

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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TestAmerica Job ID: 580-77797-3

Client Project/Site: Portland Harbor Pre-Remedial Design
Revision: 1

For:

AECOM
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Authorized for release by:
7/27/2018 10:15:50 AM

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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: 580-77797-3

Job ID: 580-77797-3

Laboratory: TestAmerica Seattle

Narrative

CASE NARRATIVE

Client: AECOM

Project: Portland Harbor Pre-Remedial Design

Report Number: 580-77797-3

REVISION 1: JULY 25, 2018

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.

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

Eleven samples were received on 5/30/2018 9:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.1° C and 0.0° 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-S204 (580-77797-1), PDI-SG-S147 (580-77797-2), PDI-SG-S084 (580-77797-3), PDI-SG-S090 (580-77797-4), PDI-SG-S010 (580-77797-5), PDI-SG-S255 (580-77797-6), PDI-SG-S097 (580-77797-7), PDI-SG-S115 (580-77797-8), PDI-SG-S078 (580-77797-9), PDI-SG-S135 (580-77797-10) and PDI-SG-S157 (580-77797-11) were analyzed for polychlorinated biphenyls congeners (PCBs) in accordance with EPA Method 1668A. The samples were prepared on 06/18/2018 and analyzed on 06/28/2018 and 06/29/2018.

The following method blank exhibited elevated noise for PCB 15 causing an elevation of the detection limit (EDL): (MB 140-21265/16-B). PCB 15 is a common laboratory contaminate which could have contributed to the elevation. The reporting limit (RL) for the affected analyte has been raised to be equal to the EDL, and a "G" qualifier applied.

Isotope Dilution Analyte (IDA) recovery is above the method recommended limit for the following samples: PDI-SG-S204 (580-77797-1). Since the high recovery is due to matrix interferences, the analytes associated with this IDA may have a low bias.

Case Narrative

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

TestAmerica Job ID: 580-77797-3

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Laboratory: TestAmerica Seattle (Continued)

Sample PDI-SG-S204 (580-77797-1) will be reported from two analyses due to retention time shifting issues across the MID2 switch point. All PCBs with the exception of PCB-147/149 are reported from the original analysis.

The (WDMCCV 140-21595/1), exhibited slight retention time shifting which caused the group 2 MID switch point to slightly interfere with PCB 147/149. All QC criteria were met and this procedure uses the ICAL response factors to calculate sample results. After client consultation the data was reported as is. There is no impact on data quality.

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: 580-77797-3

Qualifiers

Dioxin

Qualifier	Qualifier Description
C	The compound co-eluted with other compounds
C147	The compound co-eluted with PCB-147
C156	The compound co-eluted with PCB-156
*	Isotope Dilution analyte is outside acceptance limits.
S	Ion suppression
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
C93	The compound co-eluted with PCB-93
C90	The compound co-eluted with PCB-90
C98	The compound co-eluted with PCB-98
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
C135	The compound co-eluted with PCB-135
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
G	The reported quantitation limit has been raised due to an exhibited elevated noise or matrix interference
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

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: 580-77797-3

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: 580-77797-3

Client Sample ID: PDI-SG-S204

Date Collected: 05/03/18 16:25

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-1

Matrix: Solid

Percent Solids: 67.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.011		0.010	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-2	0.016		0.010	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-3	0.0096	J q	0.010	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-4	0.17		0.020	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-5	ND		0.010	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-6	0.0095	J	0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-7	0.0033	J q	0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-8	0.089		0.020	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-9	0.0051	J	0.010	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-10	0.0046	J q	0.010	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-11	0.16		0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-12	0.0058	J q C	0.020	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-13	0.0058	J q C12	0.020	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-14	ND		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-15	0.032		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-16	0.037		0.010	0.00034	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-17	0.11		0.010	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-18	0.11	C	0.020	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-19	0.24		0.010	0.00037	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-20	0.16	C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-21	0.069	C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-22	0.037		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-23	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-24	0.0026	J	0.010	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-25	0.021		0.010	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-26	0.025	C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-27	0.027	q	0.010	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-28	0.16	C20	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-29	0.025	C26	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-30	0.11	C18	0.020	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-31	0.12		0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-32	0.11		0.010	0.00021	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-33	0.069	C21	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-34	ND		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-35	0.0051	J q	0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-36	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-37	0.038		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-38	ND		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-39	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-40	0.34	C	0.030	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-41	0.34	C40	0.030	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-42	0.11		0.010	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-43	0.036	q C	0.020	0.0088	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-44	1.9	C	0.030	0.0083	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-45	0.59	C	0.020	0.0098	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-46	0.036	G	0.012	0.012	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-47	1.9	C44	0.030	0.0083	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-48	0.046	q	0.010	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-49	0.92	C	0.020	0.0076	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Lab Sample ID: 580-77797-1

Date Collected: 05/03/18 16:25

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.45	C	0.020	0.0090	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-51	0.59	C45	0.020	0.0098	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-52	2.8		0.010	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-53	0.45	C50	0.020	0.0090	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-54	0.10		0.010	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-55	ND		0.010	0.0068	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-56	0.18		0.010	0.0068	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-57	ND		0.010	0.0069	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-58	ND		0.010	0.0070	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-59	0.042	q C	0.030	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-60	0.081		0.010	0.0069	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-61	1.9	C	0.040	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-62	0.042	q C59	0.030	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-63	0.021		0.010	0.0063	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-64	0.27		0.010	0.0062	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-65	1.9	C44	0.030	0.0083	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-66	0.50		0.010	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-67	ND		0.010	0.0060	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-68	0.015	q	0.010	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-69	0.92	C49	0.020	0.0076	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-70	1.9	C61	0.040	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-71	0.34	C40	0.030	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-72	0.011	q	0.010	0.0068	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-73	0.036	q C43	0.020	0.0088	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-74	1.9	C61	0.040	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-75	0.042	q C59	0.030	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-76	1.9	C61	0.040	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-77	0.031	q	0.010	0.0067	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-78	ND		0.010	0.0070	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-79	0.026		0.010	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-80	0.019	q	0.010	0.0059	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-81	ND		0.010	0.0062	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-82	0.48		0.010	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-83	2.5	C	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-84	1.4		0.010	0.00037	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-85	0.73	C	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-86	3.4	C	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-87	3.4	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-88	0.82	C	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-89	ND		0.010	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-90	5.3	C	0.030	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-91	0.82	C88	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-92	0.87		0.010	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-93	0.17	C	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-94	0.059	q	0.010	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-95	5.1		0.010	0.00034	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-96	0.057		0.010	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-97	3.4	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-98	0.18	C	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Lab Sample ID: 580-77797-1

Date Collected: 05/03/18 16:25

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	2.5	C83	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-100	0.17	C93	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-101	5.3	C90	0.030	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-102	0.18	C98	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-103	0.11		0.010	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-104	ND		0.010	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-105	1.6		0.010	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-106	ND		0.010	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-107	0.32		0.010	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-108	0.18	C	0.020	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-109	3.4	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-110	5.1	C	0.020	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-111	ND		0.010	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-112	0.0080	J q	0.010	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-113	5.3	C90	0.030	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-114	0.085		0.010	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-115	5.1	C110	0.020	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-116	0.73	C85	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-117	0.73	C85	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-118	4.2		0.010	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-119	3.4	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-120	ND		0.010	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-121	ND		0.010	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-122	0.053		0.010	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-123	0.045	q	0.010	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-124	0.18	C108	0.020	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-125	3.4	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-126	0.056	q	0.010	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-127	ND		0.010	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-128	1.2	C	0.020	0.0072	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-129	7.9	C	0.040	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-130	0.52		0.010	0.0098	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-131	0.12		0.010	0.010	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-132	3.0		0.010	0.0096	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-133	0.13		0.010	0.0093	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-134	0.54	C	0.020	0.0097	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-135	2.1	C	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-136	0.96		0.010	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-137	0.39		0.010	0.0084	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-138	7.9	C129	0.040	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-139	0.15	C	0.020	0.0083	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-140	0.15	C139	0.020	0.0083	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-141	1.4		0.010	0.0087	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-142	ND		0.010	0.0092	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-143	0.54	C134	0.020	0.0097	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-144	0.26		0.010	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-145	0.0043	J	0.010	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-146	1.2		0.010	0.0082	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-147	7.6	C	0.020	0.011	ng/g	☼	06/18/18 06:31	06/28/18 14:42	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Lab Sample ID: 580-77797-1

Date Collected: 05/03/18 16:25

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.015	q	0.010	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-149	7.6	C147	0.020	0.011	ng/g	☼	06/18/18 06:31	06/28/18 14:42	1
PCB-150	0.018	q	0.010	0.00021	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-151	2.1	C135	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-152	0.016		0.010	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-153	5.7	C	0.020	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-154	0.11		0.010	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-155	ND		0.010	0.00021	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-156	0.85	C	0.020	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-157	0.85	C156	0.020	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-158	0.82		0.010	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-159	0.031	q	0.010	0.0062	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-160	7.9	C129	0.040	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-161	ND		0.010	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-162	0.018		0.010	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-163	7.9	C129	0.040	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-164	0.55		0.010	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-165	ND		0.010	0.0070	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-166	1.2	C128	0.020	0.0072	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-167	0.26		0.010	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-168	5.7	C153	0.020	0.0065	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-169	0.0076	J q	0.010	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-170	1.3		0.010	0.00059	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-171	0.40	C	0.020	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-172	0.20		0.010	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-173	0.40	C171	0.020	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-174	1.2		0.010	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-175	0.048		0.010	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-176	0.16		0.010	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-177	0.72		0.010	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-178	0.24		0.010	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-179	0.54		0.010	0.00038	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-180	2.5	C	0.020	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-181	0.017		0.010	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-182	0.012		0.010	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-183	0.86	C	0.020	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-184	ND		0.010	0.00039	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-185	0.86	C183	0.020	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-186	ND		0.010	0.00038	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-187	1.4		0.010	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-188	ND		0.010	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-189	0.044		0.010	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-190	0.23		0.010	0.00034	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-191	0.051		0.010	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-192	ND		0.010	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-193	2.5	C180	0.020	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-194	0.49		0.010	0.0041	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-195	0.20		0.010	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-196	0.24	q	0.010	0.00061	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Lab Sample ID: 580-77797-1

Date Collected: 05/03/18 16:25

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.021		0.010	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-198	0.52	C	0.020	0.00062	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-199	0.52	C198	0.020	0.00062	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-200	0.055		0.010	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-201	0.065		0.010	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-202	0.10		0.010	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-203	0.34		0.010	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-204	ND		0.010	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-205	0.028		0.010	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-206	0.25		0.010	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-207	0.029	q	0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-208	0.073		0.010	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1
PCB-209	0.10		0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 13:41	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	67		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-1L	69		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-3L	72		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-3L	77		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-4L	71		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-4L	73		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-15L	82		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-15L	83		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-19L	142	*	30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-19L	148	*	30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-37L	87		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-37L	84		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-54L	71		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-54L	78	S	30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-77L	74		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-77L	70		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-81L	73		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-81L	71		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-104L	94		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-104L	91		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-105L	94		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-105L	93		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-114L	96		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-114L	96		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-118L	90		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-118L	92		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-123L	93		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-123L	92		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-126L	86		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-126L	86		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-155L	77		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-155L	76		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-156L	76	C	30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-156L	76	C	30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-157L	76	C156	30 - 140	06/18/18 06:31	06/28/18 13:41	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Date Collected: 05/03/18 16:25

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-1

Matrix: Solid

Percent Solids: 67.8

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-157L	76	C156	30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-167L	85		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-167L	88		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-169L	88		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-169L	87		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-170L	87		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-170L	87		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-188L	96		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-188L	97		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-189L	88		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-189L	96		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-202L	93		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-202L	94		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-205L	73		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-205L	76		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-206L	77		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-206L	83		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-208L	69		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-208L	76		30 - 140	06/18/18 06:31	06/28/18 14:42	1
PCB-209L	77		30 - 140	06/18/18 06:31	06/28/18 13:41	1
PCB-209L	83		30 - 140	06/18/18 06:31	06/28/18 14:42	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	93		40 - 125	06/18/18 06:31	06/28/18 13:41	1
PCB-28L	92		40 - 125	06/18/18 06:31	06/28/18 14:42	1
PCB-111L	87		40 - 125	06/18/18 06:31	06/28/18 13:41	1
PCB-111L	79		40 - 125	06/18/18 06:31	06/28/18 14:42	1
PCB-178L	89		40 - 125	06/18/18 06:31	06/28/18 13:41	1
PCB-178L	99		40 - 125	06/18/18 06:31	06/28/18 14:42	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S147

Date Collected: 05/04/18 17:19

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-2

Matrix: Solid

Percent Solids: 55.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0035	J q	0.0099	0.00050	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-2	0.013		0.0099	0.00049	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-3	0.0046	J	0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-4	0.020	q	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-5	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-6	0.0054	J q	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-7	0.0017	J q	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-8	0.024		0.020	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-9	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-10	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-11	0.042		0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-12	0.0037	J C q	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-13	0.0037	J C12 q	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-14	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-15	0.022		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-16	0.020		0.0099	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-17	0.037		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-18	0.066	C	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-19	0.033		0.0099	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-20	0.12	C	0.020	0.00085	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-21	0.052	C	0.020	0.00083	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-22	0.033		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-23	ND		0.0099	0.00086	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-24	0.0015	J q	0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-25	0.0082	J	0.0099	0.00078	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-26	0.016	J C	0.020	0.00084	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-27	0.0077	J q	0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-28	0.12	C20	0.020	0.00085	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-29	0.016	J C26	0.020	0.00084	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-30	0.066	C18	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-31	0.097		0.020	0.00083	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-32	0.023		0.0099	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-33	0.052	C21	0.020	0.00083	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-34	ND		0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-35	0.0013	J q	0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-36	ND		0.0099	0.00084	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-37	0.034		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-38	ND		0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-39	ND		0.0099	0.00081	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-40	0.076	C	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-41	0.076	C40	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-42	0.033		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-43	0.0046	J C q	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-44	0.19	C	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-45	0.037	C	0.020	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-46	0.0073	J	0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-47	0.19	C44	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-48	0.024		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-49	0.11	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S147

Lab Sample ID: 580-77797-2

Date Collected: 05/04/18 17:19

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 55.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.034	C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-51	0.037	C45	0.020	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-52	0.21		0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-53	0.034	C50	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-54	0.0087	J	0.0099	0.000038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-55	0.0019	J	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-56	0.054		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-57	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-58	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-59	0.013	J C	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-60	0.023		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-61	0.24	C	0.039	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-62	0.013	J C59	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-63	0.0051	J	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-64	0.058		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-65	0.19	C44	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-66	0.14		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-67	0.0027	J q	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-68	0.0042	J q	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-69	0.11	C49	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-70	0.24	C61	0.039	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-71	0.076	C40	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-72	0.0044	J	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-73	0.0046	J C43 q	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-74	0.24	C61	0.039	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-75	0.013	J C59	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-76	0.24	C61	0.039	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-77	0.013	q	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-78	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-79	0.0025	J	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-80	ND		0.0099	0.00099	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-81	ND		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-82	0.026		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-83	0.21	C	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-84	0.064		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-85	0.042	C q	0.030	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-86	0.18	C	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-87	0.18	C86	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-88	0.055	C	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-89	0.0021	J q	0.0099	0.00033	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-90	0.39	C	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-91	0.055	C88	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-92	0.083		0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-93	0.014	J C q	0.020	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-94	0.0027	J q	0.0099	0.00033	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-95	0.31		0.0099	0.00032	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-96	0.0032	J q	0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-97	0.18	C86	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-98	0.0092	J C	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S147

Lab Sample ID: 580-77797-2

Date Collected: 05/04/18 17:19

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 55.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.21	C83	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-100	0.014	J C93 q	0.020	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-101	0.39	C90	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-102	0.0092	J C98	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-103	0.010	q	0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-104	ND		0.0099	0.00022	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-105	0.087		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-106	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-107	0.024		0.0099	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-108	0.0080	J C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-109	0.18	C86	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-110	0.38	C	0.020	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-111	ND		0.0099	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-112	ND		0.0099	0.00022	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-113	0.39	C90	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-114	0.0043	J	0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-115	0.38	C110	0.020	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-116	0.042	C85 q	0.030	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-117	0.042	C85 q	0.030	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-118	0.24		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-119	0.18	C86	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-120	0.0043	J	0.0099	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-121	ND		0.0099	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-122	0.0039	J	0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-123	0.0025	J q	0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-124	0.0080	J C108	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-125	0.18	C86	0.059	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-126	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-127	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-128	ND	C	0.020	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-129	0.70	C	0.039	0.0028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-130	0.038		0.0099	0.0037	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-131	ND		0.0099	0.0038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-132	0.20		0.0099	0.0036	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-133	0.016		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-134	0.026	C q	0.020	0.0036	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-135	0.29	C	0.020	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-136	0.085		0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-137	0.013	q	0.0099	0.0031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-138	0.70	C129	0.039	0.0028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-139	0.0097	J C	0.020	0.0031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-140	0.0097	J C139	0.020	0.0031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-141	0.14		0.0099	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-142	ND		0.0099	0.0034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-143	0.026	C134 q	0.020	0.0036	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-144	0.027		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-145	ND		0.0099	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-146	0.15		0.0099	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-147	0.69	C	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S147

Lab Sample ID: 580-77797-2

Date Collected: 05/04/18 17:19

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 55.2

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	0.0099	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-149	0.69	C147	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-150	0.0022	J q	0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-151	0.29	C135	0.020	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-152	0.00052	J q	0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-153	0.65	C	0.020	0.0024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-154	0.017	q	0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-155	ND		0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-156	0.053	C	0.020	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-157	0.053	C156	0.020	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-158	0.054		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-159	0.0055	J	0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-160	0.70	C129	0.039	0.0028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-161	ND		0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-162	0.0028	J q	0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-163	0.70	C129	0.039	0.0028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-164	0.050		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-165	ND		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-166	ND	C128	0.020	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-167	0.021		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-168	0.65	C153	0.020	0.0024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-169	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-170	0.21		0.0099	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-171	0.059	C q	0.020	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-172	0.038		0.0099	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-173	0.059	C171 q	0.020	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-174	0.23		0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-175	0.0075	J q	0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-176	0.025		0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-177	0.13		0.0099	0.00036	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-178	0.054		0.0099	0.00036	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-179	0.11		0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-180	0.49	C	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-181	ND		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-182	ND		0.0099	0.00032	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-183	0.16	C	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-184	ND		0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-185	0.16	C183	0.020	0.00033	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-186	ND		0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-187	0.30		0.0099	0.00031	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-188	ND		0.0099	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-189	0.0068	J	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-190	0.039		0.0099	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-191	0.010		0.0099	0.00025	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-192	ND		0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-193	0.49	C180	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-194	0.10		0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-195	0.041		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-196	0.049		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S147

Lab Sample ID: 580-77797-2

Date Collected: 05/04/18 17:19

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 55.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0032	J q	0.0099	0.00079	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-198	0.12	C	0.020	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-199	0.12	C198	0.020	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-200	0.013		0.0099	0.00070	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-201	0.012		0.0099	0.00072	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-202	0.024		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-203	0.065		0.0099	0.00093	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-204	ND		0.0099	0.00079	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-205	0.0048	J q	0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-206	0.060		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-207	0.0057	J q	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-208	0.022		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1
PCB-209	0.055		0.0099	0.00084	ng/g	☼	06/18/18 06:31	06/29/18 09:10	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	56		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-3L	66		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-4L	70		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-15L	81		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-19L	93		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-37L	86		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-54L	58		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-77L	81		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-81L	79		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-104L	81		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-105L	87		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-114L	86		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-118L	83		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-123L	84		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-126L	85		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-155L	81		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-156L	86	C	30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-157L	86	C156	30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-167L	90		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-169L	94		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-170L	85		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-188L	88		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-189L	81		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-202L	96		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-205L	72		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-206L	77		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-208L	79		30 - 140	06/18/18 06:31	06/29/18 09:10	1
PCB-209L	78		30 - 140	06/18/18 06:31	06/29/18 09:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	94		40 - 125	06/18/18 06:31	06/29/18 09:10	1
PCB-111L	91		40 - 125	06/18/18 06:31	06/29/18 09:10	1
PCB-178L	93		40 - 125	06/18/18 06:31	06/29/18 09:10	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S084

Date Collected: 05/08/18 13:40

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-3

Matrix: Solid

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-2	ND		0.0099	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-3	ND		0.0099	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-4	ND		0.020	0.0075	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-5	ND		0.0099	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-6	ND		0.0099	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-7	ND		0.0099	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-8	ND		0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-9	ND		0.0099	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-10	ND		0.0099	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-11	0.0055	J q	0.020	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-12	ND	C	0.020	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-13	ND	C12	0.020	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-14	ND		0.0099	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-15	ND		0.0099	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-16	ND		0.0099	0.00073	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-17	ND		0.0099	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-18	ND	C	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-19	ND		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-20	0.0037	J C	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-21	ND	C	0.020	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-22	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-23	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-24	ND		0.0099	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-25	ND		0.0099	0.00074	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-26	ND	C	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-27	ND		0.0099	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-28	0.0037	J C20	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-29	ND	C26	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-30	ND	C18	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-31	0.0021	J q	0.020	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-32	ND		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-33	ND	C21	0.020	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-34	ND		0.0099	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-35	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-36	ND		0.0099	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-37	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-38	ND		0.0099	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-39	ND		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-40	ND	C	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-41	ND	C40	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-42	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-43	ND	C	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-44	0.0039	J q C	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-45	ND	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-46	ND		0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-47	0.0039	J q C44	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-48	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-49	0.0029	J q C	0.020	0.00098	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S084

Lab Sample ID: 580-77797-3

Date Collected: 05/08/18 13:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND	C	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-51	ND	C45	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-52	0.0056	J q	0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-53	ND	C50	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-54	ND		0.0099	0.000050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-55	ND		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-56	ND		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-57	ND		0.0099	0.00088	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-58	ND		0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-59	ND	C	0.030	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-60	ND		0.0099	0.00089	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-61	0.0061	J q C	0.040	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-62	ND	C59	0.030	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-63	ND		0.0099	0.00081	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-64	ND		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-65	0.0039	J q C44	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-66	0.0031	J	0.0099	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-67	ND		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-68	ND		0.0099	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-69	0.0029	J q C49	0.020	0.00098	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-70	0.0061	J q C61	0.040	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-71	ND	C40	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-72	ND		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-73	ND	C43	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-74	0.0061	J q C61	0.040	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-75	ND	C59	0.030	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-76	0.0061	J q C61	0.040	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-77	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-78	ND		0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-79	ND		0.0099	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-80	ND		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-81	ND		0.0099	0.00084	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-82	ND		0.0099	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-83	0.0073	J q C	0.020	0.00061	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-84	0.0022	J q	0.0099	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-85	ND	C	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-86	0.0049	J q C	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-87	0.0049	J q C86	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-88	ND	C	0.020	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-89	ND		0.0099	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-90	0.0094	J q C	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-91	ND	C88	0.020	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-92	ND		0.0099	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-93	ND	C	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-94	ND		0.0099	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-95	0.011		0.0099	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-96	ND		0.0099	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-97	0.0049	J q C86	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-98	ND	C	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S084

Lab Sample ID: 580-77797-3

Date Collected: 05/08/18 13:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.0073	J q C83	0.020	0.00061	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-100	ND	C93	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-101	0.0094	J q C90	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-102	ND	C98	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-103	ND		0.0099	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-104	ND		0.0099	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-105	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-106	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-107	ND		0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-108	ND	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-109	0.0049	J q C86	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-110	0.013	J C	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-111	ND		0.0099	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-112	ND		0.0099	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-113	0.0094	J q C90	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-114	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-115	0.013	J C110	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-116	ND	C85	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-117	ND	C85	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-118	0.0056	J q	0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-119	0.0049	J q C86	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-120	ND		0.0099	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-121	ND		0.0099	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-122	ND		0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-123	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-124	ND	C108	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-125	0.0049	J q C86	0.059	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-126	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-127	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-128	ND	C	0.020	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-129	0.017	J C	0.040	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-130	ND		0.0099	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-131	ND		0.0099	0.0041	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-132	ND		0.0099	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-133	ND		0.0099	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-134	ND	C	0.020	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-135	0.0084	J q C	0.020	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-136	0.0023	J q	0.0099	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-137	ND		0.0099	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-138	0.017	J C129	0.040	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-139	ND	C	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-140	ND	C139	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-141	ND		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-142	ND		0.0099	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-143	ND	C134	0.020	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-144	0.0021	J q	0.0099	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-145	ND		0.0099	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-146	ND		0.0099	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-147	0.020	C	0.020	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S084

Lab Sample ID: 580-77797-3

Date Collected: 05/08/18 13:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0099	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-149	0.020	C147	0.020	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-150	ND		0.0099	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-151	0.0084	J q C135	0.020	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-152	ND		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-153	0.016	J C	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-154	ND		0.0099	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-155	ND		0.0099	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-156	ND	C	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-157	ND	C156	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-158	ND		0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-159	ND		0.0099	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-160	0.017	J C129	0.040	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-161	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-162	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-163	0.017	J C129	0.040	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-164	ND		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-165	ND		0.0099	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-166	ND	C128	0.020	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-167	ND		0.0099	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-168	0.016	J C153	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-169	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-170	ND		0.0099	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-171	ND	C	0.020	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-172	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-173	ND	C171	0.020	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-174	0.0067	J q	0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-175	ND		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-176	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-177	ND		0.0099	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-178	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-179	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-180	0.013	J C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-181	ND		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-182	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-183	0.0047	J q C	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-184	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-185	0.0047	J q C183	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-186	ND		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-187	0.0065	J	0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-188	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-189	ND		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-190	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-191	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-192	ND		0.0099	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-193	0.013	J C180	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-194	ND		0.0099	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-195	ND		0.0099	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-196	ND		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S084

Lab Sample ID: 580-77797-3

Date Collected: 05/08/18 13:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.0099	0.0027	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-198	ND	C	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-199	ND	C198	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-200	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-201	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-202	ND		0.0099	0.0027	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-203	ND		0.0099	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-204	ND		0.0099	0.0027	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-205	ND		0.0099	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-206	ND		0.0099	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-207	ND		0.0099	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-208	ND		0.0099	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1
PCB-209	0.0021	J q	0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 05:49	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	64		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-3L	68		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-4L	69		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-15L	82		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-19L	75		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-37L	90		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-54L	60		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-77L	89		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-81L	88		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-104L	71		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-105L	88		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-114L	89		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-118L	87		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-123L	88		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-126L	84		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-155L	75		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-156L	84	C	30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-157L	84	C156	30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-167L	84		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-169L	87		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-170L	86		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-188L	91		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-189L	88		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-202L	90		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-205L	75		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-206L	78		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-208L	80		30 - 140	06/18/18 06:31	06/28/18 05:49	1
PCB-209L	79		30 - 140	06/18/18 06:31	06/28/18 05:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	91		40 - 125	06/18/18 06:31	06/28/18 05:49	1
PCB-111L	92		40 - 125	06/18/18 06:31	06/28/18 05:49	1
PCB-178L	93		40 - 125	06/18/18 06:31	06/28/18 05:49	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S090

Date Collected: 05/09/18 14:34

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-4

Matrix: Solid

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.0098	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-2	ND		0.0098	0.00034	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-3	0.00083	J	0.0098	0.00038	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-4	ND		0.020	0.0076	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-5	ND		0.0098	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-6	ND		0.0098	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-7	ND		0.0098	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-8	ND		0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-9	ND		0.0098	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-10	ND		0.0098	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-11	0.0052	J q	0.020	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-12	ND	C	0.020	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-13	ND	C12	0.020	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-14	ND		0.0098	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-15	ND		0.0098	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-16	ND		0.0098	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-17	ND		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-18	ND	C	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-19	0.00077	J q	0.0098	0.00039	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-20	0.0031	J q C	0.020	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-21	ND	C	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-22	ND		0.0098	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-23	ND		0.0098	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-24	ND		0.0098	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-25	ND		0.0098	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-26	ND	C	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-27	ND		0.0098	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-28	0.0031	J q C20	0.020	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-29	ND	C26	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-30	ND	C18	0.020	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-31	0.0021	J q	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-32	0.0013	J q	0.0098	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-33	ND	C21	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-34	ND		0.0098	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-35	ND		0.0098	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-36	ND		0.0098	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-37	ND		0.0098	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-38	ND		0.0098	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-39	ND		0.0098	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-40	ND	C	0.029	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-41	ND	C40	0.029	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-42	ND		0.0098	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-43	0.00093	J q C	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-44	0.0042	J q C	0.029	0.00039	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-45	ND	C	0.020	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-46	ND		0.0098	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-47	0.0042	J q C44	0.029	0.00039	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-48	ND		0.0098	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-49	0.0021	J q C	0.020	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S090

Lab Sample ID: 580-77797-4

Date Collected: 05/09/18 14:34

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND	C	0.020	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-51	ND	C45	0.020	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-52	0.0040	J q	0.0098	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-53	ND	C50	0.020	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-54	ND		0.0098	0.000062	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-55	ND		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-56	ND		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-57	ND		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-58	ND		0.0098	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-59	ND	C	0.029	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-60	ND		0.0098	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-61	0.0050	J q C	0.039	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-62	ND	C59	0.029	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-63	ND		0.0098	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-64	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-65	0.0042	J q C44	0.029	0.00039	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-66	0.0026	J q	0.0098	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-67	ND		0.0098	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-68	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-69	0.0021	J q C49	0.020	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-70	0.0050	J q C61	0.039	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-71	ND	C40	0.029	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-72	ND		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-73	0.00093	J q C43	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-74	0.0050	J q C61	0.039	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-75	ND	C59	0.029	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-76	0.0050	J q C61	0.039	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-77	ND		0.0098	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-78	ND		0.0098	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-79	ND		0.0098	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-80	ND		0.0098	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-81	ND		0.0098	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-82	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-83	0.0057	J q C	0.020	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-84	ND		0.0098	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-85	0.0024	J q C	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-86	0.0060	J C	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-87	0.0060	J C86	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-88	ND	C	0.020	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-89	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-90	0.010	J C	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-91	ND	C88	0.020	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-92	ND		0.0098	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-93	ND	C	0.020	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-94	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-95	0.011		0.0098	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-96	ND		0.0098	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-97	0.0060	J C86	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-98	ND	C	0.020	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S090

Lab Sample ID: 580-77797-4

Date Collected: 05/09/18 14:34

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.0057	J q C83	0.020	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-100	ND	C93	0.020	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-101	0.010	J C90	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-102	ND	C98	0.020	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-103	ND		0.0098	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-104	ND		0.0098	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-105	0.0027	J q	0.0098	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-106	ND		0.0098	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-107	ND		0.0098	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-108	ND	C	0.020	0.00081	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-109	0.0060	J C86	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-110	0.013	J C	0.020	0.00018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-111	ND		0.0098	0.00018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-112	ND		0.0098	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-113	0.010	J C90	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-114	ND		0.0098	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-115	0.013	J C110	0.020	0.00018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-116	0.0024	J q C85	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-117	0.0024	J q C85	0.029	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-118	0.0083	J	0.0098	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-119	0.0060	J C86	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-120	ND		0.0098	0.00018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-121	ND		0.0098	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-122	ND		0.0098	0.00091	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-123	ND		0.0098	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-124	ND	C108	0.020	0.00081	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-125	0.0060	J C86	0.059	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-126	ND		0.0098	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-127	ND		0.0098	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-128	ND	C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-129	0.018	J C	0.039	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-130	ND		0.0098	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-131	ND		0.0098	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-132	0.0053	J q	0.0098	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-133	ND		0.0098	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-134	ND	C	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-135	0.0062	J C	0.020	0.00015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-136	0.0022	J q	0.0098	0.00011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-137	ND		0.0098	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-138	0.018	J C129	0.039	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-139	ND	C	0.020	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-140	ND	C139	0.020	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-141	0.0039	J q	0.0098	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-142	ND		0.0098	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-143	ND	C134	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-144	0.0013	J q	0.0098	0.00014	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-145	ND		0.0098	0.00011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-146	ND		0.0098	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-147	0.015	J C	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S090

Lab Sample ID: 580-77797-4

Date Collected: 05/09/18 14:34

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0098	0.00015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-149	0.015	J C147	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-150	ND		0.0098	0.00010	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-151	0.0062	J C135	0.020	0.00015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-152	ND		0.0098	0.00011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-153	0.016	J q C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-154	ND		0.0098	0.00012	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-155	ND		0.0098	0.00010	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-156	0.0018	J q C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-157	0.0018	J q C156	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-158	0.0015	J q	0.0098	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-159	ND		0.0098	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-160	0.018	J C129	0.039	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-161	ND		0.0098	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-162	ND		0.0098	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-163	0.018	J C129	0.039	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-164	ND		0.0098	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-165	ND		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-166	ND	C128	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-167	ND		0.0098	0.00099	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-168	0.016	J q C153	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-169	ND		0.0098	0.00090	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-170	0.010		0.0098	0.00073	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-171	0.0044	J q C	0.020	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-172	ND		0.0098	0.00074	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-173	0.0044	J q C171	0.020	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-174	0.0087	J q	0.0098	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-175	ND		0.0098	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-176	ND		0.0098	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-177	0.0048	J q	0.0098	0.00072	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-178	ND		0.0098	0.00073	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-179	0.0031	J	0.0098	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-180	0.015	J C	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-181	ND		0.0098	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-182	ND		0.0098	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-183	0.0058	J C	0.020	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-184	ND		0.0098	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-185	0.0058	J C183	0.020	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-186	ND		0.0098	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-187	0.0095	J	0.0098	0.00062	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-188	ND		0.0098	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-189	ND		0.0098	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-190	0.0016	J q	0.0098	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-191	ND		0.0098	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-192	ND		0.0098	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-193	0.015	J C180	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-194	ND		0.0098	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-195	ND		0.0098	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-196	0.0046	J	0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S090

Lab Sample ID: 580-77797-4

Date Collected: 05/09/18 14:34

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 73.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-198	0.0091	J C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-199	0.0091	J C198	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-200	ND		0.0098	0.00099	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-201	ND		0.0098	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-202	ND		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-203	0.0034	J q	0.0098	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-204	ND		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-205	ND		0.0098	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-206	ND		0.0098	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-207	ND		0.0098	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-208	ND		0.0098	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1
PCB-209	ND		0.0098	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 06:50	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	61		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-3L	65		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-4L	68		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-15L	87		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-19L	73		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-37L	89		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-54L	62		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-77L	90		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-81L	89		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-104L	75		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-105L	88		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-114L	88		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-118L	86		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-123L	85		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-126L	85		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-155L	78		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-156L	89	C	30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-157L	89	C156	30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-167L	89		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-169L	96		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-170L	90		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-188L	91		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-189L	91		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-202L	93		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-205L	76		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-206L	77		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-208L	82		30 - 140	06/18/18 06:31	06/28/18 06:50	1
PCB-209L	76		30 - 140	06/18/18 06:31	06/28/18 06:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	90		40 - 125	06/18/18 06:31	06/28/18 06:50	1
PCB-111L	88		40 - 125	06/18/18 06:31	06/28/18 06:50	1
PCB-178L	88		40 - 125	06/18/18 06:31	06/28/18 06:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S010

Date Collected: 05/09/18 17:30

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-5

Matrix: Solid

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.035		0.0097	0.00044	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-2	0.0071	J q	0.0097	0.00047	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-3	0.051		0.0097	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-4	0.39		0.019	0.0064	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-5	0.0064	J q	0.0097	0.0043	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-6	0.13		0.0097	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-7	0.016	q	0.0097	0.0039	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-8	0.39		0.019	0.0035	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-9	0.025		0.0097	0.0040	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-10	0.014	q	0.0097	0.0042	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-11	0.0088	J q	0.019	0.0037	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-12	0.058	C	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-13	0.058	C12	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-14	ND		0.0097	0.0032	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-15	0.42		0.0097	0.0035	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-16	0.37		0.0097	0.00073	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-17	0.99		0.0097	0.00066	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-18	1.3	C	0.019	0.00058	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-19	0.35		0.0097	0.00081	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-20	3.2	C	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-21	0.87	C	0.019	0.0037	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-22	0.61		0.0097	0.0039	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-23	ND		0.0097	0.0039	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-24	0.022	q	0.0097	0.00055	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-25	0.21		0.0097	0.0035	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-26	0.41	C	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-27	0.24		0.0097	0.00048	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-28	3.2	C20	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-29	0.41	C26	0.019	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-30	1.3	C18	0.019	0.00058	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-31	1.9		0.019	0.0037	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-32	1.2		0.0097	0.00046	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-33	0.87	C21	0.019	0.0037	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-34	0.014	q	0.0097	0.0040	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-35	0.019		0.0097	0.0039	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-36	ND		0.0097	0.0038	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-37	1.1		0.0097	0.0039	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-38	ND		0.0097	0.0041	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-39	0.025		0.0097	0.0036	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-40	5.3	C	0.029	0.0078	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-41	5.3	C40	0.029	0.0078	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-42	2.5		0.0097	0.0078	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-43	0.28	C	0.019	0.0073	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-44	9.4	C	0.029	0.0069	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-45	1.5	C	0.019	0.0082	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-46	0.46	G	0.0099	0.0099	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-47	9.4	C44	0.029	0.0069	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-48	1.4		0.0097	0.0078	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1
PCB-49	5.9	C	0.019	0.0064	ng/g	☆	06/18/18 06:31	06/28/18 07:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S010

Lab Sample ID: 580-77797-5

Date Collected: 05/09/18 17:30

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	1.3	C	0.019	0.0076	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-51	1.5	C45	0.019	0.0082	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-52	11		0.0097	0.0077	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-53	1.3	C50	0.019	0.0076	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-54	0.022		0.0097	0.000066	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-55	0.17		0.0097	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-56	5.1		0.0097	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-57	0.028		0.0097	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-58	0.032		0.0097	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-59	0.80	C	0.029	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-60	2.6		0.0097	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-61	15	C	0.039	0.0054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-62	0.80	C59	0.029	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-63	0.30		0.0097	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-64	4.7		0.0097	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-65	9.4	C44	0.029	0.0069	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-66	12		0.0097	0.0054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-67	0.16		0.0097	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-68	0.021	q	0.0097	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-69	5.9	C49	0.019	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-70	15	C61	0.039	0.0054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-71	5.3	C40	0.029	0.0078	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-72	0.054		0.0097	0.0056	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-73	0.28	C43	0.019	0.0073	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-74	15	C61	0.039	0.0054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-75	0.80	C59	0.029	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-76	15	C61	0.039	0.0054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-77	1.2		0.0097	0.0056	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-78	ND		0.0097	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-79	0.084		0.0097	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-80	ND		0.0097	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-81	0.029	q	0.0097	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-82	2.9		0.0097	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-83	8.5	C	0.019	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-84	3.9		0.0097	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-85	4.0	C	0.029	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-86	10	C	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-87	10	C86	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-88	2.5	C	0.019	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-89	0.38		0.0097	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-90	11	C	0.029	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-91	2.5	C88	0.019	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-92	2.0		0.0097	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-93	0.25	C	0.019	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-94	0.11		0.0097	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-95	9.3		0.0097	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-96	0.18		0.0097	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-97	10	C86	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-98	0.65	C	0.019	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S010

Lab Sample ID: 580-77797-5

Date Collected: 05/09/18 17:30

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	8.5	C83	0.019	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-100	0.25	C93	0.019	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-101	11	C90	0.029	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-102	0.65	C98	0.019	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-103	0.080		0.0097	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-104	ND		0.0097	0.00021	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-105	6.2		0.0097	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-106	0.0094	J q	0.0097	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-107	0.90		0.0097	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-108	0.47	C	0.019	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-109	10	C86	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-110	15	C	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-111	0.034		0.0097	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-112	0.075	q	0.0097	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-113	11	C90	0.029	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-114	0.35		0.0097	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-115	15	C110	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-116	4.0	C85	0.029	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-117	4.0	C85	0.029	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-118	10		0.0097	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-119	10	C86	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-120	0.029	q	0.0097	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-121	ND		0.0097	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-122	0.29		0.0097	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-123	0.36		0.0097	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-124	0.47	C108	0.019	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-125	10	C86	0.058	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-126	0.045		0.0097	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-127	ND		0.0097	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-128	1.5	C	0.019	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-129	9.7	C	0.039	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-130	0.61		0.0097	0.0075	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-131	0.16		0.0097	0.0078	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-132	3.6		0.0097	0.0073	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-133	0.11		0.0097	0.0071	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-134	0.61	C	0.019	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-135	3.1	C	0.019	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-136	1.1		0.0097	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-137	0.51		0.0097	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-138	9.7	C129	0.039	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-139	0.17	C	0.019	0.0063	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-140	0.17	C139	0.019	0.0063	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-141	2.1		0.0097	0.0066	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-142	ND		0.0097	0.0070	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-143	0.61	C134	0.019	0.0074	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-144	0.46		0.0097	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-145	0.0075	J q	0.0097	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-146	1.2		0.0097	0.0062	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-147	8.3	C	0.019	0.0071	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S010

Lab Sample ID: 580-77797-5

Date Collected: 05/09/18 17:30

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0097	0.00035	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-149	8.3	C147	0.019	0.0071	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-150	0.0060	J	0.0097	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-151	3.1	C135	0.019	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-152	0.0076	J q	0.0097	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-153	7.0	C	0.019	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-154	0.055	q	0.0097	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-155	ND		0.0097	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-156	1.2	C	0.019	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-157	1.2	C156	0.019	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-158	1.1		0.0097	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-159	0.058		0.0097	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-160	9.7	C129	0.039	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-161	ND		0.0097	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-162	0.029		0.0097	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-163	9.7	C129	0.039	0.0057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-164	0.68		0.0097	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-165	ND		0.0097	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-166	1.5	C128	0.019	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-167	0.35		0.0097	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-168	7.0	C153	0.019	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-169	0.020	q	0.0097	0.0036	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-170	2.1		0.0097	0.00092	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-171	0.66	C	0.019	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-172	0.32		0.0097	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-173	0.66	C171	0.019	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-174	2.2		0.0097	0.00074	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-175	0.091		0.0097	0.00071	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-176	0.29		0.0097	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-177	1.2		0.0097	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-178	0.41		0.0097	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-179	1.0		0.0097	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-180	4.0	C	0.019	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-181	ND		0.0097	0.00071	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-182	0.019	q	0.0097	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-183	1.5	C	0.019	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-184	ND		0.0097	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-185	1.5	C183	0.019	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-186	ND		0.0097	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-187	2.5		0.0097	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-188	ND		0.0097	0.00047	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-189	0.069		0.0097	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-190	0.35		0.0097	0.00052	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-191	0.078		0.0097	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-192	ND		0.0097	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-193	4.0	C180	0.019	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-194	0.93		0.0097	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-195	0.44		0.0097	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-196	0.42		0.0097	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S010

Lab Sample ID: 580-77797-5

Date Collected: 05/09/18 17:30

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 74.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.034		0.0097	0.00096	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-198	0.95	C	0.019	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-199	0.95	C198	0.019	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-200	0.11		0.0097	0.00086	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-201	0.12		0.0097	0.00088	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-202	0.19		0.0097	0.00098	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-203	0.56		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-204	ND		0.0097	0.00097	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-205	0.048		0.0097	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-206	0.40		0.0097	0.0058	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-207	0.058		0.0097	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-208	0.11		0.0097	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1
PCB-209	0.17		0.0097	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 07:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	57		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-3L	62		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-4L	66		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-15L	85		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-19L	81		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-37L	92		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-54L	59		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-77L	88		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-81L	89		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-104L	79		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-105L	91		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-114L	93		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-118L	90		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-123L	89		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-126L	86		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-155L	82		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-156L	82	C	30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-157L	82	C156	30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-167L	85		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-169L	80		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-170L	82		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-188L	100		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-189L	92		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-202L	102		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-205L	72		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-206L	76		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-208L	92		30 - 140	06/18/18 06:31	06/28/18 07:52	1
PCB-209L	70		30 - 140	06/18/18 06:31	06/28/18 07:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	93		40 - 125	06/18/18 06:31	06/28/18 07:52	1
PCB-111L	91		40 - 125	06/18/18 06:31	06/28/18 07:52	1
PCB-178L	100		40 - 125	06/18/18 06:31	06/28/18 07:52	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Date Collected: 05/11/18 12:40

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-6

Matrix: Solid

Percent Solids: 63.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.046	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-2	ND		0.046	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-3	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-4	ND		0.091	0.030	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-5	ND		0.046	0.021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-6	ND		0.046	0.019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-7	ND		0.046	0.019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-8	ND		0.091	0.017	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-9	ND		0.046	0.020	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-10	ND		0.046	0.021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-11	0.042	J q	0.091	0.018	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-12	ND	C	0.091	0.019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-13	ND	C12	0.091	0.019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-14	ND		0.046	0.016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-15	ND		0.046	0.018	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-16	ND		0.046	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-17	ND		0.046	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-18	0.015	J q C	0.091	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-19	ND		0.046	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-20	0.026	J C	0.091	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-21	0.0078	J q C	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-22	0.0067	J q	0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-23	ND		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-24	ND		0.046	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-25	ND		0.046	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-26	ND	C	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-27	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-28	0.026	J C20	0.091	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-29	ND	C26	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-30	0.015	J q C18	0.091	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-31	0.013	J q	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-32	ND		0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-33	0.0078	J q C21	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-34	ND		0.046	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-35	ND		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-36	ND		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-37	0.012	J q	0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-38	ND		0.046	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-39	ND		0.046	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-40	0.019	J C	0.14	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-41	0.019	J C40	0.14	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-42	0.012	J	0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-43	ND	C	0.091	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-44	0.044	J q C	0.14	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-45	0.0074	J q C	0.091	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-46	ND		0.046	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-47	0.044	J q C44	0.14	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-48	ND		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-49	0.029	J C	0.091	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Lab Sample ID: 580-77797-6

Date Collected: 05/11/18 12:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 63.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	ND	C	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-51	0.0074	J q C45	0.091	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-52	0.046	q	0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-53	ND	C50	0.091	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-54	ND		0.046	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-55	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-56	0.021	J q	0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-57	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-58	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-59	ND	C	0.14	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-60	0.0095	J	0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-61	0.075	J C	0.18	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-62	ND	C59	0.14	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-63	ND		0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-64	0.012	J q	0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-65	0.044	J q C44	0.14	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-66	0.042	J q	0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-67	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-68	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-69	0.029	J C49	0.091	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-70	0.075	J C61	0.18	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-71	0.019	J C40	0.14	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-72	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-73	ND	C43	0.091	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-74	0.075	J C61	0.18	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-75	ND	C59	0.14	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-76	0.075	J C61	0.18	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-77	0.011	J	0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-78	ND		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-79	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-80	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-81	ND		0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-82	0.026	J q	0.046	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-83	0.13	C	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-84	0.046		0.046	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-85	0.044	J C	0.14	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-86	0.12	J C	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-87	0.12	J C86	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-88	0.037	J q C	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-89	ND		0.046	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-90	0.26	C	0.14	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-91	0.037	J q C88	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-92	0.047	q	0.046	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-93	ND	C	0.091	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-94	ND		0.046	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-95	0.21	q	0.046	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-96	ND		0.046	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-97	0.12	J C86	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-98	ND	C	0.091	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Lab Sample ID: 580-77797-6

Date Collected: 05/11/18 12:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 63.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.13	C83	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-100	ND	C93	0.091	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-101	0.26	C90	0.14	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-102	ND	C98	0.091	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-103	ND		0.046	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-104	ND		0.046	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-105	0.090		0.046	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-106	ND		0.046	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-107	0.016	J	0.046	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-108	ND	C	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-109	0.12	J C86	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-110	0.28	C	0.091	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-111	ND		0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-112	ND		0.046	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-113	0.26	C90	0.14	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-114	ND		0.046	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-115	0.28	C110	0.091	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-116	0.044	J C85	0.14	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-117	0.044	J C85	0.14	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-118	0.14	q	0.046	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-119	0.12	J C86	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-120	ND		0.046	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-121	ND		0.046	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-122	ND		0.046	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-123	ND		0.046	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-124	ND	C108	0.091	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-125	0.12	J C86	0.27	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-126	ND		0.046	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-127	ND		0.046	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-128	0.11	C	0.091	0.0075	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-129	1.0	C	0.18	0.0077	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-130	0.057		0.046	0.010	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-131	ND		0.046	0.011	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-132	0.26	q	0.046	0.010	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-133	0.031	J	0.046	0.0096	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-134	0.056	J q C	0.091	0.010	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-135	0.45	C	0.091	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-136	0.11		0.046	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-137	0.018	J q	0.046	0.0087	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-138	1.0	C129	0.18	0.0077	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-139	0.019	J C	0.091	0.0086	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-140	0.019	J C139	0.091	0.0086	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-141	0.21	q	0.046	0.0090	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-142	ND		0.046	0.0096	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-143	0.056	J q C134	0.091	0.010	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-144	0.044	J	0.046	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-145	ND		0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-146	0.22		0.046	0.0085	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-147	0.95	C	0.091	0.0097	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Lab Sample ID: 580-77797-6

Date Collected: 05/11/18 12:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 63.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.046	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-149	0.95	C147	0.091	0.0097	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-150	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-151	0.45	C135	0.091	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-152	ND		0.046	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-153	1.0	C	0.091	0.0067	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-154	0.025	J q	0.046	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-155	ND		0.046	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-156	0.067	J C	0.091	0.0088	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-157	0.067	J C156	0.091	0.0088	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-158	0.078		0.046	0.0061	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-159	0.013	J q	0.046	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-160	1.0	C129	0.18	0.0077	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-161	ND		0.046	0.0064	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-162	ND		0.046	0.0063	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-163	1.0	C129	0.18	0.0077	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-164	0.084		0.046	0.0068	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-165	ND		0.046	0.0073	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-166	0.11	C128	0.091	0.0075	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-167	0.040	J	0.046	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-168	1.0	C153	0.091	0.0067	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-169	ND		0.046	0.0046	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-170	0.58		0.046	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-171	0.16	C	0.091	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-172	0.11		0.046	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-173	0.16	C171	0.091	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-174	0.64		0.046	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-175	0.016	J q	0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-176	0.056		0.046	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-177	0.38		0.046	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-178	0.13		0.046	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-179	0.21	q	0.046	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-180	1.3	C	0.091	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-181	ND		0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-182	ND		0.046	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-183	0.38	C	0.091	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-184	ND		0.046	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-185	0.38	C183	0.091	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-186	ND		0.046	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-187	0.78		0.046	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-188	ND		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-189	0.024	J	0.046	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-190	0.11		0.046	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-191	0.023	J q	0.046	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-192	ND		0.046	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-193	1.3	C180	0.091	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-194	0.39		0.046	0.011	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-195	0.16		0.046	0.012	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-196	0.16		0.046	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Lab Sample ID: 580-77797-6

Date Collected: 05/11/18 12:40

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 63.8

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0076	J q	0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-198	0.38	C	0.091	0.0041	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-199	0.38	C198	0.091	0.0041	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-200	0.040	J	0.046	0.0027	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-201	0.042	J	0.046	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-202	0.066	q	0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-203	0.22		0.046	0.0036	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-204	ND		0.046	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-205	0.018	J q	0.046	0.0092	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-206	0.12	q	0.046	0.012	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-207	ND		0.046	0.0085	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-208	ND		0.046	0.0086	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
PCB-209	0.032	J q	0.046	0.010	ng/g	☼	06/18/18 06:31	06/28/18 08:53	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	59		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-3L	62		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-4L	67		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-15L	79		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-19L	76		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-37L	86		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-54L	62		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-77L	85		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-81L	86		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-104L	73		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-105L	86		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-114L	87		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-118L	84		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-123L	84		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-126L	85		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-155L	79		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-156L	88	C	30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-157L	88	C156	30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-167L	89		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-169L	93		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-170L	85		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-188L	85		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-189L	85		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-202L	93		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-205L	75		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-206L	81		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-208L	82		30 - 140				06/18/18 06:31	06/28/18 08:53	1
PCB-209L	79		30 - 140				06/18/18 06:31	06/28/18 08:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	87		40 - 125				06/18/18 06:31	06/28/18 08:53	1
PCB-111L	85		40 - 125				06/18/18 06:31	06/28/18 08:53	1
PCB-178L	87		40 - 125				06/18/18 06:31	06/28/18 08:53	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S097

Date Collected: 05/13/18 11:45

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-7

Matrix: Solid

Percent Solids: 61.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0040	J	0.0097	0.00022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-2	0.0063	J	0.0097	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-3	0.0048	J	0.0097	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-4	0.013	J	0.019	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-5	ND		0.0097	0.00089	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-6	0.0060	J	0.0097	0.00078	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-7	0.0018	J q	0.0097	0.00080	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-8	0.020		0.019	0.00072	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-9	0.0015	J q	0.0097	0.00082	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-10	0.0011	J q	0.0097	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-11	0.026		0.019	0.00076	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-12	0.0041	J q C	0.019	0.00079	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-13	0.0041	J q C12	0.019	0.00079	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-14	ND		0.0097	0.00067	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-15	0.021		0.0097	0.00077	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-16	0.016		0.0097	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-17	0.022	q	0.0097	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-18	0.042	C	0.019	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-19	0.015	q	0.0097	0.00023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-20	0.091	C	0.019	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-21	0.041	C	0.019	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-22	0.026		0.0097	0.00043	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-23	ND		0.0097	0.00043	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-24	0.00063	J q	0.0097	0.00016	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-25	0.0061	J	0.0097	0.00039	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-26	0.011	J q C	0.019	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-27	0.0054	J	0.0097	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-28	0.091	C20	0.019	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-29	0.011	J q C26	0.019	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-30	0.042	C18	0.019	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-31	0.068		0.019	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-32	0.017		0.0097	0.00013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-33	0.041	C21	0.019	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-34	ND		0.0097	0.00045	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-35	0.0018	J q	0.0097	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-36	ND		0.0097	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-37	0.029		0.0097	0.00043	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-38	ND		0.0097	0.00045	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-39	0.00057	J q	0.0097	0.00040	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-40	0.058	C	0.029	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-41	0.058	C40	0.029	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-42	0.029		0.0097	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-43	0.0041	J C	0.019	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-44	0.17	C	0.029	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-45	0.030	C	0.019	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-46	0.0056	J q	0.0097	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-47	0.17	C44	0.029	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-48	0.019	q	0.0097	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-49	0.097	C	0.019	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S097

Lab Sample ID: 580-77797-7

Date Collected: 05/13/18 11:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 61.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.024	C	0.019	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-51	0.030	C45	0.019	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-52	0.23		0.0097	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-53	0.024	C50	0.019	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-54	0.0043	J	0.0097	0.000015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-55	0.0017	J	0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-56	0.042		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-57	ND		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-58	ND		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-59	0.012	J C	0.029	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-60	0.018		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-61	0.23	C	0.039	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-62	0.012	J C59	0.029	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-63	0.0054	J	0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-64	0.049		0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-65	0.17	C44	0.029	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-66	0.12		0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-67	0.0029	J	0.0097	0.00096	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-68	0.0028	J	0.0097	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-69	0.097	C49	0.019	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-70	0.23	C61	0.039	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-71	0.058	C40	0.029	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-72	0.0023	J q	0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-73	0.0041	J C43	0.019	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-74	0.23	C61	0.039	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-75	0.012	J C59	0.029	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-76	0.23	C61	0.039	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-77	0.011		0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-78	ND		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-79	0.0030	J	0.0097	0.00097	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-80	ND		0.0097	0.00095	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-81	ND		0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-82	0.046		0.0097	0.00023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-83	0.27	C	0.019	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-84	0.12		0.0097	0.00023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-85	0.069	C	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-86	0.27	C	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-87	0.27	C86	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-88	0.072	C	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-89	ND		0.0097	0.00022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-90	0.57	C	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-91	0.072	C88	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-92	0.10		0.0097	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-93	0.019	C	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-94	ND		0.0097	0.00022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-95	0.51		0.0097	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-96	ND		0.0097	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-97	0.27	C86	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-98	0.013	J C	0.019	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S097

Lab Sample ID: 580-77797-7

Date Collected: 05/13/18 11:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 61.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.27	C83	0.019	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-100	0.019	C93	0.019	0.00020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-101	0.57	C90	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-102	0.013	J C98	0.019	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-103	0.0096	J	0.0097	0.00020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-104	ND		0.0097	0.00015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-105	0.14		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-106	ND		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-107	0.034		0.0097	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-108	0.016	J C	0.019	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-109	0.27	C86	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-110	0.59	C	0.019	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-111	ND		0.0097	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-112	ND		0.0097	0.00015	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-113	0.57	C90	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-114	0.0067	J	0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-115	0.59	C110	0.019	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-116	0.069	C85	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-117	0.069	C85	0.029	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-118	0.36		0.0097	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-119	0.27	C86	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-120	0.0032	J	0.0097	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-121	ND		0.0097	0.00014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-122	0.0052	J	0.0097	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-123	0.0061	J	0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-124	0.016	J C108	0.019	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-125	0.27	C86	0.058	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-126	0.0024	J q	0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-127	ND		0.0097	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-128	0.16	C	0.019	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-129	1.5	C	0.039	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-130	0.072		0.0097	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-131	ND		0.0097	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-132	0.44		0.0097	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-133	0.023		0.0097	0.0029	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-134	0.064	C	0.019	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-135	0.47	C	0.019	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-136	0.17		0.0097	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-137	0.032		0.0097	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-138	1.5	C129	0.039	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-139	0.015	J C	0.019	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-140	0.015	J C139	0.019	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-141	0.30		0.0097	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-142	ND		0.0097	0.0029	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-143	0.064	C134	0.019	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-144	0.061		0.0097	0.00024	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-145	ND		0.0097	0.00018	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-146	0.23		0.0097	0.0025	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-147	1.2	C	0.019	0.0029	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S097

Lab Sample ID: 580-77797-7

Date Collected: 05/13/18 11:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 61.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0038	J q	0.0097	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-149	1.2	C147	0.019	0.0029	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-150	0.0017	J	0.0097	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-151	0.47	C135	0.019	0.00026	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-152	0.0010	J	0.0097	0.00019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-153	1.3	C	0.019	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-154	0.016		0.0097	0.00021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-155	ND		0.0097	0.00017	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-156	0.11	C	0.019	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-157	0.11	C156	0.019	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-158	0.13		0.0097	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-159	0.011		0.0097	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-160	1.5	C129	0.039	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-161	ND		0.0097	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-162	0.0019	J	0.0097	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-163	1.5	C129	0.039	0.0023	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-164	0.10		0.0097	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-165	ND		0.0097	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-166	0.16	C128	0.019	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-167	0.043		0.0097	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-168	1.3	C153	0.019	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-169	ND		0.0097	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-170	0.58		0.0097	0.00060	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-171	0.17	C	0.019	0.00058	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-172	0.088		0.0097	0.00057	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-173	0.17	C171	0.019	0.00058	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-174	0.54		0.0097	0.00054	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-175	0.021		0.0097	0.00052	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-176	0.065		0.0097	0.00039	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-177	0.31		0.0097	0.00055	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-178	0.11		0.0097	0.00056	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-179	0.22		0.0097	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-180	1.2	C	0.019	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-181	ND		0.0097	0.00052	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-182	0.0057	J q	0.0097	0.00050	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-183	0.40	C	0.019	0.00051	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-184	ND		0.0097	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-185	0.40	C183	0.019	0.00051	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-186	ND		0.0097	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-187	0.65		0.0097	0.00048	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-188	ND		0.0097	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-189	0.017		0.0097	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-190	0.10		0.0097	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-191	0.022		0.0097	0.00039	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-192	ND		0.0097	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-193	1.2	C180	0.019	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-194	0.26		0.0097	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-195	0.11		0.0097	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-196	0.13		0.0097	0.00053	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S097

Lab Sample ID: 580-77797-7

Date Collected: 05/13/18 11:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 61.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.010		0.0097	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-198	0.27	C	0.019	0.00054	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-199	0.27	C198	0.019	0.00054	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-200	0.027		0.0097	0.00036	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-201	0.029		0.0097	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-202	0.050		0.0097	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-203	0.17		0.0097	0.00048	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-204	ND		0.0097	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-205	0.012		0.0097	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-206	0.16		0.0097	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-207	0.013		0.0097	0.00089	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-208	0.054		0.0097	0.00092	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1
PCB-209	0.15		0.0097	0.00058	ng/g	☼	06/18/18 06:31	06/29/18 07:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	53		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-3L	61		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-4L	68		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-15L	79		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-19L	91		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-37L	84		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-54L	66		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-77L	76		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-81L	75		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-104L	81		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-105L	84		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-114L	84		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-118L	83		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-123L	84		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-126L	83		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-155L	79		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-156L	80	C	30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-157L	80	C156	30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-167L	86		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-169L	90		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-170L	81		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-188L	83		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-189L	79		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-202L	92		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-205L	71		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-206L	79		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-208L	78		30 - 140	06/18/18 06:31	06/29/18 07:07	1
PCB-209L	81		30 - 140	06/18/18 06:31	06/29/18 07:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	89		40 - 125	06/18/18 06:31	06/29/18 07:07	1
PCB-111L	85		40 - 125	06/18/18 06:31	06/29/18 07:07	1
PCB-178L	87		40 - 125	06/18/18 06:31	06/29/18 07:07	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S115

Date Collected: 05/12/18 12:21

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-8

Matrix: Solid

Percent Solids: 71.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.010	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-2	ND		0.010	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-3	0.0020	J q	0.010	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-4	0.013	J q	0.020	0.0041	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-5	ND		0.010	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-6	0.0038	J q	0.010	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-7	ND		0.010	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-8	0.010	J	0.020	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-9	ND		0.010	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-10	ND		0.010	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-11	0.016	J	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-12	ND	C	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-13	ND	C12	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-14	ND		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-15	0.0085	J q	0.010	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-16	0.026		0.010	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-17	0.019		0.010	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-18	0.059	C	0.020	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-19	0.014		0.010	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-20	0.035	C	0.020	0.00081	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-21	0.019	J C	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-22	0.012		0.010	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-23	ND		0.010	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-24	ND		0.010	0.00053	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-25	0.0035	J	0.010	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-26	0.0063	J q C	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-27	0.0044	J	0.010	0.00046	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-28	0.035	C20	0.020	0.00081	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-29	0.0063	J q C26	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-30	0.059	C18	0.020	0.00055	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-31	0.033		0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-32	0.015		0.010	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-33	0.019	J C21	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-34	ND		0.010	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-35	ND		0.010	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-36	ND		0.010	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-37	0.013		0.010	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-38	ND		0.010	0.00086	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-39	ND		0.010	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-40	0.067	C	0.030	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-41	0.067	C40	0.030	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-42	0.029		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-43	0.011	J C	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-44	0.16	C	0.030	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-45	0.037	C	0.020	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-46	0.013		0.010	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-47	0.16	C44	0.030	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-48	0.021		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-49	0.087	C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S115

Lab Sample ID: 580-77797-8

Date Collected: 05/12/18 12:21

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 71.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.032	C	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-51	0.037	C45	0.020	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-52	0.28		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-53	0.032	C50	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-54	0.0020	J q	0.010	0.00013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-55	ND		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-56	0.041		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-57	ND		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-58	ND		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-59	0.0099	J q C	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-60	0.016	q	0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-61	0.20	C	0.040	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-62	0.0099	J q C59	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-63	ND		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-64	0.047		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-65	0.16	C44	0.030	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-66	0.098		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-67	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-68	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-69	0.087	C49	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-70	0.20	C61	0.040	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-71	0.067	C40	0.030	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-72	ND		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-73	0.011	J C43	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-74	0.20	C61	0.040	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-75	0.0099	J q C59	0.030	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-76	0.20	C61	0.040	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-77	0.0088	J q	0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-78	ND		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-79	0.0042	J q	0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-80	ND		0.010	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-81	ND		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-82	0.076		0.010	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-83	0.36	C	0.020	0.00061	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-84	0.21		0.010	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-85	0.12	C	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-86	0.44	C	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-87	0.44	C86	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-88	0.11	C	0.020	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-89	ND		0.010	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-90	0.75	C	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-91	0.11	C88	0.020	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-92	0.14		0.010	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-93	0.036	q C	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-94	ND		0.010	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-95	0.81		0.010	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-96	ND		0.010	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-97	0.44	C86	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-98	0.017	J q C	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S115

Lab Sample ID: 580-77797-8

Date Collected: 05/12/18 12:21

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 71.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.36	C83	0.020	0.00061	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-100	0.036	q C93	0.020	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-101	0.75	C90	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-102	0.017	J q C98	0.020	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-103	ND		0.010	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-104	ND		0.010	0.00044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-105	0.17		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-106	ND		0.010	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-107	0.036		0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-108	0.020	q C	0.020	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-109	0.44	C86	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-110	0.91	C	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-111	ND		0.010	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-112	ND		0.010	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-113	0.75	C90	0.030	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-114	0.0075	J q	0.010	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-115	0.91	C110	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-116	0.12	C85	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-117	0.12	C85	0.030	0.00049	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-118	0.43		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-119	0.44	C86	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-120	ND		0.010	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-121	ND		0.010	0.00042	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-122	0.0043	J q	0.010	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-123	0.0080	J q	0.010	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-124	0.020	q C108	0.020	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-125	0.44	C86	0.060	0.00050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-126	ND		0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-127	ND		0.010	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-128	0.21	C	0.020	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-129	1.6	C	0.040	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-130	0.088		0.010	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-131	ND		0.010	0.0055	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-132	0.55		0.010	0.0051	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-133	0.019	q	0.010	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-134	0.087	C	0.020	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-135	0.60	C	0.020	0.00096	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-136	0.20		0.010	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-137	0.054		0.010	0.0045	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-138	1.6	C129	0.040	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-139	0.019	J q C	0.020	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-140	0.019	J q C139	0.020	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-141	0.37		0.010	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-142	ND		0.010	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-143	0.087	C134	0.020	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-144	0.078		0.010	0.00087	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-145	ND		0.010	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-146	0.23		0.010	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-147	1.7	C	0.020	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S115

Lab Sample ID: 580-77797-8

Date Collected: 05/12/18 12:21

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 71.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.010	0.00093	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-149	1.7	C147	0.020	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-150	ND		0.010	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-151	0.60	C135	0.020	0.00096	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-152	ND		0.010	0.00068	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-153	1.4	C	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-154	0.011		0.010	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-155	ND		0.010	0.00063	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-156	0.12	C	0.020	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-157	0.12	C156	0.020	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-158	0.14		0.010	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-159	ND		0.010	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-160	1.6	C129	0.040	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-161	ND		0.010	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-162	ND		0.010	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-163	1.6	C129	0.040	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-164	0.12		0.010	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-165	ND		0.010	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-166	0.21	C128	0.020	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-167	0.045		0.010	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-168	1.4	C153	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-169	ND		0.010	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-170	0.50		0.010	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-171	0.15	C	0.020	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-172	0.085		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-173	0.15	C171	0.020	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-174	0.60		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-175	0.023		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-176	0.078		0.010	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-177	0.32		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-178	0.13		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-179	0.30		0.010	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-180	1.1	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-181	ND		0.010	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-182	ND		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-183	0.41	C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-184	ND		0.010	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-185	0.41	C183	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-186	ND		0.010	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-187	0.73		0.010	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-188	ND		0.010	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-189	0.013	q	0.010	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-190	0.099		0.010	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-191	0.019	q	0.010	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-192	ND		0.010	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-193	1.1	C180	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-194	0.25		0.010	0.0063	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-195	0.13		0.010	0.0069	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-196	0.12		0.010	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S115

Lab Sample ID: 580-77797-8

Date Collected: 05/12/18 12:21

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 71.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.011	q	0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-198	0.24	q C	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-199	0.24	q C198	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-200	0.030	q	0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-201	0.035		0.010	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-202	0.048	q	0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-203	0.15		0.010	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-204	ND		0.010	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-205	0.013		0.010	0.0053	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-206	0.11		0.010	0.0059	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-207	0.0095	J q	0.010	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-208	0.035		0.010	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1
PCB-209	0.091		0.010	0.0036	ng/g	☼	06/18/18 06:31	06/28/18 17:47	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	53		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-3L	60		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-4L	62		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-15L	81		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-19L	75		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-37L	90		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-54L	61		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-77L	83		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-81L	81		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-104L	81		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-105L	93		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-114L	92		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-118L	92		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-123L	91		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-126L	87		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-155L	83		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-156L	81	C	30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-157L	81	C156	30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-167L	84		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-169L	80		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-170L	83		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-188L	103		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-189L	90		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-202L	100		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-205L	73		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-206L	73		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-208L	89		30 - 140	06/18/18 06:31	06/28/18 17:47	1
PCB-209L	70		30 - 140	06/18/18 06:31	06/28/18 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	89		40 - 125	06/18/18 06:31	06/28/18 17:47	1
PCB-111L	90		40 - 125	06/18/18 06:31	06/28/18 17:47	1
PCB-178L	99		40 - 125	06/18/18 06:31	06/28/18 17:47	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S078

Date Collected: 05/12/18 15:50

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-9

Matrix: Solid

Percent Solids: 60.4

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.0099	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-2	0.0064	J q	0.0099	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-3	0.0020	J q	0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-4	0.0070	J q	0.020	0.0031	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-5	ND		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-6	ND		0.0099	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-7	ND		0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-8	0.010	J	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-9	ND		0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-10	ND		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-11	0.025		0.020	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-12	ND	C	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-13	ND	C12	0.020	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-14	ND		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-15	0.011	q	0.0099	0.0019	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-16	0.011		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-17	0.015		0.0099	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-18	0.027	C	0.020	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-19	0.0066	J	0.0099	0.00051	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-20	0.052	C	0.020	0.00072	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-21	0.021	C	0.020	0.00070	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-22	0.015		0.0099	0.00074	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-23	ND		0.0099	0.00073	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-24	0.00098	J q	0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-25	0.0041	J	0.0099	0.00067	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-26	0.0083	J C	0.020	0.00071	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-27	0.0032	J q	0.0099	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-28	0.052	C20	0.020	0.00072	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-29	0.0083	J C26	0.020	0.00071	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-30	0.027	C18	0.020	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-31	0.038		0.020	0.00070	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-32	0.0096	J	0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-33	0.021	C21	0.020	0.00070	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-34	ND		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-35	ND		0.0099	0.00074	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-36	ND		0.0099	0.00071	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-37	0.017		0.0099	0.00073	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-38	ND		0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-39	ND		0.0099	0.00069	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-40	0.033	q C	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-41	0.033	q C40	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-42	0.015	q	0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-43	ND	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-44	0.088	C	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-45	0.014	J C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-46	0.0053	J	0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-47	0.088	C44	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-48	0.011	q	0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-49	0.059	C	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S078

Lab Sample ID: 580-77797-9

Date Collected: 05/12/18 15:50

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 60.4

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.013	J C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-51	0.014	J C45	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-52	0.12		0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-53	0.013	J C50	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-54	0.0014	J	0.0099	0.00010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-55	ND		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-56	0.029		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-57	ND		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-58	ND		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-59	0.0076	J C	0.030	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-60	0.0063	J	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-61	0.13	C	0.040	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-62	0.0076	J C59	0.030	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-63	0.0024	J q	0.0099	0.00095	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-64	0.031		0.0099	0.00094	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-65	0.088	C44	0.030	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-66	0.075		0.0099	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-67	0.0012	J q	0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-68	0.0014	J q	0.0099	0.00092	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-69	0.059	C49	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-70	0.13	C61	0.040	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-71	0.033	q C40	0.030	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-72	0.0021	J q	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-73	ND	C43	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-74	0.13	C61	0.040	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-75	0.0076	J C59	0.030	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-76	0.13	C61	0.040	0.00098	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-77	0.0074	J q	0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-78	ND		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-79	ND		0.0099	0.00091	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-80	ND		0.0099	0.00090	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-81	ND		0.0099	0.00093	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-82	0.026		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-83	0.12	C	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-84	0.052		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-85	0.036	C	0.030	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-86	0.12	C	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-87	0.12	C86	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-88	0.032	C	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-89	ND		0.0099	0.00045	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-90	0.22	C	0.030	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-91	0.032	C88	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-92	0.032		0.0099	0.00039	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-93	0.0059	J C	0.020	0.00040	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-94	ND		0.0099	0.00045	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-95	0.18		0.0099	0.00043	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-96	0.0019	J q	0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-97	0.12	C86	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-98	0.0062	J C	0.020	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S078

Lab Sample ID: 580-77797-9

Date Collected: 05/12/18 15:50

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 60.4

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.12	C83	0.020	0.00042	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-100	0.0059	J C93	0.020	0.00040	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-101	0.22	C90	0.030	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-102	0.0062	J C98	0.020	0.00038	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-103	0.0043	J	0.0099	0.00040	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-104	ND		0.0099	0.00030	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-105	0.062		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-106	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-107	0.016		0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-108	0.0068	J C	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-109	0.12	C86	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-110	0.25	C	0.020	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-111	ND		0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-112	ND		0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-113	0.22	C90	0.030	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-114	0.0034	J	0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-115	0.25	C110	0.020	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-116	0.036	C85	0.030	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-117	0.036	C85	0.030	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-118	0.17		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-119	0.12	C86	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-120	ND		0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-121	ND		0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-122	0.0026	J	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-123	0.0037	J	0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-124	0.0068	J C108	0.020	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-125	0.12	C86	0.059	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-126	ND		0.0099	0.0014	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-127	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-128	0.054	C	0.020	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-129	0.37	C	0.040	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-130	0.024		0.0099	0.0042	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-131	ND		0.0099	0.0043	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-132	0.12		0.0099	0.0041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-133	ND		0.0099	0.0039	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-134	0.019	J q C	0.020	0.0041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-135	0.11	C	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-136	0.031	q	0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-137	0.013	q	0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-138	0.37	C129	0.040	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-139	ND	C	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-140	ND	C139	0.020	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-141	0.067		0.0099	0.0037	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-142	ND		0.0099	0.0039	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-143	0.019	J q C134	0.020	0.0041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-144	0.010	q	0.0099	0.00044	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-145	ND		0.0099	0.00033	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-146	0.061		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-147	0.34	C	0.020	0.0040	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S078

Lab Sample ID: 580-77797-9

Date Collected: 05/12/18 15:50

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 60.4

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0099	0.00046	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-149	0.34	C147	0.020	0.0040	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-150	ND		0.0099	0.00032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-151	0.11	C135	0.020	0.00048	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-152	ND		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-153	0.32	C	0.020	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-154	0.0064	J q	0.0099	0.00037	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-155	ND		0.0099	0.00032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-156	0.032	C	0.020	0.0036	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-157	0.032	C156	0.020	0.0036	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-158	0.034		0.0099	0.0025	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-159	ND		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-160	0.37	C129	0.040	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-161	ND		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-162	ND		0.0099	0.0026	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-163	0.37	C129	0.040	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-164	0.025		0.0099	0.0028	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-165	ND		0.0099	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-166	0.054	C128	0.020	0.0030	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-167	0.012		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-168	0.32	C153	0.020	0.0027	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-169	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-170	0.076		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-171	0.023	C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-172	0.014		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-173	0.023	C171	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-174	0.083		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-175	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-176	0.013		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-177	0.047		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-178	0.019	q	0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-179	0.041		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-180	0.15	C	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-181	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-182	0.0017	J q	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-183	0.056	C	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-184	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-185	0.056	C183	0.020	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-186	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-187	0.12		0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-188	ND		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-189	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-190	0.011	q	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-191	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-192	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-193	0.15	C180	0.020	0.0013	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-194	0.033		0.0099	0.0038	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-195	0.018		0.0099	0.0041	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-196	0.016		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S078

Lab Sample ID: 580-77797-9

Date Collected: 05/12/18 15:50

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 60.4

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	ND		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-198	0.041	C	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-199	0.041	C198	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-200	0.0033	J q	0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-201	0.0050	J q	0.0099	0.00079	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-202	0.010		0.0099	0.00088	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-203	0.022		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-204	ND		0.0099	0.00087	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-205	ND		0.0099	0.0032	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-206	0.032		0.0099	0.0034	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-207	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-208	0.0098	J	0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
PCB-209	0.033		0.0099	0.0018	ng/g	☼	06/18/18 06:31	06/29/18 10:12	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	53		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-3L	61		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-4L	68		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-15L	80		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-19L	81		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-37L	84		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-54L	65		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-77L	79		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-81L	80		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-104L	80		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-105L	87		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-114L	89		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-118L	88		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-123L	88		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-126L	80		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-155L	80		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-156L	71	C	30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-157L	71	C156	30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-167L	79		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-169L	70		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-170L	78		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-188L	98		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-189L	81		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-202L	102		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-205L	70		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-206L	72		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-208L	84		30 - 140				06/18/18 06:31	06/29/18 10:12	1
PCB-209L	72		30 - 140				06/18/18 06:31	06/29/18 10:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	90		40 - 125				06/18/18 06:31	06/29/18 10:12	1
PCB-111L	87		40 - 125				06/18/18 06:31	06/29/18 10:12	1
PCB-178L	103		40 - 125				06/18/18 06:31	06/29/18 10:12	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S135

Lab Sample ID: 580-77797-10

Date Collected: 05/14/18 10:15

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0046	J q	0.0099	0.00036	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-2	0.0019	J q	0.0099	0.00038	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-3	0.0029	J q	0.0099	0.00038	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-4	0.012	J q	0.020	0.0028	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-5	ND		0.0099	0.0020	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-6	0.0024	J q	0.0099	0.0017	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-7	ND		0.0099	0.0018	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-8	0.024		0.020	0.0016	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-9	ND		0.0099	0.0018	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-10	ND		0.0099	0.0019	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-11	0.014	J q	0.020	0.0017	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-12	0.0026	J q C	0.020	0.0018	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-13	0.0026	J q C12	0.020	0.0018	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-14	ND		0.0099	0.0015	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-15	0.018		0.0099	0.0017	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-16	0.021		0.0099	0.00033	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-17	0.020		0.0099	0.00030	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-18	0.041	q C	0.020	0.00026	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-19	0.0086	J	0.0099	0.00037	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-20	0.065	C	0.020	0.00051	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-21	0.022	C	0.020	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-22	0.020		0.0099	0.00053	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-23	ND		0.0099	0.00052	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-24	ND		0.0099	0.00025	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-25	0.0033	J q	0.0099	0.00047	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-26	0.0080	J C	0.020	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-27	0.0038	J	0.0099	0.00022	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-28	0.065	C20	0.020	0.00051	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-29	0.0080	J C26	0.020	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-30	0.041	q C18	0.020	0.00026	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-31	0.049		0.020	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-32	0.019		0.0099	0.00021	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-33	0.022	C21	0.020	0.00050	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-34	ND		0.0099	0.00054	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-35	0.0012	J	0.0099	0.00053	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-36	ND		0.0099	0.00051	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-37	0.022		0.0099	0.00052	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-38	ND		0.0099	0.00055	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-39	ND		0.0099	0.00049	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-40	0.063	C	0.030	0.0011	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-41	0.063	C40	0.030	0.0011	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-42	0.031		0.0099	0.0011	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-43	0.0068	J q C	0.020	0.0010	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-44	0.11	C	0.030	0.00098	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-45	0.025	q C	0.020	0.0012	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-46	0.010		0.0099	0.0014	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-47	0.11	C44	0.030	0.00098	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-48	0.017		0.0099	0.0011	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1
PCB-49	0.061	C	0.020	0.00090	ng/g	☆	06/18/18 06:31	06/28/18 19:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S135

Lab Sample ID: 580-77797-10

Date Collected: 05/14/18 10:15

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.019	J C	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-51	0.025	q C45	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-52	0.13		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-53	0.019	J C50	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-54	ND		0.0099	0.000072	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-55	ND		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-56	0.048		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-57	ND		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-58	ND		0.0099	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-59	0.012	J C	0.030	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-60	0.022		0.0099	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-61	0.13	C	0.040	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-62	0.012	J C59	0.030	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-63	0.0031	J	0.0099	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-64	0.048		0.0099	0.00074	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-65	0.11	C44	0.030	0.00098	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-66	0.096		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-67	ND		0.0099	0.00071	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-68	ND		0.0099	0.00072	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-69	0.061	C49	0.020	0.00090	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-70	0.13	C61	0.040	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-71	0.063	C40	0.030	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-72	ND		0.0099	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-73	0.0068	J q C43	0.020	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-74	0.13	C61	0.040	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-75	0.012	J C59	0.030	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-76	0.13	C61	0.040	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-77	0.011	q	0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-78	ND		0.0099	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-79	ND		0.0099	0.00072	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-80	ND		0.0099	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-81	ND		0.0099	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-82	0.029		0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-83	0.11	C	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-84	0.048	q	0.0099	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-85	0.042	C	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-86	0.13	C	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-87	0.13	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-88	0.036	C	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-89	ND		0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-90	0.27	C	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-91	0.036	C88	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-92	0.042		0.0099	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-93	0.0071	J C	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-94	ND		0.0099	0.00035	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-95	0.25		0.0099	0.00034	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-96	ND		0.0099	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-97	0.13	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-98	0.0063	J q C	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S135

Lab Sample ID: 580-77797-10

Date Collected: 05/14/18 10:15

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.11	C83	0.020	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-100	0.0071	J C93	0.020	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-101	0.27	C90	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-102	0.0063	J q C98	0.020	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-103	0.0025	J q	0.0099	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-104	ND		0.0099	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-105	0.063		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-106	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-107	0.011		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-108	0.0053	J q C	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-109	0.13	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-110	0.30	C	0.020	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-111	ND		0.0099	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-112	ND		0.0099	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-113	0.27	C90	0.030	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-114	ND		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-115	0.30	C110	0.020	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-116	0.042	C85	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-117	0.042	C85	0.030	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-118	0.13		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-119	0.13	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-120	ND		0.0099	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-121	ND		0.0099	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-122	ND		0.0099	0.0013	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-123	0.0037	J	0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-124	0.0053	J q C108	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-125	0.13	C86	0.060	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-126	ND		0.0099	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-127	ND		0.0099	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-128	0.078	C	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-129	0.90	C	0.040	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-130	0.036		0.0099	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-131	ND		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-132	0.25		0.0099	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-133	0.0095	J	0.0099	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-134	0.034	C	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-135	0.28	C	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-136	0.090		0.0099	0.00030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-137	0.011	q	0.0099	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-138	0.90	C129	0.040	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-139	ND	C	0.020	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-140	ND	C139	0.020	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-141	0.21		0.0099	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-142	ND		0.0099	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-143	0.034	C134	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-144	0.037		0.0099	0.00037	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-145	ND		0.0099	0.00028	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-146	0.12		0.0099	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-147	0.81	C	0.020	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S135

Lab Sample ID: 580-77797-10

Date Collected: 05/14/18 10:15

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	ND		0.0099	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-149	0.81	C147	0.020	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-150	0.00076	J	0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-151	0.28	C135	0.020	0.00041	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-152	ND		0.0099	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-153	0.81	C	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-154	0.0054	J q	0.0099	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-155	ND		0.0099	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-156	0.063	C	0.020	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-157	0.063	C156	0.020	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-158	0.081		0.0099	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-159	0.012		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-160	0.90	C129	0.040	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-161	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-162	ND		0.0099	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-163	0.90	C129	0.040	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-164	0.069		0.0099	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-165	ND		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-166	0.078	C128	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-167	0.023	q	0.0099	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-168	0.81	C153	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-169	ND		0.0099	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-170	0.47		0.0099	0.00088	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-171	0.12	C	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-172	0.066		0.0099	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-173	0.12	C171	0.020	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-174	0.37		0.0099	0.00073	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-175	0.014	q	0.0099	0.00071	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-176	0.042		0.0099	0.00054	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-177	0.22		0.0099	0.00075	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-178	0.070		0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-179	0.14		0.0099	0.00057	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-180	0.91	C	0.020	0.00059	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-181	ND		0.0099	0.00071	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-182	ND		0.0099	0.00068	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-183	0.27	C	0.020	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-184	ND		0.0099	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-185	0.27	C183	0.020	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-186	ND		0.0099	0.00056	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-187	0.39		0.0099	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-188	ND		0.0099	0.00048	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-189	0.019		0.0099	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-190	0.089		0.0099	0.00051	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-191	0.013	q	0.0099	0.00053	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-192	ND		0.0099	0.00060	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-193	0.91	C180	0.020	0.00059	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-194	0.23		0.0099	0.0035	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-195	0.10		0.0099	0.0039	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-196	0.085		0.0099	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S135

Lab Sample ID: 580-77797-10

Date Collected: 05/14/18 10:15

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 67.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-197	0.0049	J q	0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-198	0.17	C	0.020	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-199	0.17	C198	0.020	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-200	0.020		0.0099	0.00068	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-201	0.018		0.0099	0.00070	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-202	0.023		0.0099	0.00078	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-203	0.11		0.0099	0.00091	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-204	ND		0.0099	0.00077	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-205	ND		0.0099	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-206	0.15		0.0099	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-207	0.010		0.0099	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-208	0.021		0.0099	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1
PCB-209	0.27		0.0099	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 19:50	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	55		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-3L	61		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-4L	67		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-15L	84		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-19L	77		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-37L	89		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-54L	64		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-77L	86		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-81L	83		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-104L	78		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-105L	85		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-114L	90		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-118L	87		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-123L	86		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-126L	84		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-155L	80		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-156L	78	C	30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-157L	78	C156	30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-167L	84		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-169L	78		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-170L	82		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-188L	97		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-189L	86		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-202L	100		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-205L	71		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-206L	72		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-208L	87		30 - 140	06/18/18 06:31	06/28/18 19:50	1
PCB-209L	71		30 - 140	06/18/18 06:31	06/28/18 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	93		40 - 125	06/18/18 06:31	06/28/18 19:50	1
PCB-111L	91		40 - 125	06/18/18 06:31	06/28/18 19:50	1
PCB-178L	101		40 - 125	06/18/18 06:31	06/28/18 19:50	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Date Collected: 05/14/18 15:45

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-11

Matrix: Solid

Percent Solids: 59.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0085	J q	0.0098	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-2	0.0048	J	0.0098	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-3	0.0071	J	0.0098	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-4	0.030		0.020	0.0040	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-5	ND		0.0098	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-6	0.024	q	0.0098	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-7	0.0035	J q	0.0098	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-8	0.096		0.020	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-9	0.0053	J q	0.0098	0.0027	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-10	ND		0.0098	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-11	0.017	J	0.020	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-12	0.0067	J q C	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-13	0.0067	J q C12	0.020	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-14	ND		0.0098	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-15	0.045		0.0098	0.0025	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-16	0.11		0.0098	0.00033	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-17	0.18		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-18	0.33	C	0.020	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-19	0.022	q	0.0098	0.00036	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-20	0.51	C	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-21	0.26	C	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-22	0.12		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-23	ND		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-24	0.0044	J	0.0098	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-25	0.035		0.0098	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-26	0.073	C	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-27	0.020		0.0098	0.00021	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-28	0.51	C20	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-29	0.073	C26	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-30	0.33	C18	0.020	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-31	0.40		0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-32	0.10		0.0098	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-33	0.26	C21	0.020	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-34	0.0061	J	0.0098	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-35	0.0038	J q	0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-36	ND		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-37	0.11		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-38	ND		0.0098	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-39	0.0055	J	0.0098	0.0010	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-40	0.32	C	0.029	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-41	0.32	C40	0.029	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-42	0.17		0.0098	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-43	0.022	C	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-44	0.65	C	0.029	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-45	0.096	C	0.020	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-46	0.035		0.0098	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-47	0.65	C44	0.029	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-48	0.13		0.0098	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-49	0.47	C	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Lab Sample ID: 580-77797-11

Date Collected: 05/14/18 15:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 59.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-50	0.079	C	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-51	0.096	C45	0.020	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-52	0.81		0.0098	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-53	0.079	C50	0.020	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-54	ND		0.0098	0.000032	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-55	ND		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-56	0.26		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-57	ND		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-58	0.0045	J q	0.0098	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-59	0.053	C	0.029	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-60	0.049		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-61	1.1	C	0.039	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-62	0.053	C59	0.029	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-63	0.029		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-64	0.26		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-65	0.65	C44	0.029	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-66	0.69		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-67	0.014		0.0098	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-68	0.0080	J	0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-69	0.47	C49	0.020	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-70	1.1	C61	0.039	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-71	0.32	C40	0.029	0.0022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-72	0.017		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-73	0.022	C43	0.020	0.0021	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-74	1.1	C61	0.039	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-75	0.053	C59	0.029	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-76	1.1	C61	0.039	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-77	0.050		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-78	ND		0.0098	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-79	0.0061	J	0.0098	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-80	ND		0.0098	0.0014	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-81	ND		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-82	0.093	q	0.0098	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-83	0.65	C	0.020	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-84	0.25		0.0098	0.00027	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-85	0.15	C	0.029	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-86	0.54	C	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-87	0.54	C86	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-88	0.16	C	0.020	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-89	0.012		0.0098	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-90	1.0	C	0.029	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-91	0.16	C88	0.020	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-92	0.20		0.0098	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-93	0.051	C	0.020	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-94	ND		0.0098	0.00026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-95	0.87		0.0098	0.00025	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-96	ND		0.0098	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-97	0.54	C86	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-98	0.035	C	0.020	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Lab Sample ID: 580-77797-11

Date Collected: 05/14/18 15:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 59.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-99	0.65	C83	0.020	0.00024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-100	0.051	C93	0.020	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-101	1.0	C90	0.029	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-102	0.035	C98	0.020	0.00022	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-103	0.022		0.0098	0.00023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-104	ND		0.0098	0.00017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-105	0.16		0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-106	ND		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-107	0.081		0.0098	0.0017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-108	ND	C	0.020	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-109	0.54	C86	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-110	1.0	C	0.020	0.00017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-111	ND		0.0098	0.00016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-112	ND		0.0098	0.00017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-113	1.0	C90	0.029	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-114	0.0097	J q	0.0098	0.0015	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-115	1.0	C110	0.020	0.00017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-116	0.15	C85	0.029	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-117	0.15	C85	0.029	0.00019	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-118	0.64		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-119	0.54	C86	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-120	0.0071	J	0.0098	0.00016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-121	ND		0.0098	0.00017	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-122	0.0056	J q	0.0098	0.0018	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-123	0.012		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-124	ND	C108	0.020	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-125	0.54	C86	0.059	0.00020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-126	0.0025	J	0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-127	ND		0.0098	0.0016	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-128	0.13	C	0.020	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-129	1.2	C	0.039	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-130	0.074		0.0098	0.0050	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-131	ND		0.0098	0.0052	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-132	0.38		0.0098	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-133	0.023		0.0098	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-134	0.060	C	0.020	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-135	0.46	C	0.020	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-136	0.16		0.0098	0.00032	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-137	0.028		0.0098	0.0043	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-138	1.2	C129	0.039	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-139	0.016	J C	0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-140	0.016	J C139	0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-141	0.20		0.0098	0.0044	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-142	ND		0.0098	0.0047	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-143	0.060	C134	0.020	0.0049	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-144	0.043		0.0098	0.00040	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-145	ND		0.0098	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-146	0.25		0.0098	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-147	1.2	C	0.020	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Lab Sample ID: 580-77797-11

Date Collected: 05/14/18 15:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 59.9

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-148	0.0044	J q	0.0098	0.00043	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-149	1.2	C147	0.020	0.0048	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-150	0.0036	J q	0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-151	0.46	C135	0.020	0.00045	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-152	ND		0.0098	0.00031	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-153	1.1	C	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-154	0.027		0.0098	0.00035	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-155	ND		0.0098	0.00029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-156	0.092	C	0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-157	0.092	C156	0.020	0.0042	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-158	0.085		0.0098	0.0030	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-159	0.012		0.0098	0.0032	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-160	1.2	C129	0.039	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-161	ND		0.0098	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-162	ND		0.0098	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-163	1.2	C129	0.039	0.0038	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-164	0.079		0.0098	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-165	ND		0.0098	0.0036	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-166	0.13	C128	0.020	0.0037	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-167	0.031		0.0098	0.0024	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-168	1.1	C153	0.020	0.0033	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-169	ND		0.0098	0.0023	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-170	0.36		0.0098	0.00094	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-171	0.12	C	0.020	0.00091	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-172	0.061		0.0098	0.00090	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-173	0.12	C171	0.020	0.00091	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-174	0.41		0.0098	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-175	0.013	q	0.0098	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-176	0.053		0.0098	0.00062	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-177	0.24		0.0098	0.00087	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-178	0.091		0.0098	0.00089	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-179	0.19		0.0098	0.00066	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-180	0.84	C	0.020	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-181	ND		0.0098	0.00082	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-182	ND		0.0098	0.00079	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-183	0.28	C	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-184	ND		0.0098	0.00067	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-185	0.28	C183	0.020	0.00080	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-186	ND		0.0098	0.00065	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-187	0.51		0.0098	0.00076	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-188	ND		0.0098	0.00058	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-189	0.011	q	0.0098	0.0019	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-190	0.066		0.0098	0.00059	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-191	0.015		0.0098	0.00062	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-192	ND		0.0098	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-193	0.84	C180	0.020	0.00069	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-194	0.21		0.0098	0.0031	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-195	0.092		0.0098	0.0034	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-196	0.10		0.0098	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1

TestAmerica Seattle

Client Sample Results

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Lab Sample ID: 580-77797-11

Date Collected: 05/14/18 15:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 59.9

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	0.0098	0.00093	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-198	0.23	C	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-199	0.23	C198	0.020	0.0012	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-200	0.025		0.0098	0.00083	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-201	0.027		0.0098	0.00085	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-202	0.045		0.0098	0.00095	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-203	0.13		0.0098	0.0011	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-204	ND		0.0098	0.00093	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-205	0.011		0.0098	0.0026	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-206	0.11		0.0098	0.0029	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-207	0.013	q	0.0098	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-208	0.030		0.0098	0.0020	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1
PCB-209	0.14		0.0098	0.0028	ng/g	☼	06/18/18 06:31	06/28/18 20:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	56		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-3L	64		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-4L	69		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-15L	79		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-19L	87		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-37L	91		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-54L	46		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-77L	89		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-81L	87		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-104L	77		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-105L	88		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-114L	87		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-118L	85		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-123L	86		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-126L	95		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-155L	82		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-156L	85	C	30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-157L	85	C156	30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-167L	86		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-169L	88		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-170L	83		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-188L	89		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-189L	84		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-202L	94		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-205L	72		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-206L	76		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-208L	82		30 - 140	06/18/18 06:31	06/28/18 20:51	1
PCB-209L	72		30 - 140	06/18/18 06:31	06/28/18 20:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	93		40 - 125	06/18/18 06:31	06/28/18 20:51	1
PCB-111L	92		40 - 125	06/18/18 06:31	06/28/18 20:51	1
PCB-178L	92		40 - 125	06/18/18 06:31	06/28/18 20:51	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.010	0.00024	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-2	ND		0.010	0.00031	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-3	ND		0.010	0.00041	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-4	ND		0.020	0.010	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-5	ND		0.010	0.010	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-6	ND		0.010	0.0088	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-7	ND		0.010	0.0090	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-8	ND		0.020	0.0082	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-9	ND		0.010	0.0093	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-10	ND		0.010	0.0099	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-11	ND		0.020	0.0086	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-12	ND	C	0.020	0.0089	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-13	ND	C12	0.020	0.0089	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-14	ND		0.010	0.0076	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-15	ND	G	0.011	0.011	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-16	ND		0.010	0.0013	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-17	ND		0.010	0.0011	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-18	ND	C	0.020	0.00099	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-19	ND		0.010	0.0014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-20	ND	C	0.020	0.00076	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-21	ND	C	0.020	0.00074	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-22	ND		0.010	0.00078	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-23	ND		0.010	0.00077	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-24	ND		0.010	0.00095	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-25	ND		0.010	0.00070	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-26	ND	C	0.020	0.00075	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-27	ND		0.010	0.00082	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-28	ND	C20	0.020	0.00076	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-29	ND	C26	0.020	0.00075	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-30	ND	C18	0.020	0.00099	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-31	ND		0.020	0.00074	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-32	ND		0.010	0.00079	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-33	ND	C21	0.020	0.00074	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-34	ND		0.010	0.00080	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-35	ND		0.010	0.00078	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-36	ND		0.010	0.00075	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-37	ND		0.010	0.00078	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-38	ND		0.010	0.00081	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-39	ND		0.010	0.00072	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-40	ND	C	0.030	0.00050	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-41	ND	C40	0.030	0.00050	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-42	ND		0.010	0.00050	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-43	ND	C	0.020	0.00046	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-44	ND	C	0.030	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-45	ND	C	0.020	0.00052	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-46	ND		0.010	0.00063	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-47	ND	C44	0.030	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-48	ND		0.010	0.00049	ng/g		06/18/18 06:31	06/26/18 17:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-49	ND	C	0.020	0.00040	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-50	ND	C	0.020	0.00048	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-51	ND	C45	0.020	0.00052	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-52	ND		0.010	0.00049	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-53	ND	C50	0.020	0.00048	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-54	ND		0.010	0.000083	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-55	ND		0.010	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-56	ND		0.010	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-57	ND		0.010	0.00037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-58	ND		0.010	0.00037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-59	ND	C	0.030	0.00035	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-60	ND		0.010	0.00037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-61	ND	C	0.040	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-62	ND	C59	0.030	0.00035	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-63	ND		0.010	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-64	ND		0.010	0.00033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-65	ND	C44	0.030	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-66	ND		0.010	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-67	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-68	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-69	ND	C49	0.020	0.00040	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-70	ND	C61	0.040	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-71	ND	C40	0.030	0.00050	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-72	ND		0.010	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-73	ND	C43	0.020	0.00046	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-74	ND	C61	0.040	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-75	ND	C59	0.030	0.00035	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-76	ND	C61	0.040	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-77	ND		0.010	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-78	ND		0.010	0.00037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-79	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-80	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-81	ND		0.010	0.00033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-82	ND		0.010	0.000075	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-83	ND	C	0.020	0.000068	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-84	ND		0.010	0.000076	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-85	ND	C	0.030	0.000055	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-86	ND	C	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-87	ND	C86	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-88	ND	C	0.020	0.000068	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-89	ND		0.010	0.000073	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-90	ND	C	0.030	0.000057	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-91	ND	C88	0.020	0.000068	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-92	ND		0.010	0.000064	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-93	ND	C	0.020	0.000065	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-94	ND		0.010	0.000073	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-95	ND		0.010	0.000071	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-96	ND		0.010	0.000055	ng/g		06/18/18 06:31	06/26/18 17:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-97	ND	C86	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-98	ND	C	0.020	0.000063	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-99	ND	C83	0.020	0.000068	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-100	ND	C93	0.020	0.000065	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-101	ND	C90	0.030	0.000057	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-102	ND	C98	0.020	0.000063	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-103	ND		0.010	0.000065	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-104	ND		0.010	0.000049	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-105	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-106	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-107	ND		0.010	0.000015	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-108	ND	C	0.020	0.000015	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-109	ND	C86	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-110	ND	C	0.020	0.000047	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-111	ND		0.010	0.000046	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-112	ND		0.010	0.000048	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-113	ND	C90	0.030	0.000057	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-114	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-115	ND	C110	0.020	0.000047	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-116	ND	C85	0.030	0.000055	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-117	ND	C85	0.030	0.000055	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-118	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-119	ND	C86	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-120	ND		0.010	0.000046	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-121	ND		0.010	0.000048	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-122	ND		0.010	0.000017	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-123	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-124	ND	C108	0.020	0.000015	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-125	ND	C86	0.060	0.000056	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-126	ND		0.010	0.000015	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-127	ND		0.010	0.000014	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-128	ND	C	0.020	0.000027	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-129	ND	C	0.040	0.000028	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-130	ND		0.010	0.000037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-131	ND		0.010	0.000039	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-132	ND		0.010	0.000037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-133	ND		0.010	0.000035	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-134	ND	C	0.020	0.000037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-135	ND	C	0.020	0.000067	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-136	ND		0.010	0.000048	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-137	ND		0.010	0.000032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-138	ND	C129	0.040	0.000028	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-139	ND	C	0.020	0.000032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-140	ND	C139	0.020	0.000032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-141	ND		0.010	0.000033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-142	ND		0.010	0.000035	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-143	ND	C134	0.020	0.000037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-144	ND		0.010	0.000061	ng/g		06/18/18 06:31	06/26/18 17:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-145	ND		0.010	0.000046	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-146	ND		0.010	0.00031	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-147	ND	C	0.020	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-148	ND		0.010	0.000065	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-149	ND	C147	0.020	0.00036	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-150	ND		0.010	0.000044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-151	ND	C135	0.020	0.000067	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-152	ND		0.010	0.000047	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-153	ND	C	0.020	0.00025	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-154	ND		0.010	0.000052	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-155	ND		0.010	0.000044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-156	ND	C	0.020	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-157	ND	C156	0.020	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-158	ND		0.010	0.00022	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-159	ND		0.010	0.00024	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-160	ND	C129	0.040	0.00028	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-161	ND		0.010	0.00023	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-162	ND		0.010	0.00023	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-163	ND	C129	0.040	0.00028	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-164	ND		0.010	0.00025	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-165	ND		0.010	0.00027	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-166	ND	C128	0.020	0.00027	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-167	ND		0.010	0.00018	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-168	ND	C153	0.020	0.00025	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-169	ND		0.010	0.00017	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-170	ND		0.010	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-171	ND	C	0.020	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-172	ND		0.010	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-173	ND	C171	0.020	0.00044	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-174	ND		0.010	0.00041	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-175	ND		0.010	0.00040	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-176	ND		0.010	0.00030	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-177	ND		0.010	0.00042	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-178	ND		0.010	0.00043	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-179	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-180	ND	C	0.020	0.00033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-181	ND		0.010	0.00040	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-182	ND		0.010	0.00038	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-183	ND	C	0.020	0.00039	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-184	ND		0.010	0.00033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-185	ND	C183	0.020	0.00039	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-186	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-187	ND		0.010	0.00037	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-188	ND		0.010	0.00029	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-189	ND		0.010	0.00022	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-190	ND		0.010	0.00029	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-191	ND		0.010	0.00030	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-192	ND		0.010	0.00034	ng/g		06/18/18 06:31	06/26/18 17:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-193	ND	C180	0.020	0.00033	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-194	ND		0.010	0.00029	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-195	ND		0.010	0.00032	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-196	ND		0.010	0.000092	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-197	ND		0.010	0.000070	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-198	ND	C	0.020	0.000093	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-199	ND	C198	0.020	0.000093	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-200	ND		0.010	0.000063	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-201	ND		0.010	0.000064	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-202	ND		0.010	0.000072	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-203	ND		0.010	0.000083	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-204	ND		0.010	0.000070	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-205	ND		0.010	0.00025	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-206	ND		0.010	0.00088	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-207	ND		0.010	0.00064	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-208	ND		0.010	0.00067	ng/g		06/18/18 06:31	06/26/18 17:36	1
PCB-209	ND		0.010	0.00028	ng/g		06/18/18 06:31	06/26/18 17:36	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	101		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-3L	89		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-4L	83		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-15L	73		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-19L	88		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-37L	74		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-54L	102		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-77L	77		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-81L	77		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-104L	89		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-105L	82		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-114L	82		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-118L	80		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-123L	81		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-126L	80		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-155L	92		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-156L	84	C	30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-157L	84	C156	30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-167L	84		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-169L	96		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-170L	80		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-188L	81		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-189L	83		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-202L	89		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-205L	76		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-206L	73		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-208L	69		30 - 140	06/18/18 06:31	06/26/18 17:36	1
PCB-209L	68		30 - 140	06/18/18 06:31	06/26/18 17:36	1

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: MB 140-21265/16-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21265

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	86		40 - 125	06/18/18 06:31	06/26/18 17:36	1
PCB-111L	91		40 - 125	06/18/18 06:31	06/26/18 17:36	1
PCB-178L	83		40 - 125	06/18/18 06:31	06/26/18 17:36	1

Lab Sample ID: LCS 140-21265/17-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	0.500	0.460		ng/g		92	50 - 150
PCB-3	0.500	0.489		ng/g		98	50 - 150
PCB-4	0.500	0.521		ng/g		104	50 - 150
PCB-15	0.500	0.567	G	ng/g		113	50 - 150
PCB-19	0.500	0.653		ng/g		131	50 - 150
PCB-37	0.500	0.523		ng/g		105	50 - 150
PCB-54	0.500	0.498		ng/g		100	50 - 150
PCB-77	0.500	0.540	G	ng/g		108	50 - 150
PCB-81	0.500	0.523	G	ng/g		105	50 - 150
PCB-104	0.500	0.571		ng/g		114	50 - 150
PCB-105	0.500	0.528		ng/g		106	50 - 150
PCB-114	0.500	0.580		ng/g		116	50 - 150
PCB-118	0.500	0.534		ng/g		107	50 - 150
PCB-123	0.500	0.580		ng/g		116	50 - 150
PCB-126	0.500	0.587		ng/g		117	50 - 150
PCB-155	0.500	0.541		ng/g		108	50 - 150
PCB-156	1.00	1.14	C	ng/g		114	50 - 150
PCB-157	1.00	1.14	C156	ng/g		114	50 - 150
PCB-167	0.500	0.573		ng/g		115	50 - 150
PCB-169	0.500	0.515		ng/g		103	50 - 150
PCB-188	0.500	0.547		ng/g		109	50 - 150
PCB-189	0.500	0.556		ng/g		111	50 - 150
PCB-202	0.500	0.483		ng/g		97	50 - 150
PCB-205	0.500	0.614		ng/g		123	50 - 150
PCB-206	0.500	0.539		ng/g		108	50 - 150
PCB-208	0.500	0.545		ng/g		109	50 - 150
PCB-209	0.500	0.554		ng/g		111	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	106		30 - 140
PCB-3L	90		30 - 140
PCB-4L	86		30 - 140
PCB-15L	74		30 - 140
PCB-19L	84		30 - 140
PCB-37L	84		30 - 140
PCB-54L	100		30 - 140
PCB-77L	83		30 - 140
PCB-81L	80		30 - 140
PCB-104L	88		30 - 140

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: LCS 140-21265/17-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21265

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
PCB-105L	84		30 - 140
PCB-114L	82		30 - 140
PCB-118L	81		30 - 140
PCB-123L	81		30 - 140
PCB-126L	82		30 - 140
PCB-155L	96		30 - 140
PCB-156L	95	C	30 - 140
PCB-157L	95	C156	30 - 140
PCB-167L	95		30 - 140
PCB-169L	104		30 - 140
PCB-170L	88		30 - 140
PCB-188L	82		30 - 140
PCB-189L	85		30 - 140
PCB-202L	94		30 - 140
PCB-205L	78		30 - 140
PCB-206L	76		30 - 140
PCB-208L	72		30 - 140
PCB-209L	68		30 - 140

Surrogate	LCS		Limits
	%Recovery	Qualifier	
PCB-28L	87		40 - 125
PCB-111L	90		40 - 125
PCB-178L	81		40 - 125

Lab Sample ID: LCSD 140-21265/18-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
PCB-1	0.500	0.476		ng/g		95	50 - 150	4	50	
PCB-3	0.500	0.499		ng/g		100	50 - 150	2	50	
PCB-4	0.500	0.525		ng/g		105	50 - 150	1	50	
PCB-15	0.500	0.576		ng/g		115	50 - 150	1	50	
PCB-19	0.500	0.593		ng/g		119	50 - 150	10	50	
PCB-37	0.500	0.536		ng/g		107	50 - 150	2	50	
PCB-54	0.500	0.504		ng/g		101	50 - 150	1	50	
PCB-77	0.500	0.554	G	ng/g		111	50 - 150	3	50	
PCB-81	0.500	0.533	G	ng/g		107	50 - 150	2	50	
PCB-104	0.500	0.560		ng/g		112	50 - 150	2	50	
PCB-105	0.500	0.536		ng/g		107	50 - 150	2	50	
PCB-114	0.500	0.606		ng/g		121	50 - 150	4	50	
PCB-118	0.500	0.555		ng/g		111	50 - 150	4	50	
PCB-123	0.500	0.573		ng/g		115	50 - 150	1	50	
PCB-126	0.500	0.557		ng/g		111	50 - 150	5	50	
PCB-155	0.500	0.567		ng/g		113	50 - 150	5	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	0.575		ng/g		115	50 - 150	0	50	

TestAmerica Seattle

QC Sample Results

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

TestAmerica Job ID: 580-77797-3

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

Lab Sample ID: LCSD 140-21265/18-B

Matrix: Solid

Analysis Batch: 21522

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21265

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-169	0.500	0.494		ng/g		99	50 - 150	4	50
PCB-188	0.500	0.569		ng/g		114	50 - 150	4	50
PCB-189	0.500	0.540		ng/g		108	50 - 150	3	50
PCB-202	0.500	0.479		ng/g		96	50 - 150	1	50
PCB-205	0.500	0.612		ng/g		122	50 - 150	0	50
PCB-206	0.500	0.509		ng/g		102	50 - 150	6	50
PCB-208	0.500	0.547		ng/g		109	50 - 150	0	50
PCB-209	0.500	0.567		ng/g		113	50 - 150	2	50

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
PCB-1L	94		30 - 140
PCB-3L	86		30 - 140
PCB-4L	77		30 - 140
PCB-15L	68		30 - 140
PCB-19L	91		30 - 140
PCB-37L	74		30 - 140
PCB-54L	95		30 - 140
PCB-77L	75		30 - 140
PCB-81L	74		30 - 140
PCB-104L	86		30 - 140
PCB-105L	79		30 - 140
PCB-114L	78		30 - 140
PCB-118L	78		30 - 140
PCB-123L	77		30 - 140
PCB-126L	80		30 - 140
PCB-155L	89		30 - 140
PCB-156L	87	C	30 - 140
PCB-157L	87	C156	30 - 140
PCB-167L	86		30 - 140
PCB-169L	96		30 - 140
PCB-170L	80		30 - 140
PCB-188L	82		30 - 140
PCB-189L	82		30 - 140
PCB-202L	87		30 - 140
PCB-205L	72		30 - 140
PCB-206L	73		30 - 140
PCB-208L	68		30 - 140
PCB-209L	64		30 - 140

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
PCB-28L	88		40 - 125
PCB-111L	86		40 - 125
PCB-178L	87		40 - 125

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S204

Date Collected: 05/03/18 16:25

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-1

Matrix: Solid

Percent Solids: 67.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21595	06/28/18 13:41	JMN	TAL KNX
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21595	06/28/18 14:42	JMN	TAL KNX

Client Sample ID: PDI-SG-S147

Date Collected: 05/04/18 17:19

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-2

Matrix: Solid

Percent Solids: 55.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21622	06/29/18 09:10	PMP	TAL KNX

Client Sample ID: PDI-SG-S084

Date Collected: 05/08/18 13:40

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-3

Matrix: Solid

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21580	06/28/18 05:49	PMP	TAL KNX

Client Sample ID: PDI-SG-S090

Date Collected: 05/09/18 14:34

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-4

Matrix: Solid

Percent Solids: 73.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21580	06/28/18 06:50	PMP	TAL KNX

Client Sample ID: PDI-SG-S010

Date Collected: 05/09/18 17:30

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-5

Matrix: Solid

Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21580	06/28/18 07:52	PMP	TAL KNX

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S255

Date Collected: 05/11/18 12:40

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-6

Matrix: Solid

Percent Solids: 63.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21580	06/28/18 08:53	PMP	TAL KNX

Client Sample ID: PDI-SG-S097

Date Collected: 05/13/18 11:45

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-7

Matrix: Solid

Percent Solids: 61.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21622	06/29/18 07:07	PMP	TAL KNX

Client Sample ID: PDI-SG-S115

Date Collected: 05/12/18 12:21

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-8

Matrix: Solid

Percent Solids: 71.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21595	06/28/18 17:47	JMN	TAL KNX

Client Sample ID: PDI-SG-S078

Date Collected: 05/12/18 15:50

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-9

Matrix: Solid

Percent Solids: 60.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21622	06/29/18 10:12	PMP	TAL KNX

Client Sample ID: PDI-SG-S135

Date Collected: 05/14/18 10:15

Date Received: 05/30/18 09:10

Lab Sample ID: 580-77797-10

Matrix: Solid

Percent Solids: 67.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21595	06/28/18 19:50	JMN	TAL KNX

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-77797-3

Client Sample ID: PDI-SG-S157

Lab Sample ID: 580-77797-11

Date Collected: 05/14/18 15:45

Matrix: Solid

Date Received: 05/30/18 09:10

Percent Solids: 59.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	HRMS-Sox			21265	06/18/18 06:31	BRS	TAL KNX
Total/NA	Cleanup	Split			21329	06/19/18 18:41	SMM	TAL KNX
Total/NA	Analysis	1668A		1	21595	06/28/18 20:51	JMN	TAL KNX

Laboratory References:

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 580-77797-3

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	07-31-19
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: 580-77797-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-77797-1	PDI-SG-S204	Solid	05/03/18 16:25	05/30/18 09:10
580-77797-2	PDI-SG-S147	Solid	05/04/18 17:19	05/30/18 09:10
580-77797-3	PDI-SG-S084	Solid	05/08/18 13:40	05/30/18 09:10
580-77797-4	PDI-SG-S090	Solid	05/09/18 14:34	05/30/18 09:10
580-77797-5	PDI-SG-S010	Solid	05/09/18 17:30	05/30/18 09:10
580-77797-6	PDI-SG-S255	Solid	05/11/18 12:40	05/30/18 09:10
580-77797-7	PDI-SG-S097	Solid	05/13/18 11:45	05/30/18 09:10
580-77797-8	PDI-SG-S115	Solid	05/12/18 12:21	05/30/18 09:10
580-77797-9	PDI-SG-S078	Solid	05/12/18 15:50	05/30/18 09:10
580-77797-10	PDI-SG-S135	Solid	05/14/18 10:15	05/30/18 09:10
580-77797-11	PDI-SG-S157	Solid	05/14/18 15:45	05/30/18 09:10

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Loc: 580
77797

SURFACE SEDIMENT
CHAIN OF CUSTODY



580-7797 Chain of Custody

Test Location - Seattle 3755 8th Street East Tacoma, WA 98424-1317 Ph: 253-922-4310 Fax: 253-922-5047		Client Contact AECOM 1111 3rd Ave Suite 1600 Seattle, WA 98101 Phone: (206) 438-2200 Fax: (206) 438-2288 Project Name: Portland Harbor Fire Remedial Design Investigation and Baseline Sampling Portland, OR Project #: 60506335 Study: Surface Sediment - SMA		Project Contact: Amy Dahl / Chelsey Cook Tel: (206) 438-2261 / (206) 438-2010 Analysis Turnaround Time Calendar (C) or Work Days (W) ☐ 21 days ☐ Other _____		Site Contact: Jennifer Ray / Michael McCong Laboratory Contact: Elaine Walker Carrier: courier 5/25/2018 COC No: 3 _____ of _____ pages									
Sample Identification		Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Field: 20 C	PCB Congruency 1668A	PCDD/Fs 1613B	Grain size ASTM D7928/D6913	Total organic carbon, Total solids 9066			
PDI-SG-S204		5/3/2018	16:23	SS			3	X	H	H	H	H	Sample Specific Notes: Frozen 5/24/18 08:50		
PDI-SG-S147		5/4/2018	17:19	SS			3	X	H	H	H	H	Frozen 5/4/18 18:30		
PDI-SG-S084		5/8/2018	13:40	SS			5	X	H	H	H	H	Frozen 5/8/18 18:20		
PDI-SG-S090		5/9/2018	14:31	SS			5	X	H	H	H	H	Frozen 5/9/18 18:50		
PDI-SG-S010		5/9/2018	17:30	SS			5	X	H	H	H	H	Frozen 5/9/18 18:50		
PDI-SG-S255		5/11/2018	13:40	SS			5	X	H	H	H	H	Frozen 5/14/18 10:45		
PDI-SG-S097		5/13/2018	11:45	SS			5	X	H	H	H	H	Frozen 5/13/18 18:45		
PDI-SG-S115		5/12/2018	12:21	SS			5	X	H	H	H	H	Frozen 5/12/18 17:15		
PDI-SG-S078		5/12/2018	15:30	SS			5	X	H	H	H	H	Frozen 5/12/18 17:15		
PDI-SG-S155		5/14/2018	11:45	SS			5	X	H	H	H	H	Frozen 5/15/18 11:15		
PDI-SG-S135		5/14/2018	10:15	SS			5	X	H	H	H	H	Frozen 5/15/18 11:15		
PDI-SG-S157		5/14/2018	13:45	SS			5	X	H	H	H	H	Frozen 5/15/18 11:15		
Container Types: WMO-Wide Mouth Glass Jar, P-HDPE, PP-Polypropylene, AG-amber glass, G-glass, RC-Rain Column Preservatives: HCl = Hydrochloric Acid, H2PO4 = Phosphoric Acid, HNO3 = Nitric Acid Fraction: D = Dissolved, PFT = Particulate, T = Total (unfiltered)															
Special Instructions/QC Request events & Comments: Please hold in freezer pending approval of analyses marked H. Separate reports for each lab when analyzed															
Requisitioned by: Mick Mack 5/11/18		Company: AECOM		Date/Time: 5-25-18		Received by: [Signature]		Company: A.E.		Date/Time: 5/25/18/12:00		Company: TAROR		Date/Time: 5/25/18/12:00	
Requisitioned by: [Signature]		Company: TAROR		Date/Time: 5/25/18/12:00		Received by: [Signature]		Company: SEA TMA		Date/Time: 5/30/18 09:10		Company: SEA TMA		Date/Time: 5/30/18 09:10	

IR4 = 0.0 / 0.2 w/c.s.
IR7 = -0.1 / 0.1 w/c.s.

TestAmerica Seattle

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab) Company: TestAmerica Laboratories, Inc. Address: 5815 Middlebrook Pike, City: Knoxville State: TN, Zip: 37921 Phone: 865-291-3000(Tel) 865-584-4315(Fax) Email: Project Name: Portland Harbor Pre-Remedial Design Site:		Sampler: Walker, Elaine M Lab PVT: Walker, Elaine M E-Mail: elaine.walker@testamericainc.com Phone: Accreditations Required (See note):		Carrier Tracking No(s): 580-56128.1 State of Origin: Oregon Page: Page 1 of 2 Job #: 580-77797-3		COC No: 580-56128.1 Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA	
Due Date Requested: 6/26/2018 TAT Requested (days):		Analysis Requested		Preservation Codes:		580-77797 Chain of Custody	
Matrix (Water, Solid, Onwastoid, BT-Tissue, A-AU) Sample Type (C=Comp, G=Grab) Sample Time Sample Date Sample ID (Lab ID)		Field Filtered Sample (Yes or No) Screen 1668/Screen PCB P S 1668A/1668 P Sox (MOD) 209 PCBs plus Totals		Special Instructions/Note:		580-77797 Chain of Custody	
PDI-SG-S204 (580-77797-1) PDI-SG-S147 (580-77797-2) PDI-SG-S084 (580-77797-3) PDI-SG-S090 (580-77797-4) PDI-SG-S010 (580-77797-5) PDI-SG-S255 (580-77797-6) PDI-SG-S097 (580-77797-7) PDI-SG-S115 (580-77797-8) PDI-SG-S078 (580-77797-9)		Solid Solid Solid Solid Solid Solid Solid Solid Solid		16:25 Pacific 17:19 Pacific 13:40 Pacific 14:34 Pacific 17:30 Pacific 12:40 Pacific 11:45 Pacific 12:21 Pacific 15:50 Pacific		1 1 1 1 1 1 1 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, 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: Tom Plant Date/Time: 6/11/18							
Relinquished by:							
Relinquished by:							
Relinquished by:							
Custody Seals Intact: ☐ Yes ☐ No							
Custody Seal No.:							

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>SL68</u> Correction factor: <u>0.0</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)	Lot Number: _____
17. Were VOA samples received without headspace?			/	☐ Incorrect Preservative	Exp Date: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ Headspace (VOA only) ☐ Residual Chlorine	Analyst: _____
19. For 1613B water samples is pH<9?			/		Date: _____
20. For rad samples was sample activity info. Provided?			/	☐ If no, lab will adjust ☐ Project missing info	Time: _____
Project #: _____ PM Instructions: _____					

QA026R30.doc, 080916

Date: 6-12-18

Sample Receiving Associate: [Signature]

Client: AECOM

Job Number: 580-77797-3

Login Number: 77797

List Source: TestAmerica Seattle

List Number: 1

Creator: Gall, Brandon A

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter.	N/A	Received project as a subcontract.
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	No Name on COC
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Isotope Dilution Summary

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

TestAmerica Job ID: 580-77797-3

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)
580-77797-1	PDI-SG-S204	69	77	73	83	148 *	84	78 S	70
580-77797-1	PDI-SG-S204	67	72	71	82	142 *	87	71	74
580-77797-2	PDI-SG-S147	56	66	70	81	93	86	58	81
580-77797-3	PDI-SG-S084	64	68	69	82	75	90	60	89
580-77797-4	PDI-SG-S090	61	65	68	87	73	89	62	90
580-77797-5	PDI-SG-S010	57	62	66	85	81	92	59	88
580-77797-6	PDI-SG-S255	59	62	67	79	76	86	62	85
580-77797-7	PDI-SG-S097	53	61	68	79	91	84	66	76
580-77797-8	PDI-SG-S115	53	60	62	81	75	90	61	83
580-77797-9	PDI-SG-S078	53	61	68	80	81	84	65	79
580-77797-10	PDI-SG-S135	55	61	67	84	77	89	64	86
580-77797-11	PDI-SG-S157	56	64	69	79	87	91	46	89
LCS 140-21265/17-B	Lab Control Sample	106	90	86	74	84	84	100	83
LCSD 140-21265/18-B	Lab Control Sample Dup	94	86	77	68	91	74	95	75
MB 140-21265/16-B	Method Blank	101	89	83	73	88	74	102	77
		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)
580-77797-1	PDI-SG-S204	71	91	93	96	92	92	86	76
580-77797-1	PDI-SG-S204	73	94	94	96	90	93	86	77
580-77797-2	PDI-SG-S147	79	81	87	86	83	84	85	81
580-77797-3	PDI-SG-S084	88	71	88	89	87	88	84	75
580-77797-4	PDI-SG-S090	89	75	88	88	86	85	85	78
580-77797-5	PDI-SG-S010	89	79	91	93	90	89	86	82
580-77797-6	PDI-SG-S255	86	73	86	87	84	84	85	79
580-77797-7	PDI-SG-S097	75	81	84	84	83	84	83	79
580-77797-8	PDI-SG-S115	81	81	93	92	92	91	87	83
580-77797-9	PDI-SG-S078	80	80	87	89	88	88	80	80
580-77797-10	PDI-SG-S135	83	78	85	90	87	86	84	80
580-77797-11	PDI-SG-S157	87	77	88	87	85	86	95	82
LCS 140-21265/17-B	Lab Control Sample	80	88	84	82	81	81	82	96
LCSD 140-21265/18-B	Lab Control Sample Dup	74	86	79	78	78	77	80	89
MB 140-21265/16-B	Method Blank	77	89	82	82	80	81	80	92
		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)
580-77797-1	PDI-SG-S204	76 C	76 C156	88	87	87	97	96	94
580-77797-1	PDI-SG-S204	76 C	76 C156	85	88	87	96	88	93
580-77797-2	PDI-SG-S147	86 C	86 C156	90	94	85	88	81	96
580-77797-3	PDI-SG-S084	84 C	84 C156	84	87	86	91	88	90
580-77797-4	PDI-SG-S090	89 C	89 C156	89	96	90	91	91	93
580-77797-5	PDI-SG-S010	82 C	82 C156	85	80	82	100	92	102
580-77797-6	PDI-SG-S255	88 C	88 C156	89	93	85	85	85	93
580-77797-7	PDI-SG-S097	80 C	80 C156	86	90	81	83	79	92
580-77797-8	PDI-SG-S115	81 C	81 C156	84	80	83	103	90	100
580-77797-9	PDI-SG-S078	71 C	71 C156	79	70	78	98	81	102
580-77797-10	PDI-SG-S135	78 C	78 C156	84	78	82	97	86	100
580-77797-11	PDI-SG-S157	85 C	85 C156	86	88	83	89	84	94

TestAmerica Seattle

Isotope Dilution Summary

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

TestAmerica Job ID: 580-77797-3

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	PCB156L (30-140)	PCB157L (30-140)	PCB167L (30-140)	PCB169L (30-140)	PCB170L (30-140)	PCB188L (30-140)	PCB189L (30-140)	PCB202L (30-140)
LCS 140-21265/17-B	Lab Control Sample	95 C	95 C156	95	104	88	82	85	94
LCSD 140-21265/18-B	Lab Control Sample Dup	87 C	87 C156	86	96	80	82	82	87
MB 140-21265/16-B	Method Blank	84 C	84 C156	84	96	80	81	83	89

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)
580-77797-1	PDI-SG-S204	76	83	76	83
580-77797-1	PDI-SG-S204	73	77	69	77
580-77797-2	PDI-SG-S147	72	77	79	78
580-77797-3	PDI-SG-S084	75	78	80	79
580-77797-4	PDI-SG-S090	76	77	82	76
580-77797-5	PDI-SG-S010	72	76	92	70
580-77797-6	PDI-SG-S255	75	81	82	79
580-77797-7	PDI-SG-S097	71	79	78	81
580-77797-8	PDI-SG-S115	73	73	89	70
580-77797-9	PDI-SG-S078	70	72	84	72
580-77797-10	PDI-SG-S135	71	72	87	71
580-77797-11	PDI-SG-S157	72	76	82	72
LCS 140-21265/17-B	Lab Control Sample	78	76	72	68
LCSD 140-21265/18-B	Lab Control Sample Dup	72	73	68	64
MB 140-21265/16-B	Method Blank	76	73	69	68

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

TestAmerica Seattle

Isotope Dilution Summary

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-77797-3

PCB208L = PCB-208L

PCB209L = PCB-209L

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