

Data Validation Report

Project: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling
Portland Harbor Superfund Site
Subsurface Sediment – Deep Core Stations

Laboratory: ALS Environmental, Burlington, Ontario, Canada

Laboratory Group: L2146267

Analyses/Method: Chlorinated Pesticides and Total Solids

Validation Level: Stage2/(Stage 4 – PDI-SC-S229-9.9TO12.5)

AECOM Project

Number: 60566335 Task #2.12

Prepared by: Lucy Panteleeff/AECOM Completed on: December 2, 2018

Reviewed by: George Kisluk/AECOM File Name: L2146267 DVR

SUMMARY

The data quality review of 70 subsurface sediment samples, 3 field duplicates, and 3 rinsate blanks collected between August 9 and August 13, 2018, has been completed. Samples were analyzed for chlorinated pesticides by EPA Method 1699-modified (GC/HRMS) and/or total solids by American Society for Testing and Materials (ASTM) Method D-2974 at ALS Environmental (ALS) located in Burlington, Ontario, Canada. The analyses were performed in general accordance with the methods specified in *Method 1699: Pesticides in Water, Soil, Sediment, Biosolids, and Tissue by HRGC/HRMS*, December 2007 (modified by ALS SOP BU-TM-1103 v07 OCP), and Annual Book of ASTM Standards, American Society for Testing & Materials (ASTM), Philadelphia, Pennsylvania. The laboratory provided level 2 and level 4 data packages containing sample results and associated quality assurance (QA) and quality control (QC) data, preparation logs, and raw instrument outputs (where applicable). The following samples are associated with laboratory group L2146267:

Sample ID	Laboratory ID
PDI-SC-S103-0TO2	L2146267-1
PDI-SC-S103-2TO4	L2146267-2
PDI-SC-S103-4TO6	L2146267-3
PDI-SC-S103-6TO8	L2146267-4
PDI-SC-S103-8TO9.7	L2146267-5
PDI-SC-S103-9.7TO10.7	L2146267-6
PDI-SC-S103-10.7TO13.4	L2146267-7
PDI-SC-S238-0TO2	L2146267-8
PDI-SC-S238-2TO4	L2146267-9
PDI-SC-S238-2TO4D (Duplicate of PDI-SC-S238-2TO4)	L2146267-10
PDI-SC-S238-4TO6	L2146267-11
PDI-SC-S238-6TO8	L2146267-12
PDI-SC-S238-8TO10	L2146267-13
PDI-SC-S238-10TO12.4	L2146267-14
PDI-SC-S238-12.4TO13.4	L2146267-15
PDI-SC-S229-0TO2	L2146267-16
PDI-SC-S229-2TO4	L2146267-17

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Sample ID	Laboratory ID
PDI-SC-S229-4TO6	L2146267-18
PDI-SC-S229-6TO8	L2146267-19
PDI-SC-S229-8TO9.9	L2146267-20
PDI-SC-S229-9.9TO12.5	L2146267-21
PDI-SC-S230-0TO2	L2146267-22
PDI-SC-S230-2TO4	L2146267-23
PDI-SC-S230-4TO6	L2146267-24
PDI-SC-S010-0TO2	L2146267-25
PDI-SC-S010-2TO4	L2146267-26
PDI-SC-S010-4TO6.4	L2146267-27
PDI-SC-S010-6.4TO8.4	L2146267-28
PDI-SC-S010-8.4TO10.8	L2146267-29
PDI-SC-S010-10.8TO13.4	L2146267-30
PDI-SC-S010-13.4TO14.4	L2146267-31
PDI-SC-S009-0TO2	L2146267-32
PDI-SC-S009-2TO4	L2146267-33
PDI-SC-S009-4TO6	L2146267-34
PDI-SC-S009-6TO8	L2146267-35
PDI-SC-S009-8TO10	L2146267-36
PDI-SC-S009-10TO11.4	L2146267-37
PDI-SC-S011-0TO2	L2146267-38
PDI-SC-S011-2TO4	L2146267-39
PDI-SC-S011-4TO6	L2146267-40
PDI-SC-S011-6TO8	L2146267-41
PDI-SC-S011-8TO10	L2146267-42
PDI-SC-S011-10TO12	L2146267-43
PDI-SC-S011-12TO14.5	L2146267-44
PDI-SC-S011-14.5TO16.8	L2146267-45
PDI-SC-S011-14.5TO16.8D (Duplicate of PDI-SC-S011-14.5TO16.8)	L2146267-46
PDI-SC-S011-16.8TO17.9	L2146267-47
PDI-SC-S011-17.9TO18.9	L2146267-48
PDI-SC-S004-0TO2	L2146267-49
PDI-SC-S004-2TO4	L2146267-50
PDI-SC-S004-4TO6	L2146267-51
PDI-SC-S004-6TO7.3	L2146267-52
PDI-SC-S004-7.3TO9.1	L2146267-53
PDI-SC-S004-9.1TO10.3	L2146267-54
PDI-SC-S015-0TO2	L2146267-55
PDI-SC-S015-2TO4	L2146267-56
PDI-SC-S015-4TO6	L2146267-57

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Sample ID	Laboratory ID
PDI-SC-S015-6TO8	L2146267-58
PDI-SC-S015-8TO10	L2146267-59
PDI-SC-S015-10TO11.4	L2146267-60
PDI-SC-S015-11.4TO12.4	L2146267-61
PDI-RB-SS-180810-1200 (rinsate blank)	L2146267-62
PDI-RB-SS-180810-1730 (rinsate blank)	L2146267-63
PDI-SC-S007-10TO12	L2146267-64
PDI-SC-S007-4TO6	L2146267-65
PDI-SC-S007-0TO2	L2146267-66
PDI-SC-S007-2TO4	L2146267-67
PDI-SC-S230-6TO8	L2146267-68
PDI-SC-S230-8TO10.4	L2146267-69
PDI-SC-S230-10.4TO11.4	L2146267-70
PDI-SC-S007-6TO8	L2146267-71
PDI-SC-S007-12TO14	L2146267-72
PDI-SC-S007-14TO16	L2146267-73
PDI-SC-S007-4TO6D (Duplicate of PDI-SC-S007-4TO6)	L2146267-74
PDI-SC-S007-8TO10	L2146267-75
PDI-RB-SS-180809-1900 (rinsate blank)	L2146267-76

Data validation is based on method performance criteria and QC criteria documented in the *Quality Assurance Project Plan (QAPP)*, dated March 23, 2018, as amended. If data qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA documents *USEPA National Functional Guidelines for High Resolution Superfund Methods Data Review*, April 2016, *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, January 2017, and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, January 2017. Data qualifiers assigned to this sample set are included in Table 1.

SAMPLE RECEIPT

Upon receipt by ALS, the sample jar information was compared to the chain-of-custody (COC) and the cooler temperature was recorded. The cooler was received at a temperature within the EPA-recommended limits of greater than 0°C and less than or equal to 6°C. Per AECOM request, the identification of PDI-SC-S007-4TO6D was changed and reported as shown.

ORGANIC ANALYSIS

Samples were analyzed for chlorinated pesticides by EPA Method 1699.

1. Holding Times – Acceptable
2. Initial and Continuing Calibration Verifications – Acceptable except as noted below:

The percent recoveries for the following labeled compounds were outside the control limits of 70-130%.

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Analysis Date and Time	Analyte	% Recovery
August 31,2018 05:07	4,4'-DDD-13C12	64%
	4,4'-DDT-13C12	56%
August 31, 2018 15:10	4,4'-DDT-13C12	63%
September 4, 2018 04:23	4,4'-DDT-13C12	148%
	4,4'-DDD-13C12	132%
September 4, 2018 07:44	4,4'-DDT-13C12	146%

The results for 2,4'-DDD and 4,4'-DDD in PDI-SC-S103-0TO2, PDI-SC-S229-2TO4, PDI-SC-S229-4TO6, PDI-SC-S229-6TO8, PDI-SC-S010-6.4TO8.4, PDI-SC-S010-8.4TO10.8, PDI-SC-S011-0TO2, PDI-SC-S004-7.3TO9.1, PDI-SC-S004-9.1TO10.3, PDI-RB-SS-180810-1200, PDI-RB-SS-180810-1730, PDI-SC-S007-14TO16, PDI-SC-S007-4TO6D, PDI-SC-S007-8TO10, and PDI-RB-SS-180809-1900 were qualified as estimated and flagged 'J' or 'UJ' based on the associated continuing calibration verification (CCV) results.

The results for 2,4'-DDT and 4,4'-DDT in PDI-SC-S103-0TO2, PDI-SC-S229-2TO4, PDI-SC-S229-4TO6, PDI-SC-S229-6TO8, PDI-SC-S010-6.4TO8.4, PDI-SC-S010-8.4TO10.8, PDI-SC-S011-0TO2, PDI-SC-S004-7.3TO9.1, PDI-SC-S004-9.1TO10.3, PDI-RB-SS-180810-1200, PDI-RB-SS-180810-1730, PDI-SC-S007-14TO16, PDI-SC-S007-4TO6D, PDI-SC-S007-8TO10, and PDI-RB-SS-180809-1900 were qualified as estimated and flagged 'J' or 'UJ' based on the associated CCV results.

3. Blanks – Acceptable except as noted below:

The following analytes were detected in the method blanks at concentrations between the (estimated detection limits) EDLs and reporting limits.

Extraction Date	Analyte	Result
August 16, 2018	2,4'-DDE	0.0594 ng/L
	4,4'-DDT	0.083 ng/L
August 23, 2018	2,4'-DDE	0.0337 ng/g
	4,4'-DDE	0.0742 ng/g
	2,4'-DDD	0.0780 ng/g
	4,4'-DDD	0.115 ng/g
	4,4'-DDT	0.299 ng/g
August 24, 2018	2,4'-DDE	0.0780 ng/g
	4,4'-DDE	0.140 ng/g
August 24, 2018	2,4'-DDE	0.066 ng/g
	4,4'-DDE	0.0777 ng/g
	2,4'-DDT	0.057 ng/g
August 27, 2018	2,4'-DDE	0.089 ng/g
	4,4'-DDT	0.425 ng/g

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Extraction Date	Analyte	Result
August 24, 2018	2,4'-DDE	0.053 ng/g
	4,4'-DDE	0.0734 ng/g
	4,4'-DDD	0.0483 ng/g
	4,4'-DDT	0.13 ng/g

The NFG guidance stipulates that a conservative approach should be taken with regard to qualification of analytes based on blank contamination and the reporting of false negative results should be avoided.

Therefore, in order to avoid the reporting of false negative results, professional judgment was used to qualify the data in the following manner. As allowed in the NFG, a blank action limit (BAL) was determined as 5 times the blank result:

- When the sample results were < the blank result, the sample result was qualified as not detected (U) at the sample result or reported detection limit (RDL).
- When the sample result was \geq the blank result and \leq the BAL, the sample result was qualified as estimated and potentially biased high (J).
- When the sample result was $>$ the BAL, sample result was not qualified.

The following results were reported at concentrations less than the blank concentration; therefore, these results were qualified as not detected and flagged 'U' at the sample results.

- 2,4'-DDE in PDI-SC-S103-9.7TO10.7, PDI-SC-S010-10.8TO13.4, PDI-SC-S010-13.4TO14.4, PDI-SC-S011-0TO2, PDI-SC-S004-2TO4, and PDI-SC-S004-7.3TO9.1.
- 4,4'-DDE in PDI-SC-S103-10.7TO13.4, PDI-SC-S010-8.4TO10.8, PDI-SC-S010-10.8TO13.4, PDI-SC-S010-13.4TO14.4, PDI-SC-S004-2TO4, PDI-SC-S004-4TO6, PDI-SC-S004-7.3TO9.1, and PDI-SC-S004-9.1TO10.3.
- 2,4'-DDD in PDI-SC-S103-10.7TO13.4.
- 4,4'-DDD in PDI-SC-S010-10.8TO13.4 and PDI-SC-S010-13.4TO14.4.
- 4,4'-DDT in PDI-SC-S103-9.7TO10.7, PDI-SC-S103-10.7TO13.4, PDI-SC-S238-0TO2, PDI-SC-S010-6.4TO8.4, PDI-SC-S010-13.4TO14.4, PDI-SC-S015-0TO2, PDI-SC-S015-4TO6, PDI-SC-S015-6TO8, PDI-SC-S015-8TO10, and PDI-SC-S015-10TO11.4.

The following results were reported at concentrations greater than the blank concentration but less than the BAL; therefore, these results were qualified as estimated and flagged 'J' at the sample results.

- 2,4'-DDE in PDI-SC-S229-2TO4, PDI-SC-S230-0TO2, PDI-SC-S230-4TO6, PDI-SC-S010-0TO2, PDI-SC-S010-2TO4, PDI-SC-S010-4TO6.4, PDI-SC-S009-0TO2, PDI-SC-S009-2TO4, PDI-SC-S009-4TO6, PDI-SC-S009-6TO8, PDI-SC-S009-8TO10, PDI-SC-S009-10TO11.4, PDI-SC-S011-2TO4, PDI-SC-S011-4TO6, PDI-SC-S011-6TO8, PDI-SC-S011-8TO10, PDI-SC-S011-10TO12, PDI-SC-S011-12TO14.5, PDI-SC-S011-16.8TO17.9, PDI-SC-S011-17.9TO18.9, PDI-SC-S004-0TO2, PDI-SC-

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S015-0TO2, PDI-SC-S015-2TO4, PDI-SC-S015-4TO6, PDI-SC-S015-6TO8, PDI-SC-S015-8TO10, PDI-SC-S015-10TO11.4, PDI-SC-S015-11.4TO12.4, PDI-SC-S007-4TO6, PDI-SC-S007-0TO2, PDI-SC-S007-2TO4, PDI-SC-S230-6TO8, PDI-SC-S230-8TO10.4, PDI-SC-S007-6TO8, PDI-SC-S007-4TO6D, and PDI-SC-S007-8TO10.

- 4,4'-DDE in PDI-SC-S010-6.4TO8.4.
- 2,4'-DDD in PDI-SC-S103-9.7TO10.7.
- 4,4'-DDD in PDI-SC-S103-9.7TO10.7 and PDI-SC-S103-10.7TO13.4.
- 2,4'-DDT in PDI-SC-S011-10TO12, PDI-SC-S011-12TO14.5, PDI-SC-S011-14.5TO16.8, PDI-SC-S011-16.8TO17.9, PDI-SC-S011-17.9TO18.9, PDI-SC-S004-0TO2, PDI-SC-S007-10TO12, PDI-SC-S007-4TO6, PDI-SC-S007-0TO2, PDI-SC-S007-2TO4, PDI-SC-S230-6TO8, PDI-SC-S230-8TO10.4, PDI-SC-S230-10.4TO11.4, and PDI-SC-S007-6TO8.
- 4,4'-DDT in PDI-SC-S103-2TO4, PDI-SC-S103-4TO6, PDI-SC-S103-8TO9.7, PDI-SC-S238-2TO4, PDI-SC-S230-0TO2, PDI-SC-S230-2TO4, PDI-SC-S230-4TO6, PDI-SC-S010-0TO2, PDI-SC-S010-2TO4, PDI-SC-S010-4TO6.4, PDI-SC-S009-0TO2, PDI-SC-S009-2TO4, PDI-SC-S009-4TO6, PDI-SC-S009-6TO8, PDI-SC-S009-8TO10, PDI-SC-S009-10TO11.4, PDI-SC-S011-2TO4, PDI-SC-S011-4TO6, PDI-SC-S015-2TO4, and PDI-SC-S015-11.4TO12.4.

The result for 4,4'-DDD in PDI-SC-S010-8.4TO10.8 and 4,4'-DDT in PDI-RB-SS-180810-1730 were qualified as estimated based on CCV results as described in Section 2; therefore, no further qualification was necessary.

Three rinsate blanks were submitted with this laboratory group. The following analytes were detected in the rinsate blanks.

Blank Identification	Analyte	Result (ng/L)
PDI-RB-SS-180809-1900	4,4'-DDE	0.073
PDI-RB-SS-180810-1730	4,4'-DDT	0.140

Sediment data were not qualified based on rinsate blank detections.

4. Labeled compounds – Acceptable except as noted below:

The percent recoveries for 4,4'-DDE-13C12 were outside the control limits of 21-125% in the following samples.

Sample	Labeled Compound	Percent Recovery
PDI-SC-S238-8TO10	4,4'-DDE-13C12	20%
PDI-SC-S238-12.4TO13.4	4,4'-DDE-13C12	20%
PDI-SC-S015-0TO2	4,4'-DDE-13C12	14%
PDI-SC-S015-2TO4	4,4'-DDE-13C12	19%
PDI-SC-S015-4TO6	4,4'-DDE-13C12	13%

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Sample	Labeled Compound	Percent Recovery
PDI-SC-S015-6TO8	4,4'-DDE-13C12	19%
PDI-SC-S015-8TO10	4,4'-DDE-13C12	10%
PDI-SC-S015-10TO11.4	4,4'-DDE-13C12	15%
PDI-SC-S015-11.4TO12.4	4,4'-DDE-13C12	14%
Method Blank (Batch WG2851440)	4,4'-DDE-13C12	15%

Data were not qualified based on the labeled compound recovery in the QC (method blank) sample.

The results for 2,4'-DDE and 4,4'-DDE in PDI-SC-S238-8TO10 and PDI-SC-S238-12.4TO13.4 were qualified as estimated and flagged 'J' based on these labeled compound results.

The results for 4,4'-DDE in PDI-SC-S015-0TO2, PDI-SC-S015-2TO4, PDI-SC-S015-4TO6, PDI-SC-S015-6TO8, PDI-SC-S015-8TO10, PDI-SC-S015-10TO11.4, and PDI-SC-S015-11.4TO12.4 were qualified as estimated and flagged 'J' based on these labeled compound results. The results for 2,4'-DDE in these samples were qualified as estimated based on the associated method blank results as described in Section 3; therefore, no further qualifications based on the labeled compound recoveries were necessary.

5. Internal Standards – Acceptable
6. Laboratory Control Sample (LCS) – Acceptable
7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

An MS/MSD was not performed in association with the rinsate blanks. Accuracy was assessed using the LCS results. Precision was not assessed.

An MS/MSD was not performed in association with the rinsate blanks. Accuracy was assessed using the LCS results. Precision was assessed using the laboratory and field duplicate results.

8. Laboratory Duplicate – Acceptable except as noted below:

Laboratory duplicates were performed using PDI-SC-S103-0TO2, PDI-SC-S238-2TO4D, PDI-SC-S230-0TO2, PDI-SC-S011-8TO10, and PDI-SC-S004-7.3TO9.1. Results greater than five times the reporting limits (RLs) were evaluated. Results were comparable with the following exceptions.

The relative percent differences (RPDs) for 2,4'-DDT (196%) and 4,4'-DDT (196%) exceeded the control limit of $\pm 25\%$ in PDI-SC-S103-0TO2. The results for 2,4'-DDT and 4,4'-DDT in PDI-SC-S103-0TO2 were qualified as estimated based on CCV results as described in Section 2; therefore, no further qualification was required.

9. Field Duplicate – Acceptable except as noted below:

Field duplicates were submitted for PDI-SC-S238-2TO4, PDI-SC-S011-14.5TO16.8, and PDI-SC-S007-4TO6 and identified as PDI-SC-S238-2TO4D, PDI-SC-S011-14.5TO16.8D, and

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PDI-SC-S007-4TO6D, respectively. Results greater than five times the RL were evaluated. Results were comparable.

10. Calculation Checks – Acceptable

A stage 4 validation was required for PDI-SC-S229-9.9TO12.5. A calculation check was performed on PDI-SC-S229-9.9TO12.5. The review confirmed the final results were correct as reported.

11. Reporting Limits and Chromatographic Review – Acceptable except as noted below:

Chromatograms/spectra were reviewed for PDI-SC-S229-9.9TO12.5 to confirm target analytes were properly identified. The review confirmed target analytes were properly identified and reported by the laboratory.

One or more results were flagged 'J' by the laboratory to indicate the reported concentrations were above the EDLs but below the reporting limits. Laboratory 'J'-flagged results are considered estimated. As the result is between the EDL and the reporting limit, there is a greater level of uncertainty associated with the numerical result.

The reporting limits for one or more pesticides reported as not detected in multiple samples were elevated due to the moisture content and/or dilution due to matrix interference.

Analytes with an ion abundance ratio outside the control limits of 1.56 +/- 25% were flagged 'R' by the laboratory indicating an 'EMPC' (estimated maximum possible concentration). Results that were not flagged 'U' based on method blank results were qualified as tentatively identified and flagged 'JN' based on this laboratory flag as identified in Table 1.

12. Other Items:

Samples PDI-SC-S103-8TO9.7, PDI-SC-S103-9.7TO10.7, PDI-SC-S010-6.4TO8.4, PDI-SC-S010-8.4TO10.8, PDI-SC-S011-0TO2, and PDI-SC-S004-2TO4 were re-analyzed due to potential instrument carryover. Results from the re-analysis were reported.

CONVENTIONAL ANALYSIS

Sediment samples were analyzed for total solids by ASTM D-2974.

1. Holding Times – Acceptable except as noted below:

The sediment samples exceeded the 7-day holding time indicated in the QAPP. No data qualifiers were assigned based on the holding time exceedance.

2. Laboratory Duplicate – Acceptable

Laboratory duplicates were performed using PDI-SC-S103-0TO2, PDI-SC-S238-2TO4D, PDI-SC-S230-0TO2, PDI-SC-S011-8TO10, and PDI-SC-S004-7.3TO9. Results were comparable.



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3. Field Duplicate – Acceptable

Field duplicates were submitted for PDI-SC-S238-2TO4, PDI-SC-S011-14.5TO16.8, and PDI-SC-S007-4TO6 and identified as PDI-SC-S238-2TO4D, PDI-SC-S011-14.5TO16.8D, and PDI-SC-S007-4TO6D, respectively. Results were comparable.

4. Calculation Checks – Acceptable

A calculation check was performed on PDI-SC-S229-9.9TO12.5. The review confirmed the final results were correct as reported.

5. Reporting Limits – Acceptable

OVERALL ASSESSMENT OF DATA

The data reported in this laboratory group is considered usable for meeting project objectives. The completeness for laboratory group L2146267 is 100%.

Table 1
QA/QC Data Summary Review
Portland Harbor
Subsurface Sediment
ALS Burlington Laboratory Group: L2146267

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
PDI-SC-S103-0TO2	L2146267-1	E1699M	2,4-DDD	8.45	ng/g	8.45 J	c
PDI-SC-S103-0TO2	L2146267-1	E1699M	2,4-DDT	0.468 M,J	ng/g	0.468 J	c
PDI-SC-S103-0TO2	L2146267-1	E1699M	4,4'-DDD	24.5 M	ng/g	24.5 J	c
PDI-SC-S103-0TO2	L2146267-1	E1699M	4,4'-DDT	4.93	ng/g	4.93 J	c
PDI-SC-S103-2TO4	L2146267-2	E1699M	4,4'-DDT	1.03 M,J,B	ng/g	1.03 J	bl
PDI-SC-S103-4TO6	L2146267-3	E1699M	4,4'-DDT	1.37 J,B	ng/g	1.37 J	bl
PDI-SC-S103-8TO9.7	L2146267-5	E1699M	2,4-DDT	0.076 M,J,R	ng/g	0.076 JN	k
PDI-SC-S103-8TO9.7	L2146267-5	E1699M	4,4'-DDT	0.311 J,B	ng/g	0.311 J	bl
PDI-SC-S103-9.7TO10.7	L2146267-6	E1699M	2,4-DDD	0.11 J,R	ng/g	0.11 JN	bl,k
PDI-SC-S103-9.7TO10.7	L2146267-6	E1699M	2,4-DDE	0.028 M,J,R	ng/g	0.028 U	bl
PDI-SC-S103-9.7TO10.7	L2146267-6	E1699M	4,4'-DDD	0.206 M,J,B	ng/g	0.206 J	bl
PDI-SC-S103-9.7TO10.7	L2146267-6	E1699M	4,4'-DDT	0.058 M,J,R	ng/g	0.058 U	bl
PDI-SC-S103-10.7TO13.4	L2146267-7	E1699M	2,4-DDD	0.075 M,J,R	ng/g	0.075 U	bl
PDI-SC-S103-10.7TO13.4	L2146267-7	E1699M	4,4'-DDD	0.136 M,J,B	ng/g	0.136 J	bl
PDI-SC-S103-10.7TO13.4	L2146267-7	E1699M	4,4'-DDE	0.023 M,J,R	ng/g	0.023 U	bl
PDI-SC-S103-10.7TO13.4	L2146267-7	E1699M	4,4'-DDT	0.15 M,J,R	ng/g	0.15 U	bl
PDI-SC-S238-0TO2	L2146267-8	E1699M	4,4'-DDT	0.22 M,J,R	ng/g	0.22 U	bl
PDI-SC-S238-2TO4	L2146267-9	E1699M	2,4-DDT	0.13 M,J,R	ng/g	0.13 JN	k
PDI-SC-S238-2TO4	L2146267-9	E1699M	4,4'-DDT	0.345 M,J,B	ng/g	0.345 J	bl
PDI-SC-S238-2TO4D	L2146267-10	E1699M	4,4'-DDT	0.29 J,R	ng/g	0.29 JN	k
PDI-SC-S238-4TO6	L2146267-11	E1699M	2,4-DDT	0.26 M,J,R	ng/g	0.26 JN	k
PDI-SC-S238-6TO8	L2146267-12	E1699M	2,4-DDD	0.30 J,R	ng/g	0.30 JN	k
PDI-SC-S238-6TO8	L2146267-12	E1699M	2,4-DDE	0.15 M,J,R	ng/g	0.15 JN	k
PDI-SC-S238-6TO8	L2146267-12	E1699M	2,4-DDT	0.17 M,J,R	ng/g	0.17 JN	k
PDI-SC-S238-8TO10	L2146267-13	E1699M	2,4-DDE	0.38 M,J,R	ng/g	0.38 JN	lc,k
PDI-SC-S238-8TO10	L2146267-13	E1699M	4,4'-DDE	5.46 M	ng/g	5.46 J	lc
PDI-SC-S238-12.4TO13.4	L2146267-15	E1699M	2,4-DDE	0.648 J	ng/g	0.648 J	lc
PDI-SC-S238-12.4TO13.4	L2146267-15	E1699M	4,4'-DDE	7.25 M	ng/g	7.25 J	lc
PDI-SC-S229-2TO4	L2146267-17	E1699M	2,4-DDD	1.64 M	ng/g	1.64 J	c
PDI-SC-S229-2TO4	L2146267-17	E1699M	2,4-DDE	0.345 M,J	ng/g	0.345 J	bl
PDI-SC-S229-2TO4	L2146267-17	E1699M	2,4-DDT	0.054 U	ng/g	0.054 UJ	c
PDI-SC-S229-2TO4	L2146267-17	E1699M	4,4'-DDD	5.16 M	ng/g	5.16 J	c
PDI-SC-S229-2TO4	L2146267-17	E1699M	4,4'-DDT	0.41 M,J,R	ng/g	0.41 JN	c,k
PDI-SC-S229-4TO6	L2146267-18	E1699M	2,4-DDD	0.0570 M,J	ng/g	0.0570 J	c
PDI-SC-S229-4TO6	L2146267-18	E1699M	2,4-DDT	0.025 U	ng/g	0.025 UJ	c
PDI-SC-S229-4TO6	L2146267-18	E1699M	4,4'-DDD	0.179 M,J	ng/g	0.179 J	c
PDI-SC-S229-4TO6	L2146267-18	E1699M	4,4'-DDT	0.097 M,J,R	ng/g	0.097 JN	c,k
PDI-SC-S229-6TO8	L2146267-19	E1699M	2,4-DDD	0.022 U	ng/g	0.022 UJ	c
PDI-SC-S229-6TO8	L2146267-19	E1699M	2,4-DDE	0.013 M,J,R	ng/g	0.013 JN	k
PDI-SC-S229-6TO8	L2146267-19	E1699M	2,4-DDT	0.021 U	ng/g	0.021 UJ	c
PDI-SC-S229-6TO8	L2146267-19	E1699M	4,4'-DDD	0.021 U	ng/g	0.021 UJ	c
PDI-SC-S229-6TO8	L2146267-19	E1699M	4,4'-DDT	0.027 U	ng/g	0.027 UJ	c
PDI-SC-S230-0TO2	L2146267-22	E1699M	2,4-DDE	0.179 J,B	ng/g	0.179 J	bl
PDI-SC-S230-0TO2	L2146267-22	E1699M	2,4-DDT	0.078 M,J,R	ng/g	0.078 JN	k
PDI-SC-S230-0TO2	L2146267-22	E1699M	4,4'-DDT	0.171 M,J	ng/g	0.171 J	bl
PDI-SC-S230-2TO4	L2146267-23	E1699M	4,4'-DDT	0.502 M,J	ng/g	0.502 J	bl
PDI-SC-S230-4TO6	L2146267-24	E1699M	2,4-DDE	0.214 J,B	ng/g	0.214 J	bl
PDI-SC-S230-4TO6	L2146267-24	E1699M	4,4'-DDT	0.243 M,J	ng/g	0.243 J	bl
PDI-SC-S010-0TO2	L2146267-25	E1699M	2,4-DDE	0.0919 M,J,B	ng/g	0.0919 J	bl
PDI-SC-S010-0TO2	L2146267-25	E1699M	4,4'-DDT	0.265 J	ng/g	0.265 J	bl
PDI-SC-S010-2TO4	L2146267-26	E1699M	2,4-DDE	0.123 M,J,B	ng/g	0.123 J	bl
PDI-SC-S010-2TO4	L2146267-26	E1699M	4,4'-DDT	0.479 J	ng/g	0.479 J	bl
PDI-SC-S010-4TO6.4	L2146267-27	E1699M	2,4-DDE	0.191 M,J,B	ng/g	0.191 J	bl
PDI-SC-S010-4TO6.4	L2146267-27	E1699M	4,4'-DDT	0.309 J	ng/g	0.309 J	bl
PDI-SC-S010-6.4TO8.4	L2146267-28	E1699M	2,4-DDD	0.106 J	ng/g	0.106 J	c
PDI-SC-S010-6.4TO8.4	L2146267-28	E1699M	2,4-DDT	0.015 U	ng/g	0.015 UJ	c
PDI-SC-S010-6.4TO8.4	L2146267-28	E1699M	4,4'-DDD	0.334 M,J,B	ng/g	0.334 J	c
PDI-SC-S010-6.4TO8.4	L2146267-28	E1699M	4,4'-DDE	0.209 M,J,B	ng/g	0.209 J	bl
PDI-SC-S010-6.4TO8.4	L2146267-28	E1699M	4,4'-DDT	0.0563 M,J	ng/g	0.0563 UJ	c,bl

Table 1
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Portland Harbor
Subsurface Sediment
ALS Burlington Laboratory Group: L2146267

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
PDI-SC-S010-8.4TO10.8	L2146267-29	E1699M	2,4-DDD	0.019 U	ng/g	0.019 UJ	c
PDI-SC-S010-8.4TO10.8	L2146267-29	E1699M	2,4-DDT	0.018 U	ng/g	0.018 UJ	c
PDI-SC-S010-8.4TO10.8	L2146267-29	E1699M	4,4'-DDD	0.0586 M,J,B	ng/g	0.0586 J	c
PDI-SC-S010-8.4TO10.8	L2146267-29	E1699M	4,4'-DDE	0.0464 M,J,B	ng/g	0.0464 U	bl
PDI-SC-S010-8.4TO10.8	L2146267-29	E1699M	4,4'-DDT	0.027 U	ng/g	0.027 UJ	c
PDI-SC-S010-10.8TO13.4	L2146267-30	E1699M	2,4-DDE	0.028 M,J,R	ng/g	0.028 U	bl
PDI-SC-S010-10.8TO13.4	L2146267-30	E1699M	4,4'-DDD	0.029 M,J,R	ng/g	0.029 U	bl
PDI-SC-S010-10.8TO13.4	L2146267-30	E1699M	4,4'-DDE	0.037 M,J,R	ng/g	0.037 U	bl
PDI-SC-S010-13.4TO14.4	L2146267-31	E1699M	2,4-DDE	0.0165 M,J,B	ng/g	0.0165 U	bl
PDI-SC-S010-13.4TO14.4	L2146267-31	E1699M	4,4'-DDD	0.024 M,J,R	ng/g	0.024 U	bl
PDI-SC-S010-13.4TO14.4	L2146267-31	E1699M	4,4'-DDE	0.0305 M,J,B	ng/g	0.0305 U	bl
PDI-SC-S010-13.4TO14.4	L2146267-31	E1699M	4,4'-DDT	0.0476 M,J	ng/g	0.0476 U	bl
PDI-SC-S009-0TO2	L2146267-32	E1699M	2,4-DDE	0.0796 M,J,B	ng/g	0.0796 J	bl
PDI-SC-S009-0TO2	L2146267-32	E1699M	2,4-DDT	0.095 M,J,R	ng/g	0.095 JN	k
PDI-SC-S009-0TO2	L2146267-32	E1699M	4,4'-DDT	0.336 J	ng/g	0.336 J	bl
PDI-SC-S009-2TO4	L2146267-33	E1699M	2,4-DDE	0.076 M,J,R	ng/g	0.076 JN	bl,k
PDI-SC-S009-2TO4	L2146267-33	E1699M	4,4'-DDT	0.29 M,J,R	ng/g	0.29 JN	bl,k
PDI-SC-S009-4TO6	L2146267-34	E1699M	2,4-DDE	0.0872 M,J,B	ng/g	0.0872 J	bl
PDI-SC-S009-4TO6	L2146267-34	E1699M	2,4-DDT	0.081 M,J,R	ng/g	0.081 JN	k
PDI-SC-S009-4TO6	L2146267-34	E1699M	4,4'-DDT	0.25 M,J,R	ng/g	0.25 JN	bl,k
PDI-SC-S009-6TO8	L2146267-35	E1699M	2,4-DDE	0.104 M,J,B	ng/g	0.104 J	bl
PDI-SC-S009-6TO8	L2146267-35	E1699M	4,4'-DDT	0.326 J	ng/g	0.326 J	bl
PDI-SC-S009-8TO10	L2146267-36	E1699M	2,4-DDE	0.146 M,J,B	ng/g	0.146 J	bl
PDI-SC-S009-8TO10	L2146267-36	E1699M	4,4'-DDT	0.314 M,J	ng/g	0.314 J	bl
PDI-SC-S009-10TO11.4	L2146267-37	E1699M	2,4-DDE	0.158 M,J,B	ng/g	0.158 J	bl
PDI-SC-S009-10TO11.4	L2146267-37	E1699M	2,4-DDT	0.12 M,J,R	ng/g	0.12 JN	k
PDI-SC-S009-10TO11.4	L2146267-37	E1699M	4,4'-DDT	0.374 M,J	ng/g	0.374 J	bl
PDI-SC-S011-0TO2	L2146267-38	E1699M	2,4-DDD	0.268 J	ng/g	0.268 J	c
PDI-SC-S011-0TO2	L2146267-38	E1699M	2,4-DDE	0.045 M,J,R	ng/g	0.045 U	bl
PDI-SC-S011-0TO2	L2146267-38	E1699M	2,4-DDT	0.030 U	ng/g	0.030 UJ	c
PDI-SC-S011-0TO2	L2146267-38	E1699M	4,4'-DDD	0.907 M,J	ng/g	0.907 J	c
PDI-SC-S011-0TO2	L2146267-38	E1699M	4,4'-DDT	0.216 J	ng/g	0.216 J	c
PDI-SC-S011-2TO4	L2146267-39	E1699M	2,4-DDE	0.090 M,J,R	ng/g	0.090 JN	bl,k
PDI-SC-S011-2TO4	L2146267-39	E1699M	4,4'-DDT	0.401 M,J	ng/g	0.401 J	bl
PDI-SC-S011-4TO6	L2146267-40	E1699M	2,4-DDE	0.197 M,J,B	ng/g	0.197 J	bl
PDI-SC-S011-4TO6	L2146267-40	E1699M	4,4'-DDT	0.422 J	ng/g	0.422 J	bl
PDI-SC-S011-6TO8	L2146267-41	E1699M	2,4-DDE	0.228 J,B	ng/g	0.228 J	bl
PDI-SC-S011-8TO10	L2146267-42	E1699M	2,4-DDE	0.207 J,B	ng/g	0.207 J	bl
PDI-SC-S011-10TO12	L2146267-43	E1699M	2,4-DDE	0.248 J,B	ng/g	0.248 J	bl
PDI-SC-S011-10TO12	L2146267-43	E1699M	2,4-DDT	0.170 M,J	ng/g	0.170 J	bl
PDI-SC-S011-12TO14.5	L2146267-44	E1699M	2,4-DDE	0.254 J,B	ng/g	0.254 J	bl
PDI-SC-S011-12TO14.5	L2146267-44	E1699M	2,4-DDT	0.156 M,J	ng/g	0.156 J	bl
PDI-SC-S011-14.5TO16.8	L2146267-45	E1699M	2,4-DDT	0.20 M,J,R	ng/g	0.20 JN	bl,k
PDI-SC-S011-16.8TO17.9	L2146267-47	E1699M	2,4-DDE	0.128 J,B	ng/g	0.128 J	bl
PDI-SC-S011-16.8TO17.9	L2146267-47	E1699M	2,4-DDT	0.0862 M,J	ng/g	0.0862 J	bl
PDI-SC-S011-17.9TO18.9	L2146267-48	E1699M	2,4-DDE	0.272 M,J,B	ng/g	0.272 J	bl
PDI-SC-S011-17.9TO18.9	L2146267-48	E1699M	2,4-DDT	0.097 M,J,R	ng/g	0.097 JN	bl,k
PDI-SC-S011-17.9TO18.9	L2146267-48	E1699M	4,4'-DDT	0.14 J,R	ng/g	0.14 JN	k
PDI-SC-S004-0TO2	L2146267-49	E1699M	2,4-DDE	0.179 J,B	ng/g	0.179 J	bl
PDI-SC-S004-0TO2	L2146267-49	E1699M	2,4-DDT	0.131 M,J	ng/g	0.131 J	bl
PDI-SC-S004-2TO4	L2146267-50	E1699M	2,4-DDE	0.0123 M,J,B	ng/g	0.0123 U	bl
PDI-SC-S004-2TO4	L2146267-50	E1699M	4,4'-DDE	0.0422 M,J,B	ng/g	0.0422 U	bl
PDI-SC-S004-4TO6	L2146267-51	E1699M	4,4'-DDD	0.052 M,J,R	ng/g	0.052 JN	k
PDI-SC-S004-4TO6	L2146267-51	E1699M	4,4'-DDE	0.0336 M,J,B	ng/g	0.0336 U	bl
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	2,4-DDD	0.061 M,U	ng/g	0.061 UJ	c
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	2,4-DDE	0.076 M,J,R	ng/g	0.076 U	bl
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	2,4-DDT	0.048 U	ng/g	0.048 UJ	c
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	4,4'-DDD	0.049 U	ng/g	0.049 UJ	c
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	4,4'-DDE	0.0898 M,J	ng/g	0.0898 U	bl
PDI-SC-S004-7.3TO9.1	L2146267-53	E1699M	4,4'-DDT	0.17 M,J,R	ng/g	0.17 JN	c,k

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Subsurface Sediment
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Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
PDI-SC-S004-9.1TO10.3	L2146267-54	E1699M	2,4-DDD	0.033 U	ng/g	0.033 UJ	c
PDI-SC-S004-9.1TO10.3	L2146267-54	E1699M	2,4-DDT	0.031 U	ng/g	0.031 UJ	c
PDI-SC-S004-9.1TO10.3	L2146267-54	E1699M	4,4'-DDD	0.032 U	ng/g	0.032 UJ	c
PDI-SC-S004-9.1TO10.3	L2146267-54	E1699M	4,4'-DDE	0.0362 M,J	ng/g	0.0362 U	bl
PDI-SC-S004-9.1TO10.3	L2146267-54	E1699M	4,4'-DDT	0.042 U	ng/g	0.042 UJ	c
PDI-SC-S015-0TO2	L2146267-55	E1699M	2,4-DDE	0.141 M,J	ng/g	0.141 J	bl
PDI-SC-S015-0TO2	L2146267-55	E1699M	4,4'-DDE	2.31 M	ng/g	2.31 J	lc
PDI-SC-S015-0TO2	L2146267-55	E1699M	4,4'-DDT	0.22 M,J,R	ng/g	0.22 U	bl
PDI-SC-S015-2TO4	L2146267-56	E1699M	2,4-DDE	0.190 M,J	ng/g	0.190 J	bl
PDI-SC-S015-2TO4	L2146267-56	E1699M	4,4'-DDE	5.36	ng/g	5.36 J	lc
PDI-SC-S015-2TO4	L2146267-56	E1699M	4,4'-DDT	0.55 M,J,R	ng/g	0.55 JN	bl,k
PDI-SC-S015-4TO6	L2146267-57	E1699M	2,4-DDE	0.253 M,J	ng/g	0.253 J	bl
PDI-SC-S015-4TO6	L2146267-57	E1699M	2,4-DDT	0.19 M,J,R	ng/g	0.19 JN	k
PDI-SC-S015-4TO6	L2146267-57	E1699M	4,4'-DDE	4.48	ng/g	4.48 J	lc
PDI-SC-S015-4TO6	L2146267-57	E1699M	4,4'-DDT	0.41 M,J,R	ng/g	0.41 U	bl
PDI-SC-S015-6TO8	L2146267-58	E1699M	2,4-DDE	0.317 M,J	ng/g	0.317 J	bl
PDI-SC-S015-6TO8	L2146267-58	E1699M	2,4-DDT	0.15 M,J,R	ng/g	0.15 JN	k
PDI-SC-S015-6TO8	L2146267-58	E1699M	4,4'-DDE	5.92	ng/g	5.92 J	lc
PDI-SC-S015-6TO8	L2146267-58	E1699M	4,4'-DDT	0.36 M,J,R	ng/g	0.36 U	bl
PDI-SC-S015-8TO10	L2146267-59	E1699M	2,4-DDE	0.403 M,J	ng/g	0.403 J	bl
PDI-SC-S015-8TO10	L2146267-59	E1699M	4,4'-DDE	5.31	ng/g	5.31 J	lc
PDI-SC-S015-8TO10	L2146267-59	E1699M	4,4'-DDT	0.370 M,J,B	ng/g	0.370 U	bl
PDI-SC-S015-10TO11.4	L2146267-60	E1699M	2,4-DDE	0.244 M,J	ng/g	0.244 J	bl
PDI-SC-S015-10TO11.4	L2146267-60	E1699M	2,4-DDT	0.20 M,J,R	ng/g	0.20 JN	k
PDI-SC-S015-10TO11.4	L2146267-60	E1699M	4,4'-DDE	3.93	ng/g	3.93 J	lc
PDI-SC-S015-10TO11.4	L2146267-60	E1699M	4,4'-DDT	0.352 M,J,B	ng/g	0.352 U	bl
PDI-SC-S015-11.4TO12.4	L2146267-61	E1699M	2,4-DDE	0.31 M,J,R	ng/g	0.31 JN	bl,k
PDI-SC-S015-11.4TO12.4	L2146267-61	E1699M	4,4'-DDE	4.95	ng/g	4.95 J	lc
PDI-SC-S015-11.4TO12.4	L2146267-61	E1699M	4,4'-DDT	1.42 J,B	ng/g	1.42 J	bl
PDI-RB-SS-180810-1200	L2146267-62	E1699M	2,4-DDD	0.054 U	ng/L	0.054 UJ	c
PDI-RB-SS-180810-1200	L2146267-62	E1699M	2,4-DDT	0.037 U	ng/L	0.037 UJ	c
PDI-RB-SS-180810-1200	L2146267-62	E1699M	4,4'-DDD	0.038 U	ng/L	0.038 UJ	c
PDI-RB-SS-180810-1200	L2146267-62	E1699M	4,4'-DDT	0.053 U	ng/L	0.053 UJ	c
PDI-RB-SS-180810-1730	L2146267-63	E1699M	2,4-DDD	0.071 U	ng/L	0.071 UJ	c
PDI-RB-SS-180810-1730	L2146267-63	E1699M	2,4-DDT	0.050 U	ng/L	0.050 UJ	c
PDI-RB-SS-180810-1730	L2146267-63	E1699M	4,4'-DDD	0.052 U	ng/L	0.052 UJ	c
PDI-RB-SS-180810-1730	L2146267-63	E1699M	4,4'-DDT	0.14 M,J,R	ng/L	0.14 JN	c,k
PDI-SC-S007-10TO12	L2146267-64	E1699M	2,4-DDT	0.246 M,J	ng/g	0.246 J	bl
PDI-SC-S007-4TO6	L2146267-65	E1699M	2,4-DDE	0.187 J,B	ng/g	0.187 J	bl
PDI-SC-S007-4TO6	L2146267-65	E1699M	2,4-DDT	0.171 J	ng/g	0.171 J	bl
PDI-SC-S007-0TO2	L2146267-66	E1699M	2,4-DDE	0.067 M,J,R	ng/g	0.067 JN	bl,k
PDI-SC-S007-0TO2	L2146267-66	E1699M	2,4-DDT	0.14 M,J,R	ng/g	0.14 JN	bl,k
PDI-SC-S007-2TO4	L2146267-67	E1699M	2,4-DDE	0.161 M,J,B	ng/g	0.161 J	bl
PDI-SC-S007-2TO4	L2146267-67	E1699M	2,4-DDT	0.135 M,J	ng/g	0.135 J	bl
PDI-SC-S230-6TO8	L2146267-68	E1699M	2,4-DDE	0.284 J,B	ng/g	0.284 J	bl
PDI-SC-S230-6TO8	L2146267-68	E1699M	2,4-DDT	0.084 M,J,R	ng/g	0.084 JN	bl,k
PDI-SC-S230-8TO10.4	L2146267-69	E1699M	2,4-DDE	0.284 J,B	ng/g	0.284 J	bl
PDI-SC-S230-8TO10.4	L2146267-69	E1699M	2,4-DDT	0.152 M,J	ng/g	0.152 J	bl
PDI-SC-S230-10.4TO11.4	L2146267-70	E1699M	2,4-DDT	0.11 M,J,R	ng/g	0.11 JN	bl,k
PDI-SC-S007-6TO8	L2146267-71	E1699M	2,4-DDE	0.264 M,J,B	ng/g	0.264 J	bl
PDI-SC-S007-6TO8	L2146267-71	E1699M	2,4-DDT	0.186 J	ng/g	0.186 J	bl
PDI-SC-S007-14TO16	L2146267-73	E1699M	2,4-DDD	2.13	ng/g	2.13 J	c
PDI-SC-S007-14TO16	L2146267-73	E1699M	2,4-DDT	0.354 M,J	ng/g	0.354 J	c
PDI-SC-S007-14TO16	L2146267-73	E1699M	4,4'-DDD	7.45 M	ng/g	7.45 J	c
PDI-SC-S007-14TO16	L2146267-73	E1699M	4,4'-DDT	0.443 M,J	ng/g	0.443 J	c

Table 1
QA/QC Data Summary Review
Portland Harbor
Subsurface Sediment
ALS Burlington Laboratory Group: L2146267

Sample ID	Laboratory ID	Method	Analyte	Laboratory Result	Units	Final Result	Reason Code
PDI-SC-S007-4TO6D	L2146267-74	E1699M	2,4-DDD	0.872 J	ng/g	0.872 J	c
PDI-SC-S007-4TO6D	L2146267-74	E1699M	2,4-DDE	0.180 J	ng/g	0.180 J	bl
PDI-SC-S007-4TO6D	L2146267-74	E1699M	2,4-DDT	0.174 J	ng/g	0.174 J	c
PDI-SC-S007-4TO6D	L2146267-74	E1699M	4,4'-DDD	2.85	ng/g	2.85 J	c
PDI-SC-S007-4TO6D	L2146267-74	E1699M	4,4'-DDT	0.470 M,J	ng/g	0.470 J	c
PDI-SC-S007-8TO10	L2146267-75	E1699M	2,4-DDD	1.09 M,J	ng/g	1.09 J	c
PDI-SC-S007-8TO10	L2146267-75	E1699M	2,4-DDE	0.282 J	ng/g	0.282 J	bl
PDI-SC-S007-8TO10	L2146267-75	E1699M	2,4-DDT	0.12 M,J,R	ng/g	0.12 JN	c,k
PDI-SC-S007-8TO10	L2146267-75	E1699M	4,4'-DDD	4.48 M	ng/g	4.48 J	c
PDI-SC-S007-8TO10	L2146267-75	E1699M	4,4'-DDT	0.356 J	ng/g	0.356 J	c
PDI-RB-SS-180809-1900	L2146267-76	E1699M	2,4-DDD	0.051 U	ng/L	0.051 UJ	c
PDI-RB-SS-180809-1900	L2146267-76	E1699M	2,4-DDT	0.044 U	ng/L	0.044 UJ	c
PDI-RB-SS-180809-1900	L2146267-76	E1699M	4,4'-DDD	0.045 U	ng/L	0.045 UJ	c
PDI-RB-SS-180809-1900	L2146267-76	E1699M	4,4'-DDT	0.066 U	ng/L	0.066 UJ	c

Notes:

B - detected in blank at >10% of sample concentration

bl - laboratory blank contamination

c - calibration issue

J - estimated value

JN - tentatively identified analyte

k - Estimated Maximum Possible Concentration (EMPC)

l - LCS recovery

lc - labeled compound recovery

M - manual integration by laboratory

ng/g - nanogram per gram

ng/L - nanogram per liter

R - Ion abundance outside acceptance criterion

U - Compound was analyzed for, but not detected above the value shown.

Note: Line items where the laboratory result contains a "J" and the final result contains a "U" with a data validation reason code "bl" indicate that the final result is reported as not detected ("U" flag) at the sample result.