

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-76388-5

Client Project/Site: Portland Harbor Pre-Remedial Design

For:

AECOM
1111 Third Ave
Suite 1600
Seattle, Washington 98101

Attn: Karen Mixon

M. Elaine Walker

Authorized for release by:
7/26/2018 12:48:32 PM

Elaine Walker, Project Manager II
(253)248-4972
elaine.walker@testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 580-76388-5

Job ID: 580-76388-5

Laboratory: TestAmerica Seattle

Narrative

Job Narrative 580-76388-5

Receipt

The samples were received on 4/6/2018 2:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.6° C, 2.7° C and 4.7° C.

This report contains results for Total Solids @ 70 degrees C only. All other data have been previously reported under separate covers.

General Chemistry

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

Definitions/Glossary

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

TestAmerica Job ID: 580-76388-5

Qualifiers

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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: 580-76388-5

Client Sample ID: PDI-SG-B049-BL1

Date Collected: 04/04/18 10:23

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-1

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	47	H	0.10	0.10	%	-		04/13/18 08:03	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B048-BL1

Date Collected: 04/04/18 12:32

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-2

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	86	H	0.10	0.10	%	—		04/13/18 08:04	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B047-BL1

Date Collected: 04/04/18 14:07

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-3

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	43	H	0.10	0.10	%	-		04/13/18 08:05	1

Client Sample Results

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B051-BL1

Date Collected: 04/04/18 15:08

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-4

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	42	H	0.10	0.10	%	-		04/13/18 08:06	1

Client Sample Results

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B050-BL1

Date Collected: 04/04/18 16:27

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-5

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	78	H	0.10	0.10	%	-		04/13/18 08:07	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B055-BL1

Date Collected: 04/04/18 17:56

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-6

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	64	H	0.10	0.10	%	-		04/13/18 08:08	1

Client Sample Results

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B052-BL1

Date Collected: 04/05/18 10:41

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-7

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	62	H	0.10	0.10	%	-		04/13/18 08:09	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B053-BL1

Date Collected: 04/05/18 11:47

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-8

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	75	H	0.10	0.10	%	-		04/13/18 08:10	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B057-BL1

Date Collected: 04/05/18 12:43

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-9

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	62	H	0.10	0.10	%	-		04/13/18 08:11	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B056-BL1

Lab Sample ID: 580-76388-10

Date Collected: 04/05/18 16:23

Matrix: Solid

Date Received: 04/06/18 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	48	H	0.10	0.10	%	-		04/13/18 08:12	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B058-BL1

Lab Sample ID: 580-76388-11

Date Collected: 04/05/18 15:20

Matrix: Solid

Date Received: 04/06/18 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	53	H	0.10	0.10	%	-		04/13/18 08:13	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B060-BL1

Lab Sample ID: 580-76388-12

Date Collected: 04/05/18 14:02

Matrix: Solid

Date Received: 04/06/18 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	64	H	0.10	0.10	%	-		04/13/18 08:14	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B060-BL1-D

Lab Sample ID: 580-76388-13

Date Collected: 04/05/18 14:02

Matrix: Solid

Date Received: 04/06/18 14:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	66	H	0.10	0.10	%	-		07/23/18 14:23	1

Client Sample Results

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B061-BL1

Date Collected: 04/05/18 17:17

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-14

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids @ 70°C	53	H	0.10	0.10	%	-		04/13/18 08:15	1

QC Sample Results

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

TestAmerica Job ID: 580-76388-5

Method: Moisture 70C - Percent Moisture, 70 C

Lab Sample ID: 580-76388-14 DU

Matrix: Solid

Analysis Batch: 278705

Client Sample ID: PDI-SG-B061-BL1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	53	H	53		%	-	0.4	20

Lab Sample ID: 580-76388-13 DU

Matrix: Solid

Analysis Batch: 279816

Client Sample ID: PDI-SG-B060-BL1-D

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	66	H	66		%	-	0.6	20

Lab Chronicle

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B049-BL1

Date Collected: 04/04/18 10:23

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:03	HJM	TAL SEA

Client Sample ID: PDI-SG-B048-BL1

Date Collected: 04/04/18 12:32

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:04	HJM	TAL SEA

Client Sample ID: PDI-SG-B047-BL1

Date Collected: 04/04/18 14:07

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:05	HJM	TAL SEA

Client Sample ID: PDI-SG-B051-BL1

Date Collected: 04/04/18 15:08

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:06	HJM	TAL SEA

Client Sample ID: PDI-SG-B050-BL1

Date Collected: 04/04/18 16:27

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:07	HJM	TAL SEA

Client Sample ID: PDI-SG-B055-BL1

Date Collected: 04/04/18 17:56

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:08	HJM	TAL SEA

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B052-BL1

Date Collected: 04/05/18 10:41

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:09	HJM	TAL SEA

Client Sample ID: PDI-SG-B053-BL1

Date Collected: 04/05/18 11:47

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:10	HJM	TAL SEA

Client Sample ID: PDI-SG-B057-BL1

Date Collected: 04/05/18 12:43

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:11	HJM	TAL SEA

Client Sample ID: PDI-SG-B056-BL1

Date Collected: 04/05/18 16:23

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:12	HJM	TAL SEA

Client Sample ID: PDI-SG-B058-BL1

Date Collected: 04/05/18 15:20

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:13	HJM	TAL SEA

Client Sample ID: PDI-SG-B060-BL1

Date Collected: 04/05/18 14:02

Date Received: 04/06/18 14:00

Lab Sample ID: 580-76388-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:14	HJM	TAL SEA

TestAmerica Seattle

Lab Chronicle

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

TestAmerica Job ID: 580-76388-5

Client Sample ID: PDI-SG-B060-BL1-D

Lab Sample ID: 580-76388-13

Date Collected: 04/05/18 14:02

Matrix: Solid

Date Received: 04/06/18 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	279816	07/23/18 14:23	HJM	TAL SEA

Client Sample ID: PDI-SG-B061-BL1

Lab Sample ID: 580-76388-14

Date Collected: 04/05/18 17:17

Matrix: Solid

Date Received: 04/06/18 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	278705	04/13/18 08:15	HJM	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: AECOM

TestAmerica Job ID: 580-76388-5

Project/Site: Portland Harbor Pre-Remedial Design

Laboratory: TestAmerica Seattle

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

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

Sample Summary

Client: AECOM

Project/Site: Portland Harbor Pre-Remedial Design

TestAmerica Job ID: 580-76388-5

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76388-1	PDI-SG-B049-BL1	Solid	04/04/18 10:23	04/06/18 14:00
580-76388-2	PDI-SG-B048-BL1	Solid	04/04/18 12:32	04/06/18 14:00
580-76388-3	PDI-SG-B047-BL1	Solid	04/04/18 14:07	04/06/18 14:00
580-76388-4	PDI-SG-B051-BL1	Solid	04/04/18 15:08	04/06/18 14:00
580-76388-5	PDI-SG-B050-BL1	Solid	04/04/18 16:27	04/06/18 14:00
580-76388-6	PDI-SG-B055-BL1	Solid	04/04/18 17:56	04/06/18 14:00
580-76388-7	PDI-SG-B052-BL1	Solid	04/05/18 10:41	04/06/18 14:00
580-76388-8	PDI-SG-B053-BL1	Solid	04/05/18 11:47	04/06/18 14:00
580-76388-9	PDI-SG-B057-BL1	Solid	04/05/18 12:43	04/06/18 14:00
580-76388-10	PDI-SG-B056-BL1	Solid	04/05/18 16:23	04/06/18 14:00
580-76388-11	PDI-SG-B058-BL1	Solid	04/05/18 15:20	04/06/18 14:00
580-76388-12	PDI-SG-B060-BL1	Solid	04/05/18 14:02	04/06/18 14:00
580-76388-13	PDI-SG-B060-BL1-D	Solid	04/05/18 14:02	04/06/18 14:00
580-76388-14	PDI-SG-B061-BL1	Solid	04/05/18 17:17	04/06/18 14:00

SURFACE SEDIMENT CHAIN OF CUSTODY													
TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 Ph: 253-922-2310 Fax: 253-922-5047		Client Contact AECOM 1111 3rd Ave Suite 1600 Seattle, WA 98101 Phone: (206) 438-2700 Fax: 1+(866) 495-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR Project #: 60566335 Study: Surface Sediment		Project Contact: Any Dahl / Chelsea Cook Tel: (206) 438-2261 / (206) 438-2010 Analysis Turnaround Time Calendar (C) or Work Days (W) ☒ 21 days ☐ Other _____		Site Contact: Jennifer Ray / Michaela McCoig Laboratory Contact: Elaine-Walker Date: 4/16/18 Carrier: _____		COC No: _____ 1 of 2 COC's					
Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Fraction	PCB Congeners 168A	PCDD/Fs 1613B	TPH Diesel, Metals, Mercury NWTPH-Dx, 6020B, 7471A	Grain Size ASTM D7928/D6913	Total organic carbon, Total solids 9060	Archive Archive -20 C	Sample Specific Notes:
PDI-SG-B049-BL1	4/4/2018	10:23	SS		DH	6	X	X	X	X	X		
PDI-SG-B048-BL1	4/4/2018	12:32	SS		DH	6	X	X	X	X	X		
PDI-SG-B047-BL1	4/4/2018	14:07	SS	MS/MSD	DH	9	X	X	X	X	X		
PDI-SG-B051-BL1	4/4/2018	15:08	SS		DH	6	X	X	X	X	X		
PDI-SG-B050-BL1	4/4/2018	16:27	SS		DH	6	X	X	X	X	X		
PDI-SG-B055-BL1	4/4/2018	17:56	SS		DH	6	X	X	X	X	X		
PDI-SG-B052-BL1	4/5/2018	10:41	SS		DH	6	X	X	X	X	X		
PDI-SG-B053-BL1	4/5/2018	11:47	SS		DH	6	X	X	X	X	X		
PDI-SG-B057-BL1	4/5/2018	12:43	SS		DH	6	X	X	X	X	X		
PDI-SG-B056-BL1	4/5/2018	16:23	SS		DH	6	X	X	X	X	X		
PDI-SG-B058-BL1	4/5/2018	15:20	SS		DH	6	X	X	X	X	X		
PDI-SG-B060-BL1	4/5/2018	14:02	SS		DH	6	X	X	X	X	X		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Column Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)													
Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☒ Archive For 12 Months													
Special Instructions/QC Requirements & Comments: Separate Reports for each lab													
Relinquished by: <i>Any Dahl</i> Date/Time: 4/16/18 1150 Company: AECOM		Received by: <i>Agustin M</i> Date/Time: 4/16/18 1150 Company: M.E.		Relinquished by: <i>Agustin M</i> Date/Time: 4/16/18 1400 Company: M.E.		Received by: <i>AS-POR</i> Date/Time: 4/16/18 1400 Company: AS-POR		Relinquished by: <i>AS-POR</i> Date/Time: 4/16/18 1400 Company: AS-POR		Received by: <i>AS-POR</i> Date/Time: 4/16/18 1400 Company: AS-POR		Relinquished by: <i>AS-POR</i> Date/Time: 4/16/18 1400 Company: AS-POR	

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 Ph: 253-922-2310 Fax: 253-922-5047		SURFACE SEDIMENT CHAIN OF CUSTODY										COC No: _____ 1 of 2 COCs									
Client Contact AECOM 1111 3rd Ave Suite 1600 Seattle, WA 98101 Phone: (206) 438-2700 Fax: 1-(866)-493-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR Project #: 60566335 Study: Surface Sediment		Project Contact: Amy Dahl / Chelsey Cook Tel: (206) 438-2261 / (206) 438-2010		Site Contact: Jennifer Ray / Michaela McCoog Laboratory Contact: Elaine-Walker		Date: 4/6/18															
		Analysis Turnaround Time Calendar (C) or Work Days (W) ☒ 21 days ☐ Other _____																			
Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCB Congeners 168A	PCDD/Fs 1613B	TPH Diesel Metals Mercury NWTPH-Dx 6020B, 7471A	Grain size ASTM D7928/D6913	Total organic carbon, Total solids 9060	Archive Archive-20 C	Sample Specific Notes:							
PDI-SG-B049-BL1	4/4/2018	10:23	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B048-BL1	4/4/2018	12:32	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B047-BL1	4/4/2018	14:07	SS	MS/MSD	DH	9		x	x	x	x	x	x								
PDI-SG-B051-BL1	4/4/2018	15:08	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B050-BL1	4/4/2018	16:27	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B055-BL1	4/4/2018	17:56	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B052-BL1	4/5/2018	10:41	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B053-BL1	4/5/2018	11:47	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B057-BL1	4/5/2018	12:43	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B056-BL1	4/5/2018	16:23	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B058-BL1	4/5/2018	15:20	SS		DH	6		x	x	x	x	x	x								
PDI-SG-B060-BL1	4/5/2018	14:02	SS		DH	6		x	x	x	x	x	x								
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Column Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)							Sample Disposal ☐ Return To Client ☒ Disposal By Lab ☒ Archive For 12 Months														
Special Instructions/QC Requirements & Comments: Separate Reports for each lab 4.7 1.6 2.7																					
Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i>		Company: AECOM Company: M.E. Company: R-POR		Date/Time: 4/6/18 / 1150 Date/Time: 4/6/18 1400 Date/Time: 4/6/18 1700		Received by: <i>[Signature]</i> Received by: <i>[Signature]</i> Received by: <i>[Signature]</i>		Company: M.E. Company: R-POR Company: Tased		Date/Time: 4/6/18 1150 Date/Time: 4/6/18 1400 Date/Time: 4-7-18 1125											

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-76388-5

Login Number: 76388

List Source: TestAmerica Seattle

List Number: 1

Creator: O'Connell, Jason I

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