018.

Several analytes were detected in method blank MB 140-19471/5-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Definitions/Glossary

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Qualifiers

Dioxin

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
C93	The compound co-eluted with PCB-93
q	The reported result is the estimated maximum possible concentration of this analyte, quantitated using the theoretical ion ratio. The measured ion ratio does not meet qualitative identification criteria and indicates a possible interference.
B	Compound was found in the blank and sample.
C90	The compound co-eluted with PCB-90
C98	The compound co-eluted with PCB-98
C	The compound co-eluted with other compounds
C86	The compound co-eluted with PCB-86
C110	The compound co-eluted with PCB-110
C85	The compound co-eluted with PCB-85
C108	The compound co-eluted with PCB-108
C12	The compound co-eluted with PCB-12
C129	The compound co-eluted with PCB-129
C139	The compound co-eluted with PCB-139
C134	The compound co-eluted with PCB-134
C147	The compound co-eluted with PCB-147
C135	The compound co-eluted with PCB-135
C156	The compound co-eluted with PCB-156
C128	The compound co-eluted with PCB-128
C153	The compound co-eluted with PCB-153
C171	The compound co-eluted with PCB-171
C183	The compound co-eluted with PCB-183
C180	The compound co-eluted with PCB-180
C198	The compound co-eluted with PCB-198
C20	The compound co-eluted with PCB-20
C26	The compound co-eluted with PCB-26
C18	The compound co-eluted with PCB-18
C21	The compound co-eluted with PCB-21
C40	The compound co-eluted with PCB-40
C44	The compound co-eluted with PCB-44
C45	The compound co-eluted with PCB-45
C50	The compound co-eluted with PCB-50
C59	The compound co-eluted with PCB-59
C49	The compound co-eluted with PCB-49
C61	The compound co-eluted with PCB-61
C43	The compound co-eluted with PCB-43
C88	The compound co-eluted with PCB-88
C83	The compound co-eluted with PCB-83
*	Isotope Dilution analyte is outside acceptance limits.
I	Value is EMPC (estimated maximum possible concentration).

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor

TestAmerica Seattle

Definitions/Glossary

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Date Collected: 04/06/18 10:23

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-1

Matrix: Solid

Percent Solids: 69.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.00095	J	0.0069	0.00010	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-2	0.00073	J q B	0.0069	0.00012	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-3	0.00059	J q	0.0069	0.00013	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-4	0.0041	J q	0.014	0.0033	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-5	ND		0.0069	0.0025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-6	ND		0.0069	0.0022	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-7	ND		0.0069	0.0023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-8	0.0067	J q	0.014	0.0021	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-9	ND		0.0069	0.0023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-10	ND		0.0069	0.0025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-11	0.010	J q B	0.014	0.0022	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-12	ND	C	0.014	0.0023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-13	ND	C12	0.014	0.0023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-14	ND		0.0069	0.0019	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-15	0.0049	J q	0.0069	0.0023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-16	0.0050	J q	0.0069	0.00039	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-17	0.0071		0.0069	0.00035	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-18	0.014	C	0.014	0.00031	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-19	0.0014	J q	0.0069	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-20	0.019	C B	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-21	0.0099	J C	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-22	0.0062	J	0.0069	0.00026	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-23	ND		0.0069	0.00026	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-24	ND		0.0069	0.00029	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-25	0.0010	J q	0.0069	0.00023	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-26	0.0027	J C	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-27	ND		0.0069	0.00026	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-28	0.019	C20 B	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-29	0.0027	J C26	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-30	0.014	C18	0.014	0.00031	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-31	0.014	B	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-32	0.0038	J q B	0.0069	0.00024	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-33	0.0099	J C21	0.014	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-34	ND		0.0069	0.00027	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-35	ND		0.0069	0.00026	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-36	ND		0.0069	0.00025	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-37	0.0061	J B	0.0069	0.00026	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-38	ND		0.0069	0.00027	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-39	ND		0.0069	0.00024	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-40	0.0070	J C	0.021	0.00057	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-41	0.0070	J C40	0.021	0.00057	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-42	0.0070		0.0069	0.00057	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-43	ND	C	0.014	0.00053	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-44	0.020	J C	0.021	0.00050	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-45	0.0038	J C	0.014	0.00060	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-46	ND		0.0069	0.00072	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-47	0.020	J C44	0.021	0.00050	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-48	0.0031	J	0.0069	0.00057	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1
PCB-49	0.012	J C	0.014	0.00046	ng/g	☆	04/13/18 12:10	04/24/18 20:58	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Lab Sample ID: 580-76440-1

Date Collected: 04/06/18 10:23

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 69.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.0026	J q C	0.014	0.00055	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-51	0.0038	J C45	0.014	0.00060	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-52	0.027		0.0069	0.00056	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-53	0.0026	J q C50	0.014	0.00055	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-54	ND		0.0069	0.000052	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-55	ND		0.0069	0.00041	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-56	0.0063	J	0.0069	0.00041	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-57	ND		0.0069	0.00042	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-58	ND		0.0069	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-59	0.0016	J q C	0.021	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-60	0.0030	J q	0.0069	0.00042	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-61	0.030	C	0.028	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-62	0.0016	J q C59	0.021	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-63	ND		0.0069	0.00038	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-64	0.0072	q	0.0069	0.00038	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-65	0.020	J C44	0.021	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-66	0.017		0.0069	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-67	ND		0.0069	0.00036	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-68	ND		0.0069	0.00037	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-69	0.012	J C49	0.014	0.00046	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-70	0.030	C61	0.028	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-71	0.0070	J C40	0.021	0.00057	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-72	ND		0.0069	0.00041	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-73	ND	C43	0.014	0.00053	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-74	0.030	C61	0.028	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-75	0.0016	J q C59	0.021	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-76	0.030	C61	0.028	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-77	0.0020	J	0.0069	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-78	ND		0.0069	0.00042	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-79	ND		0.0069	0.00037	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-80	ND		0.0069	0.00036	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-81	ND		0.0069	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-82	0.0032	J q	0.0069	0.00022	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-83	0.022	C B	0.014	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-84	0.0091	q	0.0069	0.00022	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-85	0.0072	J q C B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-86	0.025	J C	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-87	0.025	J C86	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-88	0.0067	J C	0.014	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-89	ND		0.0069	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-90	0.046	C B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-91	0.0067	J C88	0.014	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-92	0.0067	J B	0.0069	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-93	0.0012	J q C	0.014	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-94	ND		0.0069	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-95	0.040	B	0.0069	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-96	ND		0.0069	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-97	0.025	J C86	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-98	0.0011	J q C	0.014	0.00018	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Lab Sample ID: 580-76440-1

Date Collected: 04/06/18 10:23

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 69.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.022	C83 B	0.014	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-100	0.0012	J q C93	0.014	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-101	0.046	C90 B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-102	0.0011	J q C98	0.014	0.00018	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-103	ND		0.0069	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-104	ND		0.0069	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-105	0.014	B	0.0069	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-106	ND		0.0069	0.00048	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-107	ND		0.0069	0.00051	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-108	0.0014	J C	0.014	0.00049	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-109	0.025	J C86	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-110	0.055	C B	0.014	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-111	ND		0.0069	0.00013	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-112	ND		0.0069	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-113	0.046	C90 B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-114	ND		0.0069	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-115	0.055	C110 B	0.014	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-116	0.0072	J q C85 B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-117	0.0072	J q C85 B	0.021	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-118	0.039	B	0.0069	0.00046	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-119	0.025	J C86	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-120	ND		0.0069	0.00013	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-121	ND		0.0069	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-122	ND		0.0069	0.00055	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-123	ND		0.0069	0.00049	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-124	0.0014	J C108	0.014	0.00049	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-125	0.025	J C86	0.042	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-126	ND		0.0069	0.00049	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-127	ND		0.0069	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-128	0.010	J C B	0.014	0.00077	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-129	0.074	C B	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-130	0.0029	J q	0.0069	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-131	ND		0.0069	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-132	0.020	q	0.0069	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-133	ND		0.0069	0.00099	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-134	0.0025	J q C	0.014	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-135	0.023	C B	0.014	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-136	0.0093		0.0069	0.00011	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-137	0.0023	J	0.0069	0.00090	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-138	0.074	C129 B	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-139	ND	C	0.014	0.00089	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-140	ND	C139	0.014	0.00089	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-141	0.013		0.0069	0.00093	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-142	ND		0.0069	0.00099	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-143	0.0025	J q C134	0.014	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-144	0.0025	J q	0.0069	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-145	ND		0.0069	0.00011	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-146	0.010		0.0069	0.00088	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-147	0.064	C B	0.014	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Lab Sample ID: 580-76440-1

Date Collected: 04/06/18 10:23

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 69.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0069	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-149	0.064	C147 B	0.014	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-150	ND		0.0069	0.00010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-151	0.023	C135 B	0.014	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-152	ND		0.0069	0.00011	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-153	0.056	C B	0.014	0.00069	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-154	0.00056	J q	0.0069	0.00012	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-155	ND		0.0069	0.00010	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-156	0.0069	J C	0.014	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-157	0.0069	J C156	0.014	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-158	0.0069		0.0069	0.00063	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-159	ND		0.0069	0.00066	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-160	0.074	C129 B	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-161	ND		0.0069	0.00066	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-162	ND		0.0069	0.00065	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-163	0.074	C129 B	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-164	0.0035	J q	0.0069	0.00070	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-165	ND		0.0069	0.00075	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-166	0.010	J C128 B	0.014	0.00077	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-167	0.0023	J	0.0069	0.00053	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-168	0.056	C153 B	0.014	0.00069	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-169	ND		0.0069	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-170	0.015	q B	0.0069	0.00064	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-171	0.0072	J C	0.014	0.00063	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-172	0.0023	J q	0.0069	0.00062	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-173	0.0072	J C171	0.014	0.00063	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-174	0.020	B	0.0069	0.00058	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-175	ND		0.0069	0.00057	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-176	0.0019	J q B	0.0069	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-177	0.012	B	0.0069	0.00060	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-178	0.0036	J	0.0069	0.00061	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-179	0.0098		0.0069	0.00045	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-180	0.041	C B	0.014	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-181	ND		0.0069	0.00056	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-182	ND		0.0069	0.00054	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-183	0.012	J C	0.014	0.00055	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-184	ND		0.0069	0.00046	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-185	0.012	J C183	0.014	0.00055	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-186	ND		0.0069	0.00045	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-187	0.023		0.0069	0.00052	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-188	ND		0.0069	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-189	ND		0.0069	0.00084	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-190	0.0028	J q B	0.0069	0.00041	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-191	ND		0.0069	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-192	ND		0.0069	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-193	0.041	C180 B	0.014	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-194	0.0073	q	0.0069	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-195	ND		0.0069	0.0015	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-196	0.0042	J q	0.0069	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Lab Sample ID: 580-76440-1

Date Collected: 04/06/18 10:23

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 69.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.0069	0.00030	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-198	0.012	J C	0.014	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-199	0.012	J C198	0.014	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-200	0.0013	J q	0.0069	0.00026	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-201	0.0010	J q	0.0069	0.00027	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-202	0.0016	J q	0.0069	0.00030	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-203	0.0057	J q	0.0069	0.00035	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-204	ND		0.0069	0.00030	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-205	ND		0.0069	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-206	0.0075		0.0069	0.0024	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-207	ND		0.0069	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-208	ND		0.0069	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
PCB-209	0.011	q	0.0069	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 20:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	91		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-3L	88		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-4L	71		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-15L	76		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-19L	82		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-37L	85		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-54L	86		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-77L	87		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-81L	85		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-104L	76		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-105L	92		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-114L	84		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-118L	83		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-123L	83		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-126L	83		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-155L	79		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-156L	90	C	30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-157L	90	C156	30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-167L	89		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-169L	93		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-170L	84		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-188L	88		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-189L	95		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-202L	90		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-205L	71		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-206L	68		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-208L	74		30 - 140				04/13/18 12:10	04/24/18 20:58	1
PCB-209L	56		30 - 140				04/13/18 12:10	04/24/18 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	84		40 - 125				04/13/18 12:10	04/24/18 20:58	1
PCB-111L	89		40 - 125				04/13/18 12:10	04/24/18 20:58	1
PCB-178L	87		40 - 125				04/13/18 12:10	04/24/18 20:58	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B059-BL1

Date Collected: 04/06/18 11:27

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-2

Matrix: Solid

Percent Solids: 56.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.016		0.0085	0.00018	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-2	0.012	B	0.0085	0.00021	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-3	0.0030	J q	0.0085	0.00024	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-4	0.047	q	0.017	0.0044	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-5	ND		0.0085	0.0033	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-6	0.011	q	0.0085	0.0029	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-7	ND		0.0085	0.0029	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-8	0.051		0.017	0.0027	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-9	ND		0.0085	0.0030	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-10	ND		0.0085	0.0032	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-11	0.055	B	0.017	0.0028	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-12	0.0071	J q C	0.017	0.0029	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-13	0.0071	J q C12	0.017	0.0029	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-14	ND		0.0085	0.0025	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-15	0.039		0.0085	0.0029	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-16	0.021		0.0085	0.00058	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-17	0.041		0.0085	0.00052	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-18	0.065	C	0.017	0.00046	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-19	0.019	q	0.0085	0.00064	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-20	0.14	C B	0.017	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-21	0.056	C	0.017	0.00042	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-22	0.037		0.0085	0.00044	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-23	ND		0.0085	0.00044	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-24	ND		0.0085	0.00044	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-25	0.0097		0.0085	0.00040	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-26	0.019	C	0.017	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-27	0.0066	J q	0.0085	0.00038	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-28	0.14	C20 B	0.017	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-29	0.019	C26	0.017	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-30	0.065	C18	0.017	0.00046	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-31	0.089	B	0.017	0.00042	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-32	0.027	q B	0.0085	0.00036	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-33	0.056	C21	0.017	0.00042	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-34	ND		0.0085	0.00046	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-35	0.0011	J q	0.0085	0.00045	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-36	ND		0.0085	0.00043	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-37	0.042	B	0.0085	0.00044	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-38	ND		0.0085	0.00046	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-39	ND		0.0085	0.00041	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-40	0.070	C	0.026	0.0012	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-41	0.070	C40	0.026	0.0012	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-42	0.032		0.0085	0.0012	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-43	0.0029	J q C	0.017	0.0011	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-44	0.14	C	0.026	0.0010	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-45	0.027	C	0.017	0.0012	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-46	0.0064	J	0.0085	0.0015	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-47	0.14	C44	0.026	0.0010	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-48	0.024		0.0085	0.0012	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1
PCB-49	0.094	C	0.017	0.00095	ng/g	☆	04/13/18 12:10	04/24/18 22:00	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B059-BL1

Lab Sample ID: 580-76440-2

Date Collected: 04/06/18 11:27

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.023	C	0.017	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-51	0.027	C45	0.017	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-52	0.16		0.0085	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-53	0.023	C50	0.017	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-54	0.0015	J q	0.0085	0.00010	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-55	ND		0.0085	0.00085	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-56	0.052		0.0085	0.00085	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-57	ND		0.0085	0.00086	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-58	ND		0.0085	0.00087	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-59	0.011	J C	0.026	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-60	0.020		0.0085	0.00086	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-61	0.20	C	0.034	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-62	0.011	J C59	0.026	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-63	0.0043	J	0.0085	0.00079	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-64	0.051		0.0085	0.00078	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-65	0.14	C44	0.026	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-66	0.13		0.0085	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-67	0.0028	J	0.0085	0.00074	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-68	0.0015	J q	0.0085	0.00076	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-69	0.094	C49	0.017	0.00095	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-70	0.20	C61	0.034	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-71	0.070	C40	0.026	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-72	ND		0.0085	0.00084	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-73	0.0029	J q C43	0.017	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-74	0.20	C61	0.034	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-75	0.011	J C59	0.026	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-76	0.20	C61	0.034	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-77	0.013		0.0085	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-78	ND		0.0085	0.00087	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-79	ND		0.0085	0.00075	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-80	ND		0.0085	0.00074	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-81	ND		0.0085	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-82	0.026		0.0085	0.00023	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-83	0.15	C B	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-84	0.056		0.0085	0.00023	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-85	0.041	C B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-86	0.14	C	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-87	0.14	C86	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-88	0.034	q C	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-89	ND		0.0085	0.00023	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-90	0.24	C B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-91	0.034	q C88	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-92	0.044	B	0.0085	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-93	0.0068	J C	0.017	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-94	ND		0.0085	0.00023	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-95	0.19	B	0.0085	0.00022	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-96	0.0026	J	0.0085	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-97	0.14	C86	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-98	0.0067	J q C	0.017	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B059-BL1

Lab Sample ID: 580-76440-2

Date Collected: 04/06/18 11:27

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.15	C83 B	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-100	0.0068	J C93	0.017	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-101	0.24	C90 B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-102	0.0067	J q C98	0.017	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-103	0.0051	J q	0.0085	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-104	ND		0.0085	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-105	0.077	B	0.0085	0.00082	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-106	ND		0.0085	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-107	0.020		0.0085	0.00086	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-108	0.0067	J q C	0.017	0.00083	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-109	0.14	C86	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-110	0.28	C B	0.017	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-111	ND		0.0085	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-112	ND		0.0085	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-113	0.24	C90 B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-114	0.0032	J	0.0085	0.00077	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-115	0.28	C110 B	0.017	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-116	0.041	C85 B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-117	0.041	C85 B	0.026	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-118	0.20	B	0.0085	0.00077	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-119	0.14	C86	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-120	0.0020	J B	0.0085	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-121	ND		0.0085	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-122	0.0028	J	0.0085	0.00093	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-123	0.0023	J q	0.0085	0.00078	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-124	0.0067	J q C108	0.017	0.00083	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-125	0.14	C86	0.051	0.00017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-126	ND		0.0085	0.00080	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-127	ND		0.0085	0.00081	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-128	0.052	C B	0.017	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-129	0.38	C B	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-130	0.020	q	0.0085	0.0017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-131	ND		0.0085	0.0018	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-132	0.11		0.0085	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-133	0.0066	J	0.0085	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-134	0.015	J C	0.017	0.0017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-135	0.12	C B	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-136	0.040		0.0085	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-137	0.0093	q	0.0085	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-138	0.38	C129 B	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-139	ND	C	0.017	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-140	ND	C139	0.017	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-141	0.061		0.0085	0.0015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-142	ND		0.0085	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-143	0.015	J C134	0.017	0.0017	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-144	0.0089	q	0.0085	0.00019	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-145	ND		0.0085	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-146	0.067		0.0085	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-147	0.33	C B	0.017	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B059-BL1

Lab Sample ID: 580-76440-2

Date Collected: 04/06/18 11:27

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0085	0.00020	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-149	0.33	C147 B	0.017	0.0016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-150	0.00088	J q	0.0085	0.00013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-151	0.12	C135 B	0.017	0.00021	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-152	ND		0.0085	0.00015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-153	0.32	C B	0.017	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-154	0.0074	J q	0.0085	0.00016	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-155	ND		0.0085	0.00014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-156	0.035	C	0.017	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-157	0.035	C156	0.017	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-158	0.031		0.0085	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-159	ND		0.0085	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-160	0.38	C129 B	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-161	ND		0.0085	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-162	ND		0.0085	0.0010	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-163	0.38	C129 B	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-164	0.025		0.0085	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-165	ND		0.0085	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-166	0.052	C128 B	0.017	0.0012	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-167	0.012		0.0085	0.00085	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-168	0.32	C153 B	0.017	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-169	ND		0.0085	0.00078	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-170	0.11	B	0.0085	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-171	0.034	C	0.017	0.00048	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-172	0.017	q	0.0085	0.00048	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-173	0.034	C171	0.017	0.00048	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-174	0.12	B	0.0085	0.00045	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-175	0.0032	J	0.0085	0.00044	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-176	0.013	B	0.0085	0.00033	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-177	0.073	B	0.0085	0.00046	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-178	0.022		0.0085	0.00047	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-179	0.053		0.0085	0.00035	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-180	0.26	C B	0.017	0.00036	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-181	ND		0.0085	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-182	ND		0.0085	0.00042	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-183	0.076	C	0.017	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-184	ND		0.0085	0.00036	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-185	0.076	C183	0.017	0.00043	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-186	ND		0.0085	0.00035	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-187	0.15		0.0085	0.00040	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-188	ND		0.0085	0.00031	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-189	0.0032	J	0.0085	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-190	0.020	B	0.0085	0.00031	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-191	0.0028	J q	0.0085	0.00033	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-192	ND		0.0085	0.00037	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-193	0.26	C180 B	0.017	0.00036	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-194	0.056		0.0085	0.0013	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-195	0.022		0.0085	0.0014	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-196	0.024		0.0085	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B059-BL1

Lab Sample ID: 580-76440-2

Date Collected: 04/06/18 11:27

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0013	J q	0.0085	0.00038	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-198	0.065	C	0.017	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-199	0.065	C198	0.017	0.00050	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-200	0.0059	J	0.0085	0.00034	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-201	0.0064	J	0.0085	0.00034	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-202	0.012		0.0085	0.00039	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-203	0.036		0.0085	0.00045	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-204	ND		0.0085	0.00038	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-205	0.0022	J q	0.0085	0.0011	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-206	0.047		0.0085	0.0027	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-207	0.0031	J	0.0085	0.0018	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-208	0.015		0.0085	0.0018	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
PCB-209	0.057		0.0085	0.0015	ng/g	☼	04/13/18 12:10	04/24/18 22:00	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	80		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-3L	83		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-4L	67		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-15L	75		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-19L	75		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-37L	82		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-54L	77		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-77L	83		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-81L	82		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-104L	75		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-105L	80		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-114L	82		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-118L	81		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-123L	80		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-126L	80		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-155L	77		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-156L	86	C	30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-157L	86	C156	30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-167L	87		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-169L	92		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-170L	79		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-188L	81		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-189L	92		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-202L	85		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-205L	69		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-206L	67		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-208L	71		30 - 140				04/13/18 12:10	04/24/18 22:00	1
PCB-209L	56		30 - 140				04/13/18 12:10	04/24/18 22:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	91		40 - 125				04/13/18 12:10	04/24/18 22:00	1
PCB-111L	91		40 - 125				04/13/18 12:10	04/24/18 22:00	1
PCB-178L	88		40 - 125				04/13/18 12:10	04/24/18 22:00	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B062-BL1

Date Collected: 04/06/18 12:37

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-3

Matrix: Solid

Percent Solids: 66.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0024	J q	0.073	0.00013	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-2	0.0023	J q B	0.073	0.00016	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-3	0.0015	J q	0.073	0.00018	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-4	0.0088	J q	0.15	0.0029	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-5	ND		0.073	0.0023	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-6	0.0051	J q	0.073	0.0021	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-7	ND	q	0.073	0.0021	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-8	0.019	J q	0.15	0.0019	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-9	ND		0.073	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-10	ND		0.073	0.0023	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-11	0.031	J q B	0.15	0.0020	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-12	0.0023	J q C	0.15	0.0021	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-13	0.0023	J q C12	0.15	0.0021	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-14	ND		0.073	0.0018	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-15	0.013	J q	0.073	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-16	0.011	J	0.073	0.00044	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-17	0.012	J q	0.073	0.00039	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-18	0.026	J q C	0.15	0.00035	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-19	0.0078	J	0.073	0.00048	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-20	0.054	J C B	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-21	0.023	J q C	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-22	0.016	J	0.073	0.00037	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-23	ND		0.073	0.00037	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-24	0.00065	J q	0.073	0.00033	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-25	0.0036	J	0.073	0.00034	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-26	0.0076	J C	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-27	0.0023	J q	0.073	0.00029	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-28	0.054	J C20 B	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-29	0.0076	J C26	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-30	0.026	J q C18	0.15	0.00035	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-31	0.037	J B	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-32	0.011	J B	0.073	0.00027	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-33	0.023	J q C21	0.15	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-34	ND		0.073	0.00038	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-35	0.0010	J	0.073	0.00037	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-36	ND		0.073	0.00036	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-37	0.016	J B	0.073	0.00037	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-38	ND		0.073	0.00039	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-39	ND		0.073	0.00035	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-40	0.030	J C	0.22	0.00092	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-41	0.030	J C40	0.22	0.00092	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-42	0.014	J	0.073	0.00093	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-43	0.0012	J q C	0.15	0.00087	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-44	0.063	J C	0.22	0.00082	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-45	0.011	J C	0.15	0.00097	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-46	0.0032	J	0.073	0.0012	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-47	0.063	J C44	0.22	0.00082	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-48	0.0085	J q	0.073	0.00092	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10
PCB-49	0.038	J C	0.15	0.00075	ng/g	✱	04/13/18 12:10	04/25/18 04:30	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B062-BL1

Lab Sample ID: 580-76440-3

Date Collected: 04/06/18 12:37

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 66.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.0098	J C	0.15	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-51	0.011	J C45	0.15	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-52	0.078		0.073	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-53	0.0098	J C50	0.15	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-54	0.0011	J	0.073	0.000049	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-55	ND		0.073	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-56	0.020	J	0.073	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-57	ND		0.073	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-58	ND		0.073	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-59	0.0047	J C	0.22	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-60	0.0092	J	0.073	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-61	0.087	J C	0.29	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-62	0.0047	J C59	0.22	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-63	0.00097	J q	0.073	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-64	0.023	J	0.073	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-65	0.063	J C44	0.22	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-66	0.047	J	0.073	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-67	ND		0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-68	ND		0.073	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-69	0.038	J C49	0.15	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-70	0.087	J C61	0.29	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-71	0.030	J C40	0.22	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-72	ND		0.073	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-73	0.0012	J q C43	0.15	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-74	0.087	J C61	0.29	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-75	0.0047	J C59	0.22	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-76	0.087	J C61	0.29	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-77	0.0047	J	0.073	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-78	ND		0.073	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-79	ND		0.073	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-80	ND		0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-81	ND		0.073	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-82	0.013	J q	0.073	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-83	0.069	J C B	0.15	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-84	0.029	J	0.073	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-85	0.020	J C B	0.22	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-86	0.081	J C	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-87	0.081	J C86	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-88	0.018	J C	0.15	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-89	ND		0.073	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-90	0.13	J C B	0.22	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-91	0.018	J C88	0.15	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-92	0.020	J q B	0.073	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-93	0.0026	J q C	0.15	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-94	ND		0.073	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-95	0.11	B	0.073	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-96	ND		0.073	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-97	0.081	J C86	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-98	0.0038	J C	0.15	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B062-BL1

Lab Sample ID: 580-76440-3

Date Collected: 04/06/18 12:37

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 66.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.069	J C83 B	0.15	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-100	0.0026	J q C93	0.15	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-101	0.13	J C90 B	0.22	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-102	0.0038	J C98	0.15	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-103	0.0021	J q	0.073	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-104	ND		0.073	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-105	0.047	J B	0.073	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-106	ND		0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-107	0.0096	J	0.073	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-108	0.0043	J C	0.15	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-109	0.081	J C86	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-110	0.16	C B	0.15	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-111	ND		0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-112	ND		0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-113	0.13	J C90 B	0.22	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-114	0.0021	J	0.073	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-115	0.16	C110 B	0.15	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-116	0.020	J C85 B	0.22	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-117	0.020	J C85 B	0.22	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-118	0.11	B	0.073	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-119	0.081	J C86	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-120	ND		0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-121	ND		0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-122	0.0014	J	0.073	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-123	0.0019	J q	0.073	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-124	0.0043	J C108	0.15	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-125	0.081	J C86	0.44	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-126	ND		0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-127	ND		0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-128	0.035	J C B	0.15	0.00086	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-129	0.26	J C B	0.29	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-130	0.015	J	0.073	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-131	0.0019	J q	0.073	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-132	0.082		0.073	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-133	0.0038	J	0.073	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-134	0.012	J C	0.15	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-135	0.075	J C B	0.15	0.00012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-136	0.025	J	0.073	0.000085	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-137	0.0091	J	0.073	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-138	0.26	J C129 B	0.29	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-139	0.0026	J q C	0.15	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-140	0.0026	J q C139	0.15	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-141	0.044	J	0.073	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-142	ND		0.073	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-143	0.012	J C134	0.15	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-144	0.0079	J q	0.073	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-145	ND		0.073	0.000081	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-146	0.036	J	0.073	0.00098	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-147	0.22	C B	0.15	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B062-BL1

Lab Sample ID: 580-76440-3

Date Collected: 04/06/18 12:37

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 66.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.073	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-149	0.22	C147 B	0.15	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-150	ND		0.073	0.000077	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-151	0.075	J C135 B	0.15	0.00012	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-152	ND		0.073	0.000083	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-153	0.20	C B	0.15	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-154	0.0014	J q	0.073	0.000092	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-155	ND		0.073	0.000078	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-156	0.022	J C	0.15	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-157	0.022	J C156	0.15	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-158	0.024	J	0.073	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-159	ND		0.073	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-160	0.26	J C129 B	0.29	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-161	ND		0.073	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-162	ND		0.073	0.00073	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-163	0.26	J C129 B	0.29	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-164	0.017	J	0.073	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-165	ND		0.073	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-166	0.035	J C128 B	0.15	0.00086	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-167	0.0087	J	0.073	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-168	0.20	C153 B	0.15	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-169	ND		0.073	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-170	0.070	J B	0.073	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-171	0.022	J C	0.15	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-172	0.011	J	0.073	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-173	0.022	J C171	0.15	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-174	0.070	J B	0.073	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-175	0.0028	J	0.073	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-176	0.0093	J B	0.073	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-177	0.037	J B	0.073	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-178	0.0097	J q	0.073	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-179	0.032	J	0.073	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-180	0.15	C B	0.15	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-181	ND		0.073	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-182	ND		0.073	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-183	0.047	J C	0.15	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-184	ND		0.073	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-185	0.047	J C183	0.15	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-186	ND		0.073	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-187	0.089		0.073	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-188	ND		0.073	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-189	0.0014	J q	0.073	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-190	0.012	J B	0.073	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-191	0.0024	J q	0.073	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-192	ND		0.073	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-193	0.15	C180 B	0.15	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-194	0.030	J	0.073	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-195	0.013	J q	0.073	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-196	0.013	J q	0.073	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B062-BL1

Lab Sample ID: 580-76440-3

Date Collected: 04/06/18 12:37

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 66.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0046	J	0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-198	0.036	J C	0.15	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-199	0.036	J C198	0.15	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-200	0.00042	J q	0.073	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-201	0.0036	J q	0.073	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-202	0.0055	J q	0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-203	0.019	J	0.073	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-204	ND		0.073	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-205	0.0019	J q	0.073	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-206	0.017	J	0.073	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-207	0.0022	J q	0.073	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-208	0.0053	J	0.073	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10
PCB-209	0.013	J	0.073	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 04:30	10

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	84		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-3L	83		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-4L	74		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-15L	75		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-19L	80		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-37L	85		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-54L	84		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-77L	87		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-81L	86		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-104L	78		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-105L	83		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-114L	86		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-118L	85		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-123L	86		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-126L	84		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-155L	84		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-156L	87	C	30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-157L	87	C156	30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-167L	88		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-169L	89		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-170L	81		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-188L	90		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-189L	99		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-202L	91		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-205L	70		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-206L	65		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-208L	74		30 - 140	04/13/18 12:10	04/25/18 04:30	10
PCB-209L	57		30 - 140	04/13/18 12:10	04/25/18 04:30	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	90		40 - 125	04/13/18 12:10	04/25/18 04:30	10
PCB-111L	92		40 - 125	04/13/18 12:10	04/25/18 04:30	10
PCB-178L	89		40 - 125	04/13/18 12:10	04/25/18 04:30	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B063-BL1

Date Collected: 04/06/18 14:02

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-4

Matrix: Solid

Percent Solids: 59.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0028	J	0.083	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-2	0.0074	J B	0.083	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-3	0.0032	J	0.083	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-4	0.0085	J q	0.17	0.0036	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-5	ND		0.083	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-6	0.0042	J q	0.083	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-7	ND	q	0.083	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-8	0.028	J	0.17	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-9	0.0025	J q	0.083	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-10	ND	q	0.083	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-11	0.040	J B	0.17	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-12	0.0034	J q C	0.17	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-13	0.0034	J q C12	0.17	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-14	ND		0.083	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-15	0.028	J	0.083	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-16	0.0091	J q	0.083	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-17	0.018	J	0.083	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-18	0.030	J C	0.17	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-19	0.0073	J	0.083	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-20	0.097	J C B	0.17	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-21	0.040	J C	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-22	0.023	J	0.083	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-23	ND		0.083	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-24	0.00082	J	0.083	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-25	0.0066	J	0.083	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-26	0.012	J C	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-27	0.0035	J q	0.083	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-28	0.097	J C20 B	0.17	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-29	0.012	J C26	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-30	0.030	J C18	0.17	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-31	0.060	J B	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-32	0.013	J B	0.083	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-33	0.040	J C21	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-34	ND		0.083	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-35	0.0012	J q	0.083	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-36	ND		0.083	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-37	0.033	J B	0.083	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-38	ND		0.083	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-39	ND		0.083	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-40	0.044	J C	0.25	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-41	0.044	J C40	0.25	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-42	0.021	J	0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-43	0.0036	J q C	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-44	0.098	J C	0.25	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-45	0.011	J q C	0.17	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-46	0.0036	J	0.083	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-47	0.098	J C44	0.25	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-48	0.012	J q	0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-49	0.064	J C	0.17	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B063-BL1

Lab Sample ID: 580-76440-4

Date Collected: 04/06/18 14:02

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 59.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.011	J C	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-51	0.011	J q C45	0.17	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-52	0.11		0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-53	0.011	J C50	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-54	0.0025	J	0.083	0.000055	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-55	0.0016	J q	0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-56	0.037	J	0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-57	ND		0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-58	ND		0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-59	0.0071	J C	0.25	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-60	0.012	J	0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-61	0.15	J C	0.33	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-62	0.0071	J C59	0.25	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-63	0.0025	J	0.083	0.00098	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-64	0.034	J	0.083	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-65	0.098	J C44	0.25	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-66	0.10		0.083	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-67	0.0021	J q	0.083	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-68	0.0016	J q	0.083	0.00095	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-69	0.064	J C49	0.17	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-70	0.15	J C61	0.33	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-71	0.044	J C40	0.25	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-72	0.0016	J	0.083	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-73	0.0036	J q C43	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-74	0.15	J C61	0.33	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-75	0.0071	J C59	0.25	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-76	0.15	J C61	0.33	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-77	0.0096	J	0.083	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-78	ND		0.083	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-79	ND		0.083	0.00094	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-80	ND		0.083	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-81	ND		0.083	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-82	0.019	J	0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-83	0.13	J C B	0.17	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-84	0.040	J	0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-85	0.031	J C B	0.25	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-86	0.11	J C	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-87	0.11	J C86	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-88	0.029	J C	0.17	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-89	ND		0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-90	0.20	J C B	0.25	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-91	0.029	J C88	0.17	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-92	0.037	J B	0.083	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-93	0.0054	J q C	0.17	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-94	ND		0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-95	0.15	B	0.083	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-96	ND		0.083	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-97	0.11	J C86	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-98	0.0047	J q C	0.17	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B063-BL1

Lab Sample ID: 580-76440-4

Date Collected: 04/06/18 14:02

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 59.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.13	J C83 B	0.17	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-100	0.0054	J q C93	0.17	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-101	0.20	J C90 B	0.25	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-102	0.0047	J q C98	0.17	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-103	0.0043	J q	0.083	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-104	ND		0.083	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-105	0.064	J B	0.083	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-106	ND		0.083	0.00077	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-107	0.013	J q	0.083	0.00083	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-108	0.0061	J q C	0.17	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-109	0.11	J C86	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-110	0.22	C B	0.17	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-111	ND		0.083	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-112	ND		0.083	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-113	0.20	J C90 B	0.25	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-114	0.0027	J	0.083	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-115	0.22	C110 B	0.17	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-116	0.031	J C85 B	0.25	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-117	0.031	J C85 B	0.25	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-118	0.18	B	0.083	0.00073	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-119	0.11	J C86	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-120	0.0012	J q B	0.083	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-121	ND		0.083	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-122	0.0023	J q	0.083	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-123	0.0033	J q	0.083	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-124	0.0061	J q C108	0.17	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-125	0.11	J C86	0.50	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-126	ND		0.083	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-127	ND		0.083	0.00077	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-128	0.041	J C B	0.17	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-129	0.30	J C B	0.33	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-130	0.019	J	0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-131	0.0020	J q	0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-132	0.092		0.083	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-133	0.0043	J q	0.083	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-134	0.012	J C	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-135	0.10	J C B	0.17	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-136	0.036	J	0.083	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-137	0.0080	J q	0.083	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-138	0.30	J C129 B	0.33	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-139	0.0049	J C	0.17	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-140	0.0049	J C139	0.17	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-141	0.054	J	0.083	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-142	ND		0.083	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-143	0.012	J C134	0.17	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-144	0.010	J q	0.083	0.00017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-145	ND		0.083	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-146	0.054	J	0.083	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-147	0.27	C B	0.17	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B063-BL1

Lab Sample ID: 580-76440-4

Date Collected: 04/06/18 14:02

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 59.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.083	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-149	0.27	C147 B	0.17	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-150	ND		0.083	0.00012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-151	0.10	J C135 B	0.17	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-152	ND		0.083	0.00013	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-153	0.27	C B	0.17	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-154	0.0066	J	0.083	0.00014	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-155	ND		0.083	0.00012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-156	0.027	J C	0.17	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-157	0.027	J C156	0.17	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-158	0.025	J	0.083	0.00083	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-159	0.0028	J	0.083	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-160	0.30	J C129 B	0.33	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-161	ND		0.083	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-162	ND		0.083	0.00086	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-163	0.30	J C129 B	0.33	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-164	0.021	J	0.083	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-165	ND		0.083	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-166	0.041	J C128 B	0.17	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-167	0.0086	J	0.083	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-168	0.27	C153 B	0.17	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-169	ND		0.083	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-170	0.087	B	0.083	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-171	0.027	J C	0.17	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-172	0.012	J q	0.083	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-173	0.027	J C171	0.17	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-174	0.096	B	0.083	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-175	0.0031	J	0.083	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-176	0.011	J B	0.083	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-177	0.053	J B	0.083	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-178	0.020	J	0.083	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-179	0.044	J	0.083	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-180	0.20	C B	0.17	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-181	ND		0.083	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-182	ND		0.083	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-183	0.060	J C	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-184	ND		0.083	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-185	0.060	J C183	0.17	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-186	ND		0.083	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-187	0.13		0.083	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-188	ND		0.083	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-189	0.0024	J	0.083	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-190	0.016	J B	0.083	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-191	0.0031	J	0.083	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-192	ND		0.083	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-193	0.20	C180 B	0.17	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-194	0.046	J	0.083	0.00081	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-195	0.022	J	0.083	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-196	0.020	J	0.083	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B063-BL1

Lab Sample ID: 580-76440-4

Date Collected: 04/06/18 14:02

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 59.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0040	J q	0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-198	0.054	J C	0.17	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-199	0.054	J C198	0.17	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-200	0.0011	J q	0.083	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-201	0.0041	J q	0.083	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-202	0.011	J	0.083	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-203	0.026	J q	0.083	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-204	ND		0.083	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-205	0.0026	J	0.083	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-206	0.030	J	0.083	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-207	0.0030	J	0.083	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-208	0.0070	J q	0.083	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
PCB-209	0.041	J	0.083	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 05:32	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	80		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-3L	85		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-4L	70		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-15L	76		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-19L	77		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-37L	81		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-54L	80		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-77L	85		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-81L	84		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-104L	76		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-105L	82		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-114L	87		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-118L	84		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-123L	83		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-126L	83		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-155L	81		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-156L	87	C	30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-157L	87	C156	30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-167L	86		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-169L	92		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-170L	81		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-188L	87		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-189L	97		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-202L	89		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-205L	70		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-206L	65		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-208L	70		30 - 140				04/13/18 12:10	04/25/18 05:32	10
PCB-209L	58		30 - 140				04/13/18 12:10	04/25/18 05:32	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	86		40 - 125				04/13/18 12:10	04/25/18 05:32	10
PCB-111L	89		40 - 125				04/13/18 12:10	04/25/18 05:32	10
PCB-178L	88		40 - 125				04/13/18 12:10	04/25/18 05:32	10

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B067-BL1

Date Collected: 04/06/18 14:51

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-5

Matrix: Solid

Percent Solids: 65.2

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0088		0.0076	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-2	0.015	B	0.0076	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-3	0.011		0.0076	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-4	0.035		0.015	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-5	ND		0.0076	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-6	0.021	q	0.0076	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-7	0.0052	J q	0.0076	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-8	0.11		0.015	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-9	0.0050	J q	0.0076	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-10	ND		0.0076	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-11	0.050	B	0.015	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-12	0.017	q C	0.015	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-13	0.017	q C12	0.015	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-14	ND		0.0076	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-15	0.17		0.0076	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-16	0.043		0.0076	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-17	0.064		0.0076	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-18	0.11	C	0.015	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-19	0.023	q	0.0076	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-20	0.29	C B	0.015	0.00050	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-21	0.13	C	0.015	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-22	0.081		0.0076	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-23	ND		0.0076	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-24	0.0019	J q	0.0076	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-25	0.020		0.0076	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-26	0.039	C	0.015	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-27	0.012		0.0076	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-28	0.29	C20 B	0.015	0.00050	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-29	0.039	C26	0.015	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-30	0.11	C18	0.015	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-31	0.20	B	0.015	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-32	0.040	B	0.0076	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-33	0.13	C21	0.015	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-34	ND		0.0076	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-35	0.0045	J	0.0076	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-36	ND		0.0076	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-37	0.13	B	0.0076	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-38	ND		0.0076	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-39	ND		0.0076	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-40	0.11	C	0.023	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-41	0.11	C40	0.023	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-42	0.052		0.0076	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-43	0.0054	J q C	0.015	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-44	0.28	C	0.023	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-45	0.046	C	0.015	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-46	0.0089	q	0.0076	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-47	0.28	C44	0.023	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-48	0.038		0.0076	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-49	0.15	C	0.015	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B067-BL1

Lab Sample ID: 580-76440-5

Date Collected: 04/06/18 14:51

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 65.2

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.036	C	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-51	0.046	C45	0.015	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-52	0.31		0.0076	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-53	0.036	C50	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-54	0.0031	J q	0.0076	0.000046	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-55	0.0030	J	0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-56	0.070		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-57	ND		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-58	ND		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-59	0.018	J C	0.023	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-60	0.030		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-61	0.33	C	0.030	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-62	0.018	J C59	0.023	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-63	0.0057	J q	0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-64	0.083		0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-65	0.28	C44	0.023	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-66	0.20		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-67	0.0049	J q	0.0076	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-68	0.0083		0.0076	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-69	0.15	C49	0.015	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-70	0.33	C61	0.030	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-71	0.11	C40	0.023	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-72	0.0031	J q	0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-73	0.0054	J q C43	0.015	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-74	0.33	C61	0.030	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-75	0.018	J C59	0.023	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-76	0.33	C61	0.030	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-77	0.022		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-78	ND		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-79	0.0029	J	0.0076	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-80	ND		0.0076	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-81	ND		0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-82	0.052		0.0076	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-83	0.30	C B	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-84	0.12		0.0076	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-85	0.074	q C B	0.023	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-86	0.31	C	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-87	0.31	C86	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-88	0.080	C	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-89	ND		0.0076	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-90	0.54	C B	0.023	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-91	0.080	C88	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-92	0.097	B	0.0076	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-93	0.014	J C	0.015	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-94	ND		0.0076	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-95	0.45	B	0.0076	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-96	0.0041	J q	0.0076	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-97	0.31	C86	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-98	0.014	J q C	0.015	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B067-BL1

Lab Sample ID: 580-76440-5

Date Collected: 04/06/18 14:51

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 65.2

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.30	C83 B	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-100	0.014	J C93	0.015	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-101	0.54	C90 B	0.023	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-102	0.014	J q C98	0.015	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-103	0.0089		0.0076	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-104	ND		0.0076	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-105	0.16	B	0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-106	ND		0.0076	0.00096	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-107	0.036		0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-108	0.016	q C	0.015	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-109	0.31	C86	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-110	0.60	C B	0.015	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-111	ND		0.0076	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-112	ND		0.0076	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-113	0.54	C90 B	0.023	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-114	0.0080		0.0076	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-115	0.60	C110 B	0.015	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-116	0.074	q C85 B	0.023	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-117	0.074	q C85 B	0.023	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-118	0.44	B	0.0076	0.00088	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-119	0.31	C86	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-120	ND		0.0076	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-121	ND		0.0076	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-122	0.0049	J q	0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-123	0.0060	J q	0.0076	0.00093	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-124	0.016	q C108	0.015	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-125	0.31	C86	0.046	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-126	0.0021	J q	0.0076	0.00095	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-127	ND		0.0076	0.00096	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-128	0.11	C B	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-129	0.85	C B	0.030	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-130	0.050		0.0076	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-131	0.0085		0.0076	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-132	0.26		0.0076	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-133	0.010		0.0076	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-134	0.042	C	0.015	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-135	0.26	C B	0.015	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-136	0.090		0.0076	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-137	0.031		0.0076	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-138	0.85	C129 B	0.030	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-139	0.012	J C	0.015	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-140	0.012	J C139	0.015	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-141	0.16		0.0076	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-142	ND		0.0076	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-143	0.042	C134	0.015	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-144	0.028		0.0076	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-145	ND		0.0076	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-146	0.13		0.0076	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-147	0.73	C B	0.015	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B067-BL1

Lab Sample ID: 580-76440-5

Date Collected: 04/06/18 14:51

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 65.2

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0018	J	0.0076	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-149	0.73	C147 B	0.015	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-150	0.0014	J	0.0076	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-151	0.26	C135 B	0.015	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-152	ND		0.0076	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-153	0.67	C B	0.015	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-154	0.0093	q	0.0076	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-155	ND		0.0076	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-156	0.086	C	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-157	0.086	C156	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-158	0.075		0.0076	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-159	0.0041	J q	0.0076	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-160	0.85	C129 B	0.030	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-161	ND		0.0076	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-162	ND		0.0076	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-163	0.85	C129 B	0.030	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-164	0.057		0.0076	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-165	ND		0.0076	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-166	0.11	C128 B	0.015	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-167	0.028		0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-168	0.67	C153 B	0.015	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-169	ND		0.0076	0.00095	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-170	0.23	B	0.0076	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-171	0.068	C	0.015	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-172	0.037		0.0076	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-173	0.068	C171	0.015	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-174	0.22	B	0.0076	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-175	0.0059	J q	0.0076	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-176	0.025	B	0.0076	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-177	0.13	B	0.0076	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-178	0.045		0.0076	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-179	0.098		0.0076	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-180	0.49	C B	0.015	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-181	ND		0.0076	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-182	0.0021	J q	0.0076	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-183	0.15	C	0.015	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-184	ND		0.0076	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-185	0.15	C183	0.015	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-186	ND		0.0076	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-187	0.27		0.0076	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-188	ND		0.0076	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-189	0.0078	q	0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-190	0.042	B	0.0076	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-191	0.0069	J q	0.0076	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-192	ND		0.0076	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-193	0.49	C180 B	0.015	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-194	0.12		0.0076	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-195	0.048		0.0076	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-196	0.051		0.0076	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B067-BL1

Lab Sample ID: 580-76440-5

Date Collected: 04/06/18 14:51

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 65.2

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.010	q	0.0076	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-198	0.11	C	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-199	0.11	C198	0.015	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-200	0.0020	J q	0.0076	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-201	0.0090	q	0.0076	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-202	0.021		0.0076	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-203	0.077		0.0076	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-204	ND		0.0076	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-205	0.0063	J	0.0076	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-206	0.067		0.0076	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-207	0.0056	J	0.0076	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-208	0.018		0.0076	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
PCB-209	0.052	q	0.0076	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 06:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	79		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-3L	85		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-4L	73		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-15L	81		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-19L	85		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-37L	88		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-54L	90		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-77L	86		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-81L	87		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-104L	81		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-105L	81		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-114L	88		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-118L	87		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-123L	88		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-126L	86		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-155L	85		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-156L	91	C	30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-157L	91	C156	30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-167L	91		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-169L	94		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-170L	84		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-188L	90		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-189L	105		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-202L	94		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-205L	75		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-206L	70		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-208L	77		30 - 140				04/13/18 12:10	04/25/18 06:34	1
PCB-209L	62		30 - 140				04/13/18 12:10	04/25/18 06:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	92		40 - 125				04/13/18 12:10	04/25/18 06:34	1
PCB-111L	94		40 - 125				04/13/18 12:10	04/25/18 06:34	1
PCB-178L	90		40 - 125				04/13/18 12:10	04/25/18 06:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Date Collected: 04/06/18 15:56

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-6

Matrix: Solid

Percent Solids: 41.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0037	J	0.012	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-2	0.016	q B	0.012	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-3	0.0047	J	0.012	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-4	0.022	J q	0.024	0.0041	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-5	ND	q	0.012	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-6	0.0083	J q	0.012	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-7	ND	q	0.012	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-8	0.038		0.024	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-9	0.0031	J q	0.012	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-10	ND	q	0.012	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-11	0.096	B	0.024	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-12	0.0062	J q C	0.024	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-13	0.0062	J q C12	0.024	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-14	ND		0.012	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-15	0.039		0.012	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-16	0.017	q	0.012	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-17	0.032	q	0.012	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-18	0.057	C	0.024	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-19	0.015	q	0.012	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-20	0.15	C B	0.024	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-21	0.060	C	0.024	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-22	0.040		0.012	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-23	ND		0.012	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-24	0.0011	J	0.012	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-25	0.012		0.012	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-26	0.023	J C	0.024	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-27	0.0055	J q	0.012	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-28	0.15	C20 B	0.024	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-29	0.023	J C26	0.024	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-30	0.057	C18	0.024	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-31	0.11	B	0.024	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-32	0.022	B	0.012	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-33	0.060	C21	0.024	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-34	ND		0.012	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-35	0.0024	J q	0.012	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-36	ND		0.012	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-37	0.058	B	0.012	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-38	ND		0.012	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-39	ND		0.012	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-40	0.075	C	0.035	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-41	0.075	C40	0.035	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-42	0.037		0.012	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-43	0.0059	J q C	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-44	0.18	C	0.035	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-45	0.030	C	0.024	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-46	0.0085	J	0.012	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-47	0.18	C44	0.035	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-48	0.021	q	0.012	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-49	0.11	C	0.024	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Lab Sample ID: 580-76440-6

Date Collected: 04/06/18 15:56

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 41.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.027	C	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-51	0.030	C45	0.024	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-52	0.19		0.012	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-53	0.027	C50	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-54	0.0037	J q	0.012	0.000097	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-55	0.0015	J q	0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-56	0.061		0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-57	0.0015	J	0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-58	ND	I	0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-59	0.011	J q C	0.035	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-60	0.020		0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-61	0.25	C	0.047	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-62	0.011	J q C59	0.035	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-63	0.0041	J	0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-64	0.058		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-65	0.18	C44	0.035	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-66	0.16		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-67	0.0030	J q	0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-68	0.0033	J q	0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-69	0.11	C49	0.024	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-70	0.25	C61	0.047	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-71	0.075	C40	0.035	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-72	0.0034	J	0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-73	0.0059	J q C43	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-74	0.25	C61	0.047	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-75	0.011	J q C59	0.035	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-76	0.25	C61	0.047	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-77	0.017		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-78	ND		0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-79	0.0017	J q	0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-80	ND		0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-81	ND		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-82	0.029	q	0.012	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-83	0.20	C B	0.024	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-84	0.066		0.012	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-85	0.046	q C B	0.035	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-86	0.19	C	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-87	0.19	C86	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-88	0.049	C	0.024	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-89	ND		0.012	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-90	0.34	C B	0.035	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-91	0.049	C88	0.024	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-92	0.064	B	0.012	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-93	0.015	J C	0.024	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-94	0.0022	J q	0.012	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-95	0.25	B	0.012	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-96	ND		0.012	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-97	0.19	C86	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-98	0.0087	J q C	0.024	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1

lab confirmed this I
flag is not
applicable

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Lab Sample ID: 580-76440-6

Date Collected: 04/06/18 15:56

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 41.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.20	C83 B	0.024	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-100	0.015	J C93	0.024	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-101	0.34	C90 B	0.035	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-102	0.0087	J q C98	0.024	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-103	0.0061	J q	0.012	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-104	ND		0.012	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-105	0.11	B	0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-106	ND		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-107	0.028		0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-108	0.011	J C	0.024	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-109	0.19	C86	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-110	0.37	C B	0.024	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-111	ND		0.012	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-112	ND		0.012	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-113	0.34	C90 B	0.035	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-114	0.0031	J q	0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-115	0.37	C110 B	0.024	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-116	0.046	q C85 B	0.035	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-117	0.046	q C85 B	0.035	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-118	0.30	B	0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-119	0.19	C86	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-120	0.0025	J q B	0.012	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-121	ND		0.012	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-122	ND		0.012	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-123	0.0047	J q	0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-124	0.011	J C108	0.024	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-125	0.19	C86	0.071	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-126	0.0026	J	0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-127	ND		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-128	0.068	C B	0.024	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-129	0.55	C B	0.047	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-130	0.027	q	0.012	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-131	ND		0.012	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-132	0.16		0.012	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-133	0.010	J	0.012	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-134	0.022	J C	0.024	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-135	0.17	C B	0.024	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-136	0.056		0.012	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-137	0.019		0.012	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-138	0.55	C129 B	0.047	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-139	0.0051	J q C	0.024	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-140	0.0051	J q C139	0.024	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-141	0.089		0.012	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-142	ND		0.012	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-143	0.022	J C134	0.024	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-144	0.016	q	0.012	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-145	ND		0.012	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-146	0.095		0.012	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-147	0.49	C B	0.024	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Lab Sample ID: 580-76440-6

Date Collected: 04/06/18 15:56

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 41.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.012	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-149	0.49	C147 B	0.024	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-150	ND		0.012	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-151	0.17	C135 B	0.024	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-152	ND		0.012	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-153	0.48	C B	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-154	0.0071	J q	0.012	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-155	ND		0.012	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-156	0.049	C	0.024	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-157	0.049	C156	0.024	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-158	0.044		0.012	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-159	0.0037	J	0.012	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-160	0.55	C129 B	0.047	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-161	ND		0.012	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-162	ND		0.012	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-163	0.55	C129 B	0.047	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-164	0.034		0.012	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-165	ND		0.012	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-166	0.068	C128 B	0.024	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-167	0.017		0.012	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-168	0.48	C153 B	0.024	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-169	ND		0.012	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-170	0.16	B	0.012	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-171	0.044	C	0.024	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-172	0.026		0.012	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-173	0.044	C171	0.024	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-174	0.17	B	0.012	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-175	0.0073	J	0.012	0.00094	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-176	0.021	B	0.012	0.00071	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-177	0.098	B	0.012	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-178	0.036		0.012	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-179	0.074		0.012	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-180	0.35	C B	0.024	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-181	ND		0.012	0.00093	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-182	ND		0.012	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-183	0.11	C	0.024	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-184	ND		0.012	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-185	0.11	C183	0.024	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-186	ND		0.012	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-187	0.21		0.012	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-188	ND		0.012	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-189	0.0050	J q	0.012	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-190	0.029	B	0.012	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-191	0.0064	J	0.012	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-192	ND		0.012	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-193	0.35	C180 B	0.024	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-194	0.089		0.012	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-195	0.032	q	0.012	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-196	0.037		0.012	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Lab Sample ID: 580-76440-6

Date Collected: 04/06/18 15:56

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 41.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0081	J	0.012	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-198	0.091	C	0.024	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-199	0.091	C198	0.024	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-200	0.0015	J q	0.012	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-201	0.0094	J	0.012	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-202	0.016		0.012	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-203	0.054		0.012	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-204	ND		0.012	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-205	0.0059	J	0.012	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-206	0.065		0.012	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-207	0.0066	J	0.012	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-208	0.020		0.012	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
PCB-209	0.078		0.012	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 07:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	81		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-3L	82		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-4L	70		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-15L	74		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-19L	81		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-37L	84		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-54L	82		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-77L	82		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-81L	82		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-104L	76		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-105L	76		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-114L	85		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-118L	83		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-123L	84		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-126L	82		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-155L	79		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-156L	87	C	30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-157L	87	C156	30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-167L	87		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-169L	89		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-170L	81		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-188L	88		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-189L	98		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-202L	90		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-205L	69		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-206L	66		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-208L	74		30 - 140				04/13/18 12:10	04/25/18 07:35	1
PCB-209L	57		30 - 140				04/13/18 12:10	04/25/18 07:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	89		40 - 125				04/13/18 12:10	04/25/18 07:35	1
PCB-111L	90		40 - 125				04/13/18 12:10	04/25/18 07:35	1
PCB-178L	91		40 - 125				04/13/18 12:10	04/25/18 07:35	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B072-BL1

Date Collected: 04/06/18 16:54

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-7

Matrix: Solid

Percent Solids: 43.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0034	J	0.011	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-2	0.015	q B	0.011	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-3	0.0041	J q	0.011	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-4	0.020	J q	0.022	0.0043	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-5	ND		0.011	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-6	0.0086	J q	0.011	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-7	ND		0.011	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-8	0.041		0.022	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-9	ND		0.011	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-10	ND		0.011	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-11	0.079	B	0.022	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-12	0.0055	J q C	0.022	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-13	0.0055	J q C12	0.022	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-14	ND		0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-15	0.036	q	0.011	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-16	0.019	q	0.011	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-17	0.040		0.011	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-18	0.063	C	0.022	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-19	0.016	q	0.011	0.00093	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-20	0.15	C B	0.022	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-21	0.061	C	0.022	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-22	0.040		0.011	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-23	ND		0.011	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-24	ND		0.011	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-25	0.019		0.011	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-26	0.028	C	0.022	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-27	0.0086	J	0.011	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-28	0.15	C20 B	0.022	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-29	0.028	C26	0.022	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-30	0.063	C18	0.022	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-31	0.11	B	0.022	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-32	0.022	B	0.011	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-33	0.061	C21	0.022	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-34	ND		0.011	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-35	0.0025	J q	0.011	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-36	ND		0.011	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-37	0.052	B	0.011	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-38	ND		0.011	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-39	ND		0.011	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-40	0.074	C	0.033	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-41	0.074	C40	0.033	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-42	0.040		0.011	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-43	ND	C	0.022	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-44	0.18	C	0.033	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-45	0.028	C	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-46	0.0062	J q	0.011	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-47	0.18	C44	0.033	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-48	0.024		0.011	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-49	0.13	C	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B072-BL1

Lab Sample ID: 580-76440-7

Date Collected: 04/06/18 16:54

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 43.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.027	C	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-51	0.028	C45	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-52	0.21		0.011	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-53	0.027	C50	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-54	0.0042	J	0.011	0.000065	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-55	0.0029	J	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-56	0.060		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-57	ND		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-58	0.0016	J q	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-59	0.011	J C	0.033	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-60	0.023		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-61	0.26	C	0.044	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-62	0.011	J C59	0.033	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-63	0.0064	J	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-64	0.061		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-65	0.18	C44	0.033	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-66	0.16		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-67	0.0034	J	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-68	0.0030	J q	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-69	0.13	C49	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-70	0.26	C61	0.044	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-71	0.074	C40	0.033	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-72	0.0022	J q	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-73	ND	C43	0.022	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-74	0.26	C61	0.044	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-75	0.011	J C59	0.033	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-76	0.26	C61	0.044	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-77	0.016	q	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-78	ND		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-79	0.0028	J	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-80	ND		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-81	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-82	0.038		0.011	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-83	0.24	C B	0.022	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-84	0.094		0.011	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-85	0.062	C B	0.033	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-86	0.24	C	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-87	0.24	C86	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-88	0.063	C	0.022	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-89	ND		0.011	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-90	0.41	C B	0.033	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-91	0.063	C88	0.022	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-92	0.076	B	0.011	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-93	0.011	J C	0.022	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-94	ND		0.011	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-95	0.33	B	0.011	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-96	ND		0.011	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-97	0.24	C86	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-98	0.012	J C	0.022	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B072-BL1

Lab Sample ID: 580-76440-7

Date Collected: 04/06/18 16:54

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 43.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.24	C83 B	0.022	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-100	0.011	J C93	0.022	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-101	0.41	C90 B	0.033	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-102	0.012	J C98	0.022	0.00052	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-103	0.0077	J	0.011	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-104	ND		0.011	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-105	0.12	B	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-106	ND		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-107	0.032		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-108	0.012	J C	0.022	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-109	0.24	C86	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-110	0.46	C B	0.022	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-111	ND		0.011	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-112	ND		0.011	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-113	0.41	C90 B	0.033	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-114	0.0058	J	0.011	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-115	0.46	C110 B	0.022	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-116	0.062	C85 B	0.033	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-117	0.062	C85 B	0.033	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-118	0.36	B	0.011	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-119	0.24	C86	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-120	0.0024	J q B	0.011	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-121	ND		0.011	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-122	0.0041	J q	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-123	0.0056	J	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-124	0.012	J C108	0.022	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-125	0.24	C86	0.067	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-126	ND		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-127	ND		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-128	0.077	C B	0.022	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-129	0.60	C B	0.044	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-130	0.036		0.011	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-131	0.0068	J	0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-132	0.18		0.011	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-133	0.0078	J	0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-134	0.024	C	0.022	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-135	0.21	C B	0.022	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-136	0.062	q	0.011	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-137	0.019		0.011	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-138	0.60	C129 B	0.044	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-139	0.0079	J C	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-140	0.0079	J C139	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-141	0.10		0.011	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-142	ND		0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-143	0.024	C134	0.022	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-144	0.019		0.011	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-145	ND		0.011	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-146	0.10		0.011	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-147	0.57	C B	0.022	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B072-BL1

Lab Sample ID: 580-76440-7

Date Collected: 04/06/18 16:54

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 43.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.011	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-149	0.57	C147 B	0.022	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-150	0.0011	J q	0.011	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-151	0.21	C135 B	0.022	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-152	ND		0.011	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-153	0.53	C B	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-154	0.0079	J q	0.011	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-155	ND		0.011	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-156	0.059	C	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-157	0.059	C156	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-158	0.053		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-159	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-160	0.60	C129 B	0.044	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-161	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-162	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-163	0.60	C129 B	0.044	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-164	0.042		0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-165	ND		0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-166	0.077	C128 B	0.022	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-167	0.020		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-168	0.53	C153 B	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-169	ND		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-170	0.18	B	0.011	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-171	0.058	C	0.022	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-172	0.027		0.011	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-173	0.058	C171	0.022	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-174	0.18	B	0.011	0.00093	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-175	0.0071	J	0.011	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-176	0.022	B	0.011	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-177	0.11	B	0.011	0.00096	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-178	0.041		0.011	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-179	0.084		0.011	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-180	0.37	C B	0.022	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-181	ND		0.011	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-182	0.00088	J q	0.011	0.00087	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-183	0.12	C	0.022	0.00088	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-184	ND		0.011	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-185	0.12	C183	0.022	0.00088	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-186	ND		0.011	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-187	0.22		0.011	0.00083	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-188	ND		0.011	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-189	0.0049	J	0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-190	0.031	B	0.011	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-191	0.0058	J q	0.011	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-192	ND		0.011	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-193	0.37	C180 B	0.022	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-194	0.099		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-195	0.041		0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-196	0.041		0.011	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B072-BL1

Lab Sample ID: 580-76440-7

Date Collected: 04/06/18 16:54

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 43.5

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0090	J q	0.011	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-198	0.097	C	0.022	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-199	0.097	C198	0.022	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-200	0.0027	J q	0.011	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-201	0.0079	J q	0.011	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-202	0.019	q	0.011	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-203	0.058		0.011	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-204	ND		0.011	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-205	0.0039	J q	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-206	0.096		0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-207	0.0052	J	0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-208	0.030		0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1
PCB-209	0.11		0.011	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 08:37	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	81		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-3L	81		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-4L	70		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-15L	78		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-19L	79		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-37L	86		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-54L	83		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-77L	85		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-81L	85		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-104L	80		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-105L	77		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-114L	88		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-118L	85		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-123L	85		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-126L	84		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-155L	83		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-156L	90	C	30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-157L	90	C156	30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-167L	91		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-169L	94		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-170L	82		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-188L	87		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-189L	99		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-202L	90		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-205L	71		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-206L	65		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-208L	73		30 - 140	04/13/18 12:10	04/25/18 08:37	1
PCB-209L	58		30 - 140	04/13/18 12:10	04/25/18 08:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	91		40 - 125	04/13/18 12:10	04/25/18 08:37	1
PCB-111L	93		40 - 125	04/13/18 12:10	04/25/18 08:37	1
PCB-178L	89		40 - 125	04/13/18 12:10	04/25/18 08:37	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B064-BL1

Date Collected: 04/08/18 10:19

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-8

Matrix: Solid

Percent Solids: 45.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0025	J q	0.011	0.00029	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-2	0.016	B	0.011	0.00032	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-3	0.0031	J	0.011	0.00034	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-4	0.016	J q	0.021	0.0076	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-5	ND	q	0.011	0.0056	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-6	ND	q	0.011	0.0050	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-7	ND		0.011	0.0051	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-8	0.025	q	0.021	0.0046	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-9	ND		0.011	0.0052	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-10	ND	q	0.011	0.0056	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-11	0.11	B	0.021	0.0049	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-12	ND	q C	0.021	0.0050	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-13	ND	q C12	0.021	0.0050	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-14	ND		0.011	0.0043	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-15	0.029		0.011	0.0050	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-16	0.014		0.011	0.0010	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-17	0.024	q	0.011	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-18	0.028	q C	0.021	0.00079	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-19	0.023	q	0.011	0.0011	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-20	0.11	C B	0.021	0.00092	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-21	0.044	C	0.021	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-22	0.027		0.011	0.00094	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-23	ND		0.011	0.00093	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-24	ND		0.011	0.00075	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-25	0.0078	J	0.011	0.00085	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-26	0.015	J C	0.021	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-27	0.0044	J q	0.011	0.00065	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-28	0.11	C20 B	0.021	0.00092	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-29	0.015	J C26	0.021	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-30	0.028	q C18	0.021	0.00079	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-31	0.074	B	0.021	0.00089	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-32	0.015	B	0.011	0.00062	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-33	0.044	C21	0.021	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-34	ND		0.011	0.00097	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-35	ND		0.011	0.00094	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-36	ND		0.011	0.00090	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-37	0.035	B	0.011	0.00093	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-38	ND		0.011	0.00097	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-39	ND		0.011	0.00087	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-40	0.058	C	0.032	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-41	0.058	C40	0.032	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-42	0.027		0.011	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-43	0.0038	J q C	0.021	0.0020	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-44	0.15	C	0.032	0.0019	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-45	0.024	C	0.021	0.0023	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-46	0.0040	J q	0.011	0.0027	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-47	0.15	C44	0.032	0.0019	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-48	0.014	q	0.011	0.0022	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1
PCB-49	0.089	C	0.021	0.0018	ng/g	✱	04/13/18 12:10	04/25/18 09:38	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B064-BL1

Lab Sample ID: 580-76440-8

Date Collected: 04/08/18 10:19

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.022	q C	0.021	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-51	0.024	C45	0.021	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-52	0.15		0.011	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-53	0.022	q C50	0.021	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-54	0.0049	J q	0.011	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-55	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-56	0.049		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-57	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-58	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-59	0.0088	J q C	0.032	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-60	0.016		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-61	0.20	C	0.043	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-62	0.0088	J q C59	0.032	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-63	0.0040	J	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-64	0.043		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-65	0.15	C44	0.032	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-66	0.14		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-67	0.0026	J q	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-68	0.0033	J	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-69	0.089	C49	0.021	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-70	0.20	C61	0.043	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-71	0.058	C40	0.032	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-72	0.0030	J	0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-73	0.0038	J q C43	0.021	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-74	0.20	C61	0.043	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-75	0.0088	J q C59	0.032	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-76	0.20	C61	0.043	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-77	0.014		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-78	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-79	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-80	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-81	ND		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-82	0.022	q	0.011	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-83	0.20	C B	0.021	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-84	0.054		0.011	0.00077	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-85	0.038	C B	0.032	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-86	0.15	C	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-87	0.15	C86	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-88	0.039	q C	0.021	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-89	ND		0.011	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-90	0.28	C B	0.032	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-91	0.039	q C88	0.021	0.00069	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-92	0.044	B	0.011	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-93	0.011	J q C	0.021	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-94	0.0036	J q	0.011	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-95	0.17	q B	0.011	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-96	0.0023	J q	0.011	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-97	0.15	C86	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-98	0.010	J q C	0.021	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B064-BL1

Lab Sample ID: 580-76440-8

Date Collected: 04/08/18 10:19

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.20	C83 B	0.021	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-100	0.011	J q C93	0.021	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-101	0.28	C90 B	0.032	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-102	0.010	J q C98	0.021	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-103	0.0087	J q	0.011	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-104	ND		0.011	0.00050	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-105	0.078	B	0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-106	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-107	0.020	q	0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-108	0.0073	J q C	0.021	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-109	0.15	C86	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-110	0.31	C B	0.021	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-111	ND		0.011	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-112	ND		0.011	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-113	0.28	C90 B	0.032	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-114	0.0045	J q	0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-115	0.31	C110 B	0.021	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-116	0.038	C85 B	0.032	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-117	0.038	C85 B	0.032	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-118	0.24	B	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-119	0.15	C86	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-120	0.0024	J B	0.011	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-121	ND		0.011	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-122	ND q		0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-123	0.0030	J q	0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-124	0.0073	J q C108	0.021	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-125	0.15	C86	0.064	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-126	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-127	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-128	0.056	C B	0.021	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-129	0.47	C B	0.043	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-130	0.033		0.011	0.0038	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-131	ND		0.011	0.0039	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-132	0.13		0.011	0.0037	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-133	0.0084	J	0.011	0.0035	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-134	0.016	J q C	0.021	0.0037	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-135	0.15	C B	0.021	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-136	0.048		0.011	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-137	0.013	q	0.011	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-138	0.47	C129 B	0.043	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-139	0.0053	J q C	0.021	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-140	0.0053	J q C139	0.021	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-141	0.074		0.011	0.0033	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-142	ND		0.011	0.0035	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-143	0.016	J q C134	0.021	0.0037	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-144	0.014		0.011	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-145	ND		0.011	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-146	0.085		0.011	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-147	0.43	C B	0.021	0.0036	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B064-BL1

Lab Sample ID: 580-76440-8

Date Collected: 04/08/18 10:19

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0024	J q	0.011	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-149	0.43	C147 B	0.021	0.0036	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-150	0.0018	J q	0.011	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-151	0.15	C135 B	0.021	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-152	ND		0.011	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-153	0.43	C B	0.021	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-154	0.011		0.011	0.00024	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-155	ND		0.011	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-156	0.034	q C	0.021	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-157	0.034	q C156	0.021	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-158	0.035		0.011	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-159	ND		0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-160	0.47	C129 B	0.043	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-161	ND		0.011	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-162	ND		0.011	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-163	0.47	C129 B	0.043	0.0028	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-164	0.029		0.011	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-165	ND		0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-166	0.056	C128 B	0.021	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-167	0.013		0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-168	0.43	C153 B	0.021	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-169	ND		0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-170	0.15	B	0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-171	0.039	C	0.021	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-172	0.028		0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-173	0.039	C171	0.021	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-174	0.15	B	0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-175	0.0061	J q	0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-176	0.017	B	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-177	0.092	B	0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-178	0.033		0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-179	0.071		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-180	0.34	C B	0.021	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-181	ND		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-182	0.0029	J q	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-183	0.10	C	0.021	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-184	ND		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-185	0.10	C183	0.021	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-186	ND		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-187	0.21		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-188	ND		0.011	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-189	0.0055	J	0.011	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-190	0.025	B	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-191	0.0055	J q	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-192	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-193	0.34	C180 B	0.021	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-194	0.095		0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-195	0.037		0.011	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-196	0.033	q	0.011	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B064-BL1

Lab Sample ID: 580-76440-8

Date Collected: 04/08/18 10:19

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.011		0.011	0.00050	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-198	0.10	C	0.021	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-199	0.10	C198	0.021	0.00067	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-200	0.0018	J q	0.011	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-201	0.0093	J q	0.011	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-202	0.018		0.011	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-203	0.045	q	0.011	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-204	ND		0.011	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-205	0.0056	J	0.011	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-206	0.11		0.011	0.0040	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-207	0.012		0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-208	0.041		0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1
PCB-209	0.12		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 09:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-3L	49		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-4L	40		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-15L	43		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-19L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-37L	46		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-54L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-77L	46		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-81L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-104L	43		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-105L	46		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-114L	48		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-118L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-123L	48		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-126L	47		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-155L	45		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-156L	49	C	30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-157L	49	C156	30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-167L	50		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-169L	51		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-170L	46		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-188L	51		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-189L	56		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-202L	53		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-205L	39		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-206L	37		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-208L	42		30 - 140	04/13/18 12:10	04/25/18 09:38	1
PCB-209L	31		30 - 140	04/13/18 12:10	04/25/18 09:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	52		40 - 125	04/13/18 12:10	04/25/18 09:38	1
PCB-111L	53		40 - 125	04/13/18 12:10	04/25/18 09:38	1
PCB-178L	54		40 - 125	04/13/18 12:10	04/25/18 09:38	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B065-BL1

Date Collected: 04/08/18 11:20

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-9

Matrix: Solid

Percent Solids: 40.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.061	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-2	0.018	J B	0.061	0.00088	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-3	ND		0.061	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-4	ND		0.12	0.024	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-5	ND		0.061	0.017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-6	ND		0.061	0.015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-7	ND		0.061	0.016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-8	0.032	J q	0.12	0.014	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-9	ND		0.061	0.016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-10	ND		0.061	0.017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-11	0.11	J B	0.12	0.015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-12	ND	C	0.12	0.015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-13	ND	C12	0.12	0.015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-14	ND		0.061	0.013	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-15	0.038	J q	0.061	0.015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-16	ND		0.061	0.0041	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-17	0.030	J	0.061	0.0037	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-18	0.047	J C	0.12	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-19	ND		0.061	0.0045	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-20	0.11	J C B	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-21	0.041	J C	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-22	0.029	J	0.061	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-23	ND		0.061	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-24	ND		0.061	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-25	0.010	J	0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-26	0.015	J C	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-27	ND		0.061	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-28	0.11	J C20 B	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-29	0.015	J C26	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-30	0.047	J C18	0.12	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-31	0.080	J B	0.12	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-32	0.016	J B	0.061	0.0026	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-33	0.041	J C21	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-34	ND		0.061	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-35	0.0039	J	0.061	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-36	ND		0.061	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-37	0.032	J B	0.061	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-38	ND		0.061	0.0025	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-39	ND		0.061	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-40	0.049	J C	0.18	0.0072	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-41	0.049	J C40	0.18	0.0072	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-42	0.028	J	0.061	0.0072	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-43	ND	C	0.12	0.0067	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-44	0.16	J C	0.18	0.0063	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-45	0.019	J q C	0.12	0.0075	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-46	ND		0.061	0.0091	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-47	0.16	J C44	0.18	0.0063	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-48	0.017	J q	0.061	0.0071	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-49	0.10	J C	0.12	0.0058	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B065-BL1

Lab Sample ID: 580-76440-9

Date Collected: 04/08/18 11:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND	C	0.12	0.0069	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-51	0.019	J q C45	0.12	0.0075	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-52	0.23		0.061	0.0071	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-53	ND	C50	0.12	0.0069	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-54	ND		0.061	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-55	ND		0.061	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-56	0.052	J	0.061	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-57	ND		0.061	0.0053	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-58	ND		0.061	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-59	ND	C	0.18	0.0051	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-60	0.014	J q	0.061	0.0053	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-61	0.26	C	0.24	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-62	ND	C59	0.18	0.0051	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-63	ND		0.061	0.0048	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-64	0.041	J q	0.061	0.0048	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-65	0.16	J C44	0.18	0.0063	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-66	0.14		0.061	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-67	ND		0.061	0.0046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-68	ND		0.061	0.0047	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-69	0.10	J C49	0.12	0.0058	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-70	0.26	C61	0.24	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-71	0.049	J C40	0.18	0.0072	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-72	ND		0.061	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-73	ND	C43	0.12	0.0067	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-74	0.26	C61	0.24	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-75	ND	C59	0.18	0.0051	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-76	0.26	C61	0.24	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-77	ND		0.061	0.0049	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-78	ND		0.061	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-79	ND		0.061	0.0046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-80	ND		0.061	0.0046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-81	ND		0.061	0.0051	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-82	0.055	J	0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-83	0.21	q C B	0.12	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-84	0.095		0.061	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-85	0.063	J q C B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-86	0.26	J C	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-87	0.26	J C86	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-88	0.057	J C	0.12	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-89	ND		0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-90	0.44	C B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-91	0.057	J C88	0.12	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-92	0.058	J q B	0.061	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-93	0.012	J q C	0.12	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-94	ND		0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-95	0.32	B	0.061	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-96	ND		0.061	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-97	0.26	J C86	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-98	ND	C	0.12	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B065-BL1

Lab Sample ID: 580-76440-9

Date Collected: 04/08/18 11:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.21	q C83 B	0.12	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-100	0.012	J q C93	0.12	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-101	0.44	C90 B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-102	ND	C98	0.12	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-103	ND		0.061	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-104	ND		0.061	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-105	0.15	B	0.061	0.0030	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-106	ND		0.061	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-107	0.025	J q	0.061	0.0034	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-108	0.010	J q C	0.12	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-109	0.26	J C86	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-110	0.50	C B	0.12	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-111	ND		0.061	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-112	ND		0.061	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-113	0.44	C90 B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-114	ND		0.061	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-115	0.50	C110 B	0.12	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-116	0.063	J q C85 B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-117	0.063	J q C85 B	0.18	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-118	0.39	B	0.061	0.0030	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-119	0.26	J C86	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-120	ND		0.061	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-121	ND		0.061	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-122	ND		0.061	0.0036	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-123	0.0069	J q	0.061	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-124	0.010	J q C108	0.12	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-125	0.26	J C86	0.37	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-126	ND		0.061	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-127	ND		0.061	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-128	0.077	J C B	0.12	0.0047	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-129	0.58	C B	0.24	0.0049	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-130	0.042	J	0.061	0.0065	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-131	ND		0.061	0.0067	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-132	0.13	q	0.061	0.0063	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-133	0.0095	J	0.061	0.0061	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-134	0.021	J q C	0.12	0.0064	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-135	0.18	C B	0.12	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-136	0.061		0.061	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-137	0.018	J	0.061	0.0055	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-138	0.58	C129 B	0.24	0.0049	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-139	ND	C	0.12	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-140	ND	C139	0.12	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-141	0.077	q	0.061	0.0057	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-142	ND		0.061	0.0061	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-143	0.021	J q C134	0.12	0.0064	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-144	0.019	J q	0.061	0.00094	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-145	ND		0.061	0.00071	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-146	0.092		0.061	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-147	0.44	C B	0.12	0.0062	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B065-BL1

Lab Sample ID: 580-76440-9

Date Collected: 04/08/18 11:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.061	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-149	0.44	C147 B	0.12	0.0062	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-150	ND		0.061	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-151	0.18	C135 B	0.12	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-152	ND		0.061	0.00073	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-153	0.45	C B	0.12	0.0043	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-154	0.0085	J q	0.061	0.00081	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-155	ND		0.061	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-156	0.059	J q C	0.12	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-157	0.059	J q C156	0.12	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-158	0.045	J q	0.061	0.0038	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-159	ND		0.061	0.0041	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-160	0.58	C129 B	0.24	0.0049	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-161	ND		0.061	0.0040	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-162	ND		0.061	0.0040	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-163	0.58	C129 B	0.24	0.0049	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-164	0.040	J	0.061	0.0043	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-165	ND		0.061	0.0046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-166	0.077	J C128 B	0.12	0.0047	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-167	0.021	J	0.061	0.0034	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-168	0.45	C153 B	0.12	0.0043	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-169	ND		0.061	0.0030	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-170	0.14	B	0.061	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-171	0.048	J C	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-172	0.025	J	0.061	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-173	0.048	J C171	0.12	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-174	0.13	B	0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-175	ND		0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-176	0.013	J q B	0.061	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-177	0.083	B	0.061	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-178	0.029	J q	0.061	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-179	0.061		0.061	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-180	0.32	C B	0.12	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-181	ND		0.061	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-182	ND		0.061	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-183	0.086	J q C	0.12	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-184	ND		0.061	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-185	0.086	J q C183	0.12	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-186	ND		0.061	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-187	0.19		0.061	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-188	ND		0.061	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-189	ND		0.061	0.0033	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-190	0.031	J B	0.061	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-191	0.0021	J q	0.061	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-192	ND		0.061	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-193	0.32	C180 B	0.12	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-194	0.063		0.061	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-195	0.024	J q	0.061	0.0030	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-196	0.022	J q	0.061	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B065-BL1

Lab Sample ID: 580-76440-9

Date Collected: 04/08/18 11:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.6

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.061	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-198	0.070	J C	0.12	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-199	0.070	J C198	0.12	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-200	0.0091	J	0.061	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-201	0.010	J q	0.061	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-202	0.0094	J q	0.061	0.00047	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-203	0.050	J	0.061	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-204	ND		0.061	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-205	ND		0.061	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-206	0.052	J	0.061	0.0064	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-207	ND		0.061	0.0046	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-208	0.016	J	0.061	0.0047	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
PCB-209	0.058	J	0.061	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 19:34	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	79		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-3L	80		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-4L	69		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-15L	74		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-19L	78		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-37L	85		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-54L	83		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-77L	88		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-81L	86		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-104L	78		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-105L	89		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-114L	87		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-118L	85		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-123L	84		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-126L	87		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-155L	86		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-156L	93	C	30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-157L	93	C156	30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-167L	93		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-169L	101		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-170L	87		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-188L	86		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-189L	99		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-202L	94		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-205L	73		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-206L	72		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-208L	73		30 - 140				04/13/18 12:10	04/25/18 19:34	1
PCB-209L	64		30 - 140				04/13/18 12:10	04/25/18 19:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	89		40 - 125				04/13/18 12:10	04/25/18 19:34	1
PCB-111L	94		40 - 125				04/13/18 12:10	04/25/18 19:34	1
PCB-178L	87		40 - 125				04/13/18 12:10	04/25/18 19:34	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B066-BL1

Lab Sample ID: 580-76440-10

Date Collected: 04/08/18 13:22

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 53.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0016	J	0.0094	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-2	0.0036	J q B	0.0094	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-3	0.0022	J q	0.0094	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-4	ND		0.019	0.0076	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-5	ND		0.0094	0.0058	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-6	ND		0.0094	0.0051	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-7	ND		0.0094	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-8	0.0075	J q	0.019	0.0047	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-9	ND		0.0094	0.0054	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-10	ND		0.0094	0.0057	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-11	0.043	q B	0.019	0.0050	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-12	ND	C	0.019	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-13	ND	C12	0.019	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-14	ND		0.0094	0.0044	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-15	0.0084	J q	0.0094	0.0052	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-16	0.0049	J	0.0094	0.00090	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-17	0.0064	J	0.0094	0.00081	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-18	0.0088	J q C	0.019	0.00071	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-19	0.0069	J q	0.0094	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-20	0.034	C B	0.019	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-21	0.012	J C	0.019	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-22	0.0077	J	0.0094	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-23	ND		0.0094	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-24	ND		0.0094	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-25	0.0028	J	0.0094	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-26	0.0041	J q C	0.019	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-27	ND		0.0094	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-28	0.034	C20 B	0.019	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-29	0.0041	J q C26	0.019	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-30	0.0088	J q C18	0.019	0.00071	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-31	0.023	B	0.019	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-32	0.0058	J B	0.0094	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-33	0.012	J C21	0.019	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-34	ND		0.0094	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-35	ND		0.0094	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-36	ND		0.0094	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-37	0.012	B	0.0094	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-38	ND		0.0094	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-39	ND		0.0094	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-40	0.017	J C	0.028	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-41	0.017	J C40	0.028	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-42	0.0070	J q	0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-43	0.0022	J q C	0.019	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-44	0.044	C	0.028	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-45	0.0074	J q C	0.019	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-46	ND		0.0094	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-47	0.044	C44	0.028	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-48	0.0044	J	0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-49	0.028	C	0.019	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B066-BL1

Lab Sample ID: 580-76440-10

Date Collected: 04/08/18 13:22

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 53.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.0070	J C	0.019	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-51	0.0074	J q C45	0.019	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-52	0.051		0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-53	0.0070	J C50	0.019	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-54	ND		0.0094	0.000079	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-55	ND		0.0094	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-56	0.012	q	0.0094	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-57	ND		0.0094	0.00083	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-58	ND		0.0094	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-59	0.0026	J q C	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-60	0.0044	J q	0.0094	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-61	0.062	C	0.038	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-62	0.0026	J q C59	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-63	ND		0.0094	0.00076	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-64	0.010	q	0.0094	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-65	0.044	C44	0.028	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-66	0.036		0.0094	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-67	ND		0.0094	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-68	ND		0.0094	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-69	0.028	C49	0.019	0.00092	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-70	0.062	C61	0.038	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-71	0.017	J C40	0.028	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-72	ND		0.0094	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-73	0.0022	J q C43	0.019	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-74	0.062	C61	0.038	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-75	0.0026	J q C59	0.028	0.00080	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-76	0.062	C61	0.038	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-77	0.0049	J	0.0094	0.00077	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-78	ND		0.0094	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-79	ND		0.0094	0.00073	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-80	ND		0.0094	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-81	ND		0.0094	0.00080	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-82	0.0047	J q	0.0094	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-83	0.049	q C B	0.019	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-84	0.016		0.0094	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-85	0.016	J C B	0.028	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-86	0.043	J C	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-87	0.043	J C86	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-88	0.013	J q C	0.019	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-89	ND		0.0094	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-90	0.079	q C B	0.028	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-91	0.013	J q C88	0.019	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-92	0.013	q B	0.0094	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-93	0.0020	J q C	0.019	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-94	ND		0.0094	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-95	0.063	B	0.0094	0.00039	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-96	ND		0.0094	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-97	0.043	J C86	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-98	0.0026	J q C	0.019	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B066-BL1

Lab Sample ID: 580-76440-10

Date Collected: 04/08/18 13:22

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 53.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.049	q C83 B	0.019	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-100	0.0020	J q C93	0.019	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-101	0.079	q C90 B	0.028	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-102	0.0026	J q C98	0.019	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-103	0.0018	J q	0.0094	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-104	ND		0.0094	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-105	0.029	B	0.0094	0.00096	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-106	ND		0.0094	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-107	0.0064	J	0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-108	0.0026	J q C	0.019	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-109	0.043	J C86	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-110	0.088	q C B	0.019	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-111	ND		0.0094	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-112	ND		0.0094	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-113	0.079	q C90 B	0.028	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-114	0.0011	J	0.0094	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-115	0.088	q C110 B	0.019	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-116	0.016	J C85 B	0.028	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-117	0.016	J C85 B	0.028	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-118	0.076	B	0.0094	0.00094	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-119	0.043	J C86	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-120	ND		0.0094	0.00025	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-121	ND		0.0094	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-122	ND		0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-123	0.0017	J	0.0094	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-124	0.0026	J q C108	0.019	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-125	0.043	J C86	0.056	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-126	ND		0.0094	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-127	ND		0.0094	0.00099	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-128	0.021	C B	0.019	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-129	0.17	C B	0.038	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-130	0.0088	J	0.0094	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-131	ND		0.0094	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-132	0.035	q	0.0094	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-133	ND		0.0094	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-134	ND	C	0.019	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-135	0.045	C B	0.019	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-136	0.017		0.0094	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-137	0.0054	J	0.0094	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-138	0.17	C129 B	0.038	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-139	ND	C	0.019	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-140	ND	C139	0.019	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-141	0.027		0.0094	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-142	ND		0.0094	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-143	ND	C134	0.019	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-144	0.0057	J	0.0094	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-145	ND		0.0094	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-146	0.031		0.0094	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-147	0.13	C B	0.019	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B066-BL1

Lab Sample ID: 580-76440-10

Date Collected: 04/08/18 13:22

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 53.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0094	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-149	0.13	C147 B	0.019	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-150	ND		0.0094	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-151	0.045	C135 B	0.019	0.00023	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-152	ND		0.0094	0.00016	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-153	0.14	C B	0.019	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-154	0.0035	J q	0.0094	0.00018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-155	ND		0.0094	0.00015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-156	0.013	J C	0.019	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-157	0.013	J C156	0.019	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-158	0.013		0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-159	0.0015	J q	0.0094	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-160	0.17	C129 B	0.038	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-161	ND		0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-162	ND		0.0094	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-163	0.17	C129 B	0.038	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-164	0.010		0.0094	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-165	ND		0.0094	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-166	0.021	C128 B	0.019	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-167	0.0061	J	0.0094	0.00098	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-168	0.14	C153 B	0.019	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-169	ND		0.0094	0.00085	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-170	0.035	q B	0.0094	0.00097	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-171	0.011	J q C	0.019	0.00095	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-172	0.0080	J	0.0094	0.00094	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-173	0.011	J q C171	0.019	0.00095	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-174	0.042	B	0.0094	0.00088	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-175	ND		0.0094	0.00086	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-176	0.0035	J q B	0.0094	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-177	0.024	q B	0.0094	0.00091	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-178	0.011		0.0094	0.00093	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-179	0.018		0.0094	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-180	0.10	C B	0.019	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-181	ND		0.0094	0.00085	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-182	ND		0.0094	0.00082	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-183	0.027	q C	0.019	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-184	ND		0.0094	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-185	0.027	q C183	0.019	0.00084	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-186	ND		0.0094	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-187	0.061		0.0094	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-188	ND		0.0094	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-189	ND		0.0094	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-190	0.0069	J q B	0.0094	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-191	ND		0.0094	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-192	0.0015	J q B	0.0094	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-193	0.10	C180 B	0.019	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-194	0.019		0.0094	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-195	0.0084	J	0.0094	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-196	0.0099		0.0094	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B066-BL1

Lab Sample ID: 580-76440-10

Date Collected: 04/08/18 13:22

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 53.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.00091	J q	0.0094	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-198	0.022	C	0.019	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-199	0.022	C198	0.019	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-200	0.0023	J	0.0094	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-201	0.0011	J q	0.0094	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-202	0.0057	J	0.0094	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-203	0.013	q	0.0094	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-204	ND		0.0094	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-205	ND		0.0094	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-206	0.018		0.0094	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-207	ND		0.0094	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-208	ND		0.0094	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
PCB-209	0.030		0.0094	0.00079	ng/g	☼	04/13/18 12:10	04/25/18 10:40	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	43		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-3L	44		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-4L	36		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-15L	37		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-19L	40		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-37L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-54L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-77L	42		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-81L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-104L	38		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-105L	42		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-114L	42		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-118L	42		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-123L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-126L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-155L	40		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-156L	44	C	30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-157L	44	C156	30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-167L	20	q *	30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-169L	47		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-170L	41		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-188L	42		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-189L	49		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-202L	44		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-205L	36		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-206L	33		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-208L	36		30 - 140				04/13/18 12:10	04/25/18 10:40	1
PCB-209L	29	*	30 - 140				04/13/18 12:10	04/25/18 10:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	44		40 - 125				04/13/18 12:10	04/25/18 10:40	1
PCB-111L	45		40 - 125				04/13/18 12:10	04/25/18 10:40	1
PCB-178L	43		40 - 125				04/13/18 12:10	04/25/18 10:40	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0030	J	0.011	0.00030	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-2	0.020	B	0.011	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-3	0.0055	J	0.011	0.00036	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-4	0.015	J q	0.022	0.0048	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-5	ND		0.011	0.0035	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-6	0.0069	J q	0.011	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-7	ND		0.011	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-8	0.034		0.022	0.0029	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-9	ND		0.011	0.0033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-10	ND		0.011	0.0035	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-11	0.087	B	0.022	0.0030	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-12	0.0046	J q C	0.022	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-13	0.0046	J q C12	0.022	0.0032	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-14	ND		0.011	0.0027	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-15	0.033		0.011	0.0031	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-16	0.020		0.011	0.00081	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-17	0.024	q	0.011	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-18	0.058	C	0.022	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-19	0.024		0.011	0.00089	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-20	0.15	C B	0.022	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-21	0.061	C	0.022	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-22	0.035		0.011	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-23	ND		0.011	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-24	0.00072	J q	0.011	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-25	0.011		0.011	0.00055	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-26	0.019	J C	0.022	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-27	0.0059	J q	0.011	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-28	0.15	C20 B	0.022	0.00059	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-29	0.019	J C26	0.022	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-30	0.058	C18	0.022	0.00064	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-31	0.096	B	0.022	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-32	0.022	B	0.011	0.00050	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-33	0.061	C21	0.022	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-34	ND		0.011	0.00062	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-35	0.0029	J	0.011	0.00061	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-36	0.00095	J q	0.011	0.00058	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-37	0.047	B	0.011	0.00060	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-38	0.00079	J q	0.011	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-39	0.00083	J q	0.011	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-40	0.081	C	0.034	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-41	0.081	C40	0.034	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-42	0.041		0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-43	0.0049	J q C	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-44	0.20	C	0.034	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-45	0.032	q C	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-46	0.0063	J q	0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-47	0.20	C44	0.034	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-48	0.022	q	0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-49	0.14	C	0.022	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.028	C	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-51	0.032	q C45	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-52	0.22		0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-53	0.028	C50	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-54	0.0047	J	0.011	0.00011	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-55	0.0022	J	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-56	0.072		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-57	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-58	0.0016	J	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-59	0.016	J C	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-60	0.018		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-61	0.29	C	0.045	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-62	0.016	J C59	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-63	0.0052	J q	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-64	0.062		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-65	0.20	C44	0.034	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-66	0.20		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-67	0.0028	J q	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-68	0.0064	J	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-69	0.14	C49	0.022	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-70	0.29	C61	0.045	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-71	0.081	C40	0.034	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-72	0.0049	J q	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-73	0.0049	J q C43	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-74	0.29	C61	0.045	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-75	0.016	J C59	0.034	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-76	0.29	C61	0.045	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-77	0.016	q	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-78	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-79	0.0022	J q	0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-80	ND		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-81	ND		0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-82	0.031		0.011	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-83	0.29	C B	0.022	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-84	0.070	q	0.011	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-85	0.061	C B	0.034	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-86	0.19	q C	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-87	0.19	q C86	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-88	0.077	C	0.022	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-89	ND		0.011	0.00044	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-90	0.41	C B	0.034	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-91	0.077	C88	0.022	0.00040	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-92	0.082	B	0.011	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-93	0.014	J C	0.022	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-94	0.0041	J q	0.011	0.00043	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-95	0.29	B	0.011	0.00042	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-96	0.0037	J	0.011	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-97	0.19	q C86	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-98	0.012	J C	0.022	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.29	C83 B	0.022	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-100	0.014	J C93	0.022	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-101	0.41	C90 B	0.034	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-102	0.012	J C98	0.022	0.00037	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-103	0.013		0.011	0.00038	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-104	ND		0.011	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-105	0.11	B	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-106	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-107	0.035		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-108	0.012	J C	0.022	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-109	0.19	q C86	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-110	0.44	C B	0.022	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-111	ND		0.011	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-112	ND		0.011	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-113	0.41	C90 B	0.034	0.00034	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-114	0.0054	J	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-115	0.44	C110 B	0.022	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-116	0.061	C85 B	0.034	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-117	0.061	C85 B	0.034	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-118	0.33	B	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-119	0.19	q C86	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-120	ND		0.011	0.00027	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-121	ND		0.011	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-122	0.0055	J	0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-123	0.0050	J q	0.011	0.0013	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-124	0.012	J C108	0.022	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-125	0.19	q C86	0.067	0.00033	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-126	0.0018	J	0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-127	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-128	0.077	C B	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-129	0.64	C B	0.045	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-130	0.045		0.011	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-131	0.0058	J	0.011	0.0024	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-132	0.17		0.011	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-133	0.0092	J q	0.011	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-134	0.030	C	0.022	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-135	0.25	C B	0.022	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-136	0.078		0.011	0.00021	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-137	0.014	q	0.011	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-138	0.64	C129 B	0.045	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-139	0.0080	J q C	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-140	0.0080	J q C139	0.022	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-141	0.11		0.011	0.0021	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-142	ND		0.011	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-143	0.030	C134	0.022	0.0023	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-144	0.023		0.011	0.00026	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-145	ND		0.011	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-146	0.12		0.011	0.0019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-147	0.63	C B	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0016	J q	0.011	0.00028	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-149	0.63	C147 B	0.022	0.0022	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-150	0.0027	J q	0.011	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-151	0.25	C135 B	0.022	0.00029	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-152	0.0013	J q	0.011	0.00020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-153	0.60	C B	0.022	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-154	0.013	q	0.011	0.00022	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-155	ND		0.011	0.00019	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-156	0.060	C	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-157	0.060	C156	0.022	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-158	0.049		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-159	0.0036	J q	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-160	0.64	C129 B	0.045	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-161	ND		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-162	ND		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-163	0.64	C129 B	0.045	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-164	0.048		0.011	0.0016	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-165	ND		0.011	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-166	0.077	C128 B	0.022	0.0017	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-167	0.019		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-168	0.60	C153 B	0.022	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-169	ND		0.011	0.0011	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-170	0.20	B	0.011	0.00078	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-171	0.063	C	0.022	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-172	0.035		0.011	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-173	0.063	C171	0.022	0.00075	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-174	0.22	B	0.011	0.00070	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-175	0.0086	J	0.011	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-176	0.023	q B	0.011	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-177	0.13	B	0.011	0.00072	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-178	0.050		0.011	0.00074	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-179	0.10		0.011	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-180	0.46	C B	0.022	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-181	ND		0.011	0.00068	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-182	0.0019	J q	0.011	0.00065	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-183	0.15	C	0.022	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-184	ND		0.011	0.00056	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-185	0.15	C183	0.022	0.00066	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-186	ND		0.011	0.00054	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-187	0.29		0.011	0.00063	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-188	ND		0.011	0.00048	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-189	0.0068	J	0.011	0.0018	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-190	0.036	B	0.011	0.00049	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-191	0.0058	J q	0.011	0.00051	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-192	ND		0.011	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-193	0.46	C180 B	0.022	0.00057	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-194	0.12		0.011	0.0012	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-195	0.045		0.011	0.0014	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-196	0.050		0.011	0.00045	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.00085	J q	0.011	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-198	0.13	C	0.022	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-199	0.13	C198	0.022	0.00046	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-200	0.011	q	0.011	0.00031	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-201	0.0091	J q	0.011	0.00032	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-202	0.025		0.011	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-203	0.074		0.011	0.00041	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-204	ND		0.011	0.00035	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-205	0.0036	J q	0.011	0.0010	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-206	0.090		0.011	0.0020	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-207	0.0081	J	0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-208	0.028		0.011	0.0015	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
PCB-209	0.097		0.011	0.00053	ng/g	☼	04/13/18 12:10	04/25/18 11:42	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	77		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-3L	83		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-4L	69		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-15L	76		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-19L	79		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-37L	85		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-54L	86		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-77L	81		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-81L	83		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-104L	78		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-105L	78		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-114L	87		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-118L	85		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-123L	85		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-126L	85		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-155L	83		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-156L	90	C	30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-157L	90	C156	30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-167L	90		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-169L	96		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-170L	84		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-188L	85		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-189L	100		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-202L	92		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-205L	73		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-206L	71		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-208L	71		30 - 140				04/13/18 12:10	04/25/18 11:42	1
PCB-209L	62		30 - 140				04/13/18 12:10	04/25/18 11:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	88		40 - 125				04/13/18 12:10	04/25/18 11:42	1
PCB-111L	91		40 - 125				04/13/18 12:10	04/25/18 11:42	1
PCB-178L	88		40 - 125				04/13/18 12:10	04/25/18 11:42	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0035	J q	0.011	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-2	0.027	B	0.011	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-3	0.0036	J q B	0.011	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-4	0.021	J q	0.023	0.0045	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-5	ND		0.011	0.0032	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-6	0.0089	J q	0.011	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-7	0.0033	J q	0.011	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-8	0.038		0.023	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-9	ND		0.011	0.0030	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-10	ND		0.011	0.0032	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-11	0.12	B	0.023	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-12	0.0072	J C	0.023	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-13	0.0072	J C12	0.023	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-14	ND		0.011	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-15	0.039		0.011	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-16	0.027		0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-17	0.050		0.011	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-18	0.061	q C	0.023	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-19	0.033		0.011	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-20	0.18	C B	0.023	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-21	0.069	C	0.023	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-22	0.041		0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-23	ND		0.011	0.00072	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-24	0.0016	J	0.011	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-25	0.013		0.011	0.00066	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-26	0.022	J C	0.023	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-27	0.0085	J	0.011	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-28	0.18	C20 B	0.023	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-29	0.022	J C26	0.023	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-30	0.061	q C18	0.023	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-31	0.11	B	0.023	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-32	0.026		0.011	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-33	0.069	C21	0.023	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-34	0.0014	J q	0.011	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-35	0.0020	J q	0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-36	ND		0.011	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-37	0.059		0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-38	ND		0.011	0.00076	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-39	ND		0.011	0.00068	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-40	0.096	C	0.034	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-41	0.096	C40	0.034	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-42	0.049		0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-43	0.0073	J q C	0.023	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-44	0.25	C	0.034	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-45	0.036	C	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-46	0.0060	J q	0.011	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-47	0.25	C44	0.034	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-48	0.029		0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-49	0.17	C	0.023	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.038	C	0.023	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-51	0.036	C45	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-52	0.30		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-53	0.038	C50	0.023	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-54	0.0059	J q	0.011	0.00015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-55	0.0026	J	0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-56	0.079		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-57	ND		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-58	0.0023	J	0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-59	0.017	J C	0.034	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-60	0.022		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-61	0.37	C	0.046	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-62	0.017	J C59	0.034	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-63	0.0072	J q	0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-64	0.078		0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-65	0.25	C44	0.034	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-66	0.23		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-67	0.0044	J	0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-68	0.0029	J q	0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-69	0.17	C49	0.023	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-70	0.37	C61	0.046	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-71	0.096	C40	0.034	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-72	0.0040	J	0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-73	0.0073	J q C43	0.023	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-74	0.37	C61	0.046	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-75	0.017	J C59	0.034	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-76	0.37	C61	0.046	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-77	0.022		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-78	ND		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-79	0.0036	J q	0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-80	ND		0.011	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-81	ND		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-82	0.055		0.011	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-83	0.49	C	0.023	0.00079	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-84	0.12		0.011	0.00088	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-85	0.085	q C	0.034	0.00064	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-86	0.32	C	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-87	0.32	C86	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-88	0.11	C	0.023	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-89	ND		0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-90	0.65	C	0.034	0.00066	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-91	0.11	C88	0.023	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-92	0.12	q	0.011	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-93	0.029	q C	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-94	0.0047	J q	0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-95	0.41		0.011	0.00082	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-96	0.0044	J	0.011	0.00064	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-97	0.32	C86	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-98	0.016	J C	0.023	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.49	C83	0.023	0.00079	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-100	0.029	q C93	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-101	0.65	C90	0.034	0.00066	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-102	0.016	J C98	0.023	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-103	0.019		0.011	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-104	ND		0.011	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-105	0.16	B	0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-106	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-107	0.055		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-108	0.016	J C B	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-109	0.32	C86	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-110	0.60	C B	0.023	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-111	0.0047	J	0.011	0.00053	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-112	ND		0.011	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-113	0.65	C90	0.034	0.00066	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-114	0.0088	J	0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-115	0.60	C110 B	0.023	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-116	0.085	q C85	0.034	0.00064	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-117	0.085	q C85	0.034	0.00064	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-118	0.48	B	0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-119	0.32	C86	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-120	0.0078	J q	0.011	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-121	ND		0.011	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-122	0.0057	J q	0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-123	0.0097	J	0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-124	0.016	J C108 B	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-125	0.32	C86	0.068	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-126	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-127	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-128	0.10	C	0.023	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-129	0.86	C B	0.046	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-130	0.062		0.011	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-131	0.0067	J	0.011	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-132	0.25	B	0.011	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-133	0.055		0.011	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-134	0.045	C	0.023	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-135	0.42	C	0.023	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-136	0.10		0.011	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-137	0.023	q	0.011	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-138	0.86	C129 B	0.046	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-139	0.020	J q C	0.023	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-140	0.020	J q C139	0.023	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-141	0.13		0.011	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-142	ND		0.011	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-143	0.045	C134	0.023	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-144	0.027	q	0.011	0.00039	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-145	ND		0.011	0.00029	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-146	0.39		0.011	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-147	0.95	C B	0.023	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.013	q	0.011	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-149	0.95	C147 B	0.023	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-150	0.0057	J q	0.011	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-151	0.42	C135	0.023	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-152	ND		0.011	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-153	0.90	C B	0.023	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-154	0.078		0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-155	ND		0.011	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-156	0.074	C	0.023	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-157	0.074	C156	0.023	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-158	0.064		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-159	0.0057	J q	0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-160	0.86	C129 B	0.046	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-161	ND		0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-162	0.0024	J q	0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-163	0.86	C129 B	0.046	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-164	0.062		0.011	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-165	ND		0.011	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-166	0.10	C128	0.023	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-167	0.024		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-168	0.90	C153 B	0.023	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-169	ND		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-170	0.25	B	0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-171	0.076	C	0.023	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-172	0.042		0.011	0.00098	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-173	0.076	C171	0.023	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-174	0.27		0.011	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-175	0.0082	J q	0.011	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-176	0.037		0.011	0.00068	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-177	0.18		0.011	0.00095	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-178	0.080		0.011	0.00097	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-179	0.16		0.011	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-180	0.54	C	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-181	ND		0.011	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-182	0.0042	J q	0.011	0.00086	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-183	0.17	C	0.023	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-184	ND		0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-185	0.17	C183	0.023	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-186	ND		0.011	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-187	0.42		0.011	0.00083	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-188	ND		0.011	0.00064	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-189	0.0093	J	0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-190	0.046		0.011	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-191	0.0076	J	0.011	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-192	ND		0.011	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-193	0.54	C180	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-194	0.13		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-195	0.052		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-196	0.061		0.011	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0042	J q	0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-198	0.15	C	0.023	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-199	0.15	C198	0.023	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-200	0.014		0.011	0.00029	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-201	0.013		0.011	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-202	0.027		0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-203	0.086		0.011	0.00039	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-204	ND		0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-205	0.0079	J	0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-206	0.11		0.011	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-207	0.010	J	0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-208	0.030		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1
PCB-209	0.11		0.011	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 14:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	86		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-3L	96		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-4L	74		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-15L	79		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-19L	86		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-37L	90		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-54L	93		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-77L	85		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-81L	87		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-104L	82		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-105L	85		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-114L	87		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-118L	87		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-123L	89		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-126L	87		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-155L	85		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-156L	91	C	30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-157L	91	C156	30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-167L	91		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-169L	95		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-170L	85		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-188L	89		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-189L	103		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-202L	95		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-205L	74		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-206L	68		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-208L	76		30 - 140	04/17/18 11:45	04/26/18 14:25	1
PCB-209L	62		30 - 140	04/17/18 11:45	04/26/18 14:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	92		40 - 125	04/17/18 11:45	04/26/18 14:25	1
PCB-111L	94		40 - 125	04/17/18 11:45	04/26/18 14:25	1
PCB-178L	89		40 - 125	04/17/18 11:45	04/26/18 14:25	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0022	J	0.011	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-2	0.015	B	0.011	0.00029	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-3	0.0022	J q B	0.011	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-4	0.014	J q	0.022	0.0036	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-5	ND		0.011	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-6	0.0048	J	0.011	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-7	ND		0.011	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-8	0.022	q	0.022	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-9	ND		0.011	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-10	ND		0.011	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-11	0.099	B	0.022	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-12	0.0044	J q C	0.022	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-13	0.0044	J q C12	0.022	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-14	ND		0.011	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-15	0.023	q	0.011	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-16	0.012		0.011	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-17	0.021	q	0.011	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-18	0.037	C	0.022	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-19	0.012	q	0.011	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-20	0.096	C B	0.022	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-21	0.032	C	0.022	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-22	0.023		0.011	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-23	ND		0.011	0.00058	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-24	ND		0.011	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-25	0.0083	J	0.011	0.00053	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-26	0.015	J C	0.022	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-27	0.0044	J q	0.011	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-28	0.096	C20 B	0.022	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-29	0.015	J C26	0.022	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-30	0.037	C18	0.022	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-31	0.067	B	0.022	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-32	0.016		0.011	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-33	0.032	C21	0.022	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-34	ND		0.011	0.00060	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-35	0.0016	J	0.011	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-36	ND		0.011	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-37	0.033		0.011	0.00058	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-38	ND		0.011	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-39	ND		0.011	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-40	0.040	C	0.033	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-41	0.040	C40	0.033	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-42	0.023		0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-43	0.0036	J C	0.022	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-44	0.11	C	0.033	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-45	0.021	J C	0.022	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-46	0.0047	J	0.011	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-47	0.11	C44	0.033	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-48	0.010	J q	0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-49	0.077	C	0.022	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.022	C	0.022	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-51	0.021	J C45	0.022	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-52	0.13		0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-53	0.022	C50	0.022	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-54	0.0030	J q	0.011	0.000083	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-55	ND		0.011	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-56	0.042		0.011	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-57	ND		0.011	0.00098	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-58	0.0018	J	0.011	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-59	0.0072	J C	0.033	0.00093	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-60	0.015		0.011	0.00098	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-61	0.18	C	0.044	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-62	0.0072	J C59	0.033	0.00093	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-63	0.0031	J q	0.011	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-64	0.039		0.011	0.00088	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-65	0.11	C44	0.033	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-66	0.11		0.011	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-67	0.0015	J q	0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-68	ND		0.011	0.00086	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-69	0.077	C49	0.022	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-70	0.18	C61	0.044	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-71	0.040	C40	0.033	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-72	ND		0.011	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-73	0.0036	J C43	0.022	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-74	0.18	C61	0.044	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-75	0.0072	J C59	0.033	0.00093	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-76	0.18	C61	0.044	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-77	0.012		0.011	0.00097	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-78	ND		0.011	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-79	ND		0.011	0.00086	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-80	ND		0.011	0.00084	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-81	ND		0.011	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-82	0.024		0.011	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-83	0.17	C	0.022	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-84	0.048		0.011	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-85	0.044	C	0.033	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-86	0.14	C	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-87	0.14	C86	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-88	0.038	C	0.022	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-89	ND		0.011	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-90	0.27	C	0.033	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-91	0.038	C88	0.022	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-92	0.043	q	0.011	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-93	0.0076	J C	0.022	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-94	ND		0.011	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-95	0.20		0.011	0.00052	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-96	0.0023	J	0.011	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-97	0.14	C86	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-98	0.0059	J q C	0.022	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.17	C83	0.022	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-100	0.0076	J C93	0.022	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-101	0.27	C90	0.033	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-102	0.0059	J q C98	0.022	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-103	0.0047	J q	0.011	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-104	ND		0.011	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-105	0.077	B	0.011	0.00093	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-106	ND		0.011	0.00091	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-107	0.019		0.011	0.00098	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-108	0.0074	J C B	0.022	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-109	0.14	C86	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-110	0.29	C B	0.022	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-111	ND		0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-112	ND		0.011	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-113	0.27	C90	0.033	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-114	0.0024	J q	0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-115	0.29	C110 B	0.022	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-116	0.044	C85	0.033	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-117	0.044	C85	0.033	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-118	0.22	B	0.011	0.00084	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-119	0.14	C86	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-120	ND		0.011	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-121	ND		0.011	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-122	ND		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-123	0.0039	J q	0.011	0.00090	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-124	0.0074	J C108 B	0.022	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-125	0.14	C86	0.066	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-126	ND		0.011	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-127	ND		0.011	0.00091	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-128	0.053	C	0.022	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-129	0.42	C B	0.044	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-130	0.023	q	0.011	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-131	ND		0.011	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-132	0.12	B	0.011	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-133	0.0080	J	0.011	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-134	0.020	J C	0.022	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-135	0.13	q C	0.022	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-136	0.047		0.011	0.00022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-137	0.012	q	0.011	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-138	0.42	C129 B	0.044	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-139	0.0052	J C	0.022	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-140	0.0052	J C139	0.022	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-141	0.069		0.011	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-142	ND		0.011	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-143	0.020	J C134	0.022	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-144	0.013		0.011	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-145	ND		0.011	0.00020	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-146	0.081		0.011	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-147	0.39	C B	0.022	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0011	J q	0.011	0.00029	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-149	0.39	C147 B	0.022	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-150	0.0015	J q	0.011	0.00020	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-151	0.13	q C135	0.022	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-152	ND		0.011	0.00021	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-153	0.38	C B	0.022	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-154	ND		0.011	0.00023	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-155	ND		0.011	0.00020	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-156	0.039	C	0.022	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-157	0.039	C156	0.022	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-158	0.034		0.011	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-159	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-160	0.42	C129 B	0.044	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-161	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-162	ND		0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-163	0.42	C129 B	0.044	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-164	0.031		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-165	ND		0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-166	0.053	C128	0.022	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-167	0.013		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-168	0.38	C153 B	0.022	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-169	ND		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-170	0.13	B	0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-171	0.038	C	0.022	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-172	0.023		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-173	0.038	C171	0.022	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-174	0.13		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-175	0.0043	J q	0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-176	0.014		0.011	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-177	0.080		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-178	0.031		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-179	0.065		0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-180	0.27	C	0.022	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-181	ND		0.011	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-182	ND		0.011	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-183	0.087	C	0.022	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-184	ND		0.011	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-185	0.087	C183	0.022	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-186	ND		0.011	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-187	0.18		0.011	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-188	ND		0.011	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-189	0.0042	J	0.011	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-190	0.023		0.011	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-191	0.0022	J q	0.011	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-192	ND		0.011	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-193	0.27	C180	0.022	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-194	0.073		0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-195	0.029		0.011	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-196	0.029		0.011	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0029	J	0.011	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-198	0.075	C	0.022	0.00049	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-199	0.075	C198	0.022	0.00049	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-200	0.0077	J	0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-201	0.0082	J	0.011	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-202	0.017		0.011	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-203	0.041		0.011	0.00043	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-204	ND		0.011	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-205	ND		0.011	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-206	0.045		0.011	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-207	0.0035	J q	0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-208	0.013	q	0.011	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1
PCB-209	0.058		0.011	0.00023	ng/g	☼	04/17/18 11:45	04/26/18 15:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	88		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-3L	97		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-4L	73		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-15L	82		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-19L	88		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-37L	85		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-54L	90		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-77L	86		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-81L	87		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-104L	77		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-105L	87		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-114L	89		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-118L	88		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-123L	90		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-126L	88		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-155L	83		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-156L	90	C	30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-157L	90	C156	30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-167L	91		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-169L	91		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-170L	86		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-188L	92		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-189L	108		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-202L	94		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-205L	74		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-206L	70		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-208L	77		30 - 140	04/17/18 11:45	04/26/18 15:27	1
PCB-209L	61		30 - 140	04/17/18 11:45	04/26/18 15:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	90		40 - 125	04/17/18 11:45	04/26/18 15:27	1
PCB-111L	91		40 - 125	04/17/18 11:45	04/26/18 15:27	1
PCB-178L	90		40 - 125	04/17/18 11:45	04/26/18 15:27	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0022	J	0.0096	0.00021	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-2	0.0058	J	0.0096	0.00024	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-3	0.0061	J	0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-4	0.0061	J q	0.019	0.0023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-5	ND		0.0096	0.0018	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-6	0.0038	J q	0.0096	0.0015	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-7	0.0021	J q	0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-8	0.021		0.019	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-9	ND		0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-10	ND		0.0096	0.0017	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-11	0.22	B	0.019	0.0015	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-12	0.0079	J q C	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-13	0.0079	J q C12	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-14	ND		0.0096	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-15	0.031		0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-16	0.016	q	0.0096	0.00037	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-17	0.020		0.0096	0.00033	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-18	0.042	C	0.019	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-19	0.0074	J	0.0096	0.00041	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-20	0.12	C B	0.019	0.00055	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-21	0.053	C	0.019	0.00054	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-22	0.042		0.0096	0.00057	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-23	ND		0.0096	0.00056	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-24	0.0012	J	0.0096	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-25	0.0098		0.0096	0.00051	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-26	0.017	J C B	0.019	0.00055	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-27	0.0035	J	0.0096	0.00024	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-28	0.12	C20 B	0.019	0.00055	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-29	0.017	J C26 B	0.019	0.00055	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-30	0.042	C18	0.019	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-31	0.096	B	0.019	0.00054	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-32	0.018		0.0096	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-33	0.053	C21	0.019	0.00054	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-34	ND		0.0096	0.00058	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-35	0.010		0.0096	0.00057	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-36	0.00081	J q	0.0096	0.00055	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-37	0.058		0.0096	0.00057	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-38	0.00074	J	0.0096	0.00059	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-39	0.0013	J q	0.0096	0.00053	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-40	0.074	C	0.029	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-41	0.074	C40	0.029	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-42	0.035		0.0096	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-43	0.0025	J q C	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-44	0.17	C B	0.029	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-45	0.023	C	0.019	0.0015	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-46	0.0073	J	0.0096	0.0018	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-47	0.17	C44 B	0.029	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-48	0.023		0.0096	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-49	0.13	C	0.019	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.016	J C	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-51	0.023	C45	0.019	0.0015	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-52	0.20		0.0096	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-53	0.016	J C50	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-54	0.0010	J q	0.0096	0.00011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-55	0.0025	J q	0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-56	0.065		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-57	ND		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-58	ND		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-59	0.010	J C	0.029	0.00098	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-60	0.043		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-61	0.24	C B	0.039	0.00097	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-62	0.010	J C59	0.029	0.00098	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-63	0.0042	J q	0.0096	0.00094	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-64	0.060		0.0096	0.00093	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-65	0.17	C44 B	0.029	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-66	0.14		0.0096	0.00096	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-67	0.0021	J q	0.0096	0.00089	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-68	0.014		0.0096	0.00091	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-69	0.13	C49	0.019	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-70	0.24	C61 B	0.039	0.00097	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-71	0.074	C40	0.029	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-72	0.0088	J	0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-73	0.0025	J q C43	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-74	0.24	C61 B	0.039	0.00097	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-75	0.010	J C59	0.029	0.00098	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-76	0.24	C61 B	0.039	0.00097	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-77	0.015		0.0096	0.00094	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-78	ND		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-79	0.0049	J	0.0096	0.00090	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-80	ND		0.0096	0.00088	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-81	ND		0.0096	0.00099	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-82	0.024		0.0096	0.00030	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-83	0.22	C	0.019	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-84	0.053		0.0096	0.00031	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-85	0.034	q C	0.029	0.00022	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-86	0.15	C B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-87	0.15	C86 B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-88	0.060	C	0.019	0.00027	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-89	ND		0.0096	0.00030	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-90	0.33	C	0.029	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-91	0.060	C88	0.019	0.00027	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-92	0.066		0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-93	0.011	J q C	0.019	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-94	ND		0.0096	0.00030	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-95	0.26	B	0.0096	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-96	0.0024	J q	0.0096	0.00022	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-97	0.15	C86 B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-98	0.0090	J C	0.019	0.00025	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.22	C83	0.019	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-100	0.011	J q C93	0.019	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-101	0.33	C90	0.029	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-102	0.0090	J C98	0.019	0.00025	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-103	0.017		0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-104	ND		0.0096	0.00020	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-105	0.068		0.0096	0.00065	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-106	ND		0.0096	0.00066	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-107	0.019		0.0096	0.00070	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-108	0.0065	J q C	0.019	0.00067	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-109	0.15	C86 B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-110	0.28	C B	0.019	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-111	0.0019	J B	0.0096	0.00018	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-112	ND		0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-113	0.33	C90	0.029	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-114	0.0040	J q B	0.0096	0.00061	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-115	0.28	C110 B	0.019	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-116	0.034	q C85	0.029	0.00022	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-117	0.034	q C85	0.029	0.00022	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-118	0.18	B	0.0096	0.00060	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-119	0.15	C86 B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-120	0.0051	J	0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-121	ND		0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-122	0.0022	J q B	0.0096	0.00076	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-123	0.0029	J q	0.0096	0.00065	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-124	0.0065	J q C108	0.019	0.00067	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-125	0.15	C86 B	0.058	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-126	0.0016	J	0.0096	0.00070	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-127	ND		0.0096	0.00065	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-128	0.055	C B	0.019	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-129	0.49	C B	0.039	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-130	0.028		0.0096	0.0017	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-131	0.0048	J q	0.0096	0.0017	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-132	0.16		0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-133	0.013		0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-134	0.026	C	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-135	0.21	C	0.019	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-136	0.087		0.0096	0.00020	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-137	0.013	q	0.0096	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-138	0.49	C129 B	0.039	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-139	0.0097	J C	0.019	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-140	0.0097	J C139	0.019	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-141	0.10		0.0096	0.0015	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-142	ND		0.0096	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-143	0.026	C134	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-144	0.020		0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-145	ND		0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-146	0.13		0.0096	0.0014	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-147	0.65	C	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0048	J	0.0096	0.00027	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-149	0.65	C147	0.019	0.0016	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-150	0.0038	J q	0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-151	0.21	C135	0.019	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-152	ND		0.0096	0.00020	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-153	0.52	C B	0.019	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-154	0.027		0.0096	0.00022	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-155	0.0016	J	0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-156	0.039	C	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-157	0.039	C156	0.019	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-158	0.039		0.0096	0.00099	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-159	0.0041	J q	0.0096	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-160	0.49	C129 B	0.039	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-161	ND		0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-162	0.0016	J q	0.0096	0.0010	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-163	0.49	C129 B	0.039	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-164	0.032	q	0.0096	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-165	ND		0.0096	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-166	0.055	C128 B	0.019	0.0012	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-167	0.012		0.0096	0.00088	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-168	0.52	C153 B	0.019	0.0011	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-169	0.0011	J	0.0096	0.00080	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-170	0.14	B	0.0096	0.00042	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-171	0.044	C B	0.019	0.00038	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-172	0.024		0.0096	0.00038	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-173	0.044	C171 B	0.019	0.00038	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-174	0.16		0.0096	0.00036	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-175	0.0056	J q	0.0096	0.00035	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-176	0.021		0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-177	0.096		0.0096	0.00037	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-178	0.039		0.0096	0.00038	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-179	0.087		0.0096	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-180	0.32	C	0.019	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-181	ND		0.0096	0.00035	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-182	0.0017	J q	0.0096	0.00033	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-183	0.11	C B	0.019	0.00034	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-184	0.0023	J	0.0096	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-185	0.11	C183 B	0.019	0.00034	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-186	ND		0.0096	0.00028	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-187	0.22		0.0096	0.00032	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-188	ND		0.0096	0.00024	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-189	0.0049	J	0.0096	0.00085	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-190	0.024		0.0096	0.00025	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-191	0.0048	J	0.0096	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-192	ND		0.0096	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-193	0.32	C180	0.019	0.00029	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-194	0.082		0.0096	0.00077	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-195	0.038		0.0096	0.00085	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-196	0.035		0.0096	0.00025	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0025	J B	0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-198	0.078	C	0.019	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-199	0.078	C198	0.019	0.00026	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-200	0.0071	J q	0.0096	0.00017	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-201	0.0085	J	0.0096	0.00018	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-202	0.015		0.0096	0.00020	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-203	0.045		0.0096	0.00023	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-204	ND		0.0096	0.00019	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-205	0.0048	J B	0.0096	0.00065	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-206	0.051		0.0096	0.0021	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-207	0.0041	J	0.0096	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-208	0.013		0.0096	0.0013	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
PCB-209	0.036	B	0.0096	0.00033	ng/g	☼	04/25/18 10:41	04/27/18 15:52	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	76		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-3L	75		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-4L	74		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-15L	79		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-19L	86		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-37L	91		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-54L	83		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-77L	89		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-81L	86		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-104L	80		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-105L	90		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-114L	90		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-118L	88		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-123L	86		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-126L	80		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-155L	82		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-156L	83	C	30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-157L	83	C156	30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-167L	86		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-169L	81		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-170L	84		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-188L	99		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-189L	98		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-202L	97		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-205L	76		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-206L	68		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-208L	83		30 - 140				04/25/18 10:41	04/27/18 15:52	1
PCB-209L	59		30 - 140				04/25/18 10:41	04/27/18 15:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	90		40 - 125				04/25/18 10:41	04/27/18 15:52	1
PCB-111L	91		40 - 125				04/25/18 10:41	04/27/18 15:52	1
PCB-178L	99		40 - 125				04/25/18 10:41	04/27/18 15:52	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0032	J q	0.013	0.00025	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-2	0.0079	J B	0.013	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-3	0.0062	J B	0.013	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-4	0.018	J q	0.026	0.0039	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-5	ND		0.013	0.0031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-6	0.0073	J q	0.013	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-7	ND		0.013	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-8	0.031		0.026	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-9	ND		0.013	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-10	ND		0.013	0.0030	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-11	0.090	B	0.026	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-12	0.0045	J q C	0.026	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-13	0.0045	J q C12	0.026	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-14	ND		0.013	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-15	0.037		0.013	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-16	0.016		0.013	0.00093	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-17	0.029		0.013	0.00083	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-18	0.045	q C	0.026	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-19	0.018	q	0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-20	0.11	C B	0.026	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-21	0.041	C	0.026	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-22	0.031		0.013	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-23	ND		0.013	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-24	ND		0.013	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-25	0.0095	J	0.013	0.00063	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-26	0.017	J C	0.026	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-27	0.0073	J q	0.013	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-28	0.11	C20 B	0.026	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-29	0.017	J C26	0.026	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-30	0.045	q C18	0.026	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-31	0.080	B	0.026	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-32	0.017		0.013	0.00058	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-33	0.041	C21	0.026	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-34	ND		0.013	0.00072	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-35	0.0029	J q	0.013	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-36	ND		0.013	0.00068	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-37	0.036	q	0.013	0.00070	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-38	ND		0.013	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-39	ND		0.013	0.00065	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-40	0.058	C	0.039	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-41	0.058	C40	0.039	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-42	0.030		0.013	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-43	0.0046	J C	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-44	0.15	C	0.039	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-45	0.029	C	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-46	ND		0.013	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-47	0.15	C44	0.039	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-48	0.016	q	0.013	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-49	0.092	C	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.024	J C	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-51	0.029	C45	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-52	0.17		0.013	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-53	0.024	J C50	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-54	0.0035	J	0.013	0.00015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-55	ND		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-56	0.048		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-57	ND		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-58	ND		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-59	0.0096	J C	0.039	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-60	0.021		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-61	0.21	C	0.052	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-62	0.0096	J C59	0.039	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-63	0.0048	J q	0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-64	0.048		0.013	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-65	0.15	C44	0.039	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-66	0.13		0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-67	0.0027	J q	0.013	0.00095	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-68	ND		0.013	0.00097	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-69	0.092	C49	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-70	0.21	C61	0.052	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-71	0.058	C40	0.039	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-72	0.0019	J q	0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-73	0.0046	J C43	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-74	0.21	C61	0.052	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-75	0.0096	J C59	0.039	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-76	0.21	C61	0.052	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-77	0.016		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-78	ND		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-79	ND		0.013	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-80	ND		0.013	0.00095	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-81	ND		0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-82	0.029		0.013	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-83	0.19	C	0.026	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-84	0.056	q	0.013	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-85	0.046	q C	0.039	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-86	0.18	C	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-87	0.18	C86	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-88	0.047	q C	0.026	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-89	ND		0.013	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-90	0.32	C	0.039	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-91	0.047	q C88	0.026	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-92	0.057		0.013	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-93	0.010	J q C	0.026	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-94	ND		0.013	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-95	0.24		0.013	0.00040	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-96	0.0042	J	0.013	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-97	0.18	C86	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-98	0.0081	J q C	0.026	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.19	C83	0.026	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-100	0.010	J q C93	0.026	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-101	0.32	C90	0.039	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-102	0.0081	J q C98	0.026	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-103	0.0050	J q	0.013	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-104	ND		0.013	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-105	0.11	B	0.013	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-106	ND		0.013	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-107	0.021		0.013	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-108	0.0090	J C B	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-109	0.18	C86	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-110	0.35	C B	0.026	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-111	ND		0.013	0.00026	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-112	ND		0.013	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-113	0.32	C90	0.039	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-114	0.0033	J q	0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-115	0.35	C110 B	0.026	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-116	0.046	q C85	0.039	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-117	0.046	q C85	0.039	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-118	0.26	B	0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-119	0.18	C86	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-120	0.0020	J q	0.013	0.00026	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-121	ND		0.013	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-122	ND		0.013	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-123	0.0038	J q	0.013	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-124	0.0090	J C108 B	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-125	0.18	C86	0.078	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-126	ND		0.013	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-127	ND		0.013	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-128	0.074	C	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-129	0.58	C B	0.052	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-130	0.029	q	0.013	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-131	ND		0.013	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-132	0.16	B	0.013	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-133	0.0098	J	0.013	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-134	0.022	J q C	0.026	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-135	0.18	C	0.026	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-136	0.056		0.013	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-137	0.020		0.013	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-138	0.58	C129 B	0.052	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-139	0.0064	J C	0.026	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-140	0.0064	J C139	0.026	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-141	0.10		0.013	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-142	ND		0.013	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-143	0.022	J q C134	0.026	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-144	0.019		0.013	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-145	ND		0.013	0.00031	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-146	0.096		0.013	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-147	0.49	C B	0.026	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0022	J q	0.013	0.00044	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-149	0.49	C147 B	0.026	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-150	0.0020	J	0.013	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-151	0.18	C135	0.026	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-152	ND		0.013	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-153	0.48	C B	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-154	0.0087	J	0.013	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-155	ND		0.013	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-156	0.054	C	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-157	0.054	C156	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-158	0.046		0.013	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-159	0.0031	J q	0.013	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-160	0.58	C129 B	0.052	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-161	ND		0.013	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-162	ND		0.013	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-163	0.58	C129 B	0.052	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-164	0.042		0.013	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-165	ND		0.013	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-166	0.074	C128	0.026	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-167	0.018		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-168	0.48	C153 B	0.026	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-169	ND		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-170	0.17	B	0.013	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-171	0.046	C	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-172	0.029		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-173	0.046	C171	0.026	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-174	0.17		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-175	0.0050	J	0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-176	0.018		0.013	0.00079	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-177	0.10		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-178	0.040		0.013	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-179	0.077		0.013	0.00083	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-180	0.35	C	0.026	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-181	ND		0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-182	ND		0.013	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-183	0.11	C	0.026	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-184	ND		0.013	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-185	0.11	C183	0.026	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-186	ND		0.013	0.00083	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-187	0.22		0.013	0.00097	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-188	ND		0.013	0.00072	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-189	0.0049	J	0.013	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-190	0.032		0.013	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-191	0.0065	J q	0.013	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-192	ND		0.013	0.00088	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-193	0.35	C180	0.026	0.00087	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-194	0.087		0.013	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-195	0.039		0.013	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-196	0.033		0.013	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0021	J q	0.013	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-198	0.093	C	0.026	0.00068	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-199	0.093	C198	0.026	0.00068	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-200	0.0077	J q	0.013	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-201	0.0089	J	0.013	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-202	0.019		0.013	0.00052	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-203	0.050		0.013	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-204	ND		0.013	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-205	0.0041	J	0.013	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-206	0.076		0.013	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-207	0.0046	J	0.013	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-208	0.023		0.013	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1
PCB-209	0.078		0.013	0.00028	ng/g	☼	04/17/18 11:45	04/26/18 16:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	97		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-3L	103		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-4L	80		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-15L	83		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-19L	89		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-37L	91		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-54L	90		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-77L	89		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-81L	89		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-104L	82		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-105L	91		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-114L	92		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-118L	91		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-123L	92		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-126L	89		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-155L	86		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-156L	91	C	30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-157L	91	C156	30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-167L	94		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-169L	91		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-170L	86		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-188L	96		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-189L	109		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-202L	99		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-205L	73		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-206L	68		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-208L	80		30 - 140	04/17/18 11:45	04/26/18 16:29	1
PCB-209L	60		30 - 140	04/17/18 11:45	04/26/18 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	95		40 - 125	04/17/18 11:45	04/26/18 16:29	1
PCB-111L	95		40 - 125	04/17/18 11:45	04/26/18 16:29	1
PCB-178L	95		40 - 125	04/17/18 11:45	04/26/18 16:29	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0046	J	0.012	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-2	0.0095	J q B	0.012	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-3	0.0054	J B	0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-4	0.032	q	0.023	0.0041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-5	ND		0.012	0.0032	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-6	0.0085	J q	0.012	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-7	ND		0.012	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-8	0.045		0.023	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-9	ND		0.012	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-10	ND		0.012	0.0031	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-11	0.11	B	0.023	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-12	0.0078	J q C	0.023	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-13	0.0078	J q C12	0.023	0.0028	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-14	ND		0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-15	0.048		0.012	0.0029	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-16	0.027		0.012	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-17	0.042		0.012	0.00084	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-18	0.067	C	0.023	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-19	0.022	q	0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-20	0.15	C B	0.023	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-21	0.061	C	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-22	0.042		0.012	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-23	ND		0.012	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-24	ND		0.012	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-25	0.012	q	0.012	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-26	0.025	C	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-27	0.0067	J q	0.012	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-28	0.15	C20 B	0.023	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-29	0.025	C26	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-30	0.067	C18	0.023	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-31	0.11	B	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-32	0.021	q	0.012	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-33	0.061	C21	0.023	0.00075	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-34	ND		0.012	0.00081	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-35	0.0033	J	0.012	0.00079	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-36	ND		0.012	0.00076	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-37	0.048		0.012	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-38	ND		0.012	0.00081	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-39	ND		0.012	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-40	0.075	q C	0.035	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-41	0.075	q C40	0.035	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-42	0.039		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-43	0.0062	J C	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-44	0.18	C	0.035	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-45	0.034	C	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-46	0.0087	J	0.012	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-47	0.18	C44	0.035	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-48	0.023		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-49	0.12	C	0.023	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.030	C	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-51	0.034	C45	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-52	0.20		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-53	0.030	C50	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-54	0.0045	J	0.012	0.00014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-55	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-56	0.053		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-57	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-58	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-59	0.012	J C	0.035	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-60	0.022		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-61	0.24	C	0.047	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-62	0.012	J C59	0.035	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-63	ND		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-64	0.054		0.012	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-65	0.18	C44	0.035	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-66	0.15		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-67	ND		0.012	0.00095	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-68	ND		0.012	0.00097	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-69	0.12	C49	0.023	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-70	0.24	C61	0.047	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-71	0.075	q C40	0.035	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-72	0.0040	J	0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-73	0.0062	J C43	0.023	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-74	0.24	C61	0.047	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-75	0.012	J C59	0.035	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-76	0.24	C61	0.047	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-77	0.019		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-78	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-79	0.0019	J q	0.012	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-80	ND		0.012	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-81	ND		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-82	0.035		0.012	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-83	0.20	C	0.023	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-84	0.075		0.012	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-85	0.057	C	0.035	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-86	0.20	C	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-87	0.20	C86	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-88	0.053	C	0.023	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-89	ND		0.012	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-90	0.37	C	0.035	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-91	0.053	C88	0.023	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-92	0.066		0.012	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-93	0.013	J C	0.023	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-94	ND		0.012	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-95	0.28		0.012	0.00052	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-96	0.0034	J q	0.012	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-97	0.20	C86	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-98	0.0066	J q C	0.023	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.20	C83	0.023	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-100	0.013	J C93	0.023	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-101	0.37	C90	0.035	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-102	0.0066	J q C98	0.023	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-103	0.0074	J q	0.012	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-104	ND		0.012	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-105	0.12	B	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-106	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-107	0.027		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-108	0.013	J C B	0.023	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-109	0.20	C86	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-110	0.41	C B	0.023	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-111	ND		0.012	0.00033	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-112	0.0015	J	0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-113	0.37	C90	0.035	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-114	0.0046	J q	0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-115	0.41	C110 B	0.023	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-116	0.057	C85	0.035	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-117	0.057	C85	0.035	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-118	0.33	B	0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-119	0.20	C86	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-120	ND		0.012	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-121	ND		0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-122	0.0055	J q	0.012	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-123	0.0076	J	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-124	0.013	J C108 B	0.023	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-125	0.20	C86	0.070	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-126	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-127	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-128	0.081	C	0.023	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-129	0.64	C B	0.047	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-130	0.037		0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-131	ND		0.012	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-132	0.18	B	0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-133	0.0084	J q	0.012	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-134	0.024	q C	0.023	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-135	0.20	C	0.023	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-136	0.069		0.012	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-137	0.017	q	0.012	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-138	0.64	C129 B	0.047	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-139	0.0079	J C	0.023	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-140	0.0079	J C139	0.023	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-141	0.11		0.012	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-142	ND		0.012	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-143	0.024	q C134	0.023	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-144	0.017	q	0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-145	ND		0.012	0.00026	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-146	0.11		0.012	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-147	0.54	C B	0.023	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0019	J	0.012	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-149	0.54	C147 B	0.023	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-150	0.0018	J	0.012	0.00025	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-151	0.20	C135	0.023	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-152	ND		0.012	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-153	0.52	C B	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-154	0.010	J q	0.012	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-155	ND		0.012	0.00025	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-156	0.053	q C	0.023	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-157	0.053	q C156	0.023	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-158	0.050		0.012	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-159	0.0047	J	0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-160	0.64	C129 B	0.047	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-161	ND		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-162	ND		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-163	0.64	C129 B	0.047	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-164	0.043		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-165	ND		0.012	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-166	0.081	C128	0.023	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-167	0.019		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-168	0.52	C153 B	0.023	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-169	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-170	0.19	B	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-171	0.054	C	0.023	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-172	0.028		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-173	0.054	C171	0.023	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-174	0.17		0.012	0.00099	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-175	0.0070	J	0.012	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-176	0.022		0.012	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-177	0.11		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-178	0.040		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-179	0.083		0.012	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-180	0.36	C	0.023	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-181	ND		0.012	0.00096	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-182	ND		0.012	0.00092	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-183	0.11	C	0.023	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-184	ND		0.012	0.00078	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-185	0.11	C183	0.023	0.00094	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-186	ND		0.012	0.00076	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-187	0.22		0.012	0.00089	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-188	ND		0.012	0.00066	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-189	0.0060	J	0.012	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-190	0.028		0.012	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-191	0.0076	J	0.012	0.00072	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-192	ND		0.012	0.00081	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-193	0.36	C180	0.023	0.00080	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-194	0.091		0.012	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-195	0.037		0.012	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-196	0.036		0.012	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0028	J q	0.012	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-198	0.099	C	0.023	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-199	0.099	C198	0.023	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-200	0.0078	J q	0.012	0.00040	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-201	0.0095	J	0.012	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-202	0.021		0.012	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-203	0.057		0.012	0.00053	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-204	ND		0.012	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-205	0.0056	J	0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-206	0.068		0.012	0.0033	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-207	0.0063	J	0.012	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-208	0.025		0.012	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1
PCB-209	0.069		0.012	0.00044	ng/g	☼	04/17/18 11:45	04/26/18 17:30	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	89		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-3L	92		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-4L	72		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-15L	77		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-19L	83		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-37L	84		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-54L	87		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-77L	84		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-81L	84		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-104L	78		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-105L	86		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-114L	87		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-118L	85		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-123L	87		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-126L	84		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-155L	79		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-156L	86	C	30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-157L	86	C156	30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-167L	87		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-169L	88		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-170L	83		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-188L	94		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-189L	103		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-202L	94		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-205L	70		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-206L	64		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-208L	74		30 - 140	04/17/18 11:45	04/26/18 17:30	1
PCB-209L	54		30 - 140	04/17/18 11:45	04/26/18 17:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	91		40 - 125	04/17/18 11:45	04/26/18 17:30	1
PCB-111L	91		40 - 125	04/17/18 11:45	04/26/18 17:30	1
PCB-178L	93		40 - 125	04/17/18 11:45	04/26/18 17:30	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0083	J	0.012	0.00025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-2	0.018	B	0.012	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-3	0.0062	J B	0.012	0.00027	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-4	0.063		0.024	0.0033	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-5	ND		0.012	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-6	0.019	q	0.012	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-7	0.0033	J q	0.012	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-8	0.082		0.024	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-9	0.0050	J q	0.012	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-10	0.0044	J q	0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-11	0.11	B	0.024	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-12	0.013	J q C	0.024	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-13	0.013	J q C12	0.024	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-14	ND		0.012	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-15	0.087		0.012	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-16	0.056		0.012	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-17	0.10		0.012	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-18	0.14	C	0.024	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-19	0.067	q	0.012	0.00085	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-20	0.31	C B	0.024	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-21	0.13	C	0.024	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-22	0.085		0.012	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-23	ND		0.012	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-24	0.0032	J q	0.012	0.00058	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-25	0.026		0.012	0.00067	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-26	0.049	C	0.024	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-27	0.028	q	0.012	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-28	0.31	C20 B	0.024	0.00073	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-29	0.049	C26	0.024	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-30	0.14	C18	0.024	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-31	0.22	B	0.024	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-32	0.054	q	0.012	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-33	0.13	C21	0.024	0.00071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-34	ND		0.012	0.00076	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-35	0.0055	J	0.012	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-36	ND		0.012	0.00072	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-37	0.096		0.012	0.00074	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-38	ND		0.012	0.00077	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-39	ND		0.012	0.00069	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-40	0.16	C	0.037	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-41	0.16	C40	0.037	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-42	0.069		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-43	0.012	J C	0.024	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-44	0.35	C	0.037	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-45	0.067	C	0.024	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-46	0.016		0.012	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-47	0.35	C44	0.037	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-48	0.052		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-49	0.22	C	0.024	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.055	C	0.024	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-51	0.067	C45	0.024	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-52	0.40		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-53	0.055	C50	0.024	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-54	0.0071	J	0.012	0.000071	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-55	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-56	0.093		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-57	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-58	0.0014	J	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-59	0.026	J C	0.037	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-60	0.035		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-61	0.43	C	0.049	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-62	0.026	J C59	0.037	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-63	0.0086	J	0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-64	0.12		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-65	0.35	C44	0.037	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-66	0.25		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-67	0.0079	J	0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-68	0.0047	J	0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-69	0.22	C49	0.024	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-70	0.43	C61	0.049	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-71	0.16	C40	0.037	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-72	0.0046	J q	0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-73	0.012	J C43	0.024	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-74	0.43	C61	0.049	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-75	0.026	J C59	0.037	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-76	0.43	C61	0.049	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-77	0.025		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-78	ND		0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-79	0.0036	J	0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-80	ND		0.012	0.0010	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-81	ND		0.012	0.0011	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-82	0.065		0.012	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-83	0.38	C	0.024	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-84	0.15		0.012	0.00056	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-85	0.11	C	0.037	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-86	0.38	C	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-87	0.38	C86	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-88	0.098	C	0.024	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-89	ND		0.012	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-90	0.65	C	0.037	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-91	0.098	C88	0.024	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-92	0.12		0.012	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-93	0.019	J C	0.024	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-94	ND		0.012	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-95	0.51		0.012	0.00053	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-96	0.0079	J	0.012	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-97	0.38	C86	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-98	0.023	J C	0.024	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.38	C83	0.024	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-100	0.019	J C93	0.024	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-101	0.65	C90	0.037	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-102	0.023	J C98	0.024	0.00047	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-103	0.0070	J q	0.012	0.00048	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-104	ND		0.012	0.00037	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-105	0.20	B	0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-106	ND		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-107	0.047		0.012	0.0014	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-108	0.020	J C B	0.024	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-109	0.38	C86	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-110	0.74	C B	0.024	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-111	ND		0.012	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-112	0.0012	J q	0.012	0.00036	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-113	0.65	C90	0.037	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-114	0.011	J	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-115	0.74	C110 B	0.024	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-116	0.11	C85	0.037	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-117	0.11	C85	0.037	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-118	0.56	B	0.012	0.0012	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-119	0.38	C86	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-120	0.0041	J q	0.012	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-121	ND		0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-122	0.0073	J q	0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-123	0.0086	J	0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-124	0.020	J C108 B	0.024	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-125	0.38	C86	0.073	0.00042	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-126	ND		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-127	ND		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-128	0.13	C	0.024	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-129	1.0	C B	0.049	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-130	0.061		0.012	0.0026	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-131	ND		0.012	0.0027	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-132	0.30	B	0.012	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-133	0.015		0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-134	0.048	C	0.024	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-135	0.30	C	0.024	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-136	0.10		0.012	0.00024	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-137	0.037		0.012	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-138	1.0	C129 B	0.049	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-139	0.015	J C	0.024	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-140	0.015	J C139	0.024	0.0022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-141	0.17		0.012	0.0023	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-142	ND		0.012	0.0024	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-143	0.048	C134	0.024	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-144	0.031		0.012	0.00030	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-145	ND		0.012	0.00023	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-146	0.17		0.012	0.0021	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-147	0.83	C B	0.024	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0025	J q	0.012	0.00032	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-149	0.83	C147 B	0.024	0.0025	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-150	0.0018	J q	0.012	0.00022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-151	0.30	C135	0.024	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-152	0.0013	J	0.012	0.00024	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-153	0.82	C B	0.024	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-154	0.017		0.012	0.00026	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-155	ND		0.012	0.00022	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-156	0.098	C	0.024	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-157	0.098	C156	0.024	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-158	0.084		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-159	ND		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-160	1.0	C129 B	0.049	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-161	ND		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-162	ND		0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-163	1.0	C129 B	0.049	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-164	0.067		0.012	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-165	ND		0.012	0.0018	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-166	0.13	C128	0.024	0.0019	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-167	0.034		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-168	0.82	C153 B	0.024	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-169	ND		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-170	0.26	B	0.012	0.00063	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-171	0.071	q C	0.024	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-172	0.042		0.012	0.00060	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-173	0.071	q C171	0.024	0.00061	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-174	0.27		0.012	0.00057	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-175	0.0094	J	0.012	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-176	0.032		0.012	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-177	0.16		0.012	0.00058	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-178	0.056		0.012	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-179	0.13		0.012	0.00044	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-180	0.57	C	0.024	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-181	ND		0.012	0.00055	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-182	ND		0.012	0.00053	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-183	0.19	C	0.024	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-184	ND		0.012	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-185	0.19	C183	0.024	0.00054	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-186	ND		0.012	0.00044	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-187	0.34		0.012	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-188	ND		0.012	0.00039	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-189	0.0091	J	0.012	0.0016	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-190	0.051		0.012	0.00040	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-191	0.011	J	0.012	0.00041	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-192	ND		0.012	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-193	0.57	C180	0.024	0.00046	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-194	0.14		0.012	0.0015	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-195	0.062		0.012	0.0017	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-196	0.060		0.012	0.00050	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0036	J q	0.012	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-198	0.15	C	0.024	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-199	0.15	C198	0.024	0.00051	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-200	0.013		0.012	0.00034	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-201	0.017		0.012	0.00035	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-202	0.029		0.012	0.00039	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-203	0.097		0.012	0.00045	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-204	ND		0.012	0.00038	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-205	0.0066	J	0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-206	0.14		0.012	0.0020	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-207	0.011	J	0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-208	0.052		0.012	0.0013	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1
PCB-209	0.14		0.012	0.00059	ng/g	☼	04/17/18 11:45	04/26/18 18:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	97		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-3L	105		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-4L	79		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-15L	84		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-19L	87		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-37L	88		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-54L	95		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-77L	87		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-81L	86		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-104L	83		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-105L	86		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-114L	90		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-118L	89		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-123L	88		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-126L	86		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-155L	85		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-156L	92	C	30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-157L	92	C156	30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-167L	92		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-169L	92		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-170L	86		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-188L	91		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-189L	105		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-202L	97		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-205L	74		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-206L	71		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-208L	77		30 - 140	04/17/18 11:45	04/26/18 18:32	1
PCB-209L	61		30 - 140	04/17/18 11:45	04/26/18 18:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	93		40 - 125	04/17/18 11:45	04/26/18 18:32	1
PCB-111L	94		40 - 125	04/17/18 11:45	04/26/18 18:32	1
PCB-178L	92		40 - 125	04/17/18 11:45	04/26/18 18:32	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.038	0.00020	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-2	ND		0.038	0.00026	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-3	0.0020	J q B	0.038	0.00035	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-4	ND		0.058	0.0056	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-5	ND		0.038	0.0046	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-6	ND		0.038	0.0041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-7	ND		0.038	0.0042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-8	ND		0.058	0.0038	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-9	ND		0.038	0.0043	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-10	ND		0.038	0.0046	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-11	0.028	J B	0.058	0.0040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-12	ND	C	0.077	0.0041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-13	ND	C12	0.077	0.0041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-14	ND		0.038	0.0035	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-15	ND		0.038	0.0044	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-16	ND		0.038	0.00028	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-17	ND		0.038	0.00025	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-18	0.0037	J C B	0.077	0.00022	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-19	ND		0.038	0.00031	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-20	0.0085	J C	0.077	0.00041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-21	0.0013	J q C B	0.077	0.00040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-22	0.0029	J B	0.038	0.00042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-23	ND		0.038	0.00042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-24	ND		0.038	0.00021	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-25	ND		0.038	0.00038	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-26	ND	C	0.077	0.00041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-27	ND		0.038	0.00018	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-28	0.0085	J C20	0.077	0.00041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-29	ND	C26	0.077	0.00041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-30	0.0037	J C18 B	0.077	0.00022	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-31	0.0068	J B	0.038	0.00040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-32	0.0019	J B	0.038	0.00018	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-33	0.0013	J q C21 B	0.077	0.00040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-34	ND		0.038	0.00044	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-35	ND		0.038	0.00042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-36	ND		0.038	0.00041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-37	0.0020	J B	0.038	0.00042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-38	ND		0.038	0.00044	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-39	ND		0.038	0.00039	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-40	ND	C	0.12	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-41	ND	C40	0.12	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-42	ND		0.038	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-43	ND	C	0.077	0.0011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-44	0.19	C B	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-45	0.020	J C	0.077	0.0013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-46	ND		0.038	0.0015	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-47	0.19	C44 B	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-48	ND		0.038	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-49	0.0037	J q C	0.077	0.00098	ng/L		04/11/18 13:58	04/16/18 22:09	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND	C	0.077	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-51	0.020	J C45	0.077	0.0013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-52	0.0031	J q	0.038	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-53	ND	C50	0.077	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-54	ND		0.038	0.000052	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-55	ND		0.038	0.00087	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-56	0.0012	J q B	0.038	0.00087	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-57	ND		0.038	0.00089	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-58	ND		0.038	0.00090	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-59	ND	C	0.12	0.00085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-60	ND		0.038	0.00089	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-61	ND	C	0.15	0.00083	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-62	ND	C59	0.12	0.00085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-63	ND		0.038	0.00081	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-64	ND		0.038	0.00080	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-65	0.19	C44 B	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-66	0.0021	J q B	0.038	0.00083	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-67	ND		0.038	0.00077	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-68	0.035	J B	0.038	0.00078	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-69	0.0037	J q C49	0.077	0.00098	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-70	ND	C61	0.15	0.00083	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-71	ND	C40	0.12	0.0012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-72	ND		0.038	0.00087	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-73	ND	C43	0.077	0.0011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-74	ND	C61	0.15	0.00083	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-75	ND	C59	0.12	0.00085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-76	ND	C61	0.15	0.00083	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-77	ND		0.038	0.00082	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-78	ND		0.038	0.00090	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-79	ND		0.038	0.00078	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-80	ND		0.038	0.00076	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-81	ND		0.038	0.00084	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-82	ND		0.038	0.000063	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-83	0.0032	J C B	0.077	0.000058	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-84	0.0013	J q B	0.038	0.000064	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-85	ND	C	0.12	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-86	0.0031	J q C B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-87	0.0031	J q C86 B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-88	ND	C	0.077	0.000057	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-89	ND		0.038	0.000062	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-90	0.0027	J q C B	0.12	0.000048	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-91	ND	C88	0.077	0.000057	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-92	0.0020	J	0.038	0.000054	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-93	ND	C	0.077	0.000055	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-94	ND		0.038	0.000062	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-95	0.0010	J q B	0.038	0.000060	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-96	ND		0.038	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-97	0.0031	J q C86 B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-98	ND	C	0.077	0.000053	ng/L		04/11/18 13:58	04/16/18 22:09	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.0032	J C83 B	0.077	0.000058	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-100	ND	C93	0.077	0.000055	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-101	0.0027	J q C90 B	0.12	0.000048	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-102	ND	C98	0.077	0.000053	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-103	ND		0.038	0.000055	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-104	ND		0.038	0.000042	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-105	0.0016	J q B	0.038	0.00021	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-106	ND		0.038	0.00023	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-107	ND		0.038	0.00024	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-108	ND	C	0.077	0.00023	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-109	0.0031	J q C86 B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-110	0.0039	J q C B	0.077	0.000040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-111	ND		0.038	0.000039	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-112	ND		0.038	0.000041	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-113	0.0027	J q C90 B	0.12	0.000048	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-114	ND		0.038	0.00023	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-115	0.0039	J q C110 E	0.077	0.000040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-116	ND	C85	0.12	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-117	ND	C85	0.12	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-118	0.0044	J B	0.038	0.00022	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-119	0.0031	J q C86 B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-120	ND		0.038	0.000039	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-121	ND		0.038	0.000040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-122	ND		0.038	0.00026	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-123	ND		0.038	0.00022	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-124	ND	C108	0.077	0.00023	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-125	0.0031	J q C86 B	0.23	0.000047	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-126	ND		0.038	0.00024	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-127	ND		0.038	0.00023	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-128	0.00050	J q C B	0.077	0.000094	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-129	0.0044	J q C B	0.15	0.000097	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-130	ND		0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-131	ND		0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-132	0.0018	J B	0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-133	ND		0.038	0.00012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-134	ND	C	0.077	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-135	ND	C	0.077	0.000088	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-136	ND		0.038	0.000064	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-137	0.0012	J	0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-138	0.0044	J q C129 E	0.15	0.000097	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-139	ND	C	0.077	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-140	ND	C139	0.077	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-141	0.0012	J q B	0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-142	ND		0.038	0.00012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-143	ND	C134	0.077	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-144	ND		0.038	0.000080	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-145	ND		0.038	0.000060	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-146	0.00059	J q	0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-147	0.0035	J C B	0.077	0.00012	ng/L		04/11/18 13:58	04/16/18 22:09	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.038	0.000085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-149	0.0035	J C147 B	0.077	0.00012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-150	ND		0.038	0.000058	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-151	ND	C135	0.077	0.000088	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-152	ND		0.038	0.000062	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-153	0.0027	J q C B	0.077	0.000085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-154	ND		0.038	0.000069	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-155	ND		0.038	0.000058	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-156	0.00037	J q C B	0.077	0.00010	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-157	0.00037	J q C156 E	0.077	0.00010	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-158	ND		0.038	0.000076	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-159	ND		0.038	0.000081	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-160	0.0044	J q C129 E	0.15	0.000097	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-161	ND		0.038	0.000080	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-162	ND		0.038	0.000079	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-163	0.0044	J q C129 E	0.15	0.000097	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-164	ND		0.038	0.000085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-165	ND		0.038	0.000091	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-166	0.00050	J q C128 E	0.077	0.000094	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-167	ND		0.038	0.000069	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-168	0.0027	J q C153 E	0.077	0.000085	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-169	ND		0.038	0.000057	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-170	0.0012	J q B	0.038	0.00014	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-171	ND	C	0.077	0.00015	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-172	ND		0.038	0.00015	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-173	ND	C171	0.077	0.00015	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-174	ND		0.038	0.00014	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-175	ND		0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-176	ND		0.038	0.00010	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-177	ND		0.038	0.00014	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-178	ND		0.038	0.00015	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-179	ND		0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-180	ND	C	0.077	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-181	ND		0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-182	ND		0.038	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-183	ND	C	0.077	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-184	ND		0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-185	ND	C183	0.077	0.00013	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-186	ND		0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-187	ND		0.038	0.00012	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-188	ND		0.038	0.00010	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-189	ND		0.038	0.00022	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-190	ND		0.038	0.000097	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-191	ND		0.038	0.00010	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-192	ND		0.038	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-193	ND	C180	0.077	0.00011	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-194	ND		0.038	0.000087	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-195	0.00032	J q B	0.038	0.000096	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-196	ND		0.038	0.000051	ng/L		04/11/18 13:58	04/16/18 22:09	1

TestAmerica Seattle

Client Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.038	0.000039	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-198	ND	C	0.077	0.000052	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-199	ND	C198	0.077	0.000052	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-200	ND		0.038	0.000035	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-201	ND		0.038	0.000036	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-202	ND		0.038	0.000040	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-203	ND		0.038	0.000046	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-204	ND		0.038	0.000039	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-205	ND		0.038	0.000074	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-206	ND		0.038	0.0027	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-207	ND		0.038	0.0019	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-208	ND		0.038	0.0019	ng/L		04/11/18 13:58	04/16/18 22:09	1
PCB-209	ND		0.038	0.000092	ng/L		04/11/18 13:58	04/16/18 22:09	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	105		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-3L	88		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-4L	75		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-15L	74		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-19L	95		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-37L	85		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-54L	75		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-77L	85		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-81L	82		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-104L	77		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-105L	86		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-114L	80		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-118L	79		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-123L	80		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-126L	83		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-155L	73		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-156L	88	C	30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-157L	88	C156	30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-167L	87		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-169L	101		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-170L	83		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-188L	77		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-189L	85		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-202L	85		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-205L	67		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-206L	68		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-208L	71		30 - 140				04/11/18 13:58	04/16/18 22:09	1
PCB-209L	58		30 - 140				04/11/18 13:58	04/16/18 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	100		40 - 125				04/11/18 13:58	04/16/18 22:09	1
PCB-111L	106		40 - 125				04/11/18 13:58	04/16/18 22:09	1
PCB-178L	102		40 - 125				04/11/18 13:58	04/16/18 22:09	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.00163	J	0.040	0.00022	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-2	0.00165	J q	0.040	0.00026	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-3	0.00396	J q	0.040	0.00031	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-4	ND		0.060	0.0061	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-5	ND		0.040	0.0048	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-6	ND		0.040	0.0042	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-7	ND		0.040	0.0043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-8	ND		0.060	0.0039	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-9	ND		0.040	0.0045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-10	ND		0.040	0.0047	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-11	0.0493	J	0.060	0.0041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-12	ND	C	0.080	0.0043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-13	ND	C12	0.080	0.0043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-14	ND		0.040	0.0036	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-15	ND		0.040	0.0044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-16	ND		0.040	0.00044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-17	0.00151	J	0.040	0.00040	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-18	0.00188	J q C	0.080	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-19	ND		0.040	0.00048	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-20	ND	C	0.080	0.00044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-21	0.00387	J q C	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-22	0.00240	J q	0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-23	ND		0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-24	ND		0.040	0.00033	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-25	0.00122	J q	0.040	0.00041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-26	0.00209	J C	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-27	ND		0.040	0.00029	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-28	ND	C20	0.080	0.00044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-29	0.00209	J C26	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-30	0.00188	J q C18	0.080	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-31	0.00472	J	0.040	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-32	0.00194	J q	0.040	0.00028	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-33	0.00387	J q C21	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-34	ND		0.040	0.00046	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-35	0.00172	J	0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-36	ND		0.040	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-37	0.00381	J q	0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-38	ND		0.040	0.00047	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-39	ND		0.040	0.00042	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-40	ND	C	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-41	ND	C40	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-42	ND		0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-43	ND	C	0.080	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-44	0.00729	J q C	0.12	0.00098	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-45	ND	C	0.080	0.0012	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-46	ND		0.040	0.0014	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-47	0.00729	J q C44	0.12	0.00098	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-48	ND		0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-49	ND	C	0.080	0.00090	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-50	ND	C	0.080	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-51	ND	C45	0.080	0.0012	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-52	ND		0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-53	ND	C50	0.080	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-54	ND		0.040	0.00012	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-55	ND		0.040	0.00080	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-56	0.00213	J	0.040	0.00080	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-57	ND		0.040	0.00082	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-58	ND		0.040	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-59	ND	C	0.12	0.00078	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-60	0.00226	J q	0.040	0.00082	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-61	0.00642	J C	0.16	0.00077	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-62	ND	C59	0.12	0.00078	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-63	ND		0.040	0.00075	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-64	ND		0.040	0.00074	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-65	0.00729	J q C44	0.12	0.00098	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-66	0.00279	J q	0.040	0.00077	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-67	ND		0.040	0.00071	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-68	0.00413	J	0.040	0.00072	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-69	ND	C49	0.080	0.00090	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-70	0.00642	J C61	0.16	0.00077	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-71	ND	C40	0.12	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-72	ND		0.040	0.00080	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-73	ND	C43	0.080	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-74	0.00642	J C61	0.16	0.00077	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-75	ND	C59	0.12	0.00078	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-76	0.00642	J C61	0.16	0.00077	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-77	0.00272	J	0.040	0.00074	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-78	ND		0.040	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-79	ND		0.040	0.00072	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-80	ND		0.040	0.00070	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-81	ND		0.040	0.00079	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-82	ND		0.040	0.00047	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-83	0.00285	J q C	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-84	0.00178	J q	0.040	0.00048	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-85	0.00208	J q C	0.12	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-86	0.00540	J q C	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-87	0.00540	J q C86	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-88	0.00141	J q C	0.080	0.00042	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-89	ND		0.040	0.00046	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-90	0.00462	J q C	0.12	0.00036	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-91	0.00141	J q C88	0.080	0.00042	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-92	ND		0.040	0.00040	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-93	ND	C	0.080	0.00041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-94	ND		0.040	0.00046	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-95	0.00316	J q	0.040	0.00044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-96	ND		0.040	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-97	0.00540	J q C86	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-98	ND	C	0.080	0.00040	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-99	0.00285	J q C83	0.080	0.00043	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-100	ND	C93	0.080	0.00041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-101	0.00462	J q C90	0.12	0.00036	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-102	ND	C98	0.080	0.00040	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-103	ND		0.040	0.00041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-104	ND		0.040	0.00031	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-105	0.00327	J q	0.040	0.00034	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-106	0.000910	J q	0.040	0.00038	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-107	0.000942	J	0.040	0.00041	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-108	0.00143	J q C	0.080	0.00039	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-109	0.00540	J q C86	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-110	0.00614	J C	0.080	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-111	0.00113	J	0.040	0.00029	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-112	ND		0.040	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-113	0.00462	J q C90	0.12	0.00036	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-114	0.00133	J	0.040	0.00037	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-115	0.00614	J C110	0.080	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-116	0.00208	J q C85	0.12	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-117	0.00208	J q C85	0.12	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-118	0.00728	J	0.040	0.00037	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-119	0.00540	J q C86	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-120	ND		0.040	0.00029	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-121	ND		0.040	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-122	0.00175	J q	0.040	0.00044	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-123	0.00128	J q	0.040	0.00038	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-124	0.00143	J q C108	0.080	0.00039	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-125	0.00540	J q C86	0.24	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-126	0.00197	J	0.040	0.00039	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-127	ND		0.040	0.00038	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-128	0.00201	J q C	0.080	0.00080	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-129	0.00944	J q C	0.16	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-130	ND		0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-131	ND		0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-132	0.00374	J	0.040	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-133	ND		0.040	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-134	ND	C	0.080	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-135	0.00128	J q C	0.080	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-136	ND		0.040	0.00025	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-137	ND		0.040	0.00093	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-138	0.00944	J q C129	0.16	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-139	ND	C	0.080	0.00092	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-140	ND	C139	0.080	0.00092	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-141	0.00174	J q	0.040	0.00096	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-142	ND		0.040	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-143	ND	C134	0.080	0.0011	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-144	ND		0.040	0.00031	ng/L		04/11/18 13:58	04/16/18 16:24	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-145	ND		0.040	0.00024	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-146	ND		0.040	0.00091	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-147	0.00771	J C	0.080	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-148	ND		0.040	0.00033	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-149	0.00771	J C147	0.080	0.0010	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-150	ND		0.040	0.00023	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-151	0.00128	J q C135	0.080	0.00035	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-152	ND		0.040	0.00024	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-153	0.00658	J q C	0.080	0.00072	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-154	0.000494	J	0.040	0.00027	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-155	ND		0.040	0.00023	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-156	0.00402	J C	0.080	0.00084	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-157	0.00402	J C156	0.080	0.00084	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-158	0.00175	J q	0.040	0.00065	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-159	ND		0.040	0.00069	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-160	0.00944	J q C129	0.16	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-161	ND		0.040	0.00068	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-162	ND		0.040	0.00068	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-163	0.00944	J q C129	0.16	0.00083	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-164	0.00166	J q	0.040	0.00072	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-165	ND		0.040	0.00078	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-166	0.00201	J q C128	0.080	0.00080	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-167	0.00208	J	0.040	0.00055	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-168	0.00658	J q C153	0.080	0.00072	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-169	0.00274	J	0.040	0.00053	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-170	0.00165	J q	0.040	0.00069	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-171	0.00318	J C	0.080	0.00069	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-172	0.00125	J q	0.040	0.00068	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-173	0.00318	J C171	0.080	0.00069	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-174	ND		0.040	0.00064	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-175	ND		0.040	0.00062	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-176	ND		0.040	0.00047	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-177	ND		0.040	0.00066	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-178	ND		0.040	0.00067	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-179	ND		0.040	0.00050	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-180	0.00454	J q C	0.080	0.00052	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-181	ND		0.040	0.00062	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-182	ND		0.040	0.00060	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-183	0.00363	J q C	0.080	0.00061	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-184	ND		0.040	0.00051	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-185	0.00363	J q C183	0.080	0.00061	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-186	0.000971	J	0.040	0.00049	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-187	0.00320	J	0.040	0.00058	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-188	ND		0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-189	0.00142	J q	0.040	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-190	0.00139	J	0.040	0.00045	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-191	ND		0.040	0.00047	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-192	0.00151	J	0.040	0.00052	ng/L		04/11/18 13:58	04/16/18 16:24	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-193	0.00454	J q C180	0.080	0.00052	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-194	0.00201	J	0.040	0.00030	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-195	0.000812	J q	0.040	0.00033	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-196	ND		0.040	0.00018	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-197	ND		0.040	0.00014	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-198	0.00115	J q C	0.080	0.00018	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-199	0.00115	J q C198	0.080	0.00018	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-200	ND		0.040	0.00012	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-201	0.000648	J q	0.040	0.00012	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-202	0.00133	J	0.040	0.00014	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-203	0.00158	J q	0.040	0.00016	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-204	0.000263	J q	0.040	0.00014	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-205	0.00209	J	0.040	0.00025	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-206	ND		0.040	0.0024	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-207	ND		0.040	0.0017	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-208	ND		0.040	0.0017	ng/L		04/11/18 13:58	04/16/18 16:24	1
PCB-209	0.00136	J q	0.040	0.000037	ng/L		04/11/18 13:58	04/16/18 16:24	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	79		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-3L	69		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-4L	67		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-15L	71		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-19L	80		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-37L	76		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-54L	90		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-77L	79		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-81L	75		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-104L	71		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-105L	84		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-114L	79		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-118L	77		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-123L	79		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-126L	78		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-155L	80		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-156L	83	C	30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-157L	83	C156	30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-167L	85		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-169L	88		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-170L	81		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-188L	83		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-189L	85		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-202L	91		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-205L	70		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-206L	70		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-208L	73		30 - 140	04/11/18 13:58	04/16/18 16:24	1
PCB-209L	60		30 - 140	04/11/18 13:58	04/16/18 16:24	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19471/5-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19471

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	95		40 - 125	04/11/18 13:58	04/16/18 16:24	1
PCB-111L	100		40 - 125	04/11/18 13:58	04/16/18 16:24	1
PCB-178L	98		40 - 125	04/11/18 13:58	04/16/18 16:24	1

Lab Sample ID: LCS 140-19471/6-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19471

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	1.00	1.03		ng/L		103	50 - 150
PCB-3	1.00	1.01		ng/L		101	50 - 150
PCB-4	1.00	1.13		ng/L		113	50 - 150
PCB-15	1.00	1.14		ng/L		114	50 - 150
PCB-19	1.00	1.30		ng/L		130	50 - 150
PCB-37	1.00	1.02		ng/L		102	50 - 150
PCB-54	1.00	1.14		ng/L		114	50 - 150
PCB-77	1.00	1.10		ng/L		110	50 - 150
PCB-81	1.00	1.03		ng/L		103	50 - 150
PCB-104	1.00	1.42		ng/L		142	50 - 150
PCB-105	1.00	0.997		ng/L		100	50 - 150
PCB-114	1.00	1.14		ng/L		114	50 - 150
PCB-118	1.00	1.08		ng/L		108	50 - 150
PCB-123	1.00	1.15		ng/L		115	50 - 150
PCB-126	1.00	1.11		ng/L		111	50 - 150
PCB-155	1.00	1.42		ng/L		142	50 - 150
PCB-156	2.00	2.33	C	ng/L		116	50 - 150
PCB-157	2.00	2.33	C156	ng/L		116	50 - 150
PCB-167	1.00	1.18		ng/L		118	50 - 150
PCB-169	1.00	1.06		ng/L		106	50 - 150
PCB-188	1.00	1.41		ng/L		141	50 - 150
PCB-189	1.00	1.08		ng/L		108	50 - 150
PCB-202	1.00	1.12		ng/L		112	50 - 150
PCB-205	1.00	1.20		ng/L		120	50 - 150
PCB-206	1.00	1.03		ng/L		103	50 - 150
PCB-208	1.00	1.15		ng/L		115	50 - 150
PCB-209	1.00	1.06		ng/L		106	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	88		30 - 140
PCB-3L	71		30 - 140
PCB-4L	71		30 - 140
PCB-15L	68		30 - 140
PCB-19L	72		30 - 140
PCB-37L	82		30 - 140
PCB-54L	88		30 - 140
PCB-77L	87		30 - 140
PCB-81L	80		30 - 140
PCB-104L	68		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19471/6-A

Matrix: Water

Analysis Batch: 19583

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19471

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-105L	94		30 - 140
PCB-114L	81		30 - 140
PCB-118L	80		30 - 140
PCB-123L	81		30 - 140
PCB-126L	89		30 - 140
PCB-155L	70		30 - 140
PCB-156L	90	C	30 - 140
PCB-157L	90	C156	30 - 140
PCB-167L	91		30 - 140
PCB-169L	101		30 - 140
PCB-170L	90		30 - 140
PCB-188L	74		30 - 140
PCB-189L	83		30 - 140
PCB-202L	99		30 - 140
PCB-205L	76		30 - 140
PCB-206L	77		30 - 140
PCB-208L	76		30 - 140
PCB-209L	66		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	98		40 - 125
PCB-111L	103		40 - 125
PCB-178L	98		40 - 125

Lab Sample ID: MB 140-19543/18-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19543

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.010	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-2	0.00305	J q	0.010	0.00020	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-3	ND		0.010	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-4	ND		0.020	0.0061	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-5	ND		0.010	0.0044	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-6	ND		0.010	0.0038	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-7	ND		0.010	0.0039	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-8	ND		0.020	0.0035	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-9	ND		0.010	0.0040	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-10	ND		0.010	0.0043	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-11	0.00452	J q	0.020	0.0038	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-12	ND	C	0.020	0.0039	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-13	ND	C12	0.020	0.0039	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-14	ND		0.010	0.0033	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-15	ND	q	0.010	0.0038	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-16	ND		0.010	0.00031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-17	ND		0.010	0.00027	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-18	ND	C	0.020	0.00024	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-19	ND		0.010	0.00034	ng/g		04/13/18 12:10	04/24/18 13:47	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19543/18-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19543

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-20	0.000934	J q C	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-21	ND	C	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-22	ND		0.010	0.00031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-23	ND		0.010	0.00031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-24	ND		0.010	0.00023	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-25	ND		0.010	0.00028	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-26	ND	C	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-27	ND		0.010	0.00020	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-28	0.000934	J q C20	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-29	ND	C26	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-30	ND	C18	0.020	0.00024	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-31	0.00111	J	0.020	0.00029	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-32	0.000867	J q	0.010	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-33	ND	C21	0.020	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-34	ND		0.010	0.00032	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-35	ND		0.010	0.00031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-36	ND		0.010	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-37	0.000535	J	0.010	0.00031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-38	ND		0.010	0.00032	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-39	ND		0.010	0.00029	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-40	ND	C	0.030	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-41	ND	C40	0.030	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-42	ND		0.010	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-43	ND	C	0.020	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-44	ND	C	0.030	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-45	ND	C	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-46	ND		0.010	0.0015	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-47	ND	C44	0.030	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-48	ND		0.010	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-49	ND	C	0.020	0.00096	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-50	ND	C	0.020	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-51	ND	C45	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-52	ND		0.010	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-53	ND	C50	0.020	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-54	ND		0.010	0.000050	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-55	ND		0.010	0.00086	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-56	ND		0.010	0.00086	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-57	ND		0.010	0.00087	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-58	ND		0.010	0.00088	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-59	ND	C	0.030	0.00083	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-60	ND		0.010	0.00087	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-61	ND	C	0.040	0.00082	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-62	ND	C59	0.030	0.00083	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-63	ND		0.010	0.00080	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-64	ND		0.010	0.00079	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-65	ND	C44	0.030	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-66	ND		0.010	0.00082	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-67	ND		0.010	0.00075	ng/g		04/13/18 12:10	04/24/18 13:47	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19543/18-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19543

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-68	ND		0.010	0.00077	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-69	ND	C49	0.020	0.00096	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-70	ND	C61	0.040	0.00082	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-71	ND	C40	0.030	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-72	ND		0.010	0.00085	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-73	ND	C43	0.020	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-74	ND	C61	0.040	0.00082	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-75	ND	C59	0.030	0.00083	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-76	ND	C61	0.040	0.00082	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-77	ND		0.010	0.00083	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-78	ND		0.010	0.00088	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-79	ND		0.010	0.00076	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-80	ND		0.010	0.00075	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-81	ND		0.010	0.00080	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-82	ND		0.010	0.00029	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-83	0.00199	J q C	0.020	0.00027	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-84	ND		0.010	0.00030	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-85	0.000841	J q C	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-86	ND	C	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-87	ND	C86	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-88	ND	C	0.020	0.00026	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-89	ND		0.010	0.00029	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-90	0.00194	J q C	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-91	ND	C88	0.020	0.00026	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-92	0.000942	J	0.010	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-93	ND	C	0.020	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-94	ND		0.010	0.00029	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-95	0.00193	J q	0.010	0.00028	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-96	ND		0.010	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-97	ND	C86	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-98	ND	C	0.020	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-99	0.00199	J q C83	0.020	0.00027	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-100	ND	C93	0.020	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-101	0.00194	J q C90	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-102	ND	C98	0.020	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-103	ND		0.010	0.00025	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-104	ND		0.010	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-105	0.00344	J	0.010	0.00061	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-106	ND		0.010	0.00063	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-107	ND		0.010	0.00068	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-108	ND	C	0.020	0.00065	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-109	ND	C86	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-110	0.00603	J C	0.020	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-111	ND		0.010	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-112	ND		0.010	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-113	0.00194	J q C90	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-114	ND		0.010	0.00059	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-115	0.00603	J C110	0.020	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19543/18-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19543

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-116	0.000841	J q C85	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-117	0.000841	J q C85	0.030	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-118	0.00552	J q	0.010	0.00060	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-119	ND	C86	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-120	0.000400	J q	0.010	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-121	ND		0.010	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-122	ND		0.010	0.00073	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-123	ND		0.010	0.00067	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-124	ND	C108	0.020	0.00065	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-125	ND	C86	0.060	0.00022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-126	ND		0.010	0.00063	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-127	ND		0.010	0.00063	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-128	0.00116	J q C	0.020	0.00089	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-129	0.00961	J C	0.040	0.00092	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-130	ND		0.010	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-131	ND		0.010	0.0013	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-132	ND		0.010	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-133	ND		0.010	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-134	ND	C	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-135	0.00136	J q C	0.020	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-136	ND		0.010	0.00014	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-137	ND		0.010	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-138	0.00961	J C129	0.040	0.00092	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-139	ND	C	0.020	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-140	ND	C139	0.020	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-141	ND		0.010	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-142	ND		0.010	0.0011	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-143	ND	C134	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-144	ND		0.010	0.00017	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-145	ND		0.010	0.00013	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-146	ND		0.010	0.0010	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-147	0.00358	J q C	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-148	ND		0.010	0.00018	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-149	0.00358	J q C147	0.020	0.0012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-150	ND		0.010	0.00012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-151	0.00136	J q C135	0.020	0.00019	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-152	ND		0.010	0.00013	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-153	0.00414	J q C	0.020	0.00080	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-154	ND		0.010	0.00015	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-155	ND		0.010	0.00012	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-156	ND	C	0.020	0.00095	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-157	ND	C156	0.020	0.00095	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-158	ND		0.010	0.00072	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-159	ND		0.010	0.00076	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-160	0.00961	J C129	0.040	0.00092	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-161	ND		0.010	0.00076	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-162	ND		0.010	0.00075	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-163	0.00961	J C129	0.040	0.00092	ng/g		04/13/18 12:10	04/24/18 13:47	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19543/18-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19543

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-164	ND		0.010	0.00080	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-165	ND		0.010	0.00086	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-166	0.00116	J q C128	0.020	0.00089	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-167	ND		0.010	0.00061	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-168	0.00414	J q C153	0.020	0.00080	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-169	ND		0.010	0.00057	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-170	0.00180	J q	0.010	0.00049	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-171	ND	C	0.020	0.00049	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-172	ND		0.010	0.00049	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-173	ND	C171	0.020	0.00049	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-174	0.00121	J q	0.010	0.00046	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-175	ND		0.010	0.00044	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-176	0.000447	J q	0.010	0.00034	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-177	0.00117	J q	0.010	0.00047	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-178	ND		0.010	0.00048	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-179	ND		0.010	0.00035	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-180	0.00316	J q C	0.020	0.00037	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-181	ND		0.010	0.00044	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-182	ND		0.010	0.00043	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-183	ND	C	0.020	0.00043	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-184	ND		0.010	0.00036	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-185	ND	C183	0.020	0.00043	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-186	ND		0.010	0.00035	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-187	ND		0.010	0.00041	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-188	ND		0.010	0.00032	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-189	ND		0.010	0.00070	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-190	0.00132	J	0.010	0.00032	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-191	ND		0.010	0.00033	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-192	0.000567	J q	0.010	0.00037	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-193	0.00316	J q C180	0.020	0.00037	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-194	ND		0.010	0.0020	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-195	ND		0.010	0.0021	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-196	ND		0.010	0.00090	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-197	ND		0.010	0.00069	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-198	ND	C	0.020	0.00091	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-199	ND	C198	0.020	0.00091	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-200	ND		0.010	0.00061	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-201	ND		0.010	0.00063	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-202	ND		0.010	0.00070	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-203	ND		0.010	0.00081	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-204	ND		0.010	0.00069	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-205	ND		0.010	0.0016	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-206	ND		0.010	0.0031	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-207	ND		0.010	0.0022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-208	ND		0.010	0.0022	ng/g		04/13/18 12:10	04/24/18 13:47	1
PCB-209	ND		0.010	0.0025	ng/g		04/13/18 12:10	04/24/18 13:47	1

TestAmerica Seattle

QC Sample Results

Client: AECOM

TestAmerica Job ID: 580-76440-3

Project/Site: Portland Harbor Pre-Remedial Design

<i>Isotope Dilution</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
PCB-1L	71		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-3L	69		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-4L	53		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-15L	60		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-19L	54	q	30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-37L	76		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-54L	70		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-77L	82		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-81L	80		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-104L	67		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-105L	79		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-114L	79		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-118L	75		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-123L	76		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-126L	81		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-155L	74		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-156L	92	C	30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-157L	92	C156	30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-167L	90		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-169L	100		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-170L	82		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-188L	76		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-189L	94		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-202L	81		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-205L	71		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-206L	71		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-208L	72		30 - 140	04/13/18 12:10	04/24/18 13:47	1
PCB-209L	65		30 - 140	04/13/18 12:10	04/24/18 13:47	1

<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
PCB-28L	87		40 - 125	04/13/18 12:10	04/24/18 13:47	1
PCB-111L	91		40 - 125	04/13/18 12:10	04/24/18 13:47	1
PCB-178L	83		40 - 125	04/13/18 12:10	04/24/18 13:47	1

Lab Sample ID: LCS 140-19543/19-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19543

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
PCB-1	0.500	0.490		ng/g		98	50 - 150
PCB-3	0.500	0.533		ng/g		107	50 - 150
PCB-4	0.500	0.527		ng/g		105	50 - 150
PCB-15	0.500	0.556		ng/g		111	50 - 150
PCB-19	0.500	0.578		ng/g		116	50 - 150
PCB-37	0.500	0.544		ng/g		109	50 - 150
PCB-54	0.500	0.497		ng/g		99	50 - 150
PCB-77	0.500	0.542		ng/g		108	50 - 150
PCB-81	0.500	0.515		ng/g		103	50 - 150
PCB-104	0.500	0.580		ng/g		116	50 - 150
PCB-105	0.500	0.529		ng/g		106	50 - 150
PCB-114	0.500	0.575		ng/g		115	50 - 150
PCB-118	0.500	0.556		ng/g		111	50 - 150
PCB-123	0.500	0.597		ng/g		119	50 - 150
PCB-126	0.500	0.555		ng/g		111	50 - 150

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19543/19-C

Matrix: Solid

Analysis Batch: 19789

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-155	0.500	0.537		ng/g		107	50 - 150
PCB-156	1.00	1.15	C	ng/g		115	50 - 150
PCB-157	1.00	1.15	C156	ng/g		115	50 - 150
PCB-167	0.500	0.586		ng/g		117	50 - 150
PCB-169	0.500	0.513		ng/g		103	50 - 150
PCB-188	0.500	0.557		ng/g		111	50 - 150
PCB-189	0.500	0.539		ng/g		108	50 - 150
PCB-202	0.500	0.497		ng/g		99	50 - 150
PCB-205	0.500	0.604		ng/g		121	50 - 150
PCB-206	0.500	0.528		ng/g		106	50 - 150
PCB-208	0.500	0.535		ng/g		107	50 - 150
PCB-209	0.500	0.559		ng/g		112	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	87		30 - 140
PCB-3L	81		30 - 140
PCB-4L	63		30 - 140
PCB-15L	65		30 - 140
PCB-19L	70		30 - 140
PCB-37L	75		30 - 140
PCB-54L	72		30 - 140
PCB-77L	85		30 - 140
PCB-81L	84		30 - 140
PCB-104L	66		30 - 140
PCB-105L	82		30 - 140
PCB-114L	78		30 - 140
PCB-118L	77		30 - 140
PCB-123L	78		30 - 140
PCB-126L	81		30 - 140
PCB-155L	72		30 - 140
PCB-156L	90	C	30 - 140
PCB-157L	90	C156	30 - 140
PCB-167L	88		30 - 140
PCB-169L	97		30 - 140
PCB-170L	82		30 - 140
PCB-188L	73		30 - 140
PCB-189L	89		30 - 140
PCB-202L	80		30 - 140
PCB-205L	74		30 - 140
PCB-206L	63		30 - 140
PCB-208L	73		30 - 140
PCB-209L	58		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	85		40 - 125
PCB-111L	93		40 - 125
PCB-178L	85		40 - 125

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: 580-76440-9 MS

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: PDI-SG-B065-BL1

Prep Type: Total/NA

Prep Batch: 19543

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	ND		2.78	2.69		ng/g	☼	97	50 - 150
PCB-3	ND		2.78	2.87		ng/g	☼	103	50 - 150
PCB-4	ND		2.78	2.97		ng/g	☼	107	50 - 150
PCB-15	0.038	J q	2.78	3.05		ng/g	☼	108	50 - 150
PCB-19	ND		2.78	3.39		ng/g	☼	122	50 - 150
PCB-37	0.032	J B	2.78	3.16		ng/g	☼	113	50 - 150
PCB-54	ND		2.78	2.73		ng/g	☼	98	50 - 150
PCB-77	ND		2.78	2.98		ng/g	☼	107	50 - 150
PCB-81	ND		2.78	2.85		ng/g	☼	103	50 - 150
PCB-104	ND		2.78	3.13		ng/g	☼	113	50 - 150
PCB-105	0.15	B	2.78	3.17		ng/g	☼	109	50 - 150
PCB-114	ND		2.78	3.22		ng/g	☼	116	50 - 150
PCB-118	0.39	B	2.78	3.34		ng/g	☼	106	50 - 150
PCB-123	0.0069	J q	2.78	3.46		ng/g	☼	124	50 - 150
PCB-126	ND		2.78	3.18		ng/g	☼	115	50 - 150
PCB-155	ND		2.78	2.91		ng/g	☼	105	50 - 150
PCB-156	0.059	J q C	5.55	6.50	C	ng/g	☼	116	50 - 150
PCB-157	0.059	J q C156	5.55	6.50	C156	ng/g	☼	116	50 - 150
PCB-167	0.021	J	2.78	3.26		ng/g	☼	117	50 - 150
PCB-169	ND		2.78	2.96		ng/g	☼	107	50 - 150
PCB-188	ND		2.78	3.09		ng/g	☼	111	50 - 150
PCB-189	ND		2.78	3.12		ng/g	☼	112	50 - 150
PCB-202	0.0094	J q	2.78	2.73		ng/g	☼	98	50 - 150
PCB-205	ND		2.78	3.51		ng/g	☼	126	50 - 150
PCB-206	0.052	J	2.78	3.05		ng/g	☼	108	50 - 150
PCB-208	0.016	J	2.78	3.11		ng/g	☼	111	50 - 150
PCB-209	0.058	J	2.78	3.15		ng/g	☼	111	50 - 150

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
PCB-1L	85		30 - 140
PCB-3L	82		30 - 140
PCB-4L	71		30 - 140
PCB-15L	75		30 - 140
PCB-19L	75		30 - 140
PCB-37L	85		30 - 140
PCB-54L	83		30 - 140
PCB-77L	85		30 - 140
PCB-81L	83		30 - 140
PCB-104L	78		30 - 140
PCB-105L	88		30 - 140
PCB-114L	86		30 - 140
PCB-118L	86		30 - 140
PCB-123L	85		30 - 140
PCB-126L	85		30 - 140
PCB-155L	84		30 - 140
PCB-156L	92	C	30 - 140
PCB-157L	92	C156	30 - 140
PCB-167L	91		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: 580-76440-9 MS

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: PDI-SG-B065-BL1

Prep Type: Total/NA

Prep Batch: 19543

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
PCB-169L	98		30 - 140
PCB-170L	85		30 - 140
PCB-188L	86		30 - 140
PCB-189L	97		30 - 140
PCB-202L	90		30 - 140
PCB-205L	72		30 - 140
PCB-206L	68		30 - 140
PCB-208L	70		30 - 140
PCB-209L	61		30 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
PCB-28L	87		40 - 125
PCB-111L	92		40 - 125
PCB-178L	87		40 - 125

Lab Sample ID: 580-76440-9 MSD

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: PDI-SG-B065-BL1

Prep Type: Total/NA

Prep Batch: 19543

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1	ND		2.87	2.76		ng/g	☼	96	50 - 150	2	50
PCB-3	ND		2.87	2.98		ng/g	☼	104	50 - 150	4	50
PCB-4	ND		2.87	3.06		ng/g	☼	107	50 - 150	3	50
PCB-15	0.038	J q	2.87	3.08		ng/g	☼	106	50 - 150	1	50
PCB-19	ND		2.87	3.39		ng/g	☼	118	50 - 150	0	50
PCB-37	0.032	J B	2.87	3.23		ng/g	☼	111	50 - 150	2	50
PCB-54	ND		2.87	2.82		ng/g	☼	98	50 - 150	3	50
PCB-77	ND		2.87	3.16		ng/g	☼	110	50 - 150	6	50
PCB-81	ND		2.87	2.93		ng/g	☼	102	50 - 150	3	50
PCB-104	ND		2.87	3.24		ng/g	☼	113	50 - 150	4	50
PCB-105	0.15	B	2.87	3.30		ng/g	☼	110	50 - 150	4	50
PCB-114	ND		2.87	3.40		ng/g	☼	118	50 - 150	5	50
PCB-118	0.39	B	2.87	3.63		ng/g	☼	113	50 - 150	8	50
PCB-123	0.0069	J q	2.87	3.40		ng/g	☼	118	50 - 150	2	50
PCB-126	ND		2.87	3.42		ng/g	☼	119	50 - 150	7	50
PCB-155	ND		2.87	3.04		ng/g	☼	106	50 - 150	5	50
PCB-156	0.059	J q C	5.74	6.75	C	ng/g	☼	117	50 - 150	4	50
PCB-157	0.059	J q C156	5.74	6.75	C156	ng/g	☼	117	50 - 150	4	50
PCB-167	0.021	J	2.87	3.35		ng/g	☼	116	50 - 150	3	50
PCB-169	ND		2.87	3.06		ng/g	☼	107	50 - 150	3	50
PCB-188	ND		2.87	3.12		ng/g	☼	109	50 - 150	1	50
PCB-189	ND		2.87	3.20		ng/g	☼	111	50 - 150	3	50
PCB-202	0.0094	J q	2.87	2.85		ng/g	☼	99	50 - 150	4	50
PCB-205	ND		2.87	3.63		ng/g	☼	126	50 - 150	3	50
PCB-206	0.052	J	2.87	2.94		ng/g	☼	101	50 - 150	4	50
PCB-208	0.016	J	2.87	3.28		ng/g	☼	114	50 - 150	5	50
PCB-209	0.058	J	2.87	3.18		ng/g	☼	109	50 - 150	1	50

TestAmerica Seattle

QC Sample Results

Client: AECOM

TestAmerica Job ID: 580-76440-3

Project/Site: Portland Harbor Pre-Remedial Design

<i>Isotope Dilution</i>	<i>MSD</i> %Recovery	<i>MSD</i> Qualifier	<i>Limits</i>
PCB-1L	89		30 - 140
PCB-3L	86		30 - 140
PCB-4L	71		30 - 140
PCB-15L	79		30 - 140
PCB-19L	84		30 - 140
PCB-37L	85		30 - 140
PCB-54L	87		30 - 140
PCB-77L	87		30 - 140
PCB-81L	85		30 - 140
PCB-104L	78		30 - 140
PCB-105L	90		30 - 140
PCB-114L	86		30 - 140
PCB-118L	85		30 - 140
PCB-123L	86		30 - 140
PCB-126L	86		30 - 140
PCB-155L	83		30 - 140
PCB-156L	90	C	30 - 140
PCB-157L	90	C156	30 - 140
PCB-167L	92		30 - 140
PCB-169L	96		30 - 140
PCB-170L	86		30 - 140
PCB-188L	89		30 - 140
PCB-189L	98		30 - 140
PCB-202L	93		30 - 140
PCB-205L	72		30 - 140
PCB-206L	70		30 - 140
PCB-208L	69		30 - 140
PCB-209L	60		30 - 140

<i>Surrogate</i>	<i>MSD</i> %Recovery	<i>MSD</i> Qualifier	<i>Limits</i>
PCB-28L	88		40 - 125
PCB-111L	92		40 - 125
PCB-178L	89		40 - 125

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

<i>Analyte</i>	<i>MB</i> Result	<i>MB</i> Qualifier	<i>RL</i>	<i>EDL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
PCB-1	ND		0.010	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-2	0.000983	J q	0.010	0.00016	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-3	0.00115	J q	0.010	0.00018	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-4	ND		0.020	0.0040	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-5	ND		0.010	0.0033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-6	ND		0.010	0.0029	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-7	ND		0.010	0.0029	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-8	ND		0.020	0.0027	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-9	ND		0.010	0.0030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-10	ND		0.010	0.0032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-11	0.00340	J q	0.020	0.0028	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-12	ND	q C	0.020	0.0029	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-13	ND	q C12	0.020	0.0029	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-14	ND		0.010	0.0025	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-15	ND		0.010	0.0031	ng/g		04/17/18 11:45	04/25/18 18:33	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-16	ND		0.010	0.00050	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-17	ND		0.010	0.00045	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-18	ND	C	0.020	0.00039	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-19	ND		0.010	0.00055	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-20	0.00163	J C	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-21	ND	C	0.020	0.00031	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-22	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-23	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-24	ND		0.010	0.00038	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-25	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-26	ND	C	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-27	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-28	0.00163	J C20	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-29	ND	C26	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-30	ND	C18	0.020	0.00039	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-31	0.000871	J q	0.020	0.00031	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-32	ND		0.010	0.00031	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-33	ND	C21	0.020	0.00031	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-34	ND		0.010	0.00034	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-35	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-36	ND		0.010	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-37	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-38	ND		0.010	0.00034	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-39	ND		0.010	0.00031	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-40	ND	C	0.030	0.00095	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-41	ND	C40	0.030	0.00095	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-42	ND		0.010	0.00095	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-43	ND	C	0.020	0.00089	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-44	ND	C	0.030	0.00084	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-45	ND	C	0.020	0.00099	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-46	ND		0.010	0.0012	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-47	ND	C44	0.030	0.00084	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-48	ND		0.010	0.00094	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-49	ND	C	0.020	0.00077	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-50	ND	C	0.020	0.00092	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-51	ND	C45	0.020	0.00099	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-52	ND		0.010	0.00094	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-53	ND	C50	0.020	0.00092	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-54	ND		0.010	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-55	ND		0.010	0.00069	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-56	ND		0.010	0.00069	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-57	ND		0.010	0.00070	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-58	ND		0.010	0.00071	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-59	ND	C	0.030	0.00067	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-60	ND		0.010	0.00070	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-61	ND	C	0.040	0.00066	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-62	ND	C59	0.030	0.00067	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-63	ND		0.010	0.00064	ng/g		04/17/18 11:45	04/25/18 18:33	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-64	ND		0.010	0.00063	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-65	ND	C44	0.030	0.00084	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-66	ND		0.010	0.00066	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-67	ND		0.010	0.00060	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-68	ND		0.010	0.00062	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-69	ND	C49	0.020	0.00077	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-70	ND	C61	0.040	0.00066	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-71	ND	C40	0.030	0.00095	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-72	ND		0.010	0.00069	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-73	ND	C43	0.020	0.00089	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-74	ND	C61	0.040	0.00066	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-75	ND	C59	0.030	0.00067	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-76	ND	C61	0.040	0.00066	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-77	ND		0.010	0.00068	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-78	ND		0.010	0.00071	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-79	ND		0.010	0.00061	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-80	ND		0.010	0.00060	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-81	ND		0.010	0.00064	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-82	ND		0.010	0.00023	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-83	ND	C	0.020	0.00021	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-84	ND		0.010	0.00024	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-85	ND	C	0.030	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-86	ND	C	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-87	ND	C86	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-88	ND	C	0.020	0.00021	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-89	ND		0.010	0.00023	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-90	ND	C	0.030	0.00018	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-91	ND	C88	0.020	0.00021	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-92	ND		0.010	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-93	ND	C	0.020	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-94	ND		0.010	0.00023	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-95	ND		0.010	0.00022	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-96	ND		0.010	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-97	ND	C86	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-98	ND	C	0.020	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-99	ND	C83	0.020	0.00021	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-100	ND	C93	0.020	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-101	ND	C90	0.030	0.00018	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-102	ND	C98	0.020	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-103	ND		0.010	0.00020	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-104	ND		0.010	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-105	0.00118	J	0.010	0.00024	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-106	ND		0.010	0.00025	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-107	ND		0.010	0.00027	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-108	0.000678	J q C	0.020	0.00026	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-109	ND	C86	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-110	0.00142	J q C	0.020	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-111	ND		0.010	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-112	ND		0.010	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-113	ND	C90	0.030	0.00018	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-114	ND		0.010	0.00024	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-115	0.00142	J q C110	0.020	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-116	ND	C85	0.030	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-117	ND	C85	0.030	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-118	0.00173	J	0.010	0.00024	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-119	ND	C86	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-120	ND		0.010	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-121	ND		0.010	0.00015	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-122	ND		0.010	0.00029	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-123	ND		0.010	0.00025	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-124	0.000678	J q C108	0.020	0.00026	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-125	ND	C86	0.060	0.00017	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-126	0.000550	J	0.010	0.00025	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-127	ND		0.010	0.00025	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-128	ND	C	0.020	0.00035	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-129	0.00305	J q C	0.040	0.00036	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-130	ND		0.010	0.00048	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-131	ND		0.010	0.00050	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-132	0.00124	J	0.010	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-133	ND		0.010	0.00045	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-134	ND	C	0.020	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-135	ND	C	0.020	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-136	ND		0.010	0.000099	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-137	ND		0.010	0.00041	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-138	0.00305	J q C129	0.040	0.00036	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-139	ND	C	0.020	0.00040	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-140	ND	C139	0.020	0.00040	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-141	ND		0.010	0.00042	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-142	ND		0.010	0.00045	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-143	ND	C134	0.020	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-144	ND		0.010	0.00012	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-145	ND		0.010	0.000094	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-146	ND		0.010	0.00040	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-147	0.00199	J C	0.020	0.00046	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-148	ND		0.010	0.00013	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-149	0.00199	J C147	0.020	0.00046	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-150	ND		0.010	0.000090	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-151	ND	C135	0.020	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-152	ND		0.010	0.000097	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-153	0.00192	J q C	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-154	ND		0.010	0.00011	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-155	ND		0.010	0.000090	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-156	ND	C	0.020	0.00037	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-157	ND	C156	0.020	0.00037	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-158	ND		0.010	0.00028	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-159	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-160	0.00305	J q C129	0.040	0.00036	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-161	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-162	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-163	0.00305	J q C129	0.040	0.00036	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-164	ND		0.010	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-165	ND		0.010	0.00034	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-166	ND	C128	0.020	0.00035	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-167	ND		0.010	0.00024	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-168	0.00192	J q C153	0.020	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-169	ND		0.010	0.00023	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-170	0.00104	J q	0.010	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-171	ND	C	0.020	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-172	ND		0.010	0.00046	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-173	ND	C171	0.020	0.00047	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-174	ND		0.010	0.00043	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-175	ND		0.010	0.00042	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-176	ND		0.010	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-177	ND		0.010	0.00045	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-178	ND		0.010	0.00046	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-179	ND		0.010	0.00034	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-180	ND	C	0.020	0.00035	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-181	ND		0.010	0.00042	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-182	ND		0.010	0.00040	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-183	ND	C	0.020	0.00041	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-184	ND		0.010	0.00034	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-185	ND	C183	0.020	0.00041	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-186	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-187	ND		0.010	0.00039	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-188	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-189	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-190	ND		0.010	0.00030	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-191	ND		0.010	0.00032	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-192	ND		0.010	0.00035	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-193	ND	C180	0.020	0.00035	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-194	ND		0.010	0.00033	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-195	ND		0.010	0.00036	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-196	ND		0.010	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-197	ND		0.010	0.00011	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-198	ND	C	0.020	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-199	ND	C198	0.020	0.00014	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-200	ND		0.010	0.000095	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-201	ND		0.010	0.000097	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-202	ND		0.010	0.00011	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-203	ND		0.010	0.00013	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-204	ND		0.010	0.00011	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-205	ND		0.010	0.00028	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-206	ND		0.010	0.00085	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-207	ND		0.010	0.00064	ng/g		04/17/18 11:45	04/25/18 18:33	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19612/15-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19612

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-208	ND		0.010	0.00068	ng/g		04/17/18 11:45	04/25/18 18:33	1
PCB-209	ND		0.010	0.00021	ng/g		04/17/18 11:45	04/25/18 18:33	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	95		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-3L	86		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-4L	75		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-15L	71		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-19L	81		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-37L	81		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-54L	85		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-77L	81		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-81L	79		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-104L	84		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-105L	86		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-114L	84		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-118L	83		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-123L	85		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-126L	85		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-155L	88		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-156L	89	C	30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-157L	89	C156	30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-167L	90		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-169L	97		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-170L	85		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-188L	87		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-189L	95		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-202L	94		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-205L	76		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-206L	76		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-208L	72		30 - 140	04/17/18 11:45	04/25/18 18:33	1
PCB-209L	69		30 - 140	04/17/18 11:45	04/25/18 18:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	88		40 - 125	04/17/18 11:45	04/25/18 18:33	1
PCB-111L	93		40 - 125	04/17/18 11:45	04/25/18 18:33	1
PCB-178L	88		40 - 125	04/17/18 11:45	04/25/18 18:33	1

Lab Sample ID: LCS 140-19612/16-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	0.500	0.490		ng/g		98	50 - 150
PCB-3	0.500	0.508		ng/g		102	50 - 150
PCB-4	0.500	0.512		ng/g		102	50 - 150
PCB-15	0.500	0.546		ng/g		109	50 - 150
PCB-19	0.500	0.575		ng/g		115	50 - 150

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19612/16-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-37	0.500	0.543		ng/g		109	50 - 150
PCB-54	0.500	0.493		ng/g		99	50 - 150
PCB-77	0.500	0.533		ng/g		107	50 - 150
PCB-81	0.500	0.494		ng/g		99	50 - 150
PCB-104	0.500	0.574		ng/g		115	50 - 150
PCB-105	0.500	0.526		ng/g		105	50 - 150
PCB-114	0.500	0.571		ng/g		114	50 - 150
PCB-118	0.500	0.550		ng/g		110	50 - 150
PCB-123	0.500	0.585		ng/g		117	50 - 150
PCB-126	0.500	0.576		ng/g		115	50 - 150
PCB-155	0.500	0.522		ng/g		104	50 - 150
PCB-156	1.00	1.16	C	ng/g		116	50 - 150
PCB-157	1.00	1.16	C156	ng/g		116	50 - 150
PCB-167	0.500	0.579		ng/g		116	50 - 150
PCB-169	0.500	0.528		ng/g		106	50 - 150
PCB-188	0.500	0.545		ng/g		109	50 - 150
PCB-189	0.500	0.550		ng/g		110	50 - 150
PCB-202	0.500	0.487		ng/g		97	50 - 150
PCB-205	0.500	0.629		ng/g		126	50 - 150
PCB-206	0.500	0.531		ng/g		106	50 - 150
PCB-208	0.500	0.562		ng/g		112	50 - 150
PCB-209	0.500	0.558		ng/g		112	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	86		30 - 140
PCB-3L	81		30 - 140
PCB-4L	67		30 - 140
PCB-15L	68		30 - 140
PCB-19L	80		30 - 140
PCB-37L	77		30 - 140
PCB-54L	77		30 - 140
PCB-77L	76		30 - 140
PCB-81L	76		30 - 140
PCB-104L	76		30 - 140
PCB-105L	82		30 - 140
PCB-114L	78		30 - 140
PCB-118L	78		30 - 140
PCB-123L	78		30 - 140
PCB-126L	81		30 - 140
PCB-155L	79		30 - 140
PCB-156L	83	C	30 - 140
PCB-157L	83	C156	30 - 140
PCB-167L	85		30 - 140
PCB-169L	91		30 - 140
PCB-170L	81		30 - 140
PCB-188L	83		30 - 140
PCB-189L	92		30 - 140
PCB-202L	90		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19612/16-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19612

	LCS	LCS	
Isotope Dilution	%Recovery	Qualifier	Limits
PCB-205L	73		30 - 140
PCB-206L	71		30 - 140
PCB-208L	68		30 - 140
PCB-209L	65		30 - 140

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
PCB-28L	89		40 - 125
PCB-111L	93		40 - 125
PCB-178L	89		40 - 125

Lab Sample ID: LCSD 140-19612/17-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1	0.500	0.484		ng/g		97	50 - 150	1	50
PCB-3	0.500	0.527		ng/g		105	50 - 150	4	50
PCB-4	0.500	0.501		ng/g		100	50 - 150	2	50
PCB-15	0.500	0.530		ng/g		106	50 - 150	3	50
PCB-19	0.500	0.588		ng/g		118	50 - 150	2	50
PCB-37	0.500	0.547		ng/g		109	50 - 150	1	50
PCB-54	0.500	0.488		ng/g		98	50 - 150	1	50
PCB-77	0.500	0.525		ng/g		105	50 - 150	2	50
PCB-81	0.500	0.512		ng/g		102	50 - 150	3	50
PCB-104	0.500	0.555		ng/g		111	50 - 150	3	50
PCB-105	0.500	0.537		ng/g		107	50 - 150	2	50
PCB-114	0.500	0.574		ng/g		115	50 - 150	1	50
PCB-118	0.500	0.550		ng/g		110	50 - 150	0	50
PCB-123	0.500	0.561		ng/g		112	50 - 150	4	50
PCB-126	0.500	0.581		ng/g		116	50 - 150	1	50
PCB-155	0.500	0.526		ng/g		105	50 - 150	1	50
PCB-156	1.00	1.14	C	ng/g		114	50 - 150	2	50
PCB-157	1.00	1.14	C156	ng/g		114	50 - 150	2	50
PCB-167	0.500	0.582		ng/g		116	50 - 150	0	50
PCB-169	0.500	0.518		ng/g		104	50 - 150	2	50
PCB-188	0.500	0.545		ng/g		109	50 - 150	0	50
PCB-189	0.500	0.552		ng/g		110	50 - 150	0	50
PCB-202	0.500	0.494		ng/g		99	50 - 150	1	50
PCB-205	0.500	0.636		ng/g		127	50 - 150	1	50
PCB-206	0.500	0.530		ng/g		106	50 - 150	0	50
PCB-208	0.500	0.555		ng/g		111	50 - 150	1	50
PCB-209	0.500	0.562		ng/g		112	50 - 150	1	50

	LCSD	LCSD	
Isotope Dilution	%Recovery	Qualifier	Limits
PCB-1L	98		30 - 140
PCB-3L	90		30 - 140
PCB-4L	77		30 - 140
PCB-15L	76		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 140-19612/17-B

Matrix: Solid

Analysis Batch: 19820

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19612

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
PCB-19L	88		30 - 140
PCB-37L	84		30 - 140
PCB-54L	89		30 - 140
PCB-77L	82		30 - 140
PCB-81L	80		30 - 140
PCB-104L	84		30 - 140
PCB-105L	88		30 - 140
PCB-114L	85		30 - 140
PCB-118L	86		30 - 140
PCB-123L	86		30 - 140
PCB-126L	89		30 - 140
PCB-155L	84		30 - 140
PCB-156L	88	C	30 - 140
PCB-157L	88	C156	30 - 140
PCB-167L	89		30 - 140
PCB-169L	98		30 - 140
PCB-170L	87		30 - 140
PCB-188L	87		30 - 140
PCB-189L	97		30 - 140
PCB-202L	92		30 - 140
PCB-205L	75		30 - 140
PCB-206L	73		30 - 140
PCB-208L	72		30 - 140
PCB-209L	67		30 - 140

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
PCB-28L	87		40 - 125
PCB-111L	92		40 - 125
PCB-178L	87		40 - 125

Lab Sample ID: 580-76440-15 MS

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: PDI-SG-B073-BL1

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	0.0032	J q	0.617	0.560		ng/g	☼	90	50 - 150
PCB-3	0.0062	J B	0.617	0.575		ng/g	☼	92	50 - 150
PCB-4	0.018	J q	0.617	0.641		ng/g	☼	101	50 - 150
PCB-15	0.037		0.617	0.676		ng/g	☼	104	50 - 150
PCB-19	0.018	q	0.617	0.692		ng/g	☼	109	50 - 150
PCB-37	0.036	q	0.617	0.675		ng/g	☼	104	50 - 150
PCB-54	0.0035	J	0.617	0.624		ng/g	☼	101	50 - 150
PCB-77	0.016		0.617	0.668		ng/g	☼	106	50 - 150
PCB-81	ND		0.617	0.618		ng/g	☼	100	50 - 150
PCB-104	ND		0.617	0.679		ng/g	☼	110	50 - 150
PCB-105	0.11	B	0.617	0.763		ng/g	☼	106	50 - 150
PCB-114	0.0033	J q	0.617	0.697		ng/g	☼	112	50 - 150
PCB-118	0.26	B	0.617	1.02		ng/g	☼	123	50 - 150

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: 580-76440-15 MS

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: PDI-SG-B073-BL1

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-123	0.0038	J q	0.617	0.690		ng/g	✱	111	50 - 150
PCB-126	ND		0.617	0.738		ng/g	✱	120	50 - 150
PCB-155	ND		0.617	0.625		ng/g	✱	101	50 - 150
PCB-156	0.054	C	1.23	1.46	C	ng/g	✱	114	50 - 150
PCB-157	0.054	C156	1.23	1.46	C156	ng/g	✱	114	50 - 150
PCB-167	0.018		0.617	0.714		ng/g	✱	113	50 - 150
PCB-169	ND		0.617	0.670		ng/g	✱	109	50 - 150
PCB-188	ND		0.617	0.664		ng/g	✱	108	50 - 150
PCB-189	0.0049	J	0.617	0.701		ng/g	✱	113	50 - 150
PCB-202	0.019		0.617	0.605		ng/g	✱	95	50 - 150
PCB-205	0.0041	J	0.617	0.763		ng/g	✱	123	50 - 150
PCB-206	0.076		0.617	0.722		ng/g	✱	105	50 - 150
PCB-208	0.023		0.617	0.706		ng/g	✱	111	50 - 150
PCB-209	0.078		0.617	0.784		ng/g	✱	114	50 - 150

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
PCB-1L	79		30 - 140
PCB-3L	80		30 - 140
PCB-4L	74		30 - 140
PCB-15L	81		30 - 140
PCB-19L	84		30 - 140
PCB-37L	91		30 - 140
PCB-54L	80		30 - 140
PCB-77L	92		30 - 140
PCB-81L	91		30 - 140
PCB-104L	81		30 - 140
PCB-105L	99		30 - 140
PCB-114L	94		30 - 140
PCB-118L	91		30 - 140
PCB-123L	89		30 - 140
PCB-126L	89		30 - 140
PCB-155L	87		30 - 140
PCB-156L	86	C	30 - 140
PCB-157L	86	C156	30 - 140
PCB-167L	87		30 - 140
PCB-169L	85		30 - 140
PCB-170L	85		30 - 140
PCB-188L	102		30 - 140
PCB-189L	97		30 - 140
PCB-202L	103		30 - 140
PCB-205L	72		30 - 140
PCB-206L	68		30 - 140
PCB-208L	80		30 - 140
PCB-209L	57		30 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
PCB-28L	94		40 - 125
PCB-111L	95		40 - 125

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: 580-76440-15 MS

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: PDI-SG-B073-BL1

Prep Type: Total/NA

Prep Batch: 19612

Surrogate	MS %Recovery	MS Qualifier	Limits
PCB-178L	102		40 - 125

Lab Sample ID: 580-76440-15 MSD

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: PDI-SG-B073-BL1

Prep Type: Total/NA

Prep Batch: 19612

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1	0.0032	J q	0.639	0.606		ng/g	☼	94	50 - 150	8	50
PCB-3	0.0062	J B	0.639	0.613		ng/g	☼	95	50 - 150	6	50
PCB-4	0.018	J q	0.639	0.685		ng/g	☼	105	50 - 150	7	50
PCB-15	0.037		0.639	0.720		ng/g	☼	107	50 - 150	6	50
PCB-19	0.018	q	0.639	0.731		ng/g	☼	112	50 - 150	6	50
PCB-37	0.036	q	0.639	0.707		ng/g	☼	105	50 - 150	5	50
PCB-54	0.0035	J	0.639	0.635		ng/g	☼	99	50 - 150	2	50
PCB-77	0.016		0.639	0.694		ng/g	☼	106	50 - 150	4	50
PCB-81	ND		0.639	0.643		ng/g	☼	101	50 - 150	4	50
PCB-104	ND		0.639	0.713		ng/g	☼	112	50 - 150	5	50
PCB-105	0.11	B	0.639	0.799		ng/g	☼	108	50 - 150	5	50
PCB-114	0.0033	J q	0.639	0.756		ng/g	☼	118	50 - 150	8	50
PCB-118	0.26	B	0.639	1.03		ng/g	☼	119	50 - 150	1	50
PCB-123	0.0038	J q	0.639	0.790		ng/g	☼	123	50 - 150	14	50
PCB-126	ND		0.639	0.799		ng/g	☼	125	50 - 150	8	50
PCB-155	ND		0.639	0.672		ng/g	☼	105	50 - 150	7	50
PCB-156	0.054	C	1.28	1.49	C	ng/g	☼	113	50 - 150	2	50
PCB-157	0.054	C156	1.28	1.49	C156	ng/g	☼	113	50 - 150	2	50
PCB-167	0.018		0.639	0.737		ng/g	☼	113	50 - 150	3	50
PCB-169	ND		0.639	0.687		ng/g	☼	108	50 - 150	3	50
PCB-188	ND		0.639	0.689		ng/g	☼	108	50 - 150	4	50
PCB-189	0.0049	J	0.639	0.719		ng/g	☼	112	50 - 150	3	50
PCB-202	0.019		0.639	0.643		ng/g	☼	98	50 - 150	6	50
PCB-205	0.0041	J	0.639	0.788		ng/g	☼	123	50 - 150	3	50
PCB-206	0.076		0.639	0.738		ng/g	☼	104	50 - 150	2	50
PCB-208	0.023		0.639	0.740		ng/g	☼	112	50 - 150	5	50
PCB-209	0.078		0.639	0.846		ng/g	☼	120	50 - 150	8	50

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
PCB-1L	73		30 - 140
PCB-3L	74		30 - 140
PCB-4L	67		30 - 140
PCB-15L	78		30 - 140
PCB-19L	81		30 - 140
PCB-37L	91		30 - 140
PCB-54L	80		30 - 140
PCB-77L	89		30 - 140
PCB-81L	87		30 - 140
PCB-104L	78		30 - 140
PCB-105L	96		30 - 140
PCB-114L	90		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: 580-76440-15 MSD

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: PDI-SG-B073-BL1

Prep Type: Total/NA

Prep Batch: 19612

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
PCB-118L	85		30 - 140
PCB-123L	85		30 - 140
PCB-126L	87		30 - 140
PCB-155L	81		30 - 140
PCB-156L	85	C	30 - 140
PCB-157L	85	C156	30 - 140
PCB-167L	86		30 - 140
PCB-169L	84		30 - 140
PCB-170L	83		30 - 140
PCB-188L	96		30 - 140
PCB-189L	97		30 - 140
PCB-202L	97		30 - 140
PCB-205L	71		30 - 140
PCB-206L	67		30 - 140
PCB-208L	77		30 - 140
PCB-209L	55		30 - 140

Surrogate	MSD %Recovery	MSD Qualifier	Limits
PCB-28L	89		40 - 125
PCB-111L	90		40 - 125
PCB-178L	95		40 - 125

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.010	0.000085	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-2	ND		0.010	0.00011	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-3	ND		0.010	0.00013	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-4	ND		0.020	0.0037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-5	ND		0.010	0.0030	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-6	ND		0.010	0.0026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-7	ND		0.010	0.0027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-8	ND		0.020	0.0024	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-9	ND		0.010	0.0028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-10	ND		0.010	0.0029	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-11	0.00282	J q	0.020	0.0026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-12	ND	C	0.020	0.0027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-13	ND	C12	0.020	0.0027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-14	ND		0.010	0.0023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-15	ND		0.010	0.0028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-16	ND		0.010	0.00047	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-17	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-18	ND	C	0.020	0.00037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-19	ND		0.010	0.00051	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-20	0.00107	J q C	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-21	ND	C	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-22	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-23	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-24	ND		0.010	0.00035	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-25	ND		0.010	0.00023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-26	0.000346	J q C	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-27	ND		0.010	0.00030	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-28	0.00107	J q C20	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-29	0.000346	J q C26	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-30	ND	C18	0.020	0.00037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-31	0.000584	J q	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-32	ND		0.010	0.00029	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-33	ND	C21	0.020	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-34	ND		0.010	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-35	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-36	ND		0.010	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-37	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-38	ND		0.010	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-39	ND		0.010	0.00024	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-40	ND	C	0.030	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-41	ND	C40	0.030	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-42	ND		0.010	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-43	ND	C	0.020	0.00053	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-44	0.00190	J C	0.030	0.00050	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-45	ND	C	0.020	0.00059	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-46	ND		0.010	0.00071	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-47	0.00190	J C44	0.030	0.00050	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-48	ND		0.010	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-49	ND	C	0.020	0.00046	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-50	ND	C	0.020	0.00055	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-51	ND	C45	0.020	0.00059	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-52	ND		0.010	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-53	ND	C50	0.020	0.00055	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-54	ND		0.010	0.00011	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-55	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-56	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-57	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-58	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-59	ND	C	0.030	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-60	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-61	0.00172	J C	0.040	0.00039	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-62	ND	C59	0.030	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-63	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-64	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-65	0.00190	J C44	0.030	0.00050	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-66	ND		0.010	0.00039	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-67	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-68	ND		0.010	0.00037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-69	ND	C49	0.020	0.00046	ng/g		04/25/18 10:41	04/27/18 14:50	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-70	0.00172	J C61	0.040	0.00039	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-71	ND	C40	0.030	0.00056	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-72	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-73	ND	C43	0.020	0.00053	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-74	0.00172	J C61	0.040	0.00039	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-75	ND	C59	0.030	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-76	0.00172	J C61	0.040	0.00039	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-77	ND		0.010	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-78	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-79	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-80	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-81	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-82	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-83	ND	C	0.020	0.00033	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-84	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-85	ND	C	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-86	0.000529	J q C	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-87	0.000529	J q C86	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-88	ND	C	0.020	0.00033	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-89	ND		0.010	0.00035	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-90	ND	C	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-91	ND	C88	0.020	0.00033	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-92	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-93	ND	C	0.020	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-94	ND		0.010	0.00035	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-95	0.000650	J q	0.010	0.00034	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-96	ND		0.010	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-97	0.000529	J q C86	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-98	ND	C	0.020	0.00030	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-99	ND	C83	0.020	0.00033	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-100	ND	C93	0.020	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-101	ND	C90	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-102	ND	C98	0.020	0.00030	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-103	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-104	ND		0.010	0.00024	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-105	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-106	ND		0.010	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-107	ND		0.010	0.00029	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-108	ND	C	0.020	0.00028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-109	0.000529	J q C86	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-110	0.00112	J C	0.020	0.00023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-111	0.000454	J	0.010	0.00022	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-112	ND		0.010	0.00023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-113	ND	C90	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-114	0.000576	J q	0.010	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-115	0.00112	J C110	0.020	0.00023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-116	ND	C85	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-117	ND	C85	0.030	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-118	0.000968	J	0.010	0.00025	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-119	0.000529	J q C86	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-120	ND		0.010	0.00022	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-121	ND		0.010	0.00023	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-122	0.000593	J q	0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-123	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-124	ND	C108	0.020	0.00028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-125	0.000529	J q C86	0.060	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-126	ND		0.010	0.00028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-127	0.000803	J q	0.010	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-128	0.00123	J C	0.020	0.00047	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-129	0.000952	J q C	0.040	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-130	ND		0.010	0.00065	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-131	ND		0.010	0.00067	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-132	ND		0.010	0.00063	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-133	ND		0.010	0.00061	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-134	ND	C	0.020	0.00064	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-135	ND	C	0.020	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-136	ND		0.010	0.00019	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-137	ND		0.010	0.00055	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-138	0.000952	J q C129	0.040	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-139	ND	C	0.020	0.00054	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-140	ND	C139	0.020	0.00054	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-141	ND		0.010	0.00057	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-142	ND		0.010	0.00061	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-143	ND	C134	0.020	0.00064	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-144	ND		0.010	0.00024	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-145	ND		0.010	0.00018	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-146	ND		0.010	0.00054	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-147	ND	C	0.020	0.00062	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-148	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-149	ND	C147	0.020	0.00062	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-150	ND		0.010	0.00018	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-151	ND	C135	0.020	0.00027	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-152	0.000774	J	0.010	0.00019	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-153	0.00109	J C	0.020	0.00043	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-154	ND		0.010	0.00021	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-155	ND		0.010	0.00018	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-156	ND	C	0.020	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-157	ND	C156	0.020	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-158	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-159	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-160	0.000952	J q C129	0.040	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-161	ND		0.010	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-162	ND		0.010	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-163	0.000952	J q C129	0.040	0.00049	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-164	ND		0.010	0.00043	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-165	ND		0.010	0.00046	ng/g		04/25/18 10:41	04/27/18 14:50	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-166	0.00123	J C128	0.020	0.00047	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-167	ND		0.010	0.00033	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-168	0.00109	J C153	0.020	0.00043	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-169	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-170	0.000982	J	0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-171	0.00104	J C	0.020	0.00043	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-172	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-173	0.00104	J C171	0.020	0.00043	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-174	ND		0.010	0.00040	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-175	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-176	ND		0.010	0.00029	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-177	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-178	ND		0.010	0.00042	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-179	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-180	ND	C	0.020	0.00032	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-181	ND		0.010	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-182	ND		0.010	0.00037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-183	0.00165	J C	0.020	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-184	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-185	0.00165	J C183	0.020	0.00038	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-186	ND		0.010	0.00031	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-187	ND		0.010	0.00036	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-188	ND		0.010	0.00028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-189	ND		0.010	0.00026	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-190	ND		0.010	0.00028	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-191	ND		0.010	0.00029	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-192	ND		0.010	0.00032	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-193	ND	C180	0.020	0.00032	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-194	ND		0.010	0.00037	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-195	ND		0.010	0.00041	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-196	ND		0.010	0.00017	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-197	0.000430	J	0.010	0.00013	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-198	ND	C	0.020	0.00017	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-199	ND	C198	0.020	0.00017	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-200	ND		0.010	0.00012	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-201	ND		0.010	0.00012	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-202	ND		0.010	0.00013	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-203	ND		0.010	0.00015	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-204	0.000485	J	0.010	0.00013	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-205	0.000889	J q	0.010	0.00032	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-206	ND		0.010	0.0012	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-207	ND		0.010	0.00088	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-208	ND		0.010	0.00093	ng/g		04/25/18 10:41	04/27/18 14:50	1
PCB-209	0.00147	J q	0.010	0.000096	ng/g		04/25/18 10:41	04/27/18 14:50	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	87		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-3L	78		30 - 140	04/25/18 10:41	04/27/18 14:50	1

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: MB 140-19821/2-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 19821

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-4L	76		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-15L	70		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-19L	79		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-37L	75		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-54L	80		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-77L	75		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-81L	72		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-104L	75		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-105L	84		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-114L	82		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-118L	82		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-123L	80		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-126L	82		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-155L	79		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-156L	85	C	30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-157L	85	C156	30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-167L	83		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-169L	92		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-170L	81		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-188L	81		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-189L	78		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-202L	92		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-205L	72		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-206L	77		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-208L	73		30 - 140	04/25/18 10:41	04/27/18 14:50	1
PCB-209L	71		30 - 140	04/25/18 10:41	04/27/18 14:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	88		40 - 125	04/25/18 10:41	04/27/18 14:50	1
PCB-111L	87		40 - 125	04/25/18 10:41	04/27/18 14:50	1
PCB-178L	85		40 - 125	04/25/18 10:41	04/27/18 14:50	1

Lab Sample ID: LCS 140-19821/3-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19821

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	0.500	0.447		ng/g		89	50 - 150
PCB-3	0.500	0.470		ng/g		94	50 - 150
PCB-4	0.500	0.510		ng/g		102	50 - 150
PCB-15	0.500	0.538		ng/g		108	50 - 150
PCB-19	0.500	0.573		ng/g		115	50 - 150
PCB-37	0.500	0.537		ng/g		107	50 - 150
PCB-54	0.500	0.492		ng/g		98	50 - 150
PCB-77	0.500	0.528		ng/g		106	50 - 150
PCB-81	0.500	0.489		ng/g		98	50 - 150
PCB-104	0.500	0.562		ng/g		112	50 - 150
PCB-105	0.500	0.540		ng/g		108	50 - 150

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19821/3-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19821

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-114	0.500	0.567		ng/g		113	50 - 150
PCB-118	0.500	0.562		ng/g		112	50 - 150
PCB-123	0.500	0.603		ng/g		121	50 - 150
PCB-126	0.500	0.598		ng/g		120	50 - 150
PCB-155	0.500	0.526		ng/g		105	50 - 150
PCB-156	1.00	1.15	C	ng/g		115	50 - 150
PCB-157	1.00	1.15	C156	ng/g		115	50 - 150
PCB-167	0.500	0.548		ng/g		110	50 - 150
PCB-169	0.500	0.539		ng/g		108	50 - 150
PCB-188	0.500	0.552		ng/g		110	50 - 150
PCB-189	0.500	0.553		ng/g		111	50 - 150
PCB-202	0.500	0.471		ng/g		94	50 - 150
PCB-205	0.500	0.620		ng/g		124	50 - 150
PCB-206	0.500	0.536		ng/g		107	50 - 150
PCB-208	0.500	0.552		ng/g		110	50 - 150
PCB-209	0.500	0.577		ng/g		115	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	86		30 - 140
PCB-3L	79		30 - 140
PCB-4L	74		30 - 140
PCB-15L	69		30 - 140
PCB-19L	80		30 - 140
PCB-37L	78		30 - 140
PCB-54L	79		30 - 140
PCB-77L	80		30 - 140
PCB-81L	78		30 - 140
PCB-104L	74		30 - 140
PCB-105L	82		30 - 140
PCB-114L	84		30 - 140
PCB-118L	76		30 - 140
PCB-123L	76		30 - 140
PCB-126L	81		30 - 140
PCB-155L	77		30 - 140
PCB-156L	82	C	30 - 140
PCB-157L	82	C156	30 - 140
PCB-167L	82		30 - 140
PCB-169L	90		30 - 140
PCB-170L	83		30 - 140
PCB-188L	81		30 - 140
PCB-189L	79		30 - 140
PCB-202L	87		30 - 140
PCB-205L	71		30 - 140
PCB-206L	73		30 - 140
PCB-208L	71		30 - 140
PCB-209L	66		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 140-19821/3-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 19821

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	86		40 - 125
PCB-111L	85		40 - 125
PCB-178L	83		40 - 125

Lab Sample ID: LCSD 140-19821/4-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19821

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1	0.500	0.432		ng/g		86	50 - 150	3	50
PCB-3	0.500	0.472		ng/g		94	50 - 150	0	50
PCB-4	0.500	0.520		ng/g		104	50 - 150	2	50
PCB-15	0.500	0.551		ng/g		110	50 - 150	2	50
PCB-19	0.500	0.585		ng/g		117	50 - 150	2	50
PCB-37	0.500	0.519		ng/g		104	50 - 150	3	50
PCB-54	0.500	0.507		ng/g		101	50 - 150	3	50
PCB-77	0.500	0.517		ng/g		103	50 - 150	2	50
PCB-81	0.500	0.502		ng/g		100	50 - 150	3	50
PCB-104	0.500	0.557		ng/g		111	50 - 150	1	50
PCB-105	0.500	0.520		ng/g		104	50 - 150	4	50
PCB-114	0.500	0.557		ng/g		111	50 - 150	2	50
PCB-118	0.500	0.548		ng/g		110	50 - 150	2	50
PCB-123	0.500	0.609		ng/g		122	50 - 150	1	50
PCB-126	0.500	0.600		ng/g		120	50 - 150	0	50
PCB-155	0.500	0.513		ng/g		103	50 - 150	3	50
PCB-156	1.00	1.11	C	ng/g		111	50 - 150	3	50
PCB-157	1.00	1.11	C156	ng/g		111	50 - 150	3	50
PCB-167	0.500	0.554		ng/g		111	50 - 150	1	50
PCB-169	0.500	0.528		ng/g		106	50 - 150	2	50
PCB-188	0.500	0.546		ng/g		109	50 - 150	1	50
PCB-189	0.500	0.541		ng/g		108	50 - 150	2	50
PCB-202	0.500	0.499		ng/g		100	50 - 150	6	50
PCB-205	0.500	0.610		ng/g		122	50 - 150	2	50
PCB-206	0.500	0.530		ng/g		106	50 - 150	1	50
PCB-208	0.500	0.561		ng/g		112	50 - 150	2	50
PCB-209	0.500	0.585		ng/g		117	50 - 150	1	50

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
PCB-1L	83		30 - 140
PCB-3L	76		30 - 140
PCB-4L	72		30 - 140
PCB-15L	69		30 - 140
PCB-19L	74		30 - 140
PCB-37L	75		30 - 140
PCB-54L	77		30 - 140
PCB-77L	76		30 - 140
PCB-81L	74		30 - 140
PCB-104L	70		30 - 140

TestAmerica Seattle

QC Sample Results

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 140-19821/4-B

Matrix: Solid

Analysis Batch: 19883

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 19821

<i>Isotope Dilution</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
PCB-105L	83		30 - 140
PCB-114L	80		30 - 140
PCB-118L	76		30 - 140
PCB-123L	77		30 - 140
PCB-126L	78		30 - 140
PCB-155L	76		30 - 140
PCB-156L	85	C	30 - 140
PCB-157L	85	C156	30 - 140
PCB-167L	83		30 - 140
PCB-169L	93		30 - 140
PCB-170L	83		30 - 140
PCB-188L	81		30 - 140
PCB-189L	81		30 - 140
PCB-202L	88		30 - 140
PCB-205L	72		30 - 140
PCB-206L	77		30 - 140
PCB-208L	73		30 - 140
PCB-209L	70		30 - 140

<i>Surrogate</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
PCB-28L	81		40 - 125
PCB-111L	83		40 - 125
PCB-178L	85		40 - 125

Lab Chronicle

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B054-BL1

Date Collected: 04/06/18 10:23

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-1

Matrix: Solid

Percent Solids: 69.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19789	04/24/18 20:58	JMN	TAL KNX

Client Sample ID: PDI-SG-B059-BL1

Date Collected: 04/06/18 11:27

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-2

Matrix: Solid

Percent Solids: 56.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19789	04/24/18 22:00	JMN	TAL KNX

Client Sample ID: PDI-SG-B062-BL1

Date Collected: 04/06/18 12:37

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-3

Matrix: Solid

Percent Solids: 66.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		10	19806	04/25/18 04:30	LKM	TAL KNX

Client Sample ID: PDI-SG-B063-BL1

Date Collected: 04/06/18 14:02

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-4

Matrix: Solid

Percent Solids: 59.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		10	19806	04/25/18 05:32	LKM	TAL KNX

Client Sample ID: PDI-SG-B067-BL1

Date Collected: 04/06/18 14:51

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-5

Matrix: Solid

Percent Solids: 65.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 06:34	LKM	TAL KNX

TestAmerica Seattle

Lab Chronicle

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B068-BL1

Date Collected: 04/06/18 15:56

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-6

Matrix: Solid

Percent Solids: 41.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 07:35	LKM	TAL KNX

Client Sample ID: PDI-SG-B072-BL1

Date Collected: 04/06/18 16:54

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-7

Matrix: Solid

Percent Solids: 43.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 08:37	LKM	TAL KNX

Client Sample ID: PDI-SG-B064-BL1

Date Collected: 04/08/18 10:19

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-8

Matrix: Solid

Percent Solids: 45.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 09:38	LKM	TAL KNX

Client Sample ID: PDI-SG-B065-BL1

Date Collected: 04/08/18 11:20

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-9

Matrix: Solid

Percent Solids: 40.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19820	04/25/18 19:34	JMN	TAL KNX

Client Sample ID: PDI-SG-B066-BL1

Date Collected: 04/08/18 13:22

Date Received: 04/09/18 14:30

Lab Sample ID: 580-76440-10

Matrix: Solid

Percent Solids: 53.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 10:40	LKM	TAL KNX

TestAmerica Seattle

Lab Chronicle

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B070-BL1

Lab Sample ID: 580-76440-11

Date Collected: 04/08/18 15:52

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 44.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19543	04/13/18 12:10	CLI	TAL KNX
Total/NA	Cleanup	Split			19631	04/17/18 11:16	EBS	TAL KNX
Total/NA	Analysis	1668A		1	19806	04/25/18 11:42	LKM	TAL KNX

Client Sample ID: PDI-SG-B071-BL1

Lab Sample ID: 580-76440-12

Date Collected: 04/08/18 16:55

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19612	04/17/18 11:45	CLI	TAL KNX
Total/NA	Cleanup	Split			19708	04/19/18 15:59	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19853	04/26/18 14:25	JMN	TAL KNX

Client Sample ID: PDI-SG-B074-BL1

Lab Sample ID: 580-76440-13

Date Collected: 04/08/18 17:47

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 45.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19612	04/17/18 11:45	CLI	TAL KNX
Total/NA	Cleanup	Split			19708	04/19/18 15:59	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19853	04/26/18 15:27	JMN	TAL KNX

Client Sample ID: PDI-SG-B041-BL1

Lab Sample ID: 580-76440-14

Date Collected: 04/08/18 12:20

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 56.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19821	04/25/18 10:41	BRS	TAL KNX
Total/NA	Cleanup	Split			19854	04/26/18 08:56	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19883	04/27/18 15:52	MSD	TAL KNX

Client Sample ID: PDI-SG-B073-BL1

Lab Sample ID: 580-76440-15

Date Collected: 04/08/18 14:36

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 38.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19612	04/17/18 11:45	CLI	TAL KNX
Total/NA	Cleanup	Split			19708	04/19/18 15:59	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19853	04/26/18 16:29	JMN	TAL KNX

TestAmerica Seattle

Lab Chronicle

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Client Sample ID: PDI-SG-B075-BL1

Lab Sample ID: 580-76440-16

Date Collected: 04/08/18 16:10

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 42.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19612	04/17/18 11:45	CLI	TAL KNX
Total/NA	Cleanup	Split			19708	04/19/18 15:59	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19853	04/26/18 17:30	JMN	TAL KNX

Client Sample ID: PDI-SG-B076-BL1

Lab Sample ID: 580-76440-17

Date Collected: 04/08/18 17:21

Matrix: Solid

Date Received: 04/09/18 14:30

Percent Solids: 40.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			19612	04/17/18 11:45	CLI	TAL KNX
Total/NA	Cleanup	Split			19708	04/19/18 15:59	ALS	TAL KNX
Total/NA	Analysis	1668A		1	19853	04/26/18 18:32	JMN	TAL KNX

Client Sample ID: PDI-RB-180408

Lab Sample ID: 580-76440-18

Date Collected: 04/08/18 18:19

Matrix: Water

Date Received: 04/09/18 14:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sepf			19471	04/11/18 13:58	SMA	TAL KNX
Total/NA	Analysis	1668A		1	19583	04/16/18 22:09	JMN	TAL KNX

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: AECOM

TestAmerica Job ID: 580-76440-3

Project/Site: Portland Harbor Pre-Remedial Design

Laboratory: TestAmerica Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19
ANAB	DoD ELAP		L2236	01-19-19
ANAB	ISO/IEC 17025		L2236	01-19-19
California	State Program	9	2901	11-05-18
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	07-31-18
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-19

Laboratory: TestAmerica Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		N/A	
ANAB	DoD ELAP		L2311	02-13-19
Arkansas DEQ	State Program	6	88-0688	06-16-19
California	State Program	9	2423	06-30-19
Colorado	State Program	8	TN00009	02-28-19
Connecticut	State Program	1	PH-0223	09-30-19
Florida	NELAP	4	E87177	06-30-19
Georgia	State Program	4	906	04-13-20
Hawaii	State Program	9	N/A	04-13-19
Kansas	NELAP	7	E-10349	10-31-18
Kentucky (DW)	State Program	4	90101	12-31-18
Louisiana	NELAP	6	83979	06-30-19
Louisiana (DW)	NELAP	6	LA160005	12-31-18
Maryland	State Program	3	277	03-31-19
Michigan	State Program	5	9933	04-13-20
Nevada	State Program	9	TN00009	07-31-18
New Jersey	NELAP	2	TN001	06-30-19
New York	NELAP	2	10781	03-31-19
North Carolina (DW)	State Program	4	21705	07-31-18
North Carolina (WW/SW)	State Program	4	64	12-31-18
Ohio VAP	State Program	5	CL0059	11-22-18
Oklahoma	State Program	6	9415	08-31-18
Oregon	NELAP	10	TNI0189	01-01-19
Pennsylvania	NELAP	3	68-00576	12-31-18
Tennessee	State Program	4	2014	04-13-20
Texas	NELAP	6	T104704380-16-9	08-31-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-16-00262	08-20-19
Utah	NELAP	8	TN00009	07-31-18
Virginia	NELAP	3	460176	09-14-18
Washington	State Program	10	C593	01-19-19
West Virginia (DW)	State Program	3	9955C	12-31-18
West Virginia DEP	State Program	3	345	04-30-19
Wisconsin	State Program	5	998044300	08-31-18

TestAmerica Seattle

Sample Summary

Client: AECOM

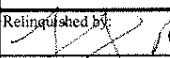
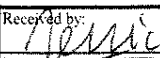
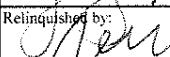
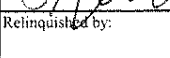
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76440-1	PDI-SG-B054-BL1	Solid	04/06/18 10:23	04/09/18 14:30
580-76440-2	PDI-SG-B059-BL1	Solid	04/06/18 11:27	04/09/18 14:30
580-76440-3	PDI-SG-B062-BL1	Solid	04/06/18 12:37	04/09/18 14:30
580-76440-4	PDI-SG-B063-BL1	Solid	04/06/18 14:02	04/09/18 14:30
580-76440-5	PDI-SG-B067-BL1	Solid	04/06/18 14:51	04/09/18 14:30
580-76440-6	PDI-SG-B068-BL1	Solid	04/06/18 15:56	04/09/18 14:30
580-76440-7	PDI-SG-B072-BL1	Solid	04/06/18 16:54	04/09/18 14:30
580-76440-8	PDI-SG-B064-BL1	Solid	04/08/18 10:19	04/09/18 14:30
580-76440-9	PDI-SG-B065-BL1	Solid	04/08/18 11:20	04/09/18 14:30
580-76440-10	PDI-SG-B066-BL1	Solid	04/08/18 13:22	04/09/18 14:30
580-76440-11	PDI-SG-B070-BL1	Solid	04/08/18 15:52	04/09/18 14:30
580-76440-12	PDI-SG-B071-BL1	Solid	04/08/18 16:55	04/09/18 14:30
580-76440-13	PDI-SG-B074-BL1	Solid	04/08/18 17:47	04/09/18 14:30
580-76440-14	PDI-SG-B041-BL1	Solid	04/08/18 12:20	04/09/18 14:30
580-76440-15	PDI-SG-B073-BL1	Solid	04/08/18 14:36	04/09/18 14:30
580-76440-16	PDI-SG-B075-BL1	Solid	04/08/18 16:10	04/09/18 14:30
580-76440-17	PDI-SG-B076-BL1	Solid	04/08/18 17:21	04/09/18 14:30
580-76440-18	PDI-RB-180408	Water	04/08/18 18:19	04/09/18 14:30

TestAmerica Seattle

SURFACE SEDIMENT CHAIN OF CUSTODY															
TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 Ph: 253-922-2310 Fax: 253-922-5047		Client Contact AECOM 1111 3rd Ave Suite 1600 Seattle, WA 98101 Phone: (206) 438-2700 Fax: 1-(866) 495-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR Project #: 60566335 Study: Surface Sediment		Project Contact: Amy Dahl / Chelsea Cook Tel: (206) 438-2261 / (206) 438-2010 Analysis Turnaround Time Calendar (C) or Work Days (W) ☒ 21 days ☐ Other _____		Site Contact: Jennifer Ray / Michaela McCoog Laboratory Contact: Elaine Walker Date: 4/9/18 Carrier: _____  580-76440 Chain of Custody		COC No: _____ of _____ COC's							
Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCB Congeners 168A	PCDD/Fs 1613B	TPH Diesel, Metals, Mercury NVTPH-DX, 6020B, 7471A	Grain size ASTM D7928/D6913	Total organic carbon, Total solids 9060	Archive Archive -20 C	Sample Specific Notes:	
PDI-SG-B054-BL1	4/6/2018	10:23	SS		DH	6		X	X	X	X	X			
PDI-SG-B059-BL1	4/6/2018	11:27	SS		DH	6		X	X	X	X	X			
PDI-SG-B062-BL1	4/6/2018	12:37	SS		DH	6		X	X	X	X	X			
PDI-SG-B063-BL1	4/6/2018	14:02	SS		DH	6		X	X	X	X	X			
PDI-SG-B067-BL1	4/6/2018	14:51	SS		DH	6		X	X	X	X	X			
PDI-SG-B068-BL1	4/6/2018	15:56	SS		DH	6		X	X	X	X	X			
PDI-SG-B072-BL1	4/6/2018	16:54	SS		DH	6		X	X	X	X	X			
PDI-SG-B064-BL1	4/8/2018	10:19	SS		DH	6		X	X	X	X	X			
PDI-SG-B065-BL1	4/8/2018	11:20	SS	MSMSD	DH	12		X	X	X	X	X			
PDI-SG-B066-BL1	4/8/2018	13:22	SS		DH	6		X	X	X	X	X			
PDI-SG-B070-BL1	4/8/2018	15:52	SS		DH	6		X	X	X	X	X			
PDI-SG-B071-BL1	4/8/2018	16:55	SS		DH	6		X	X	X	X	X			
Container Type: WMG-Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Column Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid Fraction: D = Dissolved, PFI = Particulate, T = Total (unfiltered)															
Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☐ Archive For 12 Months															
Special Instructions/QC Requirements & Comments: Separate Reports for each lab 5.3 5.2 4.3 5.5 3.4															
Relinquished by:	Company:	Date/Time:	4/9/18 1345	Received by:	Company:	Date/Time:	4/9/18 1345								
Relinquished by:	Company:	Date/Time:	4/9/18 1430	Received by:	Company:	Date/Time:	4/9/18 1430								
Relinquished by:	Company:	Date/Time:		Received by:	Company:	Date/Time:									

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 Ph: 253-922-2310 Fax: 253-922-5047		SURFACE SEDIMENT CHAIN OF CUSTODY													
Client Contact		Project Contact: Amy Dahl / Chelsey Cook Tel: (206) 438-2261 / (206) 438-2010		Site Contact: Jennifer Ray / Michaela McCoog		Date: 4/9/18		COC No: 1 of 2 COCs							
AECOM 1111 3rd Ave Suite 1600 Seattle, WA 98101 Phone: (206) 438-2700 Fax: 1-(866) 495-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR Project #: 60366335 Study: Surface Sediment		Analysis Turnaround Time Calendar (C) or Work Days (W) ☒ 21 days ☐ Other _____		Laboratory Contact: Elaine-Walker		Carrier:		 580-76440 Chain of Custody							
Sample Identification		Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.					Fraction	PCB Congeners 168A	PCDD/Fs 161B	TPH Diesel Metals, Mercury NWTPH-DX, 6020B, 1471A
PDI-SG-B054-BL1	4/6/2018	10:23	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B059-BL1	4/6/2018	11:27	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B062-BL1	4/6/2018	12:37	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B063-BL1	4/6/2018	14:02	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B067-BL1	4/6/2018	14:51	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B068-BL1	4/6/2018	15:56	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B072-BL1	4/6/2018	16:54	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B064-BL1	4/8/2018	10:19	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B065-BL1	4/8/2018	11:20	SS	MS/MSD	DH	12		x	x	x	x	x	x		
PDI-SG-B066-BL1	4/8/2018	13:22	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B070-BL1	4/8/2018	15:52	SS		DH	6		x	x	x	x	x	x		
PDI-SG-B071-BL1	4/8/2018	16:55	SS		DH	6		x	x	x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Column															
Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid															
Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)															
Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☒ Archive For 12 Months															
Special Instructions/QC Requirements & Comments: Separate Reports for each lab															
Relinquished by: 		Company: AECOM		Date/Time: 4/9/18 1345		Received by: 		Company: M.E.		Date/Time: 4/9/18 1345					
Relinquished by: 		Company: M.E.		Date/Time: 4/9/18 1430		Received by: 		Company: TA-PR		Date/Time: 4/9/18 1430					
Relinquished by: 		Company:		Date/Time:		Received by: 		Company: SEATRA		Date/Time: 4/10/18 0940					

FRY = 1.1/0.9 w/c.s.
IRY = 2.6/2.4 w/c.s.

Chain of Custody record



THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving: Company: TestAmerica Laboratories, Inc.		Lab Pmt: Walker, Elaine M E-Mail: elaine.walker@testamericainc.com Accreditations Required (See note):		Carrier Tracking No(s): 580-54419.1 State of Origin: Oregon Job #: 580-76440-3		COC No: 580-54419.1 Page: Page 1 of 2 Preservation Codes:				
Address: 5815 Middlebrook Pike, City: Knoxville State, Zip: TN, 37921 Phone: 865-291-3000(Tel) 865-584-4315(Fax) Email:		Due Date Requested: 4/26/2018 TAT Requested (days): PO #: WO #: Project #: 58012120 SSOW #:		Analysis Requested A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 2SO4 1P Dodecahydrate xstone >AA 1-4-5 1er (specify)		580-76440 Chain of Custody 				
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air)	Field Filtered Sample (Yes or No)	168A/168B_P_Sox 209 PCBs plus Totals	Screen, 1668/Screen_PCB_P_S	168A/168B_P_Sep 209 PCBs plus Totals	Total Number	Special Instructions/Note:
PDI-SG-B054-BL1 (580-76440-1)	4/6/18	10:23 Pacific	Solid	Solid	X	X	X	X	1	CUSTOMY SEALS INTACT
PDI-SG-B059-BL1 (580-76440-2)	4/6/18	11:27 Pacific	Solid	Solid	X	X	X	X	1	NEGATIVE AT
PDI-SG-B062-BL1 (580-76440-3)	4/6/18	12:37 Pacific	Solid	Solid	X	X	X	X	1	RT 1.4 / CT 1.3 C
PDI-SG-B063-BL1 (580-76440-4)	4/6/18	14:02 Pacific	Solid	Solid	X	X	X	X	1	ONS 4-11-18
PDI-SG-B067-BL1 (580-76440-5)	4/6/18	14:51 Pacific	Solid	Solid	X	X	X	X	1	100% PASS 423659229165
PDI-SG-B068-BL1 (580-76440-6)	4/6/18	15:56 Pacific	Solid	Solid	X	X	X	X	1	
PDI-SG-B072-BL1 (580-76440-7)	4/6/18	16:54 Pacific	Solid	Solid	X	X	X	X	1	
PDI-SG-B064-BL1 (580-76440-8)	4/8/18	10:19 Pacific	Solid	Solid	X	X	X	X	1	
PDI-SG-B065-BL1 (580-76440-9)	4/8/18	11:20 Pacific	Solid	Solid	X	X	X	X	1	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.										
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months										
Special Instructions/QC Requirements:										
Empty Kit Relinquished by:										
Relinquished by: Date: 4/10/18 1500										
Relinquished by: Date:										
Relinquished by: Date:										
Custody Seals Intact: ☐ Yes ☐ No										
Cooler Temperature(s) °C and Other Remarks:										

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Ver. 09/20/2016

Log In Number:

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	
2. Were ambient air containers received intact?			/	☐ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : <u>567</u> Correction factor: <u>-0.1°C</u>	/			☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			☐ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	Labeling Verified by: _____ Date: _____
10. Was the sampler identified on the COC?	/		/	☐ Sampler Not Listed on COC	pH test strip lot number: _____
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	Preservative: _____
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	Lot Number: _____ Exp Date: _____ Analyst: _____
17. Were VOA samples received without headspace?			/	☐ Headspace (VOA only) ☐ Residual Chlorine	Date: _____ Time: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: <u>194 2024/04</u>	/				
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust	
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	
Project #: _____ PM Instructions: _____					

QA026R30.doc, 080916

Date: 4-11-18

Sample Receiving Associate: *[Signature]*

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-76440-3

Login Number: 76440

List Source: TestAmerica Seattle

List Number: 1

Creator: O'Connell, Jason I

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



580-76440 Field Sheet

Job: _____

Tracking # 4236 5923 0610 SQ (PO) / FO

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: 	Therm. ID: <u>AK-2 / AK-3 / AK-4 / AK-5 / HACCP / Other</u> Ice _____ Wet _____ Gel _____ Other _____ Cooler Custody Seal: <u>Seal</u> Sample Custody Seal: _____ Cooler ID: <u>2 of 2</u> Temp: Observed <u>2.4°C</u> From: Temp Blank ☐ Sample ☒ NCM Filed: Yes ☐ No ☐ <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>NA</th> </tr> </thead> <tbody> <tr><td>Perchlorate has headspace?</td><td>☐</td><td>☐</td><td>☒</td></tr> <tr><td>CoC is complete w/o discrepancies?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Samples received within holding time?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample preservatives verified?</td><td>☐</td><td>☐</td><td>☒</td></tr> <tr><td>Cooler compromised/tampered with?</td><td>☐</td><td>☒</td><td>☐</td></tr> <tr><td>Samples compromised/tampered with?</td><td>☐</td><td>☒</td><td>☐</td></tr> <tr><td>Samples w/o discrepancies?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample containers have legible labels?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Containers are not broken or leaking?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample date/times are provided.</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Appropriate containers are used?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample bottles are completely filled?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Zero headspace?*</td><td>☐</td><td>☐</td><td>☒</td></tr> <tr><td>Multiphasic samples are not present?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample temp OK?</td><td>☒</td><td>☐</td><td>☐</td></tr> <tr><td>Sample out of temp?</td><td>☐</td><td>☒</td><td>☐</td></tr> </tbody> </table> Initials: <u>JJ</u> Date: <u>4-11-18</u> Time: <u>845</u> *Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")		Yes	No	NA	Perchlorate has headspace?	☐	☐	☒	CoC is complete w/o discrepancies?	☒	☐	☐	Samples received within holding time?	☒	☐	☐	Sample preservatives verified?	☐	☐	☒	Cooler compromised/tampered with?	☐	☒	☐	Samples compromised/tampered with?	☐	☒	☐	Samples w/o discrepancies?	☒	☐	☐	Sample containers have legible labels?	☒	☐	☐	Containers are not broken or leaking?	☒	☐	☐	Sample date/times are provided.	☒	☐	☐	Appropriate containers are used?	☒	☐	☐	Sample bottles are completely filled?	☒	☐	☐	Zero headspace?*	☐	☐	☒	Multiphasic samples are not present?	☒	☐	☐	Sample temp OK?	☒	☐	☐	Sample out of temp?	☐	☒	☐
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WLC

Sacramento Sample Receiving Notes

Job: _____

Tracking # 4236 5923 0009 SO PO / FO

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations.
File in the job folder with the COC.

Notes: _____

Therm. ID: AK-2 / AK-3 / AK-4 / AK-5 / HACCP / Other _____

Ice ☒ Wet ☒ Gel _____ Other _____

Cooler Custody Seal: Seal

Sample Custody Seal: _____

Cooler ID: 1 of 2

Temp: Observed 2.7 °C

From: Temp Blank ☐ Sample ☐

NCM Filed: Yes ☐ No ☐

	Yes	No	NA
Perchlorate has headspace?	☐	☐	☒
CoC is complete w/o discrepancies?	☒	☐	☐
Samples received within holding time?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Cooler compromised/tampered with?	☐	☒	☐
Samples compromised/tampered with?	☐	☒	☐
Samples w/o discrepancies?	☒	☐	☐
Sample containers have legible labels?	☒	☐	☐
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided.	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐
Sample temp OK?	☒	☐	☐
Sample out of temp?	☐	☒	☐

Initials: JA Date: 4-11-18 Time 845

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Isotope Dilution Summary

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB1L (30-140)	PCB3L (30-140)	PCB4L (30-140)	PCB15L (30-140)	PCB19L (30-140)	PCB37L (30-140)	PCB54L (30-140)	PCB77L (30-140)
580-76440-1	PDI-SG-B054-BL1	91	88	71	76	82	85	86	87
580-76440-2	PDI-SG-B059-BL1	80	83	67	75	75	82	77	83
580-76440-3	PDI-SG-B062-BL1	84	83	74	75	80	85	84	87
580-76440-4	PDI-SG-B063-BL1	80	85	70	76	77	81	80	85
580-76440-5	PDI-SG-B067-BL1	79	85	73	81	85	88	90	86
580-76440-6	PDI-SG-B068-BL1	81	82	70	74	81	84	82	82
580-76440-7	PDI-SG-B072-BL1	81	81	70	78	79	86	83	85
580-76440-8	PDI-SG-B064-BL1	47	49	40	43	47	46	47	46
580-76440-9	PDI-SG-B065-BL1	79	80	69	74	78	85	83	88
580-76440-9 MS	PDI-SG-B065-BL1	85	82	71	75	75	85	83	85
580-76440-9 MSD	PDI-SG-B065-BL1	89	86	71	79	84	85	87	87
580-76440-10	PDI-SG-B066-BL1	43	44	36	37	40	41	41	42
580-76440-11	PDI-SG-B070-BL1	77	83	69	76	79	85	86	81
580-76440-12	PDI-SG-B071-BL1	86	96	74	79	86	90	93	85
580-76440-13	PDI-SG-B074-BL1	88	97	73	82	88	85	90	86
580-76440-14	PDI-SG-B041-BL1	76	75	74	79	86	91	83	89
580-76440-15	PDI-SG-B073-BL1	97	103	80	83	89	91	90	89
580-76440-15 MS	PDI-SG-B073-BL1	79	80	74	81	84	91	80	92
580-76440-15 MSD	PDI-SG-B073-BL1	73	74	67	78	81	91	80	89
580-76440-16	PDI-SG-B075-BL1	89	92	72	77	83	84	87	84
580-76440-17	PDI-SG-B076-BL1	97	105	79	84	87	88	95	87
LCS 140-19543/19-C	Lab Control Sample	87	81	63	65	70	75	72	85
LCS 140-19612/16-B	Lab Control Sample	86	81	67	68	80	77	77	76
LCS 140-19821/3-B	Lab Control Sample	86	79	74	69	80	78	79	80
LCSD 140-19612/17-B	Lab Control Sample Dup	98	90	77	76	88	84	89	82
LCSD 140-19821/4-B	Lab Control Sample Dup	83	76	72	69	74	75	77	76
MB 140-19543/18-C	Method Blank	71	69	53	60	54 q	76	70	82
MB 140-19612/15-B	Method Blank	95	86	75	71	81	81	85	81
MB 140-19821/2-B	Method Blank	87	78	76	70	79	75	80	75
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB81L (30-140)	PCB104L (30-140)	PCB105L (30-140)	P114L (30-140)	PCB118L (30-140)	PCB123L (30-140)	PCB126L (30-140)	PCB155L (30-140)
580-76440-1	PDI-SG-B054-BL1	85	76	92	84	83	83	83	79
580-76440-2	PDI-SG-B059-BL1	82	75	80	82	81	80	80	77
580-76440-3	PDI-SG-B062-BL1	86	78	83	86	85	86	84	84
580-76440-4	PDI-SG-B063-BL1	84	76	82	87	84	83	83	81
580-76440-5	PDI-SG-B067-BL1	87	81	81	88	87	88	86	85
580-76440-6	PDI-SG-B068-BL1	82	76	76	85	83	84	82	79
580-76440-7	PDI-SG-B072-BL1	85	80	77	88	85	85	84	83
580-76440-8	PDI-SG-B064-BL1	47	43	46	48	47	48	47	45
580-76440-9	PDI-SG-B065-BL1	86	78	89	87	85	84	87	86
580-76440-9 MS	PDI-SG-B065-BL1	83	78	88	86	86	85	85	84
580-76440-9 MSD	PDI-SG-B065-BL1	85	78	90	86	85	86	86	83
580-76440-10	PDI-SG-B066-BL1	41	38	42	42	42	41	41	40
580-76440-11	PDI-SG-B070-BL1	83	78	78	87	85	85	85	83
580-76440-12	PDI-SG-B071-BL1	87	82	85	87	87	89	87	85
580-76440-13	PDI-SG-B074-BL1	87	77	87	89	88	90	88	83
580-76440-14	PDI-SG-B041-BL1	86	80	90	90	88	86	80	82
580-76440-15	PDI-SG-B073-BL1	89	82	91	92	91	92	89	86

TestAmerica Seattle

Isotope Dilution Summary

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB81L (30-140)	PCB104L (30-140)	PCB105L (30-140)	P114L (30-140)	PCB118L (30-140)	PCB123L (30-140)	PCB126L (30-140)	PCB155L (30-140)
580-76440-15 MS	PDI-SG-B073-BL1	91	81	99	94	91	89	89	87
580-76440-15 MSD	PDI-SG-B073-BL1	87	78	96	90	85	85	87	81
580-76440-16	PDI-SG-B075-BL1	84	78	86	87	85	87	84	79
580-76440-17	PDI-SG-B076-BL1	86	83	86	90	89	88	86	85
LCS 140-19543/19-C	Lab Control Sample	84	66	82	78	77	78	81	72
LCS 140-19612/16-B	Lab Control Sample	76	76	82	78	78	78	81	79
LCS 140-19821/3-B	Lab Control Sample	78	74	82	84	76	76	81	77
LCSD 140-19612/17-B	Lab Control Sample Dup	80	84	88	85	86	86	89	84
LCSD 140-19821/4-B	Lab Control Sample Dup	74	70	83	80	76	77	78	76
MB 140-19543/18-C	Method Blank	80	67	79	79	75	76	81	74
MB 140-19612/15-B	Method Blank	79	84	86	84	83	85	85	88
MB 140-19821/2-B	Method Blank	72	75	84	82	82	80	82	79
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB156L (30-140)	PCB157L (30-140)	PCB167L (30-140)	PCB169L (30-140)	PCB170L (30-140)	PCB188L (30-140)	PCB189L (30-140)	PCB202L (30-140)
580-76440-1	PDI-SG-B054-BL1	90 C	90 C156	89	93	84	88	95	90
580-76440-2	PDI-SG-B059-BL1	86 C	86 C156	87	92	79	81	92	85
580-76440-3	PDI-SG-B062-BL1	87 C	87 C156	88	89	81	90	99	91
580-76440-4	PDI-SG-B063-BL1	87 C	87 C156	86	92	81	87	97	89
580-76440-5	PDI-SG-B067-BL1	91 C	91 C156	91	94	84	90	105	94
580-76440-6	PDI-SG-B068-BL1	87 C	87 C156	87	89	81	88	98	90
580-76440-7	PDI-SG-B072-BL1	90 C	90 C156	91	94	82	87	99	90
580-76440-8	PDI-SG-B064-BL1	49 C	49 C156	50	51	46	51	56	53
580-76440-9	PDI-SG-B065-BL1	93 C	93 C156	93	101	87	86	99	94
580-76440-9 MS	PDI-SG-B065-BL1	92 C	92 C156	91	98	85	86	97	90
580-76440-9 MSD	PDI-SG-B065-BL1	90 C	90 C156	92	96	86	89	98	93
580-76440-10	PDI-SG-B066-BL1	44 C	44 C156	20 q *	47	41	42	49	44
580-76440-11	PDI-SG-B070-BL1	90 C	90 C156	90	96	84	85	100	92
580-76440-12	PDI-SG-B071-BL1	91 C	91 C156	91	95	85	89	103	95
580-76440-13	PDI-SG-B074-BL1	90 C	90 C156	91	91	86	92	108	94
580-76440-14	PDI-SG-B041-BL1	83 C	83 C156	86	81	84	99	98	97
580-76440-15	PDI-SG-B073-BL1	91 C	91 C156	94	91	86	96	109	99
580-76440-15 MS	PDI-SG-B073-BL1	86 C	86 C156	87	85	85	102	97	103
580-76440-15 MSD	PDI-SG-B073-BL1	85 C	85 C156	86	84	83	96	97	97
580-76440-16	PDI-SG-B075-BL1	86 C	86 C156	87	88	83	94	103	94
580-76440-17	PDI-SG-B076-BL1	92 C	92 C156	92	92	86	91	105	97
LCS 140-19543/19-C	Lab Control Sample	90 C	90 C156	88	97	82	73	89	80
LCS 140-19612/16-B	Lab Control Sample	83 C	83 C156	85	91	81	83	92	90
LCS 140-19821/3-B	Lab Control Sample	82 C	82 C156	82	90	83	81	79	87
LCSD 140-19612/17-B	Lab Control Sample Dup	88 C	88 C156	89	98	87	87	97	92
LCSD 140-19821/4-B	Lab Control Sample Dup	85 C	85 C156	83	93	83	81	81	88
MB 140-19543/18-C	Method Blank	92 C	92 C156	90	100	82	76	94	81
MB 140-19612/15-B	Method Blank	89 C	89 C156	90	97	85	87	95	94
MB 140-19821/2-B	Method Blank	85 C	85 C156	83	92	81	81	78	92
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)				
580-76440-1	PDI-SG-B054-BL1	71	68	74	56				

TestAmerica Seattle

Isotope Dilution Summary

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)			
		PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)
580-76440-2	PDI-SG-B059-BL1	69	67	71	56
580-76440-3	PDI-SG-B062-BL1	70	65	74	57
580-76440-4	PDI-SG-B063-BL1	70	65	70	58
580-76440-5	PDI-SG-B067-BL1	75	70	77	62
580-76440-6	PDI-SG-B068-BL1	69	66	74	57
580-76440-7	PDI-SG-B072-BL1	71	65	73	58
580-76440-8	PDI-SG-B064-BL1	39	37	42	31
580-76440-9	PDI-SG-B065-BL1	73	72	73	64
580-76440-9 MS	PDI-SG-B065-BL1	72	68	70	61
580-76440-9 MSD	PDI-SG-B065-BL1	72	70	69	60
580-76440-10	PDI-SG-B066-BL1	36	33	36	29 *
580-76440-11	PDI-SG-B070-BL1	73	71	71	62
580-76440-12	PDI-SG-B071-BL1	74	68	76	62
580-76440-13	PDI-SG-B074-BL1	74	70	77	61
580-76440-14	PDI-SG-B041-BL1	76	68	83	59
580-76440-15	PDI-SG-B073-BL1	73	68	80	60
580-76440-15 MS	PDI-SG-B073-BL1	72	68	80	57
580-76440-15 MSD	PDI-SG-B073-BL1	71	67	77	55
580-76440-16	PDI-SG-B075-BL1	70	64	74	54
580-76440-17	PDI-SG-B076-BL1	74	71	77	61
LCS 140-19543/19-C	Lab Control Sample	74	63	73	58
LCS 140-19612/16-B	Lab Control Sample	73	71	68	65
LCS 140-19821/3-B	Lab Control Sample	71	73	71	66
LCSD 140-19612/17-B	Lab Control Sample Dup	75	73	72	67
LCSD 140-19821/4-B	Lab Control Sample Dup	72	77	73	70
MB 140-19543/18-C	Method Blank	71	71	72	65
MB 140-19612/15-B	Method Blank	76	76	72	69
MB 140-19821/2-B	Method Blank	72	77	73	71

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
P114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
PCB157L = PCB-157L
PCB167L = PCB-167L

TestAmerica Seattle

Isotope Dilution Summary

Client: AECOM
Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

PCB169L = PCB-169L
PCB170L = PCB-170L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

Method: 1668A - Chlorinated Biphenyl Congeners (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB1L (30-140)	PCB3L (30-140)	PCB4L (30-140)	PCB15L (30-140)	PCB19L (30-140)	PCB37L (30-140)	PCB54L (30-140)	PCB77L (30-140)
580-76440-18	PDI-RB-180408	105	88	75	74	95	85	75	85
LCS 140-19471/6-A	Lab Control Sample	88	71	71	68	72	82	88	87
MB 140-19471/5-A	Method Blank	79	69	67	71	80	76	90	79

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB81L (30-140)	PCB104L (30-140)	PCB105L (30-140)	P114L (30-140)	PCB118L (30-140)	PCB123L (30-140)	PCB126L (30-140)	PCB155L (30-140)
580-76440-18	PDI-RB-180408	82	77	86	80	79	80	83	73
LCS 140-19471/6-A	Lab Control Sample	80	68	94	81	80	81	89	70
MB 140-19471/5-A	Method Blank	75	71	84	79	77	79	78	80

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB156L (30-140)	PCB157L (30-140)	PCB167L (30-140)	PCB169L (30-140)	PCB170L (30-140)	PCB188L (30-140)	PCB189L (30-140)	PCB202L (30-140)
580-76440-18	PDI-RB-180408	88 C	88 C156	87	101	83	77	85	85
LCS 140-19471/6-A	Lab Control Sample	90 C	90 C156	91	101	90	74	83	99
MB 140-19471/5-A	Method Blank	83 C	83 C156	85	88	81	83	85	91

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)				
580-76440-18	PDI-RB-180408	67	68	71	58				
LCS 140-19471/6-A	Lab Control Sample	76	77	76	66				
MB 140-19471/5-A	Method Blank	70	70	73	60				

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
P114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L

TestAmerica Seattle

Isotope Dilution Summary

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76440-3

PCB156L = PCB-156L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB170L = PCB-170L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L

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