TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Job ID: 580-79555-1
Client Project/Site: Portland Harbor Pre-Remedial Design

For:
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Authorized for release by:
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Job ID: 580-79555-1

Laboratory: TestAmerica Seattle

Narrative

CASE NARRATIVE
Client: AECOM
Project: Portland Harbor Pre-Remedial Design
Report Number: 580-79555-1

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

Fifty-four samples were received on 8/13/2018 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 8 coolers at receipt time were 0.5º C, 0.7º C, 0.8º C, 1.0º C, 2.1º C, 2.2º C, 2.5º C and 3.6º C.

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

This report contains results of all analyses performed by TestAmerica Seattle.

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.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with SW846 8270D_SIM. The samples were prepared on 08/18/2018, 08/22/2018, 08/23/2018 and 10/03/2018 and analyzed on 08/24/2018, 08/25/2018, 08/28/2018, 08/29/2018, 10/04/2018 and 10/06/2018.

The 8270D SIM reference spectra for Fluoranthene is incorrect in the raw data for samples PDI-SC-S230-0to2 (580-79555-1),

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Laboratory: TestAmerica Seattle (Continued)

PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), and PDI-SC-S004-2to4 (580-79555-41). However, this reference spectra is correct for samples PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52) and this reference spectra can be utilized for review of data for those samples listed above with incorrect spectra.

The following samples were received and frozen by the Sacramento laboratory in hold on 8/15/2018. Frozen volume was provided to the Seattle laboratory on 10/3/2018 and placed in the freezer upon receipt. The samples were removed from the freezer on 10/3/18, thawed, and extracted before the holding time expired: PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 (580-79555-47[MS]), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52).

Naphthalene and Phenanthrene were detected in method blank MB 580-281928/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. These target analyte concentrations were less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples were not performed.

Several analytes were detected in method blank MB 580-282184/1-A at levels exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Associated samples were not re-extracted or re-analyzed because results were greater than 10X the value found in the method blank.

2-Methylnaphthalene, Naphthalene and Phenanthrene were detected in method blank MB 580-282288/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. These target analyte concentrations were less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples were not performed.

Terphenyl-d14 failed the surrogate recovery criteria high for PDI-SC-S015-0to2 (580-79555-46). Terphenyl-d14 failed the surrogate recovery criteria low for PDI-SC-S015-2to4 (580-79555-47). Terphenyl-d14 failed the surrogate recovery criteria high for PDI-SC-S015-10to11.4 (580-79555-51). Refer to the QC report for details.

Acenaphthylene failed the recovery criteria high for LCS 580-285535/2-A. This is for the reanalysis due to failing Indeno[1,2,3-cd]pyrene in the initial CCV and associated to samples PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 (580-79555-47[MS]), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51), PDI-SC-S015-11.4to12.4 (580-79555-52), (LCS 580-282630/2-A) and (MB 580-282630/1-A).

Benzo[a]pyrene failed the recovery criteria low for the MS of sample PDI-SC-S009-6to8MS (580-79555-26) in batch 580-282769. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Several analytes failed the recovery criteria low for the MS of sample PDI-SC-S011-16.8to17.9MS (580-79555-38) in batch 580-282363. Several analytes failed the recovery criteria low for the MSD of sample PDI-SC-S011-16.8to17.9MSD (580-79555-38) in batch 580-282363. Several analytes exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected because the associated

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laboratory control sample (LCS) recovery was within acceptance limits.

2-Methylnaphthalene and Pyrene failed the recovery criteria high for the MS of sample PDI-SC-S015-2to4MS (580-79555-47) in batch 580-285696. For the MSD of sample PDI-SC-S015-2to4MSD (580-79555-47) in batch 580-285696, Indeno[1,2,3-cd]pyrene and Pyrene failed the recovery criteria high. Also, several analytes exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected.

Benzo[b]fluoranthene and Benzo[k]fluoranthene failed the recovery criteria low for the MS of sample PDI-SC-S015-2to4MS (580-79555-47) in batch 580-285848. Acenaphthene and Fluoranthene failed the recovery criteria high. For the MSD of sample PDI-SC-S015-2to4MSD (580-79555-47) in batch 580-285848, Fluoranthene failed the recovery criteria low. Also, several analytes exceeded the RPD limit. Sample matrix interference and/or non-homogeneity are suspected.

The following samples were diluted due to the nature of the sample matrix: PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-6to8 (580-79555-4[MS]), PDI-SC-S230-6to8 (580-79555-4[MSD]), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-6to8 (580-79555-26[MS]), PDI-SC-S009-6to8 (580-79555-26[MSD]), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-16.8to17.9 MS (580-79555-38 MS) and PDI-SC-S011-16.8to17.9 MSD (580-79555-38 MSD), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 MS (580-79555-47[MS]), PDI-SC-S015-2to4 MSD (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50) and PDI-SC-S015-10to11.4 (580-79555-51). Elevated reporting limits (RLs) are provided.

The following samples were diluted to bring the concentration of target analytes within the calibration range: PDI-SC-S007-14to16 (580-79555-15) and PDI-SC-S015-11.4to12.4 (580-79555-52). Elevated reporting limits (RLs) are provided.

The %D of surrogate in CCV associated with batch 285645 were outside the lower control limits. All associated sample surrogate recoveries fell within acceptance criteria; therefore, the data have been reported. PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18) and PDI-SC-S010-6.4to8.4 (580-79555-19).

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

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM) - RINSE BLANK

Samples PDI-RB-SS-180810-1200 (580-79555-53) and PDI-RB-SS-180810-1730 (580-79555-54) were analyzed for semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with 8270D SIM. The samples were prepared on 08/15/2018 and analyzed on 08/17/2018.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24),

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Laboratory: TestAmerica Seattle (Continued)

PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA sw-846 method 8082A. The samples were prepared on 09/26/2018 and analyzed on 09/26/2018, 09/27/2018 and 09/28/2018.

Surrogate recovery for the following samples were outside control limits: PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-6to8 (580-79555-4[MS]), PDI-SC-S230-6to8 (580-79555-4[MSD]), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis were not performed.

PCB-1260 failed the recovery criteria low for the MS of sample PDI-SC-S015-2to4MS (580-79555-47) in batch 580-285172. PCB-1016 and PCB-1260 failed the recovery criteria low for the MSD of sample PDI-SC-S015-2to4MSD (580-79555-47) in batch 580-285172. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

PCB-1260 failed the recovery criteria low for the MS of sample PDI-SC-S230-6to8MS (580-79555-4) in batch 580-285015. PCB-1016 failed the recovery criteria high. PCB-1260 failed the recovery criteria low for the MSD of sample PDI-SC-S230-6to8MSD (580-79555-4) in batch 580-285015. PCB-1016 failed the recovery criteria high. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

The continuing calibration verification (CCV) associated with 580-285015 recovered low and outside the control limits for PCB-1232 and PCB-1260 on the confirmation column only. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16) and (CCV 580-285015/50).

The continuing calibration verification (CCV) associated with 580-285017 recovered low and outside the control limits for PCB-1232 and PCB-1260 on the confirmation column only. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), (CCV 580-285017/77) and (CCVIS 580-285017/81).

The following continuing calibration verification (CCV) standard associated with batch 580-285017 recovered outside acceptance criteria for %D for surrogate DCB Decachlorobiphenyl and Tetrachloro-m-xylene. Since the %Rec is within the acceptance criteria for the surrogate in the CCV and associated samples, the data have been reported. The following samples are impacted: PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20) and (CCVIS 580-285017/81).

The continuing calibration verification (CCV) associated with 580-285050 recovered outside the control limits for PCB-1232 and PCB-1260 on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23),

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PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), (CCV 580-285050/3) and (CCVIS 580-285050/7).

The continuing calibration verification (CCV) associated with 580-285172 recovered low and outside the control limits for PCB-1248, PCB-1221, PCB-1260, and PCB-1232 on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 (580-79555-47[MS]), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51), PDI-SC-S015-11.4to12.4 (580-79555-52), (CCV 580-285172/4), (CCV 580-285172/6), (CCV 580-285172/9), (CCVIS 580-285172/7), (LCS 580-284953/2-A) and (MB 580-284953/1-A).

The following continuing calibration verification (CCV) standard associated with batch 580-285172 recovered outside acceptance criteria for %D for surrogate DCB Decachlorobiphenyl on the confirmation column only. Since the %Rec is within the acceptance criteria for the surrogate in the CCV and associated samples, the data have been reported. The following samples are impacted: PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 (580-79555-47[MS]), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51), PDI-SC-S015-11.4to12.4 (580-79555-52), (CCVIS 580-285172/7), (LCS 580-284953/2-A) and (MB 580-284953/1-A).

The continuing calibration verification (CCV) associated with 580-285151 recovered high and outside the control limits for PCB-1232, PCB-1248, PCB-1254 and PCB-1260 on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S011-14.5to16.8 (580-79555-36), (CCV 580-285151/4), (CCV 580-285151/5), (CCV 580-285151/7) and (CCVIS 580-285151/8).

The surrogate standard DCB Decachlorobiphenyl fails high for %D in the affected continuous calibration verification (CCV) on the confirmation column only. Since the % recovery passes within limits, the data has been reported. The following samples are affected: PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S011-14.5to16.8 (580-79555-36) and (CCVIS 580-285151/8).

The %RPD between the primary and confirmation column exceeded 40% for PCB-1248 for the following samples: PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32) and PDI-SC-S011-8to10 (580-79555-33). The lower value(s) has been reported and qualified in accordance with the laboratory's SOP.

The following sample(s) contained more than one Aroclor with insufficient separation to quantify individually. The PCBs present are quantified as the predominant Aroclor: PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19) and PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-4to6 (580-79555-48) and PDI-SC-S015-11.4to12.4 (580-79555-52).

The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: PDI-SC-S015-6to8 (580-79555-49). The sample(s) has been quantified and reported as PCB-1254 with one peak un-assigned due to high bias. Per SOP only 3 peaks are needed to identify a PCB. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

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The following samples required a copper clean-up to reduce matrix interferences caused by sulfur: PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-6to8 (580-79555-4[MS]), PDI-SC-S230-6to8 (580-79555-4[MSD]), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18) , PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-6to8 (580-79555-26[MS]), PDI-SC-S009-6to8 (580-79555-26[MSD]), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4 (580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35) and PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-2to4 (580-79555-47[MS]), PDI-SC-S015-2to4 (580-79555-47[MSD]), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51), PDI-SC-S015-11.4to12.4 (580-79555-52), (LCS 580-284953/2-A) and (MB 580-284953/1-A), (CCB 580-285015/55), (CCV 580-285015/50), (CCV 580-285015/51), (CCV 580-285015/52), (CCV 580-285015/53), (CCVIS 580-285015/54), (LCS 580-284921/2-A) and (MB 580-284921/1-A).

The following samples required a dilution due to the nature of the sample matrix: PDI-SC-S007-10to12 (580-79555-13) and PDI-SC-S011-14.5to16.8 (580-79555-36). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

The following samples were diluted to bring the concentration of target analytes within the calibration range: PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18) and PDI-SC-S011-14.5to16.8 (580-79555-36). Elevated reporting limits (RLs) are provided.

The following sample was diluted due to the nature of the sample matrix: PDI-SC-S011-14.5to16.8D (580-79555-37). Elevated reporting limits (RLs) are provided.

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

POLYCHLORINATED BIPHENYLS (PCBS) - RINSE BLANK

Samples PDI-RB-SS-180810-1200 (580-79555-53) and PDI-RB-SS-180810-1730 (580-79555-54) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 08/16/2018 and analyzed on 08/29/2018.

The continuing calibration verification (CCV) associated with 580-282692 recovered high and outside the control limits for PCB-1232, PCB-1242, PCB-1254, and PCB-1248 on one column. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: (CCV 580-282692/6), (CCV 580-282692/7), (CCV 580-282692/8) and (CCV 580-282692/9).

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

TOTAL ORGANIC CARBON

Samples PDI-SC-S230-0to2 (580-79555-1), PDI-SC-S230-2to4 (580-79555-2), PDI-SC-S230-4to6 (580-79555-3), PDI-SC-S230-6to8 (580-79555-4), PDI-SC-S230-8to10.0 (580-79555-5), PDI-SC-S230-10.0to11.4 (580-79555-6), PDI-SC-S007-0to2 (580-79555-7), PDI-SC-S007-2to4 (580-79555-8), PDI-SC-S007-4to6 (580-79555-9), PDI-SC-S007-4to6D (580-79555-10), PDI-SC-S007-6to8 (580-79555-11), PDI-SC-S007-8to10 (580-79555-12), PDI-SC-S007-10to12 (580-79555-13), PDI-SC-S007-12to14 (580-79555-14), PDI-SC-S007-14to16 (580-79555-15), PDI-SC-S010-0to2 (580-79555-16), PDI-SC-S010-2to4 (580-79555-17), PDI-SC-S010-4to6.4 (580-79555-18), PDI-SC-S010-6.4to8.4 (580-79555-19), PDI-SC-S010-8.4to10.8 (580-79555-20), PDI-SC-S010-10.8to13.4 (580-79555-21), PDI-SC-S010-13.4to14.4 (580-79555-22), PDI-SC-S009-0to2 (580-79555-23), PDI-SC-S009-2to4 (580-79555-24), PDI-SC-S009-4to6 (580-79555-25), PDI-SC-S009-6to8 (580-79555-26), PDI-SC-S009-8to10 (580-79555-27), PDI-SC-S009-10to11.4

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(580-79555-28), PDI-SC-S011-0to2 (580-79555-29), PDI-SC-S011-2to4 (580-79555-30), PDI-SC-S011-4to6 (580-79555-31), PDI-SC-S011-6to8 (580-79555-32), PDI-SC-S011-8to10 (580-79555-33), PDI-SC-S011-10to12 (580-79555-34), PDI-SC-S011-12to14.5 (580-79555-35), PDI-SC-S011-14.5to16.8 (580-79555-36), PDI-SC-S011-14.5to16.8D (580-79555-37), PDI-SC-S011-16.8to17.9 (580-79555-38), PDI-SC-S011-17.9to18.9 (580-79555-39), PDI-SC-S004-0to2 (580-79555-40), PDI-SC-S004-2to4 (580-79555-41), PDI-SC-S004-4to6 (580-79555-42), PDI-SC-S004-6to7.3 (580-79555-43), PDI-SC-S004-7.3to9.1 (580-79555-44), PDI-SC-S004-9.1to10.3 (580-79555-45), PDI-SC-S015-0to2 (580-79555-46), PDI-SC-S015-2to4 (580-79555-47), PDI-SC-S015-4to6 (580-79555-48), PDI-SC-S015-6to8 (580-79555-49), PDI-SC-S015-8to10 (580-79555-50), PDI-SC-S015-10to11.4 (580-79555-51) and PDI-SC-S015-11.4to12.4 (580-79555-52) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 08/23/2018 and 08/24/2018.

Total Organic Carbon - Duplicates was detected in method blank MB 580-282530/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples were not performed.

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

TOTAL ORGANIC CARBON - RINSE BLANK
S

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Geotechnical

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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 ID: PDI-SC-S230-0to2

Date Collected: 08/10/18 08:45
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-1

Matrix: Solid
Percent Solids: 41.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	55	J	57	5.1	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Acenaphthene	86		57	6.9	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Acenaphthylene	69		57	5.7	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Anthracene	66		57	6.9	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Benzo[a]anthracene	74		57	8.7	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Benzo[a]pyrene	77		57	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Benzo[b]fluoranthene	100		57	6.7	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Benzo[g,h,i]perylene	64		57	5.7	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Benzo[k]fluoranthene	40	J	57	6.9	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Chrysene	130		57	17	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Dibenz(a,h)anthracene	ND		57	8.2	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Fluoranthene	360		57	16	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Fluorene	67		57	5.7	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Indeno[1,2,3-cd]pyrene	55	J	57	6.9	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Naphthalene	170	B	57	9.1	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Phenanthrene	360	B	57	7.9	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25
Pyrene	410		57	11	ug/Kg	☼	08/18/18 19:13	08/28/18 18:43	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*57 - 120*	*08/18/18 19:13*	*08/28/18 18:43*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.6	0.79	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1221	ND		4.6	2.2	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1232	ND		4.6	1.1	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1242	ND		4.6	1.1	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1248	ND		4.6	0.37	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1254	ND		4.6	1.8	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1
PCB-1260	13		4.6	0.79	ug/Kg	☼	09/26/18 09:39	09/26/18 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*45*	*X*	*54 - 142*	*09/26/18 09:39*	*09/26/18 21:48*	*1*
Tetrachloro-m-xylene	*52*	*X*	*58 - 122*	*09/26/18 09:39*	*09/26/18 21:48*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	77000		2000	44	mg/Kg			08/23/18 13:01	1
Total Solids	41.5		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	44	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.0				%			08/24/18 15:20	1
Medium Sand	0.2				%			08/24/18 15:20	1
Fine Sand	11.0				%			08/24/18 15:20	1
Silt	67.5				%			08/24/18 15:20	1
Clay	21.3				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S230-2to4

Date Collected: 08/10/18 08:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-2
Matrix: Solid
Percent Solids: 48.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	92	J	96	8.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Acenaphthene	91	J	96	11	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Acenaphthylene	90	J	96	9.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Anthracene	120		96	11	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Benzo[a]anthracene	200		96	15	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Benzo[a]pyrene	190		96	7.7	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Benzo[b]fluoranthene	260		96	11	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Benzo[g,h,i]perylene	230		96	9.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Benzo[k]fluoranthene	110		96	11	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Chrysene	270		96	29	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Dibenz(a,h)anthracene	ND		96	14	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Fluoranthene	620		96	27	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Fluorene	83	J	96	9.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Indeno[1,2,3-cd]pyrene	160		96	11	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Naphthalene	210	B	96	15	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Phenanthrene	570	B	96	13	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50
Pyrene	800		96	19	ug/Kg	☼	08/18/18 19:13	08/28/18 19:09	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*57 - 120*	*08/18/18 19:13*	*08/28/18 19:09*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.1	0.69	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1221	ND		4.1	1.9	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1232	ND		4.1	0.95	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1242	ND		4.1	0.99	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1248	ND		4.1	0.32	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1254	ND		4.1	1.6	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1
PCB-1260	27		4.1	0.69	ug/Kg	☼	09/26/18 09:39	09/26/18 22:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*52*	*X*	*54 - 142*	*09/26/18 09:39*	*09/26/18 22:06*	*1*
Tetrachloro-m-xylene	*50*	*X*	*58 - 122*	*09/26/18 09:39*	*09/26/18 22:06*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	71000		2000	44	mg/Kg			08/23/18 13:09	1
Total Solids	48.9		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	50	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	1.0				%			08/24/18 15:20	1
Medium Sand	0.2				%			08/24/18 15:20	1
Fine Sand	5.1				%			08/24/18 15:20	1
Silt	74.2				%			08/24/18 15:20	1
Clay	19.5				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S230-4to6

Date Collected: 08/10/18 08:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-3

Matrix: Solid
Percent Solids: 53.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	75		46	4.2	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Acenaphthene	68		46	5.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Acenaphthylene	59		46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Anthracene	63		46	5.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Benzo[a]anthracene	90		46	7.0	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Benzo[a]pyrene	92		46	3.7	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Benzo[b]fluoranthene	140		46	5.5	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Benzo[g,h,i]perylene	110		46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Benzo[k]fluoranthene	49		46	5.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Chrysene	180		46	14	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Dibenz(a,h)anthracene	ND		46	6.7	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Fluoranthene	330		46	13	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Fluorene	57		46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Indeno[1,2,3-cd]pyrene	78		46	5.6	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Naphthalene	150	B	46	7.4	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Phenanthrene	350	B	46	6.4	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25
Pyrene	440		46	9.0	ug/Kg	☼	08/18/18 19:13	08/28/18 19:35	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*57 - 120*	*08/18/18 19:13*	*08/28/18 19:35*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.62	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1232	ND		3.6	0.85	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1242	ND		3.6	0.89	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1248	ND		3.6	0.29	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1
PCB-1260	32		3.6	0.62	ug/Kg	☼	09/26/18 09:39	09/26/18 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*101*		*54 - 142*	*09/26/18 09:39*	*09/26/18 22:25*	*1*
Tetrachloro-m-xylene	*55*	*X*	*58 - 122*	*09/26/18 09:39*	*09/26/18 22:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	61000		2000	44	mg/Kg			08/23/18 13:16	1
Total Solids	53.5		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	55	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.3				%			08/24/18 15:20	1
Medium Sand	0.2				%			08/24/18 15:20	1
Fine Sand	10.0				%			08/24/18 15:20	1
Silt	74.3				%			08/24/18 15:20	1
Clay	15.1				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S230-6to8

Date Collected: 08/10/18 09:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-4

Matrix: Solid
Percent Solids: 54.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	64		44	4.0	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Acenaphthene	90		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Acenaphthylene	45		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Anthracene	110		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Benzo[a]anthracene	150		44	6.7	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Benzo[a]pyrene	130		44	3.5	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Benzo[b]fluoranthene	170		44	5.2	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Benzo[g,h,i]perylene	140		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Benzo[k]fluoranthene	64		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Chrysene	200		44	13	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Dibenz(a,h)anthracene	17	J	44	6.3	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Fluoranthene	400		44	12	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Fluorene	77		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Indeno[1,2,3-cd]pyrene	140		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Naphthalene	110	B	44	7.0	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Phenanthrene	410	B	44	6.1	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25
Pyrene	510		44	8.5	ug/Kg	☼	08/18/18 19:13	08/28/18 20:01	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*57 - 120*	*08/18/18 19:13*	*08/28/18 20:01*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	3.5	0.60	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1221	ND		3.5	1.7	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1232	ND		3.5	0.83	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1242	ND		3.5	0.86	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1248	ND		3.5	0.28	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1254	ND		3.5	1.4	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1
PCB-1260	45	F1	3.5	0.60	ug/Kg	☼	09/26/18 09:39	09/26/18 22:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*54 - 142*	*09/26/18 09:39*	*09/26/18 22:44*	*1*
Tetrachloro-m-xylene	*54*	*X*	*58 - 122*	*09/26/18 09:39*	*09/26/18 22:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	55000		2000	44	mg/Kg			08/23/18 12:32	1
Total Solids	54.3		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	56	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.2				%			08/24/18 15:20	1
Medium Sand	0.1				%			08/24/18 15:20	1
Fine Sand	6.9				%			08/24/18 15:20	1
Silt	78.8				%			08/24/18 15:20	1
Clay	14.0				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S230-8to10.0

Date Collected: 08/10/18 09:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-5

Matrix: Solid
Percent Solids: 56.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	64		44	4.0	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Acenaphthene	61		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Acenaphthylene	42	J	44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Anthracene	48		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Benzo[a]anthracene	120		44	6.7	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Benzo[a]pyrene	86		44	3.5	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Benzo[b]fluoranthene	120		44	5.2	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Benzo[g,h,i]perylene	82		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Benzo[k]fluoranthene	47		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Chrysene	150		44	13	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Dibenz(a,h)anthracene	14	J	44	6.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Fluoranthene	270		44	12	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Fluorene	42	J	44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Indeno[1,2,3-cd]pyrene	75		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Naphthalene	77	B	44	7.1	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Phenanthrene	240	B	44	6.1	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25
Pyrene	330		44	8.6	ug/Kg	☼	08/18/18 19:13	08/28/18 21:19	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*57 - 120*	*08/18/18 19:13*	*08/28/18 21:19*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.60	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1232	ND		3.6	0.83	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1242	ND		3.6	0.87	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1248	ND		3.6	0.28	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1
PCB-1260	35		3.6	0.60	ug/Kg	☼	09/26/18 09:39	09/26/18 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*58*		*54 - 142*	*09/26/18 09:39*	*09/26/18 23:40*	*1*
Tetrachloro-m-xylene	*52*	*X*	*58 - 122*	*09/26/18 09:39*	*09/26/18 23:40*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	58000		2000	44	mg/Kg			08/23/18 13:29	1
Total Solids	56.2		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	56	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	2.4				%			08/24/18 15:20	1
Coarse Sand	0.5				%			08/24/18 15:20	1
Medium Sand	0.1				%			08/24/18 15:20	1
Fine Sand	9.3				%			08/24/18 15:20	1
Silt	70.5				%			08/24/18 15:20	1
Clay	17.1				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S230-10.0to11.4

Date Collected: 08/10/18 09:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-6
Matrix: Solid
Percent Solids: 56.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	73		44	4.0	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Acenaphthene	89		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Acenaphthylene	49		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Anthracene	72		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Benzo[a]anthracene	170		44	6.7	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Benzo[a]pyrene	130		44	3.5	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Benzo[b]fluoranthene	180		44	5.2	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Benzo[g,h,i]perylene	110		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Benzo[k]fluoranthene	63		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Chrysene	210		44	13	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Dibenz(a,h)anthracene	21	J	44	6.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Fluoranthene	400		44	12	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Fluorene	78		44	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Indeno[1,2,3-cd]pyrene	100		44	5.3	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Naphthalene	100	B	44	7.1	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Phenanthrene	370	B	44	6.1	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25
Pyrene	440		44	8.6	ug/Kg	☼	08/18/18 19:13	08/28/18 21:45	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*57 - 120*	*08/18/18 19:13*	*08/28/18 21:45*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.5	0.59	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1221	ND		3.5	1.7	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1232	ND		3.5	0.82	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1242	ND		3.5	0.86	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1248	ND		3.5	0.28	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1254	ND		3.5	1.4	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1
PCB-1260	55		3.5	0.59	ug/Kg	☼	09/26/18 09:39	09/26/18 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*73*		*54 - 142*	*09/26/18 09:39*	*09/26/18 23:58*	*1*
Tetrachloro-m-xylene	*61*		*58 - 122*	*09/26/18 09:39*	*09/26/18 23:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	68000		2000	44	mg/Kg			08/23/18 13:37	1
Total Solids	56.0		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	56	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.5				%			08/24/18 15:20	1
Medium Sand	0.2				%			08/24/18 15:20	1
Fine Sand	9.9				%			08/24/18 15:20	1
Silt	77.5				%			08/24/18 15:20	1
Clay	11.9				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-0to2

Date Collected: 08/10/18 10:45
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-7

Matrix: Solid
Percent Solids: 41.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		120	11	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Acenaphthene	ND		120	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Acenaphthylene	ND		120	12	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Anthracene	**23**	**J**	120	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Benzo[a]anthracene	**41**	**J**	120	18	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Benzo[a]pyrene	**50**	**J**	120	9.5	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Benzo[b]fluoranthene	**64**	**J**	120	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Benzo[g,h,i]perylene	**42**	**J**	120	12	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Benzo[k]fluoranthene	**25**	**J**	120	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Chrysene	**75**	**J**	120	36	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Dibenz(a,h)anthracene	ND		120	17	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Fluoranthene	**130**		120	33	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Fluorene	**17**	**J**	120	12	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Indeno[1,2,3-cd]pyrene	**56**	**J**	120	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Naphthalene	**33**	**J B**	120	19	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Phenanthrene	**71**	**J B**	120	16	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50
Pyrene	**140**		120	23	ug/Kg	☼	08/18/18 19:13	08/28/18 22:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*57 - 120*	*08/18/18 19:13*	*08/28/18 22:11*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.8	0.82	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1221	ND		4.8	2.3	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1232	ND		4.8	1.1	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1242	ND		4.8	1.2	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1248	ND		4.8	0.38	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1254	**6.7**		4.8	1.9	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1
PCB-1260	ND		4.8	0.82	ug/Kg	☼	09/26/18 09:39	09/27/18 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*54 - 142*	*09/26/18 09:39*	*09/27/18 00:17*	*1*
Tetrachloro-m-xylene	*59*		*58 - 122*	*09/26/18 09:39*	*09/27/18 00:17*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**52000**		2000	44	mg/Kg			08/23/18 13:44	1
Total Solids	**41.4**		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	**42**	**H**	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**0.0**				%			08/24/18 15:20	1
Coarse Sand	**0.0**				%			08/24/18 15:20	1
Medium Sand	**0.1**				%			08/24/18 15:20	1
Fine Sand	**6.5**				%			08/24/18 15:20	1
Silt	**78.5**				%			08/24/18 15:20	1
Clay	**14.8**				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-2to4

Date Collected: 08/10/18 10:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-8

Matrix: Solid
Percent Solids: 50.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	14	J	49	4.4	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Acenaphthene	26	J	49	5.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Acenaphthylene	26	J	49	4.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Anthracene	30	J	49	5.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Benzo[a]anthracene	71		49	7.5	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Benzo[a]pyrene	77		49	3.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Benzo[b]fluoranthene	110		49	5.8	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Benzo[g,h,i]perylene	77		49	4.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Benzo[k]fluoranthene	35	J	49	5.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Chrysene	110		49	15	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Dibenz(a,h)anthracene	ND		49	7.1	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Fluoranthene	180		49	14	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Fluorene	22	J	49	4.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Indeno[1,2,3-cd]pyrene	74		49	5.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Naphthalene	45	J B	49	7.9	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Phenanthrene	140	B	49	6.8	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25
Pyrene	200		49	9.6	ug/Kg	☼	08/18/18 19:13	08/28/18 22:37	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*57 - 120*	*08/18/18 19:13*	*08/28/18 22:37*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.9	0.66	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1221	ND		3.9	1.9	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1232	ND		3.9	0.92	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1242	ND		3.9	0.96	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1248	ND		3.9	0.31	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1254	19		3.9	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1
PCB-1260	ND		3.9	0.66	ug/Kg	☼	09/26/18 09:39	09/27/18 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*54 - 142*	*09/26/18 09:39*	*09/27/18 00:36*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 09:39*	*09/27/18 00:36*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	38000		2000	44	mg/Kg			08/23/18 13:51	1
Total Solids	50.3		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	52	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.0				%			08/24/18 15:20	1
Medium Sand	0.1				%			08/24/18 15:20	1
Fine Sand	7.1				%			08/24/18 15:20	1
Silt	73.6				%			08/24/18 15:20	1
Clay	19.2				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-4to6

Date Collected: 08/10/18 10:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-9

Matrix: Solid
Percent Solids: 52.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	27	J	90	8.1	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Acenaphthene	46	J	90	11	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Acenaphthylene	45	J	90	9.0	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Anthracene	59	J	90	11	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Benzo[a]anthracene	160		90	14	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Benzo[a]pyrene	170		90	7.2	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Benzo[b]fluoranthene	230		90	11	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Benzo[g,h,i]perylene	140		90	9.0	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Benzo[k]fluoranthene	100		90	11	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Chrysene	290		90	27	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Dibenz(a,h)anthracene	ND		90	13	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Fluoranthene	340		90	25	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Fluorene	36	J	90	9.0	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Indeno[1,2,3-cd]pyrene	140		90	11	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Naphthalene	100	B	90	14	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Phenanthrene	290	B	90	12	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50
Pyrene	440		90	17	ug/Kg	☼	08/18/18 19:13	08/28/18 23:04	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*57 - 120*	*08/18/18 19:13*	*08/28/18 23:04*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.62	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1232	ND		3.6	0.85	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1242	ND		3.6	0.89	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1248	ND		3.6	0.29	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1254	12		3.6	1.4	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1
PCB-1260	ND		3.6	0.62	ug/Kg	☼	09/26/18 09:39	09/27/18 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*54 - 142*	*09/26/18 09:39*	*09/27/18 00:54*	*1*
Tetrachloro-m-xylene	*59*		*58 - 122*	*09/26/18 09:39*	*09/27/18 00:54*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	41000		2000	44	mg/Kg			08/23/18 13:58	1
Total Solids	52.9		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	53	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.0				%			08/24/18 15:20	1
Medium Sand	1.5				%			08/24/18 15:20	1
Fine Sand	12.8				%			08/24/18 15:20	1
Silt	67.5				%			08/24/18 15:20	1
Clay	18.2				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-4to6D

Date Collected: 08/10/18 10:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-10

Matrix: Solid
Percent Solids: 52.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	28	J	46	4.1	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Acenaphthene	46		46	5.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Acenaphthylene	45	J	46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Anthracene	68		46	5.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Benzo[a]anthracene	170		46	7.0	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Benzo[a]pyrene	180		46	3.7	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Benzo[b]fluoranthene	250		46	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Benzo[g,h,i]perylene	190		46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Benzo[k]fluoranthene	81		46	5.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Chrysene	240		46	14	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Dibenz(a,h)anthracene	22	J	46	6.6	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Fluoranthene	390		46	13	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Fluorene	38	J	46	4.6	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Indeno[1,2,3-cd]pyrene	210		46	5.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Naphthalene	100	B	46	7.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Phenanthrene	290	B	46	6.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25
Pyrene	470		46	8.9	ug/Kg	☼	08/18/18 19:13	08/28/18 23:30	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*57 - 120*	*08/18/18 19:13*	*08/28/18 23:30*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.8	0.64	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1221	ND		3.8	1.8	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1232	ND		3.8	0.89	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1242	ND		3.8	0.93	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1248	ND		3.8	0.30	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1254	18		3.8	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1
PCB-1260	ND		3.8	0.64	ug/Kg	☼	09/26/18 09:39	09/27/18 01:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*55*		*54 - 142*	*09/26/18 09:39*	*09/27/18 01:13*	*1*
Tetrachloro-m-xylene	*56*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 01:13*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	42000		2000	44	mg/Kg			08/23/18 14:05	1
Total Solids	52.4		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	54	H	0.10	0.10	%			09/11/18 06:49	1

Client Sample ID: PDI-SC-S007-6to8

Date Collected: 08/10/18 11:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-11

Matrix: Solid
Percent Solids: 51.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	43	J	45	4.1	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Acenaphthene	64		45	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Acenaphthylene	33	J	45	4.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Anthracene	130		45	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Benzo[a]anthracene	120		45	6.9	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Benzo[a]pyrene	140		45	3.6	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Benzo[b]fluoranthene	200		45	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Benzo[g,h,i]perylene	150		45	4.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Benzo[k]fluoranthene	74		45	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Chrysene	240		45	14	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Dibenz(a,h)anthracene	ND		45	6.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Fluoranthene	370		45	13	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Fluorene	47		45	4.5	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Indeno[1,2,3-cd]pyrene	150		45	5.4	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Naphthalene	110	B	45	7.3	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Phenanthrene	290	B	45	6.3	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25
Pyrene	480		45	8.8	ug/Kg	☼	08/18/18 19:13	08/28/18 23:56	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*57 - 120*	*08/18/18 19:13*	*08/28/18 23:56*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.8	0.65	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1221	ND		3.8	1.8	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1232	ND		3.8	0.89	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1242	ND		3.8	0.93	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1248	31		3.8	0.30	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1254	ND		3.8	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1
PCB-1260	ND		3.8	0.65	ug/Kg	☼	09/26/18 09:39	09/27/18 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*48*	*X*	*54 - 142*	*09/26/18 09:39*	*09/27/18 01:31*	*1*
Tetrachloro-m-xylene	*42*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 01:31*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	42000		2000	44	mg/Kg			08/23/18 14:12	1
Total Solids	51.1		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	54	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.0				%			08/24/18 15:20	1
Medium Sand	0.3				%			08/24/18 15:20	1
Fine Sand	8.6				%			08/24/18 15:20	1
Silt	73.1				%			08/24/18 15:20	1
Clay	18.0				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-8to10

Date Collected: 08/10/18 11:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-12

Matrix: Solid
Percent Solids: 55.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	78		44	4.0	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Acenaphthene	81		44	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Acenaphthylene	53		44	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Anthracene	110		44	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Benzo[a]anthracene	180		44	6.8	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Benzo[a]pyrene	190		44	3.6	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Benzo[b]fluoranthene	240		44	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Benzo[g,h,i]perylene	220		44	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Benzo[k]fluoranthene	79		44	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Chrysene	260		44	13	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Dibenz(a,h)anthracene	23	J	44	6.4	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Fluoranthene	480		44	12	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Fluorene	81		44	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Indeno[1,2,3-cd]pyrene	200		44	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Naphthalene	170	B	44	7.1	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Phenanthrene	460	B	44	6.1	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25
Pyrene	610		44	8.6	ug/Kg	☼	08/18/18 19:13	08/29/18 00:22	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*57 - 120*	*08/18/18 19:13*	*08/29/18 00:22*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.61	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1232	ND		3.6	0.84	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1242	ND		3.6	0.88	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1248	57		3.6	0.29	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1
PCB-1260	ND		3.6	0.61	ug/Kg	☼	09/26/18 09:39	09/27/18 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*82*		*54 - 142*	*09/26/18 09:39*	*09/27/18 01:50*	*1*
Tetrachloro-m-xylene	*57*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 01:50*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	38000		2000	44	mg/Kg			08/23/18 14:18	1
Total Solids	55.0		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	56	H	0.10	0.10	%			08/24/18 15:20	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/24/18 15:20	1
Coarse Sand	0.0				%			08/24/18 15:20	1
Medium Sand	0.7				%			08/24/18 15:20	1
Fine Sand	9.7				%			08/24/18 15:20	1
Silt	69.0				%			08/24/18 15:20	1
Clay	20.7				%			08/24/18 15:20	1

Client Sample ID: PDI-SC-S007-10to12

Date Collected: 08/10/18 11:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-13

Matrix: Solid
Percent Solids: 58.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	81		40	3.6	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Acenaphthene	120		40	4.8	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Acenaphthylene	65		40	4.0	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Anthracene	150		40	4.8	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Benzo[a]anthracene	210		40	6.1	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Benzo[a]pyrene	230		40	3.2	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Benzo[b]fluoranthene	260		40	4.7	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Benzo[g,h,i]perylene	230		40	4.0	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Benzo[k]fluoranthene	130		40	4.8	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Chrysene	350		40	12	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Dibenz(a,h)anthracene	30	J	40	5.7	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Fluoranthene	510		40	11	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Fluorene	96		40	4.0	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Indeno[1,2,3-cd]pyrene	220		40	4.8	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Naphthalene	150	B	40	6.4	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Phenanthrene	530	B	40	5.5	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25
Pyrene	670		40	7.7	ug/Kg	☼	08/18/18 19:13	08/29/18 00:48	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*57 - 120*	*08/18/18 19:13*	*08/29/18 00:48*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.57	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1
PCB-1232	ND		3.4	0.79	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1
PCB-1242	ND		3.4	0.82	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1
PCB-1254	ND		3.4	1.3	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1
PCB-1260	ND		3.4	0.57	ug/Kg	☼	09/26/18 09:39	09/27/18 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*603*	*X*	*54 - 142*	*09/26/18 09:39*	*09/27/18 02:08*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 09:39*	*09/27/18 02:08*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	2200		340	27	ug/Kg	☼	09/26/18 09:39	09/28/18 14:36	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*54 - 142*	*09/26/18 09:39*	*09/28/18 14:36*	*100*
Tetrachloro-m-xylene	*0*	*X*	*58 - 122*	*09/26/18 09:39*	*09/28/18 14:36*	*100*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	37000		2000	44	mg/Kg			08/23/18 14:32	1
Total Solids	58.2		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	58	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:37	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S007-10to12
Date Collected: 08/10/18 11:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-13
Matrix: Solid
Percent Solids: 58.2

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Coarse Sand	0.2				%			08/28/18 14:37	1
Medium Sand	0.6				%			08/28/18 14:37	1
Fine Sand	17.1				%			08/28/18 14:37	1
Silt	66.2				%			08/28/18 14:37	1
Clay	15.9				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S007-12to14

Date Collected: 08/10/18 11:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-14

Matrix: Solid
Percent Solids: 58.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	300		42	3.8	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Acenaphthene	400		42	5.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Acenaphthylene	99		42	4.2	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Anthracene	290		42	5.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Benzo[a]anthracene	390		42	6.5	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Benzo[a]pyrene	360		42	3.4	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Benzo[b]fluoranthene	480		42	5.0	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Benzo[g,h,i]perylene	370		42	4.2	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Benzo[k]fluoranthene	160		42	5.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Chrysene	550		42	13	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Dibenz(a,h)anthracene	45		42	6.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Fluoranthene	1100		42	12	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Fluorene	320		42	4.2	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Indeno[1,2,3-cd]pyrene	360		42	5.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Naphthalene	450	B	42	6.8	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Phenanthrene	1300	B	42	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25
Pyrene	1300		42	8.2	ug/Kg	☼	08/18/18 19:13	08/29/18 01:14	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*57 - 120*	*08/18/18 19:13*	*08/29/18 01:14*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.57	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1232	ND		3.4	0.79	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1242	ND		3.4	0.83	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1248	130		3.4	0.27	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1254	ND		3.4	1.3	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1
PCB-1260	ND		3.4	0.57	ug/Kg	☼	09/26/18 09:39	09/27/18 02:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*54 - 142*	*09/26/18 09:39*	*09/27/18 02:27*	*1*
Tetrachloro-m-xylene	*50*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 02:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	50000		2000	44	mg/Kg			08/23/18 14:38	1
Total Solids	58.1		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	60	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	4.4				%			08/28/18 14:37	1
Coarse Sand	0.8				%			08/28/18 14:37	1
Medium Sand	0.4				%			08/28/18 14:37	1
Fine Sand	19.8				%			08/28/18 14:37	1
Silt	64.0				%			08/28/18 14:37	1
Clay	10.5				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S007-14to16

Date Collected: 08/10/18 11:20
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-15

Matrix: Solid
Percent Solids: 61.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	400		16	1.4	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Acenaphthene	650		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Acenaphthylene	78		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Anthracene	510		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Benzo[a]anthracene	350		16	2.4	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Benzo[a]pyrene	330		16	1.3	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Benzo[b]fluoranthene	320		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Benzo[g,h,i]perylene	320		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Benzo[k]fluoranthene	130		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Chrysene	460		16	4.7	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Dibenz(a,h)anthracene	36		16	2.3	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Fluoranthene	1200		16	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Fluorene	440		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Indeno[1,2,3-cd]pyrene	290		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Naphthalene	470	B	16	2.5	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Phenanthrene	2400	B	16	2.2	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10
Pyrene	1500		16	3.1	ug/Kg	☼	08/18/18 19:13	08/29/18 01:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*57 - 120*	*08/18/18 19:13*	*08/29/18 01:39*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.2	0.54	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1221	ND		3.2	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1232	ND		3.2	0.74	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1242	ND		3.2	0.77	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1248	ND		3.2	0.25	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1254	ND		3.2	1.2	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1
PCB-1260	7.2		3.2	0.54	ug/Kg	☼	09/26/18 09:39	09/27/18 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*54 - 142*	*09/26/18 09:39*	*09/27/18 02:46*	*1*
Tetrachloro-m-xylene	*43*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 02:46*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	37000		2000	44	mg/Kg			08/23/18 14:45	1
Total Solids	61.3		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	63	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:37	1
Coarse Sand	1.1				%			08/28/18 14:37	1
Medium Sand	0.1				%			08/28/18 14:37	1
Fine Sand	19.3				%			08/28/18 14:37	1
Silt	66.9				%			08/28/18 14:37	1
Clay	12.6				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S010-0to2

Date Collected: 08/10/18 14:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-16

Matrix: Solid
Percent Solids: 50.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	170		49	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Acenaphthene	51		49	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Acenaphthylene	50		49	4.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Anthracene	67		49	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Benzo[a]anthracene	130		49	7.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Benzo[a]pyrene	190		49	3.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Benzo[b]fluoranthene	270		49	5.8	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Benzo[g,h,i]perylene	250		49	4.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Benzo[k]fluoranthene	80		49	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Chrysene	300		49	15	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Dibenz(a,h)anthracene	34	J	49	7.1	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Fluoranthene	520		49	14	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Fluorene	48	J	49	4.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Indeno[1,2,3-cd]pyrene	250		49	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Naphthalene	450	B	49	7.8	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Phenanthrene	360	B	49	6.8	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25
Pyrene	520		49	9.5	ug/Kg	☼	08/18/18 19:13	08/29/18 02:05	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*57 - 120*	*08/18/18 19:13*	*08/29/18 02:05*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.8	0.64	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1221	ND		3.8	1.8	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1232	ND		3.8	0.89	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1242	ND		3.8	0.93	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1248	ND		3.8	0.30	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1254	97		3.8	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1
PCB-1260	ND		3.8	0.64	ug/Kg	☼	09/26/18 09:39	09/27/18 03:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*89*		*54 - 142*	*09/26/18 09:39*	*09/27/18 03:04*	*1*
Tetrachloro-m-xylene	*62*		*58 - 122*	*09/26/18 09:39*	*09/27/18 03:04*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	43000		2000	44	mg/Kg			08/23/18 14:51	1
Total Solids	50.7		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	53	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:37	1
Coarse Sand	1.7				%			08/28/18 14:37	1
Medium Sand	7.9				%			08/28/18 14:37	1
Fine Sand	46.9				%			08/28/18 14:37	1
Silt	36.4				%			08/28/18 14:37	1
Clay	7.1				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S010-2to4

Date Collected: 08/10/18 14:20
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-17

Matrix: Solid
Percent Solids: 60.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	91		16	1.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Acenaphthene	45		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Acenaphthylene	35		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Anthracene	70		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Benzo[a]anthracene	150		16	2.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Benzo[a]pyrene	220		16	1.3	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Benzo[b]fluoranthene	260		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Benzo[g,h,i]perylene	260		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Benzo[k]fluoranthene	110		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Chrysene	220		16	4.8	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Dibenz(a,h)anthracene	40		16	2.3	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Fluoranthene	390		16	4.5	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Fluorene	31		16	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Indeno[1,2,3-cd]pyrene	250		16	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Naphthalene	240	B	16	2.6	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Phenanthrene	280	B	16	2.2	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10
Pyrene	510		16	3.1	ug/Kg	☼	08/18/18 19:13	08/29/18 02:31	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*57 - 120*	*08/18/18 19:13*	*08/29/18 02:31*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.2	0.55	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1
PCB-1221	ND		3.2	1.5	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1
PCB-1232	ND		3.2	0.76	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1
PCB-1242	ND		3.2	0.79	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1
PCB-1248	330		32	2.6	ug/Kg	☼	09/26/18 09:39	09/28/18 12:35	10
PCB-1254	ND		3.2	1.3	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1
PCB-1260	ND		3.2	0.55	ug/Kg	☼	09/26/18 09:39	09/27/18 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*54 - 142*	*09/26/18 09:39*	*09/27/18 05:33*	*1*
Tetrachloro-m-xylene	*46*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 05:33*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	25000		2000	44	mg/Kg			08/23/18 14:58	1
Total Solids	60.8		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	62	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	10.6				%			08/28/18 14:37	1
Coarse Sand	2.5				%			08/28/18 14:37	1
Medium Sand	12.7				%			08/28/18 14:37	1
Fine Sand	38.4				%			08/28/18 14:37	1
Silt	28.8				%			08/28/18 14:37	1
Clay	7.1				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S010-4to6.4

Date Collected: 08/10/18 14:25
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-18

Matrix: Solid
Percent Solids: 66.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	360		37	3.3	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Acenaphthene	350		37	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Acenaphthylene	130		37	3.7	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Anthracene	330		37	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Benzo[a]anthracene	490		37	5.6	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Benzo[a]pyrene	570		37	3.0	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Benzo[b]fluoranthene	630		37	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Benzo[g,h,i]perylene	520		37	3.7	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Benzo[k]fluoranthene	260		37	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Chrysene	690		37	11	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Dibenz(a,h)anthracene	58		37	5.3	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Fluoranthene	1400		37	10	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Fluorene	190		37	3.7	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Indeno[1,2,3-cd]pyrene	470		37	4.4	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Naphthalene	840	B	37	5.9	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Phenanthrene	1700	B	37	5.1	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25
Pyrene	1900		37	7.2	ug/Kg	☼	08/18/18 19:13	08/29/18 02:57	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*57 - 120*	*08/18/18 19:13*	*08/29/18 02:57*	*25*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.0	0.51	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1
PCB-1221	ND		3.0	1.4	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1
PCB-1232	ND		3.0	0.70	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1
PCB-1242	ND		3.0	0.73	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1
PCB-1248	320		30	2.4	ug/Kg	☼	09/26/18 09:39	09/28/18 12:52	10
PCB-1254	ND		3.0	1.2	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1
PCB-1260	ND		3.0	0.51	ug/Kg	☼	09/26/18 09:39	09/27/18 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*86*		*54 - 142*	*09/26/18 09:39*	*09/27/18 05:52*	*1*
Tetrachloro-m-xylene	*47*	*X*	*58 - 122*	*09/26/18 09:39*	*09/27/18 05:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	24000		2000	44	mg/Kg			08/23/18 15:05	1
Total Solids	66.2		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	65	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	33.8				%			08/28/18 14:37	1
Coarse Sand	2.4				%			08/28/18 14:37	1
Medium Sand	10.0				%			08/28/18 14:37	1
Fine Sand	35.3				%			08/28/18 14:37	1
Silt	12.1				%			08/28/18 14:37	1
Clay	6.4				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S010-6.4to8.4

Date Collected: 08/10/18 14:30
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-19

Matrix: Solid
Percent Solids: 73.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	26		13	1.2	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Acenaphthene	50		13	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Acenaphthylene	52		13	1.3	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Anthracene	170		13	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Benzo[a]anthracene	290		13	2.0	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Benzo[a]pyrene	330		13	1.1	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Benzo[b]fluoranthene	320		13	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Benzo[g,h,i]perylene	260		13	1.3	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Benzo[k]fluoranthene	90		13	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Chrysene	340		13	4.0	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Dibenz(a,h)anthracene	34		13	1.9	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Fluoranthene	390		13	3.7	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Fluorene	38		13	1.3	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Indeno[1,2,3-cd]pyrene	210		13	1.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Naphthalene	74	B	13	2.1	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Phenanthrene	510	B	13	1.8	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10
Pyrene	880		13	2.6	ug/Kg	☼	08/18/18 19:13	08/29/18 03:23	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*57 - 120*	*08/18/18 19:13*	*08/29/18 03:23*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.7	0.46	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1221	ND		2.7	1.3	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1232	ND		2.7	0.63	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1242	ND		2.7	0.66	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1248	13		2.7	0.21	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1254	ND		2.7	1.1	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1
PCB-1260	ND		2.7	0.46	ug/Kg	☼	09/26/18 10:33	09/27/18 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*54 - 142*	*09/26/18 10:33*	*09/27/18 06:10*	*1*
Tetrachloro-m-xylene	*43*	*X*	*58 - 122*	*09/26/18 10:33*	*09/27/18 06:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	13000		2000	44	mg/Kg			08/23/18 15:11	1
Total Solids	73.7		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	72	H	0.10	0.10	%			08/28/18 14:37	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	3.3				%			08/28/18 14:37	1
Coarse Sand	0.3				%			08/28/18 14:37	1
Medium Sand	10.5				%			08/28/18 14:37	1
Fine Sand	56.9				%			08/28/18 14:37	1
Silt	23.2				%			08/28/18 14:37	1
Clay	5.8				%			08/28/18 14:37	1

Client Sample ID: PDI-SC-S010-8.4to10.8

Date Collected: 08/10/18 14:35
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-20

Matrix: Solid
Percent Solids: 72.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	37	B	6.4	0.58	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Acenaphthene	8.3		6.4	0.77	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Acenaphthylene	8.1		6.4	0.64	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Anthracene	21		6.4	0.77	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Benzo[a]anthracene	53		6.4	0.98	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Benzo[a]pyrene	41		6.4	0.52	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Benzo[b]fluoranthene	42		6.4	0.76	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Benzo[g,h,i]perylene	27		6.4	0.64	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Benzo[k]fluoranthene	19		6.4	0.77	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Chrysene	60		6.4	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Dibenz(a,h)anthracene	5.1	J	6.4	0.93	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Fluoranthene	83		6.4	1.8	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Fluorene	6.0	J	6.4	0.64	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Indeno[1,2,3-cd]pyrene	27		6.4	0.77	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Naphthalene	140	B	6.4	1.0	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Phenanthrene	62	B	6.4	0.89	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5
Pyrene	120		6.4	1.3	ug/Kg	☼	08/23/18 12:26	08/29/18 13:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*57 - 120*	*08/23/18 12:26*	*08/29/18 13:35*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.7	0.45	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1221	ND		2.7	1.3	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1232	ND		2.7	0.62	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1242	ND		2.7	0.65	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1248	3.6		2.7	0.21	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1254	ND		2.7	1.0	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1
PCB-1260	ND		2.7	0.45	ug/Kg	☼	09/26/18 10:33	09/27/18 06:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*54 - 142*	*09/26/18 10:33*	*09/27/18 06:29*	*1*
Tetrachloro-m-xylene	*47*	*X*	*58 - 122*	*09/26/18 10:33*	*09/27/18 06:29*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	10000		2000	44	mg/Kg			08/23/18 15:17	1
Total Solids	72.5		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	75	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	6.8				%			08/28/18 14:42	1
Fine Sand	63.2				%			08/28/18 14:42	1
Silt	24.7				%			08/28/18 14:42	1
Clay	5.3				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S010-10.8to13.4
Date Collected: 08/10/18 14:40
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-21
Matrix: Solid
Percent Solids: 67.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	1.2	J B	7.0	0.63	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Acenaphthene	0.98	J	7.0	0.84	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Acenaphthylene	0.89	J	7.0	0.70	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Anthracene	1.9	J	7.0	0.84	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Benzo[a]anthracene	2.9	J	7.0	1.1	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Benzo[a]pyrene	ND		7.0	0.56	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Benzo[b]fluoranthene	2.7	J	7.0	0.83	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Benzo[g,h,i]perylene	1.7	J	7.0	0.70	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Benzo[k]fluoranthene	ND		7.0	0.84	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Chrysene	2.9	J	7.0	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Dibenz(a,h)anthracene	ND		7.0	1.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Fluoranthene	4.9	J	7.0	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Fluorene	1.5	J	7.0	0.70	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Indeno[1,2,3-cd]pyrene	1.4	J	7.0	0.84	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Naphthalene	3.3	J B	7.0	1.1	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Phenanthrene	6.1	J B	7.0	0.97	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5
Pyrene	9.5		7.0	1.4	ug/Kg	☼	08/23/18 12:26	08/29/18 14:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*57 - 120*	*08/23/18 12:26*	*08/29/18 14:00*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.48	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1232	ND		2.8	0.67	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1242	ND		2.8	0.70	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1248	ND		2.8	0.23	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1
PCB-1260	ND		2.8	0.48	ug/Kg	☼	09/26/18 11:58	09/27/18 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*72*		*54 - 142*	*09/26/18 11:58*	*09/27/18 12:48*	*1*
Tetrachloro-m-xylene	*66*		*58 - 122*	*09/26/18 11:58*	*09/27/18 12:48*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	15000		2000	44	mg/Kg			08/24/18 08:14	1
Total Solids	67.7		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	68	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	2.3				%			08/28/18 14:42	1
Fine Sand	37.8				%			08/28/18 14:42	1
Silt	50.2				%			08/28/18 14:42	1
Clay	9.7				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S010-13.4to14.4

Date Collected: 08/10/18 14:45
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-22

Matrix: Solid
Percent Solids: 71.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.88**	**J B**	6.6	0.59	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Acenaphthene	ND		6.6	0.79	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Acenaphthylene	ND		6.6	0.66	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Anthracene	ND		6.6	0.79	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Benzo[a]anthracene	ND		6.6	1.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Benzo[a]pyrene	ND		6.6	0.53	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Benzo[b]fluoranthene	ND		6.6	0.78	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Benzo[g,h,i]perylene	ND		6.6	0.66	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Benzo[k]fluoranthene	ND		6.6	0.79	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Chrysene	ND		6.6	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Dibenz(a,h)anthracene	ND		6.6	0.95	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Fluoranthene	ND		6.6	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Fluorene	**0.73**	**J**	6.6	0.66	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Indeno[1,2,3-cd]pyrene	ND		6.6	0.79	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Naphthalene	**2.9**	**J B**	6.6	1.1	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Phenanthrene	**2.0**	**J B**	6.6	0.91	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5
Pyrene	**1.8**	**J**	6.6	1.3	ug/Kg	☼	08/23/18 12:26	08/29/18 14:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*57 - 120*	*08/23/18 12:26*	*08/29/18 14:24*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.48	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1232	ND		2.8	0.66	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1242	ND		2.8	0.69	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1248	ND		2.8	0.22	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1
PCB-1260	ND		2.8	0.48	ug/Kg	☼	09/26/18 11:58	09/27/18 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*71*		*54 - 142*	*09/26/18 11:58*	*09/27/18 13:05*	*1*
Tetrachloro-m-xylene	*66*		*58 - 122*	*09/26/18 11:58*	*09/27/18 13:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**16000**		2000	44	mg/Kg			08/24/18 08:20	1
Total Solids	**71.3**		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	**71**	**H**	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**3.2**				%			08/28/18 14:42	1
Coarse Sand	**0.7**				%			08/28/18 14:42	1
Medium Sand	**8.8**				%			08/28/18 14:42	1
Fine Sand	**48.8**				%			08/28/18 14:42	1
Silt	**34.3**				%			08/28/18 14:42	1
Clay	**4.2**				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-0to2

Date Collected: 08/10/18 15:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-23

Matrix: Solid
Percent Solids: 44.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	8.4	J B	22	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Acenaphthene	10	J	22	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Acenaphthylene	7.8	J	22	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Anthracene	21	J	22	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Benzo[a]anthracene	45		22	3.3	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Benzo[a]pyrene	47		22	1.8	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Benzo[b]fluoranthene	75		22	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Benzo[g,h,i]perylene	43		22	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Benzo[k]fluoranthene	19	J	22	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Chrysene	62		22	6.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Dibenz(a,h)anthracene	6.4	J	22	3.2	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Fluoranthene	130		22	6.2	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Fluorene	17	J	22	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Indeno[1,2,3-cd]pyrene	45		22	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Naphthalene	27	B	22	3.5	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Phenanthrene	66	B	22	3.0	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10
Pyrene	140		22	4.3	ug/Kg	☼	08/23/18 12:26	08/29/18 14:49	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*57 - 120*	*08/23/18 12:26*	*08/29/18 14:49*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.3	0.74	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1221	ND		4.3	2.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1232	ND		4.3	1.0	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1242	ND		4.3	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1248	ND		4.3	0.35	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1254	ND		4.3	1.7	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1
PCB-1260	1.9	J	4.3	0.74	ug/Kg	☼	09/26/18 11:58	09/27/18 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*54 - 142*	*09/26/18 11:58*	*09/27/18 13:23*	*1*
Tetrachloro-m-xylene	*66*		*58 - 122*	*09/26/18 11:58*	*09/27/18 13:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	59000		2000	44	mg/Kg			08/24/18 08:34	1
Total Solids	44.0		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	44	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	7.3				%			08/28/18 14:42	1
Silt	77.2				%			08/28/18 14:42	1
Clay	15.4				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-2to4

Date Collected: 08/10/18 15:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-24

Matrix: Solid
Percent Solids: 43.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	54	B	23	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Acenaphthene	50		23	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Acenaphthylene	8.5	J	23	2.3	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Anthracene	60		23	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Benzo[a]anthracene	44		23	3.4	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Benzo[a]pyrene	46		23	1.8	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Benzo[b]fluoranthene	66		23	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Benzo[g,h,i]perylene	41		23	2.3	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Benzo[k]fluoranthene	22	J	23	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Chrysene	61		23	6.8	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Dibenz(a,h)anthracene	6.9	J	23	3.3	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Fluoranthene	160		23	6.3	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Fluorene	49		23	2.3	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Indeno[1,2,3-cd]pyrene	43		23	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Naphthalene	150	B	23	3.6	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Phenanthrene	140	B	23	3.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10
Pyrene	150		23	4.4	ug/Kg	☼	08/23/18 12:26	08/29/18 15:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*57 - 120*	*08/23/18 12:26*	*08/29/18 15:14*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.5	0.76	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1221	ND		4.5	2.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1232	ND		4.5	1.0	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1242	ND		4.5	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1248	ND		4.5	0.36	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1254	ND		4.5	1.8	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1
PCB-1260	1.1	J	4.5	0.76	ug/Kg	☼	09/26/18 11:58	09/27/18 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*54 - 142*	*09/26/18 11:58*	*09/27/18 13:41*	*1*
Tetrachloro-m-xylene	*62*		*58 - 122*	*09/26/18 11:58*	*09/27/18 13:41*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	58000		2000	44	mg/Kg			08/24/18 08:41	1
Total Solids	43.2		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	43	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	7.9				%			08/28/18 14:42	1
Silt	75.8				%			08/28/18 14:42	1
Clay	16.2				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-4to6

Date Collected: 08/10/18 16:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-25

Matrix: Solid
Percent Solids: 45.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	8.7	J B	21	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Acenaphthene	9.4	J	21	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Acenaphthylene	6.9	J	21	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Anthracene	20	J	21	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Benzo[a]anthracene	38		21	3.2	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Benzo[a]pyrene	40		21	1.7	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Benzo[b]fluoranthene	65		21	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Benzo[g,h,i]perylene	40		21	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Benzo[k]fluoranthene	21		21	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Chrysene	54		21	6.4	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Dibenz(a,h)anthracene	6.7	J	21	3.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Fluoranthene	130		21	5.9	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Fluorene	15	J	21	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Indeno[1,2,3-cd]pyrene	41		21	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Naphthalene	25	B	21	3.4	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Phenanthrene	67	B	21	2.9	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10
Pyrene	130		21	4.1	ug/Kg	☼	08/23/18 12:26	08/29/18 15:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*57 - 120*	*08/23/18 12:26*	*08/29/18 15:38*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.3	0.74	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1221	ND		4.3	2.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1232	ND		4.3	1.0	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1242	ND		4.3	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1248	ND		4.3	0.35	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1254	ND		4.3	1.7	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1
PCB-1260	0.90	J	4.3	0.74	ug/Kg	☼	09/26/18 11:58	09/27/18 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*61*		*54 - 142*	*09/26/18 11:58*	*09/27/18 13:58*	*1*
Tetrachloro-m-xylene	*64*		*58 - 122*	*09/26/18 11:58*	*09/27/18 13:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	55000		2000	44	mg/Kg			08/24/18 08:47	1
Total Solids	45.6		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	46	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	6.4				%			08/28/18 14:42	1
Silt	71.5				%			08/28/18 14:42	1
Clay	22.0				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-6to8

Date Collected: 08/10/18 16:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-26

Matrix: Solid
Percent Solids: 49.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	13	J B	20	1.8	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Acenaphthene	15	J	20	2.4	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Acenaphthylene	12	J	20	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Anthracene	31		20	2.4	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Benzo[a]anthracene	74		20	3.0	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Benzo[a]pyrene	84	F1	20	1.6	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Benzo[b]fluoranthene	120		20	2.3	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Benzo[g,h,i]perylene	83		20	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Benzo[k]fluoranthene	42		20	2.4	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Chrysene	100		20	6.0	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Dibenz(a,h)anthracene	12	J	20	2.9	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Fluoranthene	180		20	5.6	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Fluorene	20		20	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Indeno[1,2,3-cd]pyrene	84		20	2.4	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Naphthalene	41	B	20	3.2	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Phenanthrene	95	B	20	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10
Pyrene	200		20	3.9	ug/Kg	☼	08/23/18 12:26	08/29/18 16:03	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*57 - 120*	*08/23/18 12:26*	*08/29/18 16:03*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.0	0.68	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1221	ND		4.0	1.9	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1232	ND		4.0	0.94	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1242	ND		4.0	0.98	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1248	2.5	J	4.0	0.32	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1254	ND		4.0	1.6	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1
PCB-1260	ND		4.0	0.68	ug/Kg	☼	09/26/18 11:58	09/27/18 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*54 - 142*	*09/26/18 11:58*	*09/27/18 14:16*	*1*
Tetrachloro-m-xylene	*66*		*58 - 122*	*09/26/18 11:58*	*09/27/18 14:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	49000		2000	44	mg/Kg			08/24/18 07:45	1
Total Solids	49.1		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	49	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	7.2				%			08/28/18 14:42	1
Silt	71.0				%			08/28/18 14:42	1
Clay	21.6				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-8to10

Date Collected: 08/10/18 16:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-27

Matrix: Solid
Percent Solids: 54.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	21	B	17	1.6	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Acenaphthene	51		17	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Acenaphthylene	16	J	17	1.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Anthracene	44		17	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Benzo[a]anthracene	59		17	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Benzo[a]pyrene	60		17	1.4	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Benzo[b]fluoranthene	79		17	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Benzo[g,h,i]perylene	57		17	1.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Benzo[k]fluoranthene	28		17	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Chrysene	76		17	5.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Dibenz(a,h)anthracene	8.1	J	17	2.5	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Fluoranthene	210		17	4.9	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Fluorene	37		17	1.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Indeno[1,2,3-cd]pyrene	55		17	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Naphthalene	61	B	17	2.8	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Phenanthrene	220	B	17	2.4	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10
Pyrene	230		17	3.4	ug/Kg	☼	08/23/18 12:26	08/29/18 17:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*57 - 120*	*08/23/18 12:26*	*08/29/18 17:16*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.61	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1232	ND		3.6	0.84	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1242	ND		3.6	0.88	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1248	11		3.6	0.29	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1
PCB-1260	ND		3.6	0.61	ug/Kg	☼	09/26/18 11:58	09/27/18 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*54 - 142*	*09/26/18 11:58*	*09/27/18 15:09*	*1*
Tetrachloro-m-xylene	*57*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 15:09*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	47000		2000	44	mg/Kg			08/24/18 08:54	1
Total Solids	54.8		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	54	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.2				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	12.7				%			08/28/18 14:42	1
Silt	66.6				%			08/28/18 14:42	1
Clay	20.5				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S009-10to11.4

Date Collected: 08/10/18 16:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-28

Matrix: Solid
Percent Solids: 51.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	20	B	19	1.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Acenaphthene	34		19	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Acenaphthylene	12	J	19	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Anthracene	42		19	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Benzo[a]anthracene	140		19	2.8	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Benzo[a]pyrene	150		19	1.5	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Benzo[b]fluoranthene	230		19	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Benzo[g,h,i]perylene	150		19	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Benzo[k]fluoranthene	77		19	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Chrysene	180		19	5.6	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Dibenz(a,h)anthracene	20		19	2.7	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Fluoranthene	300		19	5.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Fluorene	34		19	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Indeno[1,2,3-cd]pyrene	170		19	2.2	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Naphthalene	49	B	19	3.0	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Phenanthrene	180	B	19	2.6	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10
Pyrene	310		19	3.6	ug/Kg	☼	08/23/18 12:26	08/29/18 17:41	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*57 - 120*	*08/23/18 12:26*	*08/29/18 17:41*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.7	0.64	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1221	ND		3.7	1.8	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1232	ND		3.7	0.88	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1242	ND		3.7	0.92	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1248	7.6		3.7	0.30	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1254	ND		3.7	1.5	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1
PCB-1260	ND		3.7	0.64	ug/Kg	☼	09/26/18 11:58	09/27/18 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*54 - 142*	*09/26/18 11:58*	*09/27/18 15:27*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 11:58*	*09/27/18 15:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	58000		2000	44	mg/Kg			08/24/18 09:01	1
Total Solids	51.9		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	51	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.5				%			08/28/18 14:42	1
Medium Sand	0.3				%			08/28/18 14:42	1
Fine Sand	5.3				%			08/28/18 14:42	1
Silt	71.6				%			08/28/18 14:42	1
Clay	22.2				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-0to2

Date Collected: 08/10/18 16:40
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-29

Matrix: Solid
Percent Solids: 43.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	17	J B	23	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Acenaphthene	25	B	23	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Acenaphthylene	27	B	23	2.3	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Anthracene	55	B	23	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Benzo[a]anthracene	98	B	23	3.5	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Benzo[a]pyrene	87	B	23	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Benzo[b]fluoranthene	120	B	23	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Benzo[g,h,i]perylene	100	B	23	2.3	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Benzo[k]fluoranthene	37	B	23	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Chrysene	150	B	23	6.9	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Dibenz(a,h)anthracene	12	J B	23	3.3	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Fluoranthene	260	B	23	6.4	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Fluorene	31	B	23	2.3	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Indeno[1,2,3-cd]pyrene	100	B	23	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Naphthalene	53	B	23	3.7	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Phenanthrene	160	B	23	3.2	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10
Pyrene	290	B	23	4.4	ug/Kg	☼	08/22/18 12:33	08/24/18 21:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*57 - 120*	*08/22/18 12:33*	*08/24/18 21:47*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.6	0.78	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1221	ND		4.6	2.2	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1232	ND		4.6	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1242	ND		4.6	1.1	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1248	3.3	J	4.6	0.37	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1254	ND		4.6	1.8	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1
PCB-1260	ND		4.6	0.78	ug/Kg	☼	09/26/18 11:58	09/27/18 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*54 - 142*	*09/26/18 11:58*	*09/27/18 15:44*	*1*
Tetrachloro-m-xylene	*67*		*58 - 122*	*09/26/18 11:58*	*09/27/18 15:44*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	56000		2000	44	mg/Kg			08/24/18 09:09	1
Total Solids	43.4		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	44	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.1				%			08/28/18 14:42	1
Medium Sand	0.4				%			08/28/18 14:42	1
Fine Sand	9.6				%			08/28/18 14:42	1
Silt	74.9				%			08/28/18 14:42	1
Clay	15.0				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-2to4

Date Collected: 08/10/18 16:45
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-30

Matrix: Solid
Percent Solids: 54.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	23	B	18	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Acenaphthene	29	B	18	2.2	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Acenaphthylene	21	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Anthracene	43	B	18	2.2	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Benzo[a]anthracene	89	B	18	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Benzo[a]pyrene	74	B	18	1.4	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Benzo[b]fluoranthene	110	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Benzo[g,h,i]perylene	89	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Benzo[k]fluoranthene	37	B	18	2.2	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Chrysene	130	B	18	5.4	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Dibenz(a,h)anthracene	25	B	18	2.6	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Fluoranthene	230	B	18	5.0	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Fluorene	36	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Indeno[1,2,3-cd]pyrene	94	B	18	2.2	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Naphthalene	59	B	18	2.9	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Phenanthrene	180	B	18	2.5	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10
Pyrene	250	B	18	3.5	ug/Kg	☼	08/22/18 12:33	08/24/18 22:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*57 - 120*	*08/22/18 12:33*	*08/24/18 22:13*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.61	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1232	ND		3.6	0.84	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1242	ND		3.6	0.87	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1248	6.6		3.6	0.28	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1
PCB-1260	ND		3.6	0.61	ug/Kg	☼	09/26/18 11:58	09/27/18 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*54 - 142*	*09/26/18 11:58*	*09/27/18 16:02*	*1*
Tetrachloro-m-xylene	*67*		*58 - 122*	*09/26/18 11:58*	*09/27/18 16:02*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	41000		2000	44	mg/Kg			08/24/18 09:16	1
Total Solids	54.3		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	52	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.0				%			08/28/18 14:42	1
Fine Sand	10.6				%			08/28/18 14:42	1
Silt	73.7				%			08/28/18 14:42	1
Clay	15.7				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-4to6

Date Collected: 08/10/18 16:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-31

Matrix: Solid
Percent Solids: 53.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	38	B	17	1.5	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Acenaphthene	70	B	17	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Acenaphthylene	37	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Anthracene	68	B	17	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Benzo[a]anthracene	86	B	17	2.6	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Benzo[a]pyrene	71	B	17	1.4	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Benzo[b]fluoranthene	99	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Benzo[g,h,i]perylene	82	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Benzo[k]fluoranthene	31	B	17	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Chrysene	120	B	17	5.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Dibenz(a,h)anthracene	26	B	17	2.5	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Fluoranthene	250	B	17	4.8	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Fluorene	71	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Indeno[1,2,3-cd]pyrene	85	B	17	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Naphthalene	79	B	17	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Phenanthrene	280	B	17	2.4	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10
Pyrene	290	B	17	3.3	ug/Kg	☼	08/22/18 12:33	08/24/18 22:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*57 - 120*	*08/22/18 12:33*	*08/24/18 22:39*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.7	0.63	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1221	ND		3.7	1.8	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1232	ND		3.7	0.87	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1242	ND		3.7	0.91	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1248	4.6		3.7	0.30	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1254	ND		3.7	1.5	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1
PCB-1260	ND		3.7	0.63	ug/Kg	☼	09/26/18 11:58	09/27/18 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*63*		*54 - 142*	*09/26/18 11:58*	*09/27/18 16:20*	*1*
Tetrachloro-m-xylene	*62*		*58 - 122*	*09/26/18 11:58*	*09/27/18 16:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	60000		2000	44	mg/Kg			08/24/18 09:22	1
Total Solids	53.2		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	53	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.0				%			08/28/18 14:42	1
Medium Sand	0.0				%			08/28/18 14:42	1
Fine Sand	10.0				%			08/28/18 14:42	1
Silt	70.2				%			08/28/18 14:42	1
Clay	19.8				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-6to8

Date Collected: 08/10/18 16:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-32

Matrix: Solid
Percent Solids: 52.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	43	B	18	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Acenaphthene	65	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Acenaphthylene	48	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Anthracene	110	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Benzo[a]anthracene	240	B	18	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Benzo[a]pyrene	190	B	18	1.4	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Benzo[b]fluoranthene	310	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Benzo[g,h,i]perylene	190	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Benzo[k]fluoranthene	84	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Chrysene	320	B	18	5.3	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Dibenz(a,h)anthracene	58	B	18	2.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Fluoranthene	590	B	18	5.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Fluorene	84	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Indeno[1,2,3-cd]pyrene	220	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Naphthalene	130	B	18	2.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Phenanthrene	430	B	18	2.4	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10
Pyrene	640	B	18	3.4	ug/Kg	☼	08/22/18 12:33	08/24/18 23:05	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*57 - 120*	*08/22/18 12:33*	*08/24/18 23:05*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.8	0.65	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1221	ND		3.8	1.8	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1232	ND		3.8	0.89	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1242	ND		3.8	0.93	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1248	7.9		3.8	0.30	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1254	ND		3.8	1.5	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1
PCB-1260	ND		3.8	0.65	ug/Kg	☼	09/26/18 11:58	09/27/18 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*50*	*X*	*54 - 142*	*09/26/18 11:58*	*09/27/18 16:37*	*1*
Tetrachloro-m-xylene	*49*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 16:37*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	52000		2000	44	mg/Kg			08/24/18 09:30	1
Total Solids	52.1		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	52	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.1				%			08/28/18 14:42	1
Medium Sand	0.1				%			08/28/18 14:42	1
Fine Sand	8.2				%			08/28/18 14:42	1
Silt	71.4				%			08/28/18 14:42	1
Clay	20.2				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-8to10

Date Collected: 08/10/18 17:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-33

Matrix: Solid
Percent Solids: 54.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	60	B	18	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Acenaphthene	91	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Acenaphthylene	45	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Anthracene	110	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Benzo[a]anthracene	160	B	18	2.7	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Benzo[a]pyrene	120	B	18	1.4	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Benzo[b]fluoranthene	190	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Benzo[g,h,i]perylene	130	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Benzo[k]fluoranthene	56	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Chrysene	210	B	18	5.4	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Dibenz(a,h)anthracene	37	B	18	2.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Fluoranthene	380	B	18	5.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Fluorene	92	B	18	1.8	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Indeno[1,2,3-cd]pyrene	130	B	18	2.1	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Naphthalene	140	B	18	2.9	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Phenanthrene	360	B	18	2.5	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10
Pyrene	440	B	18	3.5	ug/Kg	☼	08/22/18 12:33	08/24/18 23:31	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*77*		*57 - 120*	*08/22/18 12:33*	*08/24/18 23:31*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.5	0.60	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1221	ND		3.5	1.7	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1232	ND		3.5	0.83	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1242	ND		3.5	0.87	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1248	13		3.5	0.28	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1254	ND		3.5	1.4	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1
PCB-1260	ND		3.5	0.60	ug/Kg	☼	09/26/18 11:58	09/27/18 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*59*		*54 - 142*	*09/26/18 11:58*	*09/27/18 16:55*	*1*
Tetrachloro-m-xylene	*49*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 16:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	53000		2000	44	mg/Kg			08/24/18 09:37	1
Total Solids	54.0		0.1	0.1	%			08/16/18 08:56	1
Total Solids @ 70°C	54	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	1.9				%			08/28/18 14:42	1
Medium Sand	0.2				%			08/28/18 14:42	1
Fine Sand	10.8				%			08/28/18 14:42	1
Silt	69.7				%			08/28/18 14:42	1
Clay	17.5				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-10to12

Date Collected: 08/10/18 17:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-34

Matrix: Solid
Percent Solids: 58.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	150	B	16	1.5	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Acenaphthene	200	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Acenaphthylene	68	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Anthracene	280	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Benzo[a]anthracene	840	B	16	2.5	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Benzo[a]pyrene	590	B	16	1.3	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Benzo[b]fluoranthene	700	B	16	1.9	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Benzo[g,h,i]perylene	390	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Benzo[k]fluoranthene	340	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Chrysene	1100	B	16	4.9	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Dibenz(a,h)anthracene	82	B	16	2.3	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Fluoranthene	740	B	16	4.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Fluorene	210	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Indeno[1,2,3-cd]pyrene	430	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Naphthalene	290	B	16	2.6	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Phenanthrene	890	B	16	2.2	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10
Pyrene	830	B	16	3.2	ug/Kg	☼	08/22/18 12:33	08/24/18 23:56	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*57 - 120*	*08/22/18 12:33*	*08/24/18 23:56*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.58	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1232	ND		3.4	0.81	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1242	ND		3.4	0.84	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1248	130		3.4	0.27	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1254	ND		3.4	1.4	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1
PCB-1260	ND		3.4	0.58	ug/Kg	☼	09/26/18 11:58	09/27/18 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*79*		*54 - 142*	*09/26/18 11:58*	*09/27/18 17:12*	*1*
Tetrachloro-m-xylene	*46*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 17:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	38000		2000	44	mg/Kg			08/24/18 10:04	1
Total Solids	58.2		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	60	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.1				%			08/28/18 14:42	1
Medium Sand	0.9				%			08/28/18 14:42	1
Fine Sand	17.3				%			08/28/18 14:42	1
Silt	64.3				%			08/28/18 14:42	1
Clay	17.4				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-12to14.5
Date Collected: 08/10/18 17:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-35
Matrix: Solid
Percent Solids: 59.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	140	B	15	1.4	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Acenaphthene	190	B	15	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Acenaphthylene	52	B	15	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Anthracene	220	B	15	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Benzo[a]anthracene	220	B	15	2.3	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Benzo[a]pyrene	180	B	15	1.2	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Benzo[b]fluoranthene	240	B	15	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Benzo[g,h,i]perylene	180	B	15	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Benzo[k]fluoranthene	71	B	15	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Chrysene	280	B	15	4.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Dibenz(a,h)anthracene	46	B	15	2.2	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Fluoranthene	610	B	15	4.3	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Fluorene	160	B	15	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Indeno[1,2,3-cd]pyrene	180	B	15	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Naphthalene	220	B	15	2.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Phenanthrene	900	B	15	2.1	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10
Pyrene	690	B	15	3.0	ug/Kg	☼	08/22/18 12:33	08/25/18 00:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*57 - 120*	*08/22/18 12:33*	*08/25/18 00:22*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.2	0.55	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1221	ND		3.2	1.5	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1232	ND		3.2	0.75	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1242	ND		3.2	0.79	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1248	97		3.2	0.26	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1254	ND		3.2	1.3	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1
PCB-1260	ND		3.2	0.55	ug/Kg	☼	09/26/18 11:58	09/27/18 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*	*X*	*54 - 142*	*09/26/18 11:58*	*09/27/18 17:30*	*1*
Tetrachloro-m-xylene	*41*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 17:30*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	39000		2000	44	mg/Kg			08/24/18 10:11	1
Total Solids	59.7		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	61	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1
Coarse Sand	0.5				%			08/28/18 14:42	1
Medium Sand	0.3				%			08/28/18 14:42	1
Fine Sand	11.5				%			08/28/18 14:42	1
Silt	71.9				%			08/28/18 14:42	1
Clay	15.7				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-14.5to16.8

Date Collected: 08/10/18 17:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-36

Matrix: Solid
Percent Solids: 57.5

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	230	B	16	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Acenaphthene	370	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Acenaphthylene	59	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Anthracene	370	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Benzo[a]anthracene	520	B	16	2.5	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Benzo[a]pyrene	350	B	16	1.3	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Benzo[b]fluoranthene	530	B	16	1.9	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Benzo[g,h,i]perylene	300	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Benzo[k]fluoranthene	140	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Chrysene	600	B	16	4.9	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Dibenz(a,h)anthracene	81	B	16	2.4	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Fluoranthene	1200	B	16	4.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Fluorene	380	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Indeno[1,2,3-cd]pyrene	310	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Naphthalene	290	B	16	2.6	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Phenanthrene	1500	B	16	2.3	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10
Pyrene	1200	B	16	3.2	ug/Kg	☼	08/22/18 12:33	08/25/18 00:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*57 - 120*	*08/22/18 12:33*	*08/25/18 00:48*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.58	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1
PCB-1232	ND		3.4	0.81	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1
PCB-1242	ND		3.4	0.84	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1
PCB-1254	ND		3.4	1.4	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1
PCB-1260	ND		3.4	0.58	ug/Kg	☼	09/26/18 11:58	09/27/18 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*54 - 142*	*09/26/18 11:58*	*09/27/18 17:48*	*1*
Tetrachloro-m-xylene	*50*	*X*	*58 - 122*	*09/26/18 11:58*	*09/27/18 17:48*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	590		34	2.7	ug/Kg	☼	09/26/18 11:58	09/28/18 13:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*54 - 142*	*09/26/18 11:58*	*09/28/18 13:09*	*10*
Tetrachloro-m-xylene	*54*	*X*	*58 - 122*	*09/26/18 11:58*	*09/28/18 13:09*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	50000		2000	44	mg/Kg			08/24/18 10:17	1
Total Solids	57.5		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	58	H	0.10	0.10	%			08/28/18 14:42	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/28/18 14:42	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S011-14.5to16.8
Date Collected: 08/10/18 17:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-36
Matrix: Solid
Percent Solids: 57.5

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Coarse Sand	2.4				%			08/28/18 14:42	1
Medium Sand	0.2				%			08/28/18 14:42	1
Fine Sand	9.8				%			08/28/18 14:42	1
Silt	74.5				%			08/28/18 14:42	1
Clay	13.2				%			08/28/18 14:42	1

Client Sample ID: PDI-SC-S011-14.5to16.8D

Date Collected: 08/10/18 17:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-37

Matrix: Solid
Percent Solids: 57.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	180	B	17	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Acenaphthene	300	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Acenaphthylene	67	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Anthracene	270	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Benzo[a]anthracene	420	B	17	2.6	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Benzo[a]pyrene	290	B	17	1.3	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Benzo[b]fluoranthene	430	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Benzo[g,h,i]perylene	260	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Benzo[k]fluoranthene	110	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Chrysene	470	B	17	5.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Dibenz(a,h)anthracene	68	B	17	2.4	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Fluoranthene	890	B	17	4.7	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Fluorene	310	B	17	1.7	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Indeno[1,2,3-cd]pyrene	260	B	17	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Naphthalene	220	B	17	2.7	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Phenanthrene	1100	B	17	2.3	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10
Pyrene	970	B	17	3.3	ug/Kg	☼	08/22/18 12:33	08/25/18 01:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*57 - 120*	*08/22/18 12:33*	*08/25/18 01:14*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		33	5.7	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1221	ND		33	16	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1232	ND		33	7.9	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1242	ND		33	8.2	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1248	650		33	2.7	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1254	ND		33	13	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10
PCB-1260	ND		33	5.7	ug/Kg	☼	09/26/18 11:58	09/28/18 12:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*93*		*54 - 142*	*09/26/18 11:58*	*09/28/18 12:37*	*10*
Tetrachloro-m-xylene	*82*		*58 - 122*	*09/26/18 11:58*	*09/28/18 12:37*	*10*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	49000		2000	44	mg/Kg			08/24/18 10:24	1
Total Solids	57.3		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	59	H	0.10	0.10	%			09/11/18 06:49	1

Client Sample ID: PDI-SC-S011-16.8to17.9
Date Collected: 08/10/18 17:20
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-38
Matrix: Solid
Percent Solids: 70.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	100	F2 B	6.8	0.61	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Acenaphthene	130	F2 F1 B	6.8	0.82	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Acenaphthylene	80	F2 B	6.8	0.68	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Anthracene	150	F2 F1 B	6.8	0.82	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Benzo[a]anthracene	290	F1 B	6.8	1.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Benzo[a]pyrene	250	F1 B	6.8	0.55	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Benzo[b]fluoranthene	280	F2 F1 B	6.8	0.81	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Benzo[g,h,i]perylene	160	F1 B	6.8	0.68	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Benzo[k]fluoranthene	80	F1 B	6.8	0.82	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Chrysene	270	F1 B	6.8	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Dibenz(a,h)anthracene	36	B	6.8	0.98	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Fluoranthene	510	F2 F1 B	6.8	1.9	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Fluorene	78	F2 B	6.8	0.68	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Indeno[1,2,3-cd]pyrene	190	F1 B	6.8	0.82	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Naphthalene	280	F2 F1 B	6.8	1.1	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Phenanthrene	440	F2 F1 B	6.8	0.94	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5
Pyrene	660	F2 F1 B	6.8	1.3	ug/Kg	☼	08/22/18 12:33	08/25/18 01:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*57 - 120*	*08/22/18 12:33*	*08/25/18 01:39*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.47	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1232	ND		2.8	0.65	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1242	ND		2.8	0.68	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1248	ND		2.8	0.22	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1
PCB-1260	9.7		2.8	0.47	ug/Kg	☼	09/26/18 11:58	09/28/18 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*64*		*54 - 142*	*09/26/18 11:58*	*09/28/18 12:55*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 11:58*	*09/28/18 12:55*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	23000		2000	44	mg/Kg			08/24/18 10:31	1
Total Solids	70.7		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	71	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.4				%			08/29/18 12:03	1
Medium Sand	1.8				%			08/29/18 12:03	1
Fine Sand	66.0				%			08/29/18 12:03	1
Silt	26.9				%			08/29/18 12:03	1
Clay	4.8				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S011-17.9to18.9
Date Collected: 08/10/18 17:25
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-39
Matrix: Solid
Percent Solids: 69.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	270	B	6.6	0.59	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Acenaphthene	150	B	6.6	0.79	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Acenaphthylene	51	B	6.6	0.66	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Anthracene	77	B	6.6	0.79	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Benzo[a]anthracene	89	B	6.6	1.0	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Benzo[a]pyrene	78	B	6.6	0.53	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Benzo[b]fluoranthene	100	B	6.6	0.78	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Benzo[g,h,i]perylene	89	B	6.6	0.66	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Benzo[k]fluoranthene	30	B	6.6	0.79	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Chrysene	120	B	6.6	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Dibenz(a,h)anthracene	19	B	6.6	0.95	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Fluoranthene	320	B	6.6	1.8	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Fluorene	130	B	6.6	0.66	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Indeno[1,2,3-cd]pyrene	79	B	6.6	0.79	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Naphthalene	500	B	6.6	1.1	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Phenanthrene	460	B	6.6	0.91	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5
Pyrene	400	B	6.6	1.3	ug/Kg	☼	08/22/18 12:33	08/25/18 02:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*57 - 120*	*08/22/18 12:33*	*08/25/18 02:57*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.47	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1232	ND		2.8	0.66	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1242	ND		2.8	0.68	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1248	ND		2.8	0.22	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1
PCB-1260	18		2.8	0.47	ug/Kg	☼	09/26/18 11:58	09/28/18 13:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*54 - 142*	*09/26/18 11:58*	*09/28/18 13:12*	*1*
Tetrachloro-m-xylene	*28*	*X*	*58 - 122*	*09/26/18 11:58*	*09/28/18 13:12*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	29000		2000	44	mg/Kg			08/24/18 10:37	1
Total Solids	69.3		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	70	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	2.8				%			08/29/18 12:03	1
Medium Sand	3.7				%			08/29/18 12:03	1
Fine Sand	46.3				%			08/29/18 12:03	1
Silt	41.3				%			08/29/18 12:03	1
Clay	5.9				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-0to2

Date Collected: 08/10/18 18:30
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-40

Matrix: Solid
Percent Solids: 60.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	72	B	16	1.5	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Acenaphthene	41	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Acenaphthylene	67	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Anthracene	86	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Benzo[a]anthracene	310	B	16	2.5	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Benzo[a]pyrene	370	B	16	1.3	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Benzo[b]fluoranthene	440	B	16	1.9	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Benzo[g,h,i]perylene	370	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Benzo[k]fluoranthene	110	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Chrysene	410	B	16	4.9	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Dibenz(a,h)anthracene	110	B	16	2.3	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Fluoranthene	350	B	16	4.6	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Fluorene	32	B	16	1.6	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Indeno[1,2,3-cd]pyrene	370	B	16	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Naphthalene	280	B	16	2.6	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Phenanthrene	450	B	16	2.3	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10
Pyrene	790	B	16	3.2	ug/Kg	☼	08/22/18 12:33	08/25/18 03:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*57 - 120*	*08/22/18 12:33*	*08/25/18 03:22*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.3	0.56	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1221	ND		3.3	1.6	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1232	ND		3.3	0.77	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1242	ND		3.3	0.81	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1248	120		3.3	0.26	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1254	ND		3.3	1.3	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1
PCB-1260	ND		3.3	0.56	ug/Kg	☼	09/26/18 11:58	09/28/18 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*68*		*54 - 142*	*09/26/18 11:58*	*09/28/18 13:30*	*1*
Tetrachloro-m-xylene	*48*	*X*	*58 - 122*	*09/26/18 11:58*	*09/28/18 13:30*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	36000		2000	44	mg/Kg			08/24/18 10:43	1
Total Solids	60.4		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	61	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	2.0				%			08/29/18 12:03	1
Coarse Sand	0.5				%			08/29/18 12:03	1
Medium Sand	1.7				%			08/29/18 12:03	1
Fine Sand	61.5				%			08/29/18 12:03	1
Silt	28.7				%			08/29/18 12:03	1
Clay	5.5				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-2to4

Date Collected: 08/10/18 18:35
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-41

Matrix: Solid
Percent Solids: 64.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	15	B	7.3	0.65	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Acenaphthene	12	B	7.3	0.87	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Acenaphthylene	20	B	7.3	0.73	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Anthracene	21	B	7.3	0.87	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Benzo[a]anthracene	23	B	7.3	1.1	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Benzo[a]pyrene	23	B	7.3	0.58	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Benzo[b]fluoranthene	28	B	7.3	0.86	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Benzo[g,h,i]perylene	30	B	7.3	0.73	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Benzo[k]fluoranthene	7.7	B	7.3	0.87	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Chrysene	34	B	7.3	2.2	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Dibenz(a,h)anthracene	3.2	J B	7.3	1.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Fluoranthene	49	B	7.3	2.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Fluorene	12	B	7.3	0.73	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Indeno[1,2,3-cd]pyrene	29	B	7.3	0.87	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Naphthalene	62	B	7.3	1.2	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Phenanthrene	77	B	7.3	1.0	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5
Pyrene	93	B	7.3	1.4	ug/Kg	☼	08/22/18 12:33	08/25/18 03:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*57 - 120*	*08/22/18 12:33*	*08/25/18 03:48*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.0	0.51	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1221	ND		3.0	1.4	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1232	ND		3.0	0.70	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1242	ND		3.0	0.73	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1248	ND		3.0	0.24	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1254	ND		3.0	1.2	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1
PCB-1260	ND		3.0	0.51	ug/Kg	☼	09/26/18 13:33	09/28/18 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*	*X*	*54 - 142*	*09/26/18 13:33*	*09/28/18 13:48*	*1*
Tetrachloro-m-xylene	*56*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 13:48*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	28000		2000	44	mg/Kg			08/24/18 12:48	1
Total Solids	64.4		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	62	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.6				%			08/29/18 12:03	1
Fine Sand	23.0				%			08/29/18 12:03	1
Silt	60.9				%			08/29/18 12:03	1
Clay	15.5				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-4to6

Date Collected: 08/10/18 18:40
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-42

Matrix: Solid
Percent Solids: 68.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.78**	**J B**	6.9	0.62	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Acenaphthene	ND		6.9	0.83	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Acenaphthylene	ND		6.9	0.69	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Anthracene	**0.85**	**J**	6.9	0.83	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Benzo[a]anthracene	**1.9**	**J**	6.9	1.0	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Benzo[a]pyrene	ND		6.9	0.55	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Benzo[b]fluoranthene	**2.4**	**J**	6.9	0.82	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Benzo[g,h,i]perylene	**1.2**	**J**	6.9	0.69	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Benzo[k]fluoranthene	ND		6.9	0.83	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Chrysene	**2.3**	**J**	6.9	2.1	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Dibenz(a,h)anthracene	ND		6.9	0.99	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Fluoranthene	**2.5**	**J**	6.9	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Fluorene	**1.0**	**J**	6.9	0.69	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Indeno[1,2,3-cd]pyrene	**1.4**	**J**	6.9	0.83	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Naphthalene	**2.2**	**J B**	6.9	1.1	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Phenanthrene	**3.8**	**J B**	6.9	0.95	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5
Pyrene	**3.8**	**J**	6.9	1.3	ug/Kg	☼	08/23/18 12:26	08/29/18 18:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*57 - 120*	*08/23/18 12:26*	*08/29/18 18:06*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.9	0.48	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1221	ND		2.9	1.4	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1232	ND		2.9	0.67	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1242	ND		2.9	0.70	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1248	**0.41**	**J**	2.9	0.23	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1254	ND		2.9	1.1	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1
PCB-1260	ND		2.9	0.48	ug/Kg	☼	09/26/18 13:33	09/28/18 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*60*		*54 - 142*	*09/26/18 13:33*	*09/28/18 14:06*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 13:33*	*09/28/18 14:06*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**21000**		2000	44	mg/Kg			08/24/18 13:16	1
Total Solids	**68.0**		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	**65**	**H**	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**0.0**				%			08/29/18 12:03	1
Coarse Sand	**0.0**				%			08/29/18 12:03	1
Medium Sand	**0.1**				%			08/29/18 12:03	1
Fine Sand	**43.7**				%			08/29/18 12:03	1
Silt	**47.6**				%			08/29/18 12:03	1
Clay	**8.5**				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-6to7.3

Date Collected: 08/10/18 18:45
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-43

Matrix: Solid
Percent Solids: 68.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.79**	**J B**	6.8	0.61	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Acenaphthene	ND		6.8	0.81	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Acenaphthylene	ND		6.8	0.68	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Anthracene	ND		6.8	0.81	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Benzo[a]anthracene	**1.1**	**J**	6.8	1.0	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Benzo[a]pyrene	ND		6.8	0.54	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Benzo[b]fluoranthene	**1.5**	**J**	6.8	0.80	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Benzo[g,h,i]perylene	ND		6.8	0.68	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Benzo[k]fluoranthene	ND		6.8	0.81	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Chrysene	ND		6.8	2.0	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Dibenz(a,h)anthracene	ND		6.8	0.97	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Fluoranthene	ND		6.8	1.9	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Fluorene	ND		6.8	0.68	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Indeno[1,2,3-cd]pyrene	ND		6.8	0.81	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Naphthalene	**1.4**	**J B**	6.8	1.1	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Phenanthrene	**1.8**	**J B**	6.8	0.93	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5
Pyrene	**1.4**	**J**	6.8	1.3	ug/Kg	☼	08/23/18 12:26	08/29/18 18:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*57 - 120*	*08/23/18 12:26*	*08/29/18 18:30*	*5*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.48	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1232	ND		2.8	0.66	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1242	ND		2.8	0.69	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1248	ND		2.8	0.23	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1
PCB-1260	ND		2.8	0.48	ug/Kg	☼	09/26/18 13:33	09/28/18 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*74*		*54 - 142*	*09/26/18 13:33*	*09/28/18 14:23*	*1*
Tetrachloro-m-xylene	*64*		*58 - 122*	*09/26/18 13:33*	*09/28/18 14:23*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**18000**		2000	44	mg/Kg			08/24/18 13:22	1
Total Solids	**68.7**		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	**70**	**H**	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**0.0**				%			08/29/18 12:03	1
Coarse Sand	**0.0**				%			08/29/18 12:03	1
Medium Sand	**0.0**				%			08/29/18 12:03	1
Fine Sand	**35.1**				%			08/29/18 12:03	1
Silt	**59.1**				%			08/29/18 12:03	1
Clay	**5.8**				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-7.3to9.1
Date Collected: 08/10/18 18:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-44
Matrix: Solid
Percent Solids: 70.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.56**	**J B**	1.3	0.12	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Acenaphthene	ND		1.3	0.16	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Acenaphthylene	ND		1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Anthracene	**0.23**	**J**	1.3	0.16	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Benzo[a]anthracene	**0.35**	**J**	1.3	0.20	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Benzo[a]pyrene	ND		1.3	0.11	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Benzo[b]fluoranthene	**0.72**	**J**	1.3	0.16	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Benzo[g,h,i]perylene	ND		1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Benzo[k]fluoranthene	ND		1.3	0.16	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Chrysene	**0.53**	**J**	1.3	0.40	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Dibenz(a,h)anthracene	ND		1.3	0.19	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Fluoranthene	**0.67**	**J**	1.3	0.38	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Fluorene	**0.40**	**J**	1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Indeno[1,2,3-cd]pyrene	ND		1.3	0.16	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Naphthalene	**1.3**	**B**	1.3	0.21	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Phenanthrene	**1.1**	**J B**	1.3	0.19	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1
Pyrene	**0.66**	**J**	1.3	0.26	ug/Kg	☼	08/23/18 12:26	08/29/18 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*57 - 120*	*08/23/18 12:26*	*08/29/18 18:55*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.8	0.47	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1221	ND		2.8	1.3	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1232	ND		2.8	0.65	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1242	ND		2.8	0.68	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1248	ND		2.8	0.22	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1254	ND		2.8	1.1	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1
PCB-1260	ND		2.8	0.47	ug/Kg	☼	09/26/18 13:33	09/28/18 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*75*		*54 - 142*	*09/26/18 13:33*	*09/28/18 14:41*	*1*
Tetrachloro-m-xylene	*58*		*58 - 122*	*09/26/18 13:33*	*09/28/18 14:41*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**6400**		2000	44	mg/Kg			08/24/18 13:36	1
Total Solids	**70.3**		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	**73**	**H**	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**0.0**				%			08/29/18 12:03	1
Coarse Sand	**0.0**				%			08/29/18 12:03	1
Medium Sand	**0.0**				%			08/29/18 12:03	1
Fine Sand	**54.7**				%			08/29/18 12:03	1
Silt	**41.4**				%			08/29/18 12:03	1
Clay	**3.9**				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S004-9.1to10.3

Date Collected: 08/10/18 18:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-45

Matrix: Solid
Percent Solids: 76.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**0.40**	**J B**	1.3	0.12	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Acenaphthene	ND		1.3	0.15	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Acenaphthylene	ND		1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Anthracene	**0.22**	**J**	1.3	0.15	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Benzo[a]anthracene	**0.21**	**J**	1.3	0.20	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Benzo[a]pyrene	ND		1.3	0.10	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Benzo[b]fluoranthene	**0.39**	**J**	1.3	0.15	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Benzo[g,h,i]perylene	ND		1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Benzo[k]fluoranthene	ND		1.3	0.15	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Chrysene	ND		1.3	0.39	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Dibenz(a,h)anthracene	ND		1.3	0.19	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Fluoranthene	**0.50**	**J**	1.3	0.36	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Fluorene	**0.30**	**J**	1.3	0.13	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Indeno[1,2,3-cd]pyrene	ND		1.3	0.15	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Naphthalene	**1.0**	**J B**	1.3	0.21	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Phenanthrene	**0.84**	**J B**	1.3	0.18	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1
Pyrene	**0.46**	**J**	1.3	0.25	ug/Kg	☼	08/23/18 12:26	08/29/18 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*57 - 120*	*08/23/18 12:26*	*08/29/18 19:19*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.6	0.44	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1221	ND		2.6	1.2	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1232	ND		2.6	0.61	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1242	ND		2.6	0.64	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1248	ND		2.6	0.21	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1254	ND		2.6	1.0	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1
PCB-1260	ND		2.6	0.44	ug/Kg	☼	09/26/18 13:33	09/28/18 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*97*		*54 - 142*	*09/26/18 13:33*	*09/28/18 14:59*	*1*
Tetrachloro-m-xylene	*60*		*58 - 122*	*09/26/18 13:33*	*09/28/18 14:59*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	**5100**		2000	44	mg/Kg			08/24/18 13:42	1
Total Solids	**76.7**		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	**75**	**H**	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	**0.0**				%			08/29/18 12:03	1
Coarse Sand	**0.1**				%			08/29/18 12:03	1
Medium Sand	**0.0**				%			08/29/18 12:03	1
Fine Sand	**74.6**				%			08/29/18 12:03	1
Silt	**22.6**				%			08/29/18 12:03	1
Clay	**2.7**				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-0to2

Date Collected: 08/13/18 09:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-46

Matrix: Solid
Percent Solids: 43.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	13	J	22	1.9	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Anthracene	70		22	2.6	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Benzo[a]anthracene	97		22	3.3	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Benzo[a]pyrene	89		22	1.7	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Benzo[g,h,i]perylene	89		22	2.2	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Chrysene	130		22	6.5	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Dibenz(a,h)anthracene	14	J	22	3.1	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Indeno[1,2,3-cd]pyrene	89		22	2.6	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Naphthalene	44		22	3.4	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Phenanthrene	140		22	3.0	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10
Pyrene	380		22	4.2	ug/Kg	☼	10/03/18 09:05	10/04/18 19:34	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*123*	*X*	*57 - 120*	*10/03/18 09:05*	*10/04/18 19:34*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	20	J	22	2.6	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10
Acenaphthylene	17	J *	22	2.2	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10
Benzo[b]fluoranthene	87		22	2.5	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10
Benzo[k]fluoranthene	27		22	2.6	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10
Fluoranthene	210		22	6.0	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10
Fluorene	28		22	2.2	ug/Kg	☼	10/03/18 09:05	10/06/18 16:25	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		4.4	0.75	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1221	ND		4.4	2.1	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1232	ND		4.4	1.0	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1242	ND		4.4	1.1	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1248	ND		4.4	0.35	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1254	ND		4.4	1.7	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1
PCB-1260	53		4.4	0.75	ug/Kg	☼	09/26/18 13:33	09/28/18 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*62*		*54 - 142*	*09/26/18 13:33*	*09/28/18 15:16*	*1*
Tetrachloro-m-xylene	*61*		*58 - 122*	*09/26/18 13:33*	*09/28/18 15:16*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	59000		2000	44	mg/Kg			08/24/18 13:48	1
Total Solids	43.8		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	45	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.1				%			08/29/18 12:03	1
Fine Sand	7.9				%			08/29/18 12:03	1
Silt	73.8				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-0to2
Date Collected: 08/13/18 09:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-46
Matrix: Solid
Percent Solids: 43.8

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	18.2				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-2to4

Date Collected: 08/13/18 09:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-47

Matrix: Solid
Percent Solids: 51.4

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	11	J F2 F1	18	1.7	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Anthracene	40	F2	18	2.2	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Benzo[a]anthracene	75		18	2.8	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Benzo[a]pyrene	100		18	1.5	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Benzo[g,h,i]perylene	54	F2	18	1.8	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Chrysene	100		18	5.5	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Dibenz(a,h)anthracene	8.6	J F2	18	2.7	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Indeno[1,2,3-cd]pyrene	56	F2 F1	18	2.2	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Naphthalene	40		18	2.9	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Phenanthrene	130		18	2.5	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10
Pyrene	150	F2 F1	18	3.6	ug/Kg	☼	10/03/18 09:06	10/04/18 22:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*51*	*X*	*57 - 120*	*10/03/18 09:06*	*10/04/18 22:26*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	25	F1 F2	18	2.2	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10
Acenaphthylene	15	J *	18	1.8	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10
Benzo[b]fluoranthene	120	F1 F2	18	2.2	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10
Benzo[k]fluoranthene	35	F1 F2	18	2.2	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10
Fluoranthene	280	F1 F2	18	5.2	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10
Fluorene	32		18	1.8	ug/Kg	☼	10/03/18 09:06	10/06/18 19:18	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.8	0.64	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1221	ND		3.8	1.8	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1232	ND		3.8	0.88	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1242	ND		3.8	0.92	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1248	ND		3.8	0.30	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1254	ND		3.8	1.5	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1
PCB-1260	2.4	J F1	3.8	0.64	ug/Kg	☼	09/26/18 13:33	09/28/18 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*65*		*54 - 142*	*09/26/18 13:33*	*09/28/18 15:34*	*1*
Tetrachloro-m-xylene	*59*		*58 - 122*	*09/26/18 13:33*	*09/28/18 15:34*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	49000		2000	44	mg/Kg			08/24/18 13:56	1
Total Solids	51.4		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	51	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.0				%			08/29/18 12:03	1
Fine Sand	10.0				%			08/29/18 12:03	1
Silt	71.2				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-2to4
Date Collected: 08/13/18 09:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-47
Matrix: Solid
Percent Solids: 51.4

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	18.8				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-4to6

Date Collected: 08/13/18 09:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-48

Matrix: Solid
Percent Solids: 53.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	26		18	1.6	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Anthracene	110		18	2.2	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Benzo[a]anthracene	220		18	2.8	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Benzo[a]pyrene	200		18	1.5	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Benzo[g,h,i]perylene	180		18	1.8	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Chrysene	260		18	5.5	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Dibenz(a,h)anthracene	29		18	2.6	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Indeno[1,2,3-cd]pyrene	170		18	2.2	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Naphthalene	74		18	2.9	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Phenanthrene	590		18	2.5	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10
Pyrene	580		18	3.5	ug/Kg	☼	10/03/18 09:05	10/04/18 19:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*61*		*57 - 120*	*10/03/18 09:05*	*10/04/18 19:59*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130		18	2.2	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10
Acenaphthylene	31	*	18	1.8	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10
Benzo[b]fluoranthene	250		18	2.1	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10
Benzo[k]fluoranthene	77		18	2.2	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10
Fluoranthene	660		18	5.1	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10
Fluorene	160		18	1.8	ug/Kg	☼	10/03/18 09:05	10/06/18 16:50	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.6	0.61	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1221	ND		3.6	1.7	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1232	ND		3.6	0.84	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1242	ND		3.6	0.88	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1248	4.5		3.6	0.29	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1254	ND		3.6	1.4	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1
PCB-1260	ND		3.6	0.61	ug/Kg	☼	09/26/18 13:33	09/28/18 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*47*	*X*	*54 - 142*	*09/26/18 13:33*	*09/28/18 16:27*	*1*
Tetrachloro-m-xylene	*50*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 16:27*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	50000		2000	44	mg/Kg			08/24/18 14:02	1
Total Solids	53.3		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	53	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.1				%			08/29/18 12:03	1
Fine Sand	8.2				%			08/29/18 12:03	1
Silt	70.0				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-4to6
Date Collected: 08/13/18 09:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-48
Matrix: Solid
Percent Solids: 53.3

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	21.7				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-6to8

Date Collected: 08/13/18 09:20
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-49

Matrix: Solid
Percent Solids: 55.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	64		17	1.5	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Anthracene	150		17	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Benzo[a]anthracene	220		17	2.6	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Benzo[a]pyrene	150		17	1.3	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Benzo[g,h,i]perylene	120		17	1.7	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Chrysene	250		17	5.0	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Dibenz(a,h)anthracene	18		17	2.4	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Indeno[1,2,3-cd]pyrene	120		17	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Naphthalene	170		17	2.7	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Phenanthrene	540		17	2.3	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10
Pyrene	760		17	3.3	ug/Kg	☼	10/03/18 09:06	10/04/18 20:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*57 - 120*	*10/03/18 09:06*	*10/04/18 20:48*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10
Acenaphthylene	33	*	17	1.7	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10
Benzo[b]fluoranthene	250		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10
Benzo[k]fluoranthene	70		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10
Fluoranthene	640		17	4.7	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10
Fluorene	110		17	1.7	ug/Kg	☼	10/03/18 09:06	10/06/18 17:39	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.5	0.60	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1221	ND		3.5	1.7	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1232	ND		3.5	0.83	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1242	ND		3.5	0.87	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1248	ND		3.5	0.28	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1254	10		3.5	1.4	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1
PCB-1260	ND		3.5	0.60	ug/Kg	☼	09/26/18 13:33	09/28/18 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*56*		*54 - 142*	*09/26/18 13:33*	*09/28/18 16:45*	*1*
Tetrachloro-m-xylene	*28*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 16:45*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	45000		2000	44	mg/Kg			08/24/18 14:09	1
Total Solids	55.7		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	56	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.1				%			08/29/18 12:03	1
Fine Sand	9.1				%			08/29/18 12:03	1
Silt	75.8				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-6to8
Date Collected: 08/13/18 09:20
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-49
Matrix: Solid
Percent Solids: 55.7

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	15.0				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-8to10

Date Collected: 08/13/18 09:25
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-50

Matrix: Solid
Percent Solids: 56.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	95		16	1.5	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Anthracene	180		16	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Benzo[a]anthracene	270		16	2.5	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Benzo[a]pyrene	250		16	1.3	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Benzo[g,h,i]perylene	120		16	1.6	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Chrysene	340		16	4.9	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Dibenz(a,h)anthracene	17		16	2.4	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Indeno[1,2,3-cd]pyrene	120		16	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Naphthalene	160		16	2.6	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Phenanthrene	900		16	2.3	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10
Pyrene	790		16	3.2	ug/Kg	☼	10/03/18 09:06	10/04/18 21:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*57 - 120*	*10/03/18 09:06*	*10/04/18 21:13*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	220		16	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10
Acenaphthylene	35	*	16	1.6	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10
Benzo[b]fluoranthene	310		16	1.9	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10
Benzo[k]fluoranthene	120		16	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10
Fluoranthene	730		16	4.6	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10
Fluorene	190		16	1.6	ug/Kg	☼	10/03/18 09:06	10/06/18 18:04	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.58	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1232	ND		3.4	0.80	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1242	ND		3.4	0.84	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1248	59		3.4	0.27	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1254	ND		3.4	1.4	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1
PCB-1260	ND		3.4	0.58	ug/Kg	☼	09/26/18 13:33	09/28/18 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*69*		*54 - 142*	*09/26/18 13:33*	*09/28/18 17:02*	*1*
Tetrachloro-m-xylene	*50*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 17:02*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	43000		2000	44	mg/Kg			08/24/18 14:16	1
Total Solids	56.0		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	58	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.8				%			08/29/18 12:03	1
Fine Sand	14.6				%			08/29/18 12:03	1
Silt	68.3				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-8to10
Date Collected: 08/13/18 09:25
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-50
Matrix: Solid
Percent Solids: 56.0

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	16.3				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-10to11.4

Date Collected: 08/13/18 09:30
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-51

Matrix: Solid
Percent Solids: 58.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	130		17	1.5	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Anthracene	220		17	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Benzo[a]anthracene	290		17	2.6	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Benzo[a]pyrene	330		17	1.4	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Benzo[g,h,i]perylene	180		17	1.7	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Chrysene	330		17	5.1	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Dibenz(a,h)anthracene	28		17	2.4	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Indeno[1,2,3-cd]pyrene	190		17	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Naphthalene	200		17	2.7	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Phenanthrene	1100		17	2.3	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10
Pyrene	1400		17	3.3	ug/Kg	☼	10/03/18 09:06	10/04/18 21:37	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*143*	*X*	*57 - 120*	*10/03/18 09:06*	*10/04/18 21:37*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	290		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10
Acenaphthylene	32	*	17	1.7	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10
Benzo[b]fluoranthene	300		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10
Benzo[k]fluoranthene	110		17	2.0	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10
Fluoranthene	760		17	4.7	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10
Fluorene	260		17	1.7	ug/Kg	☼	10/03/18 09:06	10/06/18 18:29	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.4	0.57	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1221	ND		3.4	1.6	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1232	ND		3.4	0.79	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1242	ND		3.4	0.83	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1248	93		3.4	0.27	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1254	ND		3.4	1.3	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1
PCB-1260	ND		3.4	0.57	ug/Kg	☼	09/26/18 13:33	09/28/18 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*57*		*54 - 142*	*09/26/18 13:33*	*09/28/18 17:20*	*1*
Tetrachloro-m-xylene	*52*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 17:20*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	48000		2000	44	mg/Kg			08/24/18 14:22	1
Total Solids	58.7		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	59	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.0				%			08/29/18 12:03	1
Medium Sand	0.7				%			08/29/18 12:03	1
Fine Sand	15.2				%			08/29/18 12:03	1
Silt	68.9				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-10to11.4
Date Collected: 08/13/18 09:30
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-51
Matrix: Solid
Percent Solids: 58.7

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	15.2				%			08/29/18 12:03	1

Client Sample ID: PDI-SC-S015-11.4to12.4

Date Collected: 08/13/18 09:35
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-52

Matrix: Solid
Percent Solids: 63.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	330		15	1.3	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Anthracene	1600		15	1.8	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Benzo[a]anthracene	960		15	2.2	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Benzo[a]pyrene	510		15	1.2	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Benzo[g,h,i]perylene	620		15	1.5	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Chrysene	950		15	4.4	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Dibenz(a,h)anthracene	88		15	2.1	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Indeno[1,2,3-cd]pyrene	510		15	1.8	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Naphthalene	300		15	2.4	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Phenanthrene	9300		15	2.0	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10
Pyrene	3300		15	2.9	ug/Kg	☼	10/03/18 09:06	10/04/18 22:02	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*84*		*57 - 120*	*10/03/18 09:06*	*10/04/18 22:02*	*10*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	2300		15	1.8	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10
Acenaphthylene	63	*	15	1.5	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10
Benzo[b]fluoranthene	630		15	1.7	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10
Benzo[k]fluoranthene	250		15	1.8	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10
Fluoranthene	4200		15	4.1	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10
Fluorene	2500		15	1.5	ug/Kg	☼	10/03/18 09:06	10/06/18 18:53	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		3.1	0.53	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1221	ND		3.1	1.5	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1232	ND		3.1	0.73	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1242	ND		3.1	0.76	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1248	ND		3.1	0.25	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1254	ND		3.1	1.2	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1
PCB-1260	11		3.1	0.53	ug/Kg	☼	09/26/18 13:33	09/28/18 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*71*		*54 - 142*	*09/26/18 13:33*	*09/28/18 17:38*	*1*
Tetrachloro-m-xylene	*56*	*X*	*58 - 122*	*09/26/18 13:33*	*09/28/18 17:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	35000		2000	44	mg/Kg			08/24/18 18:46	1
Total Solids	63.0		0.1	0.1	%			08/16/18 09:59	1
Total Solids @ 70°C	62	H	0.10	0.10	%			08/29/18 12:03	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.0				%			08/29/18 12:03	1
Coarse Sand	0.5				%			08/29/18 12:03	1
Medium Sand	7.8				%			08/29/18 12:03	1
Fine Sand	25.9				%			08/29/18 12:03	1
Silt	55.8				%			08/29/18 12:03	1

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-11.4to12.4
Date Collected: 08/13/18 09:35
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-52
Matrix: Solid
Percent Solids: 63.0

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	10.0				%			08/29/18 12:03	1

Client Sample ID: PDI-RB-SS-180810-1200

Date Collected: 08/10/18 12:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-53

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.095	0.017	ug/L		08/15/18 13:45	08/17/18 15:34	1
2-Methylnaphthalene	ND		0.095	0.019	ug/L		08/15/18 13:45	08/17/18 15:34	1
Acenaphthylene	ND		0.19	0.042	ug/L		08/15/18 13:45	08/17/18 15:34	1
Acenaphthene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Fluorene	ND		0.095	0.012	ug/L		08/15/18 13:45	08/17/18 15:34	1
Phenanthrene	ND		0.095	0.018	ug/L		08/15/18 13:45	08/17/18 15:34	1
Anthracene	ND		0.095	0.0067	ug/L		08/15/18 13:45	08/17/18 15:34	1
Fluoranthene	ND		0.095	0.012	ug/L		08/15/18 13:45	08/17/18 15:34	1
Pyrene	ND		0.095	0.0086	ug/L		08/15/18 13:45	08/17/18 15:34	1
Benzo[a]anthracene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Chrysene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Benzo[b]fluoranthene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Benzo[k]fluoranthene	ND		0.095	0.012	ug/L		08/15/18 13:45	08/17/18 15:34	1
Benzo[a]pyrene	ND		0.095	0.033	ug/L		08/15/18 13:45	08/17/18 15:34	1
Indeno[1,2,3-cd]pyrene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Dibenz(a,h)anthracene	ND		0.095	0.0057	ug/L		08/15/18 13:45	08/17/18 15:34	1
Benzo[g,h,i]perylene	ND		0.19	0.072	ug/L		08/15/18 13:45	08/17/18 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*76*		*54 - 120*	*08/15/18 13:45*	*08/17/18 15:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.43	0.058	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1221	ND		0.43	0.071	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1232	ND		0.43	0.060	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1242	ND		0.43	0.056	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1248	ND		0.43	0.049	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1254	ND		0.43	0.071	ug/L		08/16/18 18:53	08/29/18 06:49	1
PCB-1260	ND		0.43	0.058	ug/L		08/16/18 18:53	08/29/18 06:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*53*		*38 - 140*	*08/16/18 18:53*	*08/29/18 06:49*	*1*
Tetrachloro-m-xylene	*52*		*40 - 120*	*08/16/18 18:53*	*08/29/18 06:49*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.26**	**J**	1.0	0.19	mg/L			08/22/18 14:18	1

Client Sample ID: PDI-RB-SS-180810-1730

Date Collected: 08/10/18 17:30
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-54

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.099	0.018	ug/L		08/15/18 13:45	08/17/18 15:56	1
2-Methylnaphthalene	ND		0.099	0.020	ug/L		08/15/18 13:45	08/17/18 15:56	1
Acenaphthylene	ND		0.20	0.043	ug/L		08/15/18 13:45	08/17/18 15:56	1
Acenaphthene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Fluorene	ND		0.099	0.013	ug/L		08/15/18 13:45	08/17/18 15:56	1
Phenanthrene	ND		0.099	0.019	ug/L		08/15/18 13:45	08/17/18 15:56	1
Anthracene	ND		0.099	0.0069	ug/L		08/15/18 13:45	08/17/18 15:56	1
Fluoranthene	ND		0.099	0.013	ug/L		08/15/18 13:45	08/17/18 15:56	1
Pyrene	ND		0.099	0.0089	ug/L		08/15/18 13:45	08/17/18 15:56	1
Benzo[a]anthracene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Chrysene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Benzo[b]fluoranthene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Benzo[k]fluoranthene	ND		0.099	0.013	ug/L		08/15/18 13:45	08/17/18 15:56	1
Benzo[a]pyrene	ND		0.099	0.035	ug/L		08/15/18 13:45	08/17/18 15:56	1
Indeno[1,2,3-cd]pyrene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Dibenz(a,h)anthracene	ND		0.099	0.0059	ug/L		08/15/18 13:45	08/17/18 15:56	1
Benzo[g,h,i]perylene	ND		0.20	0.075	ug/L		08/15/18 13:45	08/17/18 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*54 - 120*	*08/15/18 13:45*	*08/17/18 15:56*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.44	0.060	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1221	ND		0.44	0.073	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1232	ND		0.44	0.061	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1242	ND		0.44	0.058	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1248	ND		0.44	0.051	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1254	ND		0.44	0.073	ug/L		08/16/18 18:53	08/29/18 07:05	1
PCB-1260	ND		0.44	0.060	ug/L		08/16/18 18:53	08/29/18 07:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*54*		*38 - 140*	*08/16/18 18:53*	*08/29/18 07:05*	*1*
Tetrachloro-m-xylene	*72*		*40 - 120*	*08/16/18 18:53*	*08/29/18 07:05*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	**0.24**	**J**	1.0	0.19	mg/L			08/22/18 14:18	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 580-281654/1-A
Matrix: Water
Analysis Batch: 281831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.10	0.020	ug/L		08/15/18 13:45	08/17/18 13:43	1
Acenaphthylene	ND		0.20	0.044	ug/L		08/15/18 13:45	08/17/18 13:43	1
Acenaphthene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Anthracene	ND		0.10	0.0070	ug/L		08/15/18 13:45	08/17/18 13:43	1
Benzo[a]anthracene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Chrysene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Fluoranthene	ND		0.10	0.013	ug/L		08/15/18 13:45	08/17/18 13:43	1
Benzo[b]fluoranthene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Fluorene	ND		0.10	0.013	ug/L		08/15/18 13:45	08/17/18 13:43	1
Benzo[k]fluoranthene	ND		0.10	0.013	ug/L		08/15/18 13:45	08/17/18 13:43	1
Benzo[a]pyrene	ND		0.10	0.035	ug/L		08/15/18 13:45	08/17/18 13:43	1
Naphthalene	ND		0.10	0.018	ug/L		08/15/18 13:45	08/17/18 13:43	1
Indeno[1,2,3-cd]pyrene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Phenanthrene	ND		0.10	0.019	ug/L		08/15/18 13:45	08/17/18 13:43	1
Dibenz(a,h)anthracene	ND		0.10	0.0060	ug/L		08/15/18 13:45	08/17/18 13:43	1
Pyrene	ND		0.10	0.0090	ug/L		08/15/18 13:45	08/17/18 13:43	1
Benzo[g,h,i]perylene	ND		0.20	0.076	ug/L		08/15/18 13:45	08/17/18 13:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*54 - 120*	*08/15/18 13:45*	*08/17/18 13:43*	*1*

Lab Sample ID: LCS 580-281654/2-A
Matrix: Water
Analysis Batch: 281831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	2.00	1.26		ug/L		63	53 - 120
Acenaphthylene	2.00	1.35		ug/L		68	33 - 130
Acenaphthene	2.00	1.40		ug/L		70	64 - 120
Anthracene	2.00	1.37		ug/L		69	46 - 127
Benzo[a]anthracene	2.00	1.56		ug/L		78	70 - 120
Chrysene	2.00	1.71		ug/L		86	65 - 120
Fluoranthene	2.00	1.46		ug/L		73	72 - 120
Benzo[b]fluoranthene	2.00	1.77		ug/L		89	57 - 132
Fluorene	2.00	1.47		ug/L		73	67 - 120
Benzo[k]fluoranthene	2.00	1.65		ug/L		82	61 - 132
Benzo[a]pyrene	2.00	1.68		ug/L		84	23 - 141
Naphthalene	2.00	1.24		ug/L		62	58 - 120
Indeno[1,2,3-cd]pyrene	2.00	1.92		ug/L		96	53 - 133
Phenanthrene	2.00	1.39		ug/L		70	69 - 120
Dibenz(a,h)anthracene	2.00	1.94		ug/L		97	57 - 132
Pyrene	2.00	1.44		ug/L		72	57 - 133
Benzo[g,h,i]perylene	2.00	1.71		ug/L		86	52 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*78*		*54 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 580-281654/3-A
Matrix: Water
Analysis Batch: 281831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281654

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene			2.00	1.53		ug/L		76	53 - 120	20	23
Acenaphthylene			2.00	1.53		ug/L		76	33 - 130	12	34
Acenaphthene			2.00	1.57		ug/L		79	64 - 120	12	20
Anthracene			2.00	1.57		ug/L		79	46 - 127	14	19
Benzo[a]anthracene			2.00	1.77		ug/L		89	70 - 120	12	17
Chrysene			2.00	1.91		ug/L		96	65 - 120	11	19
Fluoranthene			2.00	1.67		ug/L		83	72 - 120	13	21
Benzo[b]fluoranthene			2.00	1.97		ug/L		99	57 - 132	11	25
Fluorene			2.00	1.62		ug/L		81	67 - 120	10	20
Benzo[k]fluoranthene			2.00	1.87		ug/L		93	61 - 132	12	22
Benzo[a]pyrene			2.00	1.88		ug/L		94	23 - 141	11	35
Naphthalene			2.00	1.49		ug/L		74	58 - 120	18	23
Indeno[1,2,3-cd]pyrene			2.00	2.14		ug/L		107	53 - 133	11	25
Phenanthrene			2.00	1.60		ug/L		80	69 - 120	14	21
Dibenz(a,h)anthracene			2.00	2.18		ug/L		109	57 - 132	11	24
Pyrene			2.00	1.66		ug/L		83	57 - 133	14	21
Benzo[g,h,i]perylene			2.00	1.91		ug/L		96	52 - 129	11	24

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*82*		*54 - 120*

Lab Sample ID: MB 580-281928/1-A
Matrix: Solid
Analysis Batch: 282700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		1.0	0.090	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Acenaphthylene	ND		1.0	0.10	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Acenaphthene	ND		1.0	0.12	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Anthracene	ND		1.0	0.12	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Benzo[a]anthracene	ND		1.0	0.15	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Chrysene	ND		1.0	0.30	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Fluoranthene	ND		1.0	0.28	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Benzo[b]fluoranthene	ND		1.0	0.12	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Fluorene	ND		1.0	0.10	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Benzo[k]fluoranthene	ND		1.0	0.12	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Benzo[a]pyrene	ND		1.0	0.080	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Naphthalene	0.222	J	1.0	0.16	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.12	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Phenanthrene	0.204	J	1.0	0.14	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Dibenz(a,h)anthracene	ND		1.0	0.14	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Pyrene	ND		1.0	0.19	ug/Kg		08/18/18 19:13	08/28/18 17:26	1
Benzo[g,h,i]perylene	ND		1.0	0.10	ug/Kg		08/18/18 19:13	08/28/18 17:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*57 - 120*	*08/18/18 19:13*	*08/28/18 17:26*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 580-281928/2-A
Matrix: Solid
Analysis Batch: 282700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	200	203		ug/Kg		101	68 - 120
Acenaphthylene	200	182		ug/Kg		91	68 - 120
Acenaphthene	200	192		ug/Kg		96	68 - 120
Anthracene	200	206		ug/Kg		103	73 - 125
Benzo[a]anthracene	200	210		ug/Kg		105	66 - 120
Chrysene	200	197		ug/Kg		98	69 - 120
Fluoranthene	200	204		ug/Kg		102	74 - 125
Benzo[b]fluoranthene	200	225		ug/Kg		113	63 - 121
Fluorene	200	198		ug/Kg		99	73 - 120
Benzo[k]fluoranthene	200	228		ug/Kg		114	63 - 123
Benzo[a]pyrene	200	205		ug/Kg		102	72 - 124
Naphthalene	200	178		ug/Kg		89	70 - 120
Indeno[1,2,3-cd]pyrene	200	204		ug/Kg		102	65 - 121
Phenanthrene	200	198		ug/Kg		99	73 - 120
Dibenz(a,h)anthracene	200	222		ug/Kg		111	70 - 125
Pyrene	200	202		ug/Kg		101	70 - 120
Benzo[g,h,i]perylene	200	225		ug/Kg		113	63 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*89*		*57 - 120*

Lab Sample ID: 580-79555-4 MS
Matrix: Solid
Analysis Batch: 282700

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA
Prep Batch: 281928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	64		359	421		ug/Kg	☼	99	68 - 120
Acenaphthene	90		359	488		ug/Kg	☼	111	68 - 120
Acenaphthylene	45		359	387		ug/Kg	☼	95	68 - 120
Anthracene	110		359	518		ug/Kg	☼	114	73 - 125
Benzo[a]anthracene	150		359	506		ug/Kg	☼	98	66 - 120
Benzo[a]pyrene	130		359	443		ug/Kg	☼	88	72 - 124
Benzo[b]fluoranthene	170		359	506		ug/Kg	☼	93	63 - 121
Benzo[g,h,i]perylene	140		359	489		ug/Kg	☼	97	63 - 120
Benzo[k]fluoranthene	64		359	431		ug/Kg	☼	102	63 - 123
Chrysene	200		359	591		ug/Kg	☼	109	69 - 120
Dibenz(a,h)anthracene	17	J	359	362		ug/Kg	☼	96	70 - 125
Fluoranthene	400		359	751		ug/Kg	☼	97	74 - 125
Fluorene	77		359	435		ug/Kg	☼	100	73 - 120
Indeno[1,2,3-cd]pyrene	140		359	437		ug/Kg	☼	81	65 - 121
Naphthalene	110	B	359	417		ug/Kg	☼	86	70 - 120
Phenanthrene	410	B	359	820		ug/Kg	☼	114	73 - 120
Pyrene	510		359	851		ug/Kg	☼	96	70 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*92*		*57 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-79555-4 MSD
Matrix: Solid
Analysis Batch: 282700

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA
Prep Batch: 281928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	64		354	390		ug/Kg	☼	92	68 - 120	8	12
Acenaphthene	90		354	453		ug/Kg	☼	103	68 - 120	7	12
Acenaphthylene	45		354	353		ug/Kg	☼	87	68 - 120	9	12
Anthracene	110		354	489		ug/Kg	☼	107	73 - 125	6	12
Benzo[a]anthracene	150		354	492		ug/Kg	☼	96	66 - 120	3	14
Benzo[a]pyrene	130		354	446		ug/Kg	☼	90	72 - 124	1	12
Benzo[b]fluoranthene	170		354	494		ug/Kg	☼	91	63 - 121	2	10
Benzo[g,h,i]perylene	140		354	498		ug/Kg	☼	101	63 - 120	2	14
Benzo[k]fluoranthene	64		354	424		ug/Kg	☼	101	63 - 123	2	15
Chrysene	200		354	547		ug/Kg	☼	98	69 - 120	8	10
Dibenz(a,h)anthracene	17	J	354	325		ug/Kg	☼	87	70 - 125	11	13
Fluoranthene	400		354	739		ug/Kg	☼	95	74 - 125	2	13
Fluorene	77		354	434		ug/Kg	☼	101	73 - 120	0	13
Indeno[1,2,3-cd]pyrene	140		354	435		ug/Kg	☼	82	65 - 121	0	15
Naphthalene	110	B	354	403		ug/Kg	☼	84	70 - 120	3	12
Phenanthrene	410	B	354	751		ug/Kg	☼	96	73 - 120	9	11
Pyrene	510		354	828		ug/Kg	☼	91	70 - 120	3	12

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*57 - 120*

Lab Sample ID: MB 580-282184/1-A
Matrix: Solid
Analysis Batch: 282363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	2.66		1.0	0.090	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Acenaphthylene	2.55		1.0	0.10	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Acenaphthene	2.23		1.0	0.12	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Anthracene	2.30		1.0	0.12	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Benzo[a]anthracene	2.10		1.0	0.15	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Chrysene	2.49		1.0	0.30	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Fluoranthene	2.65		1.0	0.28	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Benzo[b]fluoranthene	1.83		1.0	0.12	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Fluorene	2.05		1.0	0.10	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Benzo[k]fluoranthene	2.31		1.0	0.12	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Benzo[a]pyrene	1.93		1.0	0.080	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Naphthalene	2.44		1.0	0.16	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Indeno[1,2,3-cd]pyrene	2.96		1.0	0.12	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Phenanthrene	2.20		1.0	0.14	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Dibenz(a,h)anthracene	1.96		1.0	0.14	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Pyrene	2.34		1.0	0.19	ug/Kg		08/22/18 12:33	08/24/18 20:04	1
Benzo[g,h,i]perylene	2.17		1.0	0.10	ug/Kg		08/22/18 12:33	08/24/18 20:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*57 - 120*	*08/22/18 12:33*	*08/24/18 20:04*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 580-282184/2-A
Matrix: Solid
Analysis Batch: 282363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	200	191		ug/Kg		95	68 - 120
Acenaphthylene	200	169		ug/Kg		84	68 - 120
Acenaphthene	200	176		ug/Kg		88	68 - 120
Anthracene	200	199		ug/Kg		99	73 - 125
Benzo[a]anthracene	200	202		ug/Kg		101	66 - 120
Chrysene	200	182		ug/Kg		91	69 - 120
Fluoranthene	200	186		ug/Kg		93	74 - 125
Benzo[b]fluoranthene	200	194		ug/Kg		97	63 - 121
Fluorene	200	183		ug/Kg		92	73 - 120
Benzo[k]fluoranthene	200	198		ug/Kg		99	63 - 123
Benzo[a]pyrene	200	188		ug/Kg		94	72 - 124
Naphthalene	200	169		ug/Kg		84	70 - 120
Indeno[1,2,3-cd]pyrene	200	193		ug/Kg		97	65 - 121
Phenanthrene	200	186		ug/Kg		93	73 - 120
Dibenz(a,h)anthracene	200	209		ug/Kg		104	70 - 125
Pyrene	200	184		ug/Kg		92	70 - 120
Benzo[g,h,i]perylene	200	206		ug/Kg		103	63 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*57 - 120*

Lab Sample ID: 580-79555-38 MS
Matrix: Solid
Analysis Batch: 282363

Client Sample ID: PDI-SC-S011-16.8to17.9
Prep Type: Total/NA
Prep Batch: 282184

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	100	F2 B	281	323		ug/Kg	☼	79	68 - 120
Acenaphthylene	80	F2 B	281	281		ug/Kg	☼	72	68 - 120
Acenaphthene	130	F2 F1 B	281	310	F1	ug/Kg	☼	64	68 - 120
Anthracene	150	F2 F1 B	281	317	F1	ug/Kg	☼	60	73 - 125
Benzo[a]anthracene	290	F1 B	281	349	F1	ug/Kg	☼	20	66 - 120
Chrysene	270	F1 B	281	291	F1	ug/Kg	☼	6	69 - 120
Fluoranthene	510	F2 F1 B	281	505	F1	ug/Kg	☼	-2	74 - 125
Benzo[b]fluoranthene	280	F2 F1 B	281	318	F1	ug/Kg	☼	12	63 - 121
Fluorene	78	F2 B	281	304		ug/Kg	☼	81	73 - 120
Benzo[k]fluoranthene	80	F1 B	281	224	F1	ug/Kg	☼	51	63 - 123
Benzo[a]pyrene	250	F1 B	281	271	F1	ug/Kg	☼	8	72 - 124
Naphthalene	280	F2 F1 B	281	436	F1	ug/Kg	☼	57	70 - 120
Indeno[1,2,3-cd]pyrene	190	F1 B	281	258	F1	ug/Kg	☼	23	65 - 121
Phenanthrene	440	F2 F1 B	281	544	F1	ug/Kg	☼	38	73 - 120
Dibenz(a,h)anthracene	36	B	281	245		ug/Kg	☼	75	70 - 125
Pyrene	660	F2 F1 B	281	581	F1	ug/Kg	☼	-27	70 - 120
Benzo[g,h,i]perylene	160	F1 B	281	273	F1	ug/Kg	☼	39	63 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*71*		*57 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-79555-38 MSD
Matrix: Solid
Analysis Batch: 282363

Client Sample ID: PDI-SC-S011-16.8to17.9
Prep Type: Total/NA
Prep Batch: 282184

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	100	F2 B	268	384	F2	ug/Kg	☼	105	68 - 120	17	12
Acenaphthylene	80	F2 B	268	319	F2	ug/Kg	☼	89	68 - 120	13	12
Acenaphthene	130	F2 F1 B	268	370	F2	ug/Kg	☼	90	68 - 120	18	12
Anthracene	150	F2 F1 B	268	365	F2	ug/Kg	☼	81	73 - 125	14	12
Benzo[a]anthracene	290	F1 B	268	379	F1	ug/Kg	☼	32	66 - 120	8	14
Chrysene	270	F1 B	268	321	F1	ug/Kg	☼	17	69 - 120	10	10
Fluoranthene	510	F2 F1 B	268	606	F2 F1	ug/Kg	☼	35	74 - 125	18	13
Benzo[b]fluoranthene	280	F2 F1 B	268	357	F2 F1	ug/Kg	☼	27	63 - 121	11	10
Fluorene	78	F2 B	268	352	F2	ug/Kg	☼	102	73 - 120	15	13
Benzo[k]fluoranthene	80	F1 B	268	232	F1	ug/Kg	☼	57	63 - 123	4	15
Benzo[a]pyrene	250	F1 B	268	306	F1	ug/Kg	☼	21	72 - 124	12	12
Naphthalene	280	F2 F1 B	268	526	F2	ug/Kg	☼	93	70 - 120	19	12
Indeno[1,2,3-cd]pyrene	190	F1 B	268	280	F1	ug/Kg	☼	33	65 - 121	8	15
Phenanthrene	440	F2 F1 B	268	731	F2	ug/Kg	☼	109	73 - 120	29	11
Dibenz(a,h)anthracene	36	B	268	252		ug/Kg	☼	81	70 - 125	3	13
Pyrene	660	F2 F1 B	268	687	F2 F1	ug/Kg	☼	11	70 - 120	17	12
Benzo[g,h,i]perylene	160	F1 B	268	305	F1	ug/Kg	☼	52	63 - 120	11	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*76*		*57 - 120*

Lab Sample ID: MB 580-282288/1-A
Matrix: Solid
Analysis Batch: 282769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 282288

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.151	J	1.0	0.090	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Acenaphthylene	ND		1.0	0.10	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Acenaphthene	ND		1.0	0.12	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Anthracene	ND		1.0	0.12	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Benzo[a]anthracene	ND		1.0	0.15	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Chrysene	ND		1.0	0.30	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Fluoranthene	ND		1.0	0.28	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Benzo[b]fluoranthene	ND		1.0	0.12	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Fluorene	ND		1.0	0.10	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Benzo[k]fluoranthene	ND		1.0	0.12	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Benzo[a]pyrene	ND		1.0	0.080	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Naphthalene	0.212	J	1.0	0.16	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.12	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Phenanthrene	0.141	J	1.0	0.14	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Dibenz(a,h)anthracene	ND		1.0	0.14	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Pyrene	ND		1.0	0.19	ug/Kg		08/23/18 12:26	08/29/18 12:45	1
Benzo[g,h,i]perylene	ND		1.0	0.10	ug/Kg		08/23/18 12:26	08/29/18 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*57 - 120*	*08/23/18 12:26*	*08/29/18 12:45*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 580-282288/2-A
Matrix: Solid
Analysis Batch: 282769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 282288

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	200	162		ug/Kg		81	68 - 120
Acenaphthylene	200	176		ug/Kg		88	68 - 120
Acenaphthene	200	170		ug/Kg		85	68 - 120
Anthracene	200	173		ug/Kg		87	73 - 125
Benzo[a]anthracene	200	174		ug/Kg		87	66 - 120
Chrysene	200	167		ug/Kg		83	69 - 120
Fluoranthene	200	184		ug/Kg		92	74 - 125
Benzo[b]fluoranthene	200	172		ug/Kg		86	63 - 121
Fluorene	200	171		ug/Kg		85	73 - 120
Benzo[k]fluoranthene	200	188		ug/Kg		94	63 - 123
Benzo[a]pyrene	200	172		ug/Kg		86	72 - 124
Naphthalene	200	158		ug/Kg		79	70 - 120
Indeno[1,2,3-cd]pyrene	200	175		ug/Kg		88	65 - 121
Phenanthrene	200	161		ug/Kg		81	73 - 120
Dibenz(a,h)anthracene	200	166		ug/Kg		83	70 - 125
Pyrene	200	179		ug/Kg		89	70 - 120
Benzo[g,h,i]perylene	200	168		ug/Kg		84	63 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*86*		*57 - 120*

Lab Sample ID: 580-79555-26 MS
Matrix: Solid
Analysis Batch: 282769

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA
Prep Batch: 282288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	13	J B	377	303		ug/Kg	☼	77	68 - 120
Acenaphthene	15	J	377	336		ug/Kg	☼	85	68 - 120
Acenaphthylene	12	J	377	339		ug/Kg	☼	87	68 - 120
Anthracene	31		377	357		ug/Kg	☼	87	73 - 125
Benzo[a]anthracene	74		377	392		ug/Kg	☼	84	66 - 120
Benzo[a]pyrene	84	F1	377	347	F1	ug/Kg	☼	70	72 - 124
Benzo[b]fluoranthene	120		377	402		ug/Kg	☼	75	63 - 121
Benzo[g,h,i]perylene	83		377	367		ug/Kg	☼	75	63 - 120
Benzo[k]fluoranthene	42		377	326		ug/Kg	☼	75	63 - 123
Chrysene	100		377	367		ug/Kg	☼	70	69 - 120
Dibenz(a,h)anthracene	12	J	377	302		ug/Kg	☼	77	70 - 125
Fluoranthene	180		377	510		ug/Kg	☼	87	74 - 125
Fluorene	20		377	347		ug/Kg	☼	87	73 - 120
Indeno[1,2,3-cd]pyrene	84		377	387		ug/Kg	☼	80	65 - 121
Naphthalene	41	B	377	322		ug/Kg	☼	75	70 - 120
Phenanthrene	95	B	377	405		ug/Kg	☼	82	73 - 120
Pyrene	200		377	522		ug/Kg	☼	85	70 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*83*		*57 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-79555-26 MSD
Matrix: Solid
Analysis Batch: 282769

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA
Prep Batch: 282288

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	13	J B	384	310		ug/Kg	☼	77	68 - 120	2	12
Acenaphthene	15	J	384	354		ug/Kg	☼	88	68 - 120	5	12
Acenaphthylene	12	J	384	356		ug/Kg	☼	90	68 - 120	5	12
Anthracene	31		384	380		ug/Kg	☼	91	73 - 125	6	12
Benzo[a]anthracene	74		384	421		ug/Kg	☼	90	66 - 120	7	14
Benzo[a]pyrene	84	F1	384	368		ug/Kg	☼	74	72 - 124	6	12
Benzo[b]fluoranthene	120		384	431		ug/Kg	☼	81	63 - 121	7	10
Benzo[g,h,i]perylene	83		384	389		ug/Kg	☼	80	63 - 120	6	14
Benzo[k]fluoranthene	42		384	343		ug/Kg	☼	78	63 - 123	5	15
Chrysene	100		384	388		ug/Kg	☼	75	69 - 120	6	10
Dibenz(a,h)anthracene	12	J	384	327		ug/Kg	☼	82	70 - 125	8	13
Fluoranthene	180		384	538		ug/Kg	☼	92	74 - 125	5	13
Fluorene	20		384	366		ug/Kg	☼	90	73 - 120	5	13
Indeno[1,2,3-cd]pyrene	84		384	417		ug/Kg	☼	87	65 - 121	7	15
Naphthalene	41	B	384	326		ug/Kg	☼	74	70 - 120	1	12
Phenanthrene	95	B	384	425		ug/Kg	☼	86	73 - 120	5	11
Pyrene	200		384	542		ug/Kg	☼	89	70 - 120	4	12

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*83*		*57 - 120*

Lab Sample ID: MB 580-285535/1-A
Matrix: Solid
Analysis Batch: 285645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 285535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		1.0	0.090	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Anthracene	ND		1.0	0.12	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Benzo[a]anthracene	ND		1.0	0.15	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Chrysene	ND		1.0	0.30	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Benzo[a]pyrene	ND		1.0	0.080	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Naphthalene	ND		1.0	0.16	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Indeno[1,2,3-cd]pyrene	ND		1.0	0.12	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Phenanthrene	ND		1.0	0.14	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Dibenz(a,h)anthracene	ND		1.0	0.14	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Pyrene	ND		1.0	0.19	ug/Kg		10/03/18 09:05	10/04/18 10:55	1
Benzo[g,h,i]perylene	ND		1.0	0.10	ug/Kg		10/03/18 09:05	10/04/18 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*57 - 120*	*10/03/18 09:05*	*10/04/18 10:55*	*1*

Lab Sample ID: LCS 580-285535/2-A
Matrix: Solid
Analysis Batch: 285645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 285535

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
2-Methylnaphthalene			200	170		ug/Kg		85	68 - 120		

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 580-285535/2-A
Matrix: Solid
Analysis Batch: 285645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	200	196		ug/Kg		98	73 - 125
Benzo[a]anthracene	200	184		ug/Kg		92	66 - 120
Chrysene	200	175		ug/Kg		88	69 - 120
Benzo[a]pyrene	200	181		ug/Kg		91	72 - 124
Naphthalene	200	173		ug/Kg		86	70 - 120
Indeno[1,2,3-cd]pyrene	200	190		ug/Kg		95	65 - 121
Phenanthrene	200	189		ug/Kg		95	73 - 120
Dibenz(a,h)anthracene	200	188		ug/Kg		94	70 - 125
Pyrene	200	183		ug/Kg		92	70 - 120
Benzo[g,h,i]perylene	200	195		ug/Kg		97	63 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*57 - 120*

Lab Sample ID: 580-79555-47 MS
Matrix: Solid
Analysis Batch: 285696

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	11	J F2 F1	363	473	F1	ug/Kg	☼	127	68 - 120
Anthracene	40	F2	363	350		ug/Kg	☼	85	73 - 125
Benzo[a]anthracene	75		363	386		ug/Kg	☼	86	66 - 120
Benzo[a]pyrene	100		363	367		ug/Kg	☼	73	72 - 124
Benzo[g,h,i]perylene	54	F2	363	309		ug/Kg	☼	70	63 - 120
Chrysene	100		363	396		ug/Kg	☼	81	69 - 120
Dibenz(a,h)anthracene	8.6	J F2	363	274		ug/Kg	☼	73	70 - 125
Indeno[1,2,3-cd]pyrene	56	F2 F1	363	454		ug/Kg	☼	110	65 - 121
Naphthalene	40		363	304		ug/Kg	☼	73	70 - 120
Phenanthrene	130		363	422		ug/Kg	☼	79	73 - 120
Pyrene	150	F2 F1	363	969	F1	ug/Kg	☼	226	70 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*120*		*57 - 120*

Lab Sample ID: 580-79555-47 MSD
Matrix: Solid
Analysis Batch: 285696

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	11	J F2 F1	353	294	F2	ug/Kg	☼	80	68 - 120	47	12
Anthracene	40	F2	353	399	F2	ug/Kg	☼	102	73 - 125	13	12
Benzo[a]anthracene	75		353	408		ug/Kg	☼	94	66 - 120	6	14
Benzo[a]pyrene	100		353	386		ug/Kg	☼	80	72 - 124	5	12
Benzo[g,h,i]perylene	54	F2	353	385	F2	ug/Kg	☼	94	63 - 120	22	14
Chrysene	100		353	417		ug/Kg	☼	89	69 - 120	5	10
Dibenz(a,h)anthracene	8.6	J F2	353	323	F2	ug/Kg	☼	89	70 - 125	17	13
Indeno[1,2,3-cd]pyrene	56	F2 F1	353	538	F1 F2	ug/Kg	☼	136	65 - 121	17	15
Naphthalene	40		353	320		ug/Kg	☼	79	70 - 120	5	12

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 580-79555-47 MSD
Matrix: Solid
Analysis Batch: 285696

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenanthrene	130		353	465		ug/Kg	☼	94	73 - 120	10	11
Pyrene	150	F2 F1	353	577	F1 F2	ug/Kg	☼	121	70 - 120	51	12

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*74*		*57 - 120*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA

Lab Sample ID: MB 580-285535/1-A
Matrix: Solid
Analysis Batch: 285848

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 285535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene - RA	ND		1.0	0.10	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Acenaphthene - RA	ND		1.0	0.12	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Fluoranthene - RA	ND		1.0	0.28	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Benzo[b]fluoranthene - RA	ND		1.0	0.12	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Fluorene - RA	ND		1.0	0.10	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Benzo[k]fluoranthene - RA	ND		1.0	0.12	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Phenanthrene - RA	ND		1.0	0.14	ug/Kg		10/03/18 09:05	10/06/18 11:29	1
Pyrene - RA	ND		1.0	0.19	ug/Kg		10/03/18 09:05	10/06/18 11:29	1

Lab Sample ID: LCS 580-285535/2-A
Matrix: Solid
Analysis Batch: 285848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene - RA	200	131	*	ug/Kg		66	68 - 120
Acenaphthene - RA	200	178		ug/Kg		89	68 - 120
Fluoranthene - RA	200	181		ug/Kg		91	74 - 125
Benzo[b]fluoranthene - RA	200	195		ug/Kg		97	63 - 121
Fluorene - RA	200	187		ug/Kg		93	73 - 120
Benzo[k]fluoranthene - RA	200	190		ug/Kg		95	63 - 123
Phenanthrene - RA	200	180		ug/Kg		90	73 - 120
Pyrene - RA	200	175		ug/Kg		87	70 - 120

Lab Sample ID: 580-79555-47 MS
Matrix: Solid
Analysis Batch: 285848

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene - RA	25	F1 F2	363	475	F1	ug/Kg	☼	124	68 - 120
Acenaphthylene - RA	15	J *	363	315		ug/Kg	☼	82	68 - 120
Benzo[b]fluoranthene - RA	120	F1 F2	363	278	F1	ug/Kg	☼	44	63 - 121
Benzo[k]fluoranthene - RA	35	F1 F2	363	257	F1	ug/Kg	☼	61	63 - 123
Fluoranthene - RA	280	F1 F2	363	776	F1	ug/Kg	☼	136	74 - 125
Fluorene - RA	32		363	336		ug/Kg	☼	84	73 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - RA (Continued)

Lab Sample ID: 580-79555-47 MSD
Matrix: Solid
Analysis Batch: 285848

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 285535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene - RA	25	F1 F2	353	329	F2	ug/Kg	☼	86	68 - 120	36	12
Acenaphthylene - RA	15	J *	353	316		ug/Kg	☼	85	68 - 120	1	12
Benzo[b]fluoranthene - RA	120	F1 F2	353	448	F2	ug/Kg	☼	94	63 - 121	47	10
Benzo[k]fluoranthene - RA	35	F1 F2	353	399	F2	ug/Kg	☼	103	63 - 123	43	15
Fluoranthene - RA	280	F1 F2	353	442	F1 F2	ug/Kg	☼	45	74 - 125	55	13
Fluorene - RA	32		353	343		ug/Kg	☼	88	73 - 120	2	13

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 580-281801/1-A
Matrix: Water
Analysis Batch: 282692

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.45	0.061	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1221	ND		0.45	0.075	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1232	ND		0.45	0.063	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1242	ND		0.45	0.059	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1248	ND		0.45	0.052	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1254	ND		0.45	0.075	ug/L		08/16/18 18:53	08/29/18 05:25	1
PCB-1260	ND		0.45	0.061	ug/L		08/16/18 18:53	08/29/18 05:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*66*		*38 - 140*	*08/16/18 18:53*	*08/29/18 05:25*	*1*
Tetrachloro-m-xylene	*79*		*40 - 120*	*08/16/18 18:53*	*08/29/18 05:25*	*1*

Lab Sample ID: LCS 580-281801/2-A
Matrix: Water
Analysis Batch: 282692

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281801

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	1.00	0.849		ug/L		85	50 - 121
PCB-1260	1.00	0.834		ug/L		83	55 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*38 - 140*
Tetrachloro-m-xylene	*82*		*40 - 120*

Lab Sample ID: LCSD 580-281801/3-A
Matrix: Water
Analysis Batch: 282692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281801

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	1.00	0.931		ug/L		93	50 - 121	9	25
PCB-1260	1.00	0.921		ug/L		92	55 - 132	10	22

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCSD 580-281801/3-A
Matrix: Water
Analysis Batch: 282692

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 281801

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*82*		*38 - 140*
Tetrachloro-m-xylene	*86*		*40 - 120*

Lab Sample ID: MB 580-284921/1-A
Matrix: Solid
Analysis Batch: 285015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 284921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.0	0.34	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1221	ND		2.0	0.95	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1232	ND		2.0	0.47	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1242	ND		2.0	0.49	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1248	ND		2.0	0.16	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1254	ND		2.0	0.79	ug/Kg		09/26/18 09:39	09/26/18 21:10	1
PCB-1260	ND		2.0	0.34	ug/Kg		09/26/18 09:39	09/26/18 21:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*70*		*54 - 142*	*09/26/18 09:39*	*09/26/18 21:10*	*1*
Tetrachloro-m-xylene	*61*		*58 - 122*	*09/26/18 09:39*	*09/26/18 21:10*	*1*

Lab Sample ID: LCS 580-284921/2-A
Matrix: Solid
Analysis Batch: 285015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284921

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			10.0	7.50		ug/Kg		75	64 - 120		
PCB-1260			10.0	7.37		ug/Kg		74	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*71*		*54 - 142*
Tetrachloro-m-xylene	*67*		*58 - 122*

Lab Sample ID: 580-79555-4 MS
Matrix: Solid
Analysis Batch: 285015

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA
Prep Batch: 284921

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1	17.9	37.9	F1	ug/Kg	☼	212	64 - 120		
PCB-1260	45	F1	17.9	40.3	F1	ug/Kg	☼	-28	63 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*58*		*54 - 142*
Tetrachloro-m-xylene	*49*	*X*	*58 - 122*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-79555-4 MSD
Matrix: Solid
Analysis Batch: 285015

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA
Prep Batch: 284921

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1	18.4	42.5	F1	ug/Kg	☼	231	64 - 120	12	21
PCB-1260	45	F1	18.4	48.2	F1	ug/Kg	☼	16	63 - 130	18	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*56*		*54 - 142*
Tetrachloro-m-xylene	*54*	*X*	*58 - 122*

Lab Sample ID: MB 580-284939/1-A
Matrix: Solid
Analysis Batch: 285050

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 284939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.0	0.34	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1221	ND		2.0	0.95	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1232	ND		2.0	0.47	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1242	ND		2.0	0.49	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1248	ND		2.0	0.16	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1254	ND		2.0	0.79	ug/Kg		09/26/18 11:58	09/27/18 12:13	1
PCB-1260	ND		2.0	0.34	ug/Kg		09/26/18 11:58	09/27/18 12:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*90*		*54 - 142*	*09/26/18 11:58*	*09/27/18 12:13*	*1*
Tetrachloro-m-xylene	*77*		*58 - 122*	*09/26/18 11:58*	*09/27/18 12:13*	*1*

Lab Sample ID: LCS 580-284939/2-A
Matrix: Solid
Analysis Batch: 285050

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			10.0	7.09		ug/Kg		71	64 - 120
PCB-1260			10.0	8.64		ug/Kg		86	63 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*81*		*54 - 142*
Tetrachloro-m-xylene	*70*		*58 - 122*

Lab Sample ID: 580-79555-26 MS
Matrix: Solid
Analysis Batch: 285050

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA
Prep Batch: 284939

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	ND		20.0	14.0		ug/Kg	☼	70	64 - 120
PCB-1260	ND		20.0	14.9		ug/Kg	☼	75	63 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*57*		*54 - 142*
Tetrachloro-m-xylene	*59*		*58 - 122*

Lab Sample ID: 580-79555-26 MSD
Matrix: Solid
Analysis Batch: 285050

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA
Prep Batch: 284939

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		20.0	14.5		ug/Kg	☼	72	64 - 120	4	21
PCB-1260	ND		20.0	16.3		ug/Kg	☼	82	63 - 130	9	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*57*		*54 - 142*
Tetrachloro-m-xylene	*65*		*58 - 122*

Lab Sample ID: MB 580-284953/1-A
Matrix: Solid
Analysis Batch: 285172

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 284953

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.0	0.34	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1221	ND		2.0	0.95	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1232	ND		2.0	0.47	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1242	ND		2.0	0.49	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1248	ND		2.0	0.16	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1254	ND		2.0	0.79	ug/Kg		09/26/18 13:33	09/28/18 12:02	1
PCB-1260	ND		2.0	0.34	ug/Kg		09/26/18 13:33	09/28/18 12:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*94*		*54 - 142*	*09/26/18 13:33*	*09/28/18 12:02*	*1*
Tetrachloro-m-xylene	*76*		*58 - 122*	*09/26/18 13:33*	*09/28/18 12:02*	*1*

Lab Sample ID: LCS 580-284953/2-A
Matrix: Solid
Analysis Batch: 285172

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 284953

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			10.0	8.96		ug/Kg		90	64 - 120		
PCB-1260			10.0	9.71		ug/Kg		97	63 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*102*		*54 - 142*
Tetrachloro-m-xylene	*81*		*58 - 122*

Lab Sample ID: 580-79555-47 MS
Matrix: Solid
Analysis Batch: 285172

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 284953

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1	19.0	10.8	F1	ug/Kg	☼	57	64 - 120		
PCB-1260	2.4	J F1	19.0	10.5	F1	ug/Kg	☼	43	63 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*59*		*54 - 142*
Tetrachloro-m-xylene	*61*		*58 - 122*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 580-79555-47 MSD
Matrix: Solid
Analysis Batch: 285172

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA
Prep Batch: 284953

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND		19.0	12.4		ug/Kg	☼	65	64 - 120	1	21
PCB-1260	2.4	J F1	19.0	10.0	F1	ug/Kg	☼	40	63 - 130	4	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl	*66*		*54 - 142*
Tetrachloro-m-xylene	*54*	*X*	*58 - 122*

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-282352/5
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	44	mg/Kg			08/23/18 12:23	1

Lab Sample ID: LCS 580-282352/6
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	4270	5170		mg/Kg		121	68 - 149

Lab Sample ID: LCSD 580-282352/7
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	4270	4620		mg/Kg		108	68 - 149	11	32

Lab Sample ID: 580-79555-4 MS
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	55000		120000	201000		mg/Kg		121	68 - 149

Lab Sample ID: 580-79555-4 MSD
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	55000		120000	176000		mg/Kg		100	68 - 149	13	32

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-79555-4 DU
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon - Duplicates	55000			56100		mg/Kg				2	50

Lab Sample ID: 580-79555-4 TRL
Matrix: Solid
Analysis Batch: 282352

Client Sample ID: PDI-SC-S230-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
Total Organic Carbon - Duplicates	55000			55800		mg/Kg				1	20

Lab Sample ID: MB 580-282429/3
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	44	mg/Kg			08/24/18 12:36	1

Lab Sample ID: LCS 580-282429/4
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates			4270	5480		mg/Kg		128	68 - 149		

Lab Sample ID: LCSD 580-282429/5
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates			4270	4930		mg/Kg		115	68 - 149	11	32

Lab Sample ID: 580-79555-41 MS
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: PDI-SC-S004-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates	28000		120000	149000		mg/Kg		101	68 - 149		

Lab Sample ID: 580-79555-41 MSD
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: PDI-SC-S004-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	28000		120000	133000		mg/Kg		88	68 - 149	12	32

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-79555-41 DU
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: PDI-SC-S004-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon - Duplicates	28000			26800		mg/Kg				4	50

Lab Sample ID: 580-79555-41 TRL
Matrix: Solid
Analysis Batch: 282429

Client Sample ID: PDI-SC-S004-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
Total Organic Carbon - Duplicates	28000			28200		mg/Kg				3	20

Lab Sample ID: MB 580-282432/3
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	ND		2000	44	mg/Kg			08/24/18 07:35	1

Lab Sample ID: LCS 580-282432/4
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates			4270	5260		mg/Kg		123	68 - 149		

Lab Sample ID: LCSD 580-282432/5
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates			4270	6080		mg/Kg		142	68 - 149	14	32

Lab Sample ID: 580-79555-26 MS
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates	49000		120000	190000		mg/Kg		117	68 - 149		

Lab Sample ID: 580-79555-26 MSD
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	49000		120000	195000		mg/Kg		121	68 - 149	2	32

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-79555-26 DU
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Organic Carbon - Duplicates	49000			49200		mg/Kg				0.7	50

Lab Sample ID: 580-79555-26 TRL
Matrix: Solid
Analysis Batch: 282432

Client Sample ID: PDI-SC-S009-6to8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		TRL Result	TRL Qualifier	Unit	D			RSD	RSD Limit
Total Organic Carbon - Duplicates	49000			49900		mg/Kg				0.7	20

Lab Sample ID: MB 580-282530/5
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	318	J	2000	44	mg/Kg			08/25/18 07:36	1

Lab Sample ID: LCS 580-282530/6
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates			4270	4560		mg/Kg		107	68 - 149		

Lab Sample ID: LCSD 580-282530/7
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates			4270	5320		mg/Kg		124	68 - 149	15	32

Lab Sample ID: 580-79555-47 MS
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon - Duplicates	52000	B	120000	178000		mg/Kg		105	68 - 149		

Lab Sample ID: 580-79555-47 MSD
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Organic Carbon - Duplicates	52000	B	120000	192000		mg/Kg		117	68 - 149	7	32

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-79555-47 DU
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon - Duplicates	52000	B	50400		mg/Kg		3	50

Lab Sample ID: 580-79555-47 TRL
Matrix: Solid
Analysis Batch: 282530

Client Sample ID: PDI-SC-S015-2to4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	TRL Result	TRL Qualifier	Unit	D	RSD	RSD Limit
Total Organic Carbon - Duplicates	52000	B	50800		mg/Kg		2	20

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-79555-1 DU
Matrix: Solid
Analysis Batch: 281709

Client Sample ID: PDI-SC-S230-0to2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	41.5		42.7		%		3	20

Lab Sample ID: 580-79555-33 DU
Matrix: Solid
Analysis Batch: 281709

Client Sample ID: PDI-SC-S011-8to10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	54.0		54.3		%		0.6	20

Lab Sample ID: 580-79555-34 DU
Matrix: Solid
Analysis Batch: 281716

Client Sample ID: PDI-SC-S011-10to12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	58.2		59.7		%		3	20

Method: Moisture 70C - Percent Moisture, 70 C

Lab Sample ID: 580-79555-1 DU
Matrix: Solid
Analysis Batch: 283167

Client Sample ID: PDI-SC-S230-0to2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	44	H	44		%		0.3	20

Lab Sample ID: 580-79555-13 DU
Matrix: Solid
Analysis Batch: 283168

Client Sample ID: PDI-SC-S007-10to12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	58	H	59		%		1	20

Method: Moisture 70C - Percent Moisture, 70 C (Continued)

Lab Sample ID: 580-79555-20 DU — **Client Sample ID: PDI-SC-S010-8.4to10.8**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 283408

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	75	H	74		%		0.6	20

Lab Sample ID: 580-79555-10 DU — **Client Sample ID: PDI-SC-S007-4to6D**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 283671

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids @ 70°C	54	H	53		%		0.9	20

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-282342/22 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 282342

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	ND		1.0	0.19	mg/L			08/22/18 14:18	1

Lab Sample ID: LCS 580-282342/23 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 282342

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	10.0	10.3		mg/L		103	85 - 115

Method: D7928/D6913 - ASTM D7928/D6913

Lab Sample ID: 580-79555-1 DU — **Client Sample ID: PDI-SC-S230-0to2**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 282421

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gravel	0.0		0.0		%		NC	20
Coarse Sand	0.0		0.0		%		NC	20
Medium Sand	0.2		0.2		%		0	20
Fine Sand	11.0		5.4	F3	%		68	20
Silt	67.5		73.2		%		8	20
Clay	21.3		21.1		%		0.9	20

Lab Sample ID: 580-79555-13 DU — **Client Sample ID: PDI-SC-S007-10to12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 282657

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gravel	0.0		0.0		%		NC	20
Coarse Sand	0.2		0.7	F3	%		111	20
Medium Sand	0.6		0.6		%		0	20
Fine Sand	17.1		17.6		%		3	20
Silt	66.2		66.6		%		0.6	20

Method: D7928/D6913 - ASTM D7928/D6913 (Continued)

Lab Sample ID: 580-79555-13 DU
Matrix: Solid
Analysis Batch: 282657

Client Sample ID: PDI-SC-S007-10to12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Clay	15.9			14.6		%				9	20

Lab Sample ID: 580-79555-20 DU
Matrix: Solid
Analysis Batch: 282658

Client Sample ID: PDI-SC-S010-8.4to10.8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Gravel	0.0			0.0		%				NC	20
Coarse Sand	0.0			0.0		%				NC	20
Medium Sand	6.8			7.0		%				3	20
Fine Sand	63.2			63.2		%				0	20
Silt	24.7			25.5		%				3	20
Clay	5.3			4.3	F3	%				21	20

Client Sample ID: PDI-SC-S230-0to2

Lab Sample ID: 580-79555-1
Date Collected: 08/10/18 08:45
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:01	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-0to2

Lab Sample ID: 580-79555-1
Date Collected: 08/10/18 08:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 41.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 18:43	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 21:48	TL1	TAL SEA

Client Sample ID: PDI-SC-S230-2to4

Lab Sample ID: 580-79555-2
Date Collected: 08/10/18 08:50
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:09	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-2to4

Lab Sample ID: 580-79555-2
Date Collected: 08/10/18 08:50
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 48.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		50	282700	08/28/18 19:09	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 22:06	TL1	TAL SEA

Client Sample ID: PDI-SC-S230-4to6

Lab Sample ID: 580-79555-3
Date Collected: 08/10/18 08:55
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:16	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-4to6
Lab Sample ID: 580-79555-3
Date Collected: 08/10/18 08:55
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 53.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 19:35	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 22:25	TL1	TAL SEA

Client Sample ID: PDI-SC-S230-6to8
Lab Sample ID: 580-79555-4
Date Collected: 08/10/18 09:00
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 12:32	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-6to8
Lab Sample ID: 580-79555-4
Date Collected: 08/10/18 09:00
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 54.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 20:01	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 22:44	TL1	TAL SEA

Client Sample ID: PDI-SC-S230-8to10.0
Lab Sample ID: 580-79555-5
Date Collected: 08/10/18 09:05
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:29	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-8to10.0

Lab Sample ID: 580-79555-5
Date Collected: 08/10/18 09:05
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 56.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 21:19	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 23:40	TL1	TAL SEA

Client Sample ID: PDI-SC-S230-10.0to11.4

Lab Sample ID: 580-79555-6
Date Collected: 08/10/18 09:10
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:37	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S230-10.0to11.4

Lab Sample ID: 580-79555-6
Date Collected: 08/10/18 09:10
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 56.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 21:45	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/26/18 23:58	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-0to2

Lab Sample ID: 580-79555-7
Date Collected: 08/10/18 10:45
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:44	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S007-0to2

Lab Sample ID: 580-79555-7
Date Collected: 08/10/18 10:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 41.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		50	282700	08/28/18 22:11	T1W	TAL SEA

Client Sample ID: PDI-SC-S007-0to2

Lab Sample ID: 580-79555-7
Date Collected: 08/10/18 10:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 41.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 00:17	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-2to4

Lab Sample ID: 580-79555-8
Date Collected: 08/10/18 10:50
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:51	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S007-2to4

Lab Sample ID: 580-79555-8
Date Collected: 08/10/18 10:50
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 50.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 22:37	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 00:36	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-4to6

Lab Sample ID: 580-79555-9
Date Collected: 08/10/18 10:55
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 13:58	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S007-4to6

Lab Sample ID: 580-79555-9
Date Collected: 08/10/18 10:55
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 52.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		50	282700	08/28/18 23:04	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 00:54	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-4to6D
Date Collected: 08/10/18 10:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:05	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283671	09/11/18 06:49	HJM	TAL SEA

Client Sample ID: PDI-SC-S007-4to6D
Date Collected: 08/10/18 10:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-10
Matrix: Solid
Percent Solids: 52.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 23:30	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 01:13	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-6to8
Date Collected: 08/10/18 11:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:12	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S007-6to8
Date Collected: 08/10/18 11:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-11
Matrix: Solid
Percent Solids: 51.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/28/18 23:56	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 01:31	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-8to10
Date Collected: 08/10/18 11:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:18	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283167	08/24/18 15:20	HJM	TAL SEA

Client Sample ID: PDI-SC-S007-8to10
Date Collected: 08/10/18 11:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D7928/D6913		1	282421	08/24/18 15:20	JKM	TAL SEA

Client Sample ID: PDI-SC-S007-8to10
Date Collected: 08/10/18 11:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-12
Matrix: Solid
Percent Solids: 55.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/29/18 00:22	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 01:50	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-10to12
Date Collected: 08/10/18 11:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:32	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S007-10to12
Date Collected: 08/10/18 11:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-13
Matrix: Solid
Percent Solids: 58.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/29/18 00:48	T1W	TAL SEA
Total/NA	Prep	3550B	DL		284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A	DL	100	285151	09/28/18 14:36	APR	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 02:08	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-12to14
Date Collected: 08/10/18 11:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:38	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA

Client Sample ID: PDI-SC-S007-12to14
Lab Sample ID: 580-79555-14
Date Collected: 08/10/18 11:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S007-12to14
Lab Sample ID: 580-79555-14
Date Collected: 08/10/18 11:15
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 58.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/29/18 01:14	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 02:27	TL1	TAL SEA

Client Sample ID: PDI-SC-S007-14to16
Lab Sample ID: 580-79555-15
Date Collected: 08/10/18 11:20
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:45	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S007-14to16
Lab Sample ID: 580-79555-15
Date Collected: 08/10/18 11:20
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 61.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	282700	08/29/18 01:39	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 02:46	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-0to2
Lab Sample ID: 580-79555-16
Date Collected: 08/10/18 14:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:51	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-0to2

Lab Sample ID: 580-79555-16
Date Collected: 08/10/18 14:15
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 50.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/29/18 02:05	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285015	09/27/18 03:04	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-2to4

Lab Sample ID: 580-79555-17
Date Collected: 08/10/18 14:20
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 14:58	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-2to4

Lab Sample ID: 580-79555-17
Date Collected: 08/10/18 14:20
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 60.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	282700	08/29/18 02:31	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		10	285151	09/28/18 12:35	APR	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285017	09/27/18 05:33	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-4to6.4

Lab Sample ID: 580-79555-18
Date Collected: 08/10/18 14:25
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 15:05	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-4to6.4

Lab Sample ID: 580-79555-18
Date Collected: 08/10/18 14:25
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 66.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		25	282700	08/29/18 02:57	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		10	285151	09/28/18 12:52	APR	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 09:39	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285017	09/27/18 05:52	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-6.4to8.4

Lab Sample ID: 580-79555-19
Date Collected: 08/10/18 14:30
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 15:11	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283168	08/28/18 14:37	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282657	08/28/18 14:37	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-6.4to8.4

Lab Sample ID: 580-79555-19
Date Collected: 08/10/18 14:30
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			281928	08/18/18 19:13	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	282700	08/29/18 03:23	T1W	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 10:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285017	09/27/18 06:10	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-8.4to10.8

Lab Sample ID: 580-79555-20
Date Collected: 08/10/18 14:35
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282352	08/23/18 15:17	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-8.4to10.8
Lab Sample ID: 580-79555-20
Date Collected: 08/10/18 14:35
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 72.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282769	08/29/18 13:35	TL1	TAL SEA
Total/NA	Prep	3550B			284921	09/26/18 10:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285017	09/27/18 06:29	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-10.8to13.4
Lab Sample ID: 580-79555-21
Date Collected: 08/10/18 14:40
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:14	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-10.8to13.4
Lab Sample ID: 580-79555-21
Date Collected: 08/10/18 14:40
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 67.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282769	08/29/18 14:00	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 12:48	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-13.4to14.4
Lab Sample ID: 580-79555-22
Date Collected: 08/10/18 14:45
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:20	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S010-13.4to14.4
Lab Sample ID: 580-79555-22
Date Collected: 08/10/18 14:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 71.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282769	08/29/18 14:24	TL1	TAL SEA

Client Sample ID: PDI-SC-S010-13.4to14.4

Lab Sample ID: 580-79555-22
Date Collected: 08/10/18 14:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 71.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 13:05	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-0to2

Lab Sample ID: 580-79555-23
Date Collected: 08/10/18 15:50
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:34	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-0to2

Lab Sample ID: 580-79555-23
Date Collected: 08/10/18 15:50
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 44.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 14:49	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 13:23	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-2to4

Lab Sample ID: 580-79555-24
Date Collected: 08/10/18 15:55
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:41	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-2to4

Lab Sample ID: 580-79555-24
Date Collected: 08/10/18 15:55
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 43.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 15:14	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 13:41	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-4to6
Date Collected: 08/10/18 16:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:47	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-4to6
Date Collected: 08/10/18 16:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-25
Matrix: Solid
Percent Solids: 45.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 15:38	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 13:58	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-6to8
Date Collected: 08/10/18 16:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-26
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 07:45	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-6to8
Date Collected: 08/10/18 16:05
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-26
Matrix: Solid
Percent Solids: 49.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 16:03	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 14:16	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-8to10
Date Collected: 08/10/18 16:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-27
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 08:54	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA

Client Sample ID: PDI-SC-S009-8to10
Lab Sample ID: 580-79555-27
Date Collected: 08/10/18 16:10
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-8to10
Lab Sample ID: 580-79555-27
Date Collected: 08/10/18 16:10
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 54.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 17:16	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 15:09	TL1	TAL SEA

Client Sample ID: PDI-SC-S009-10to11.4
Lab Sample ID: 580-79555-28
Date Collected: 08/10/18 16:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:01	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S009-10to11.4
Lab Sample ID: 580-79555-28
Date Collected: 08/10/18 16:15
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 51.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282769	08/29/18 17:41	TL1	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 15:27	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-0to2
Lab Sample ID: 580-79555-29
Date Collected: 08/10/18 16:40
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:09	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-0to2

Lab Sample ID: 580-79555-29
Date Collected: 08/10/18 16:40
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 43.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 21:47	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 15:44	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-2to4

Lab Sample ID: 580-79555-30
Date Collected: 08/10/18 16:45
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:16	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-2to4

Lab Sample ID: 580-79555-30
Date Collected: 08/10/18 16:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 54.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 22:13	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 16:02	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-4to6

Lab Sample ID: 580-79555-31
Date Collected: 08/10/18 16:50
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:22	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-4to6

Lab Sample ID: 580-79555-31
Date Collected: 08/10/18 16:50
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 53.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 22:39	W1T	TAL SEA

Client Sample ID: PDI-SC-S011-4to6
Date Collected: 08/10/18 16:50
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-31
Matrix: Solid
Percent Solids: 53.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 16:20	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-6to8
Date Collected: 08/10/18 16:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-32
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:30	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-6to8
Date Collected: 08/10/18 16:55
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-32
Matrix: Solid
Percent Solids: 52.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 23:05	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 16:37	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-8to10
Date Collected: 08/10/18 17:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-33
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 09:37	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281709	08/16/18 08:56	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-8to10
Date Collected: 08/10/18 17:00
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-33
Matrix: Solid
Percent Solids: 54.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 23:31	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 16:55	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-10to12
Lab Sample ID: 580-79555-34
Date Collected: 08/10/18 17:05
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:04	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-10to12
Lab Sample ID: 580-79555-34
Date Collected: 08/10/18 17:05
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 58.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/24/18 23:56	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 17:12	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-12to14.5
Lab Sample ID: 580-79555-35
Date Collected: 08/10/18 17:10
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:11	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-12to14.5
Lab Sample ID: 580-79555-35
Date Collected: 08/10/18 17:10
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 59.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/25/18 00:22	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 17:30	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-14.5to16.8
Lab Sample ID: 580-79555-36
Date Collected: 08/10/18 17:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:17	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA

Client Sample ID: PDI-SC-S011-14.5to16.8
Lab Sample ID: 580-79555-36
Date Collected: 08/10/18 17:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture 70C		1	283408	08/28/18 14:42	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282658	08/28/18 14:42	A1K	TAL SEA

Client Sample ID: PDI-SC-S011-14.5to16.8
Lab Sample ID: 580-79555-36
Date Collected: 08/10/18 17:15
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 57.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/25/18 00:48	W1T	TAL SEA
Total/NA	Prep	3550B	DL		284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A	DL	10	285151	09/28/18 13:09	APR	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285050	09/27/18 17:48	TL1	TAL SEA

Client Sample ID: PDI-SC-S011-14.5to16.8D
Lab Sample ID: 580-79555-37
Date Collected: 08/10/18 17:15
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:24	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283671	09/11/18 06:49	HJM	TAL SEA

Client Sample ID: PDI-SC-S011-14.5to16.8D
Lab Sample ID: 580-79555-37
Date Collected: 08/10/18 17:15
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 57.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/25/18 01:14	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		10	285172	09/28/18 12:37	APR	TAL SEA

Client Sample ID: PDI-SC-S011-16.8to17.9
Lab Sample ID: 580-79555-38
Date Collected: 08/10/18 17:20
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:31	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA

Client Sample ID: PDI-SC-S011-16.8to17.9
Lab Sample ID: 580-79555-38
Date Collected: 08/10/18 17:20
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S011-16.8to17.9
Lab Sample ID: 580-79555-38
Date Collected: 08/10/18 17:20
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 70.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282363	08/25/18 01:39	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 12:55	APR	TAL SEA

Client Sample ID: PDI-SC-S011-17.9to18.9
Lab Sample ID: 580-79555-39
Date Collected: 08/10/18 17:25
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:37	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S011-17.9to18.9
Lab Sample ID: 580-79555-39
Date Collected: 08/10/18 17:25
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 69.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282363	08/25/18 02:57	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 13:12	APR	TAL SEA

Client Sample ID: PDI-SC-S004-0to2
Lab Sample ID: 580-79555-40
Date Collected: 08/10/18 18:30
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282432	08/24/18 10:43	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-0to2

Lab Sample ID: 580-79555-40
Date Collected: 08/10/18 18:30
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 60.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		10	282363	08/25/18 03:22	W1T	TAL SEA
Total/NA	Prep	3550B			284939	09/26/18 11:58	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 13:30	APR	TAL SEA

Client Sample ID: PDI-SC-S004-2to4

Lab Sample ID: 580-79555-41
Date Collected: 08/10/18 18:35
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 12:48	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-2to4

Lab Sample ID: 580-79555-41
Date Collected: 08/10/18 18:35
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 64.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282184	08/22/18 12:33	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282363	08/25/18 03:48	W1T	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 13:48	APR	TAL SEA

Client Sample ID: PDI-SC-S004-4to6

Lab Sample ID: 580-79555-42
Date Collected: 08/10/18 18:40
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:16	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-4to6

Lab Sample ID: 580-79555-42
Date Collected: 08/10/18 18:40
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 68.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282769	08/29/18 18:06	TL1	TAL SEA

Client Sample ID: PDI-SC-S004-4to6

Lab Sample ID: 580-79555-42
Date Collected: 08/10/18 18:40
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 68.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 14:06	APR	TAL SEA

Client Sample ID: PDI-SC-S004-6to7.3

Lab Sample ID: 580-79555-43
Date Collected: 08/10/18 18:45
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:22	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-6to7.3

Lab Sample ID: 580-79555-43
Date Collected: 08/10/18 18:45
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 68.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		5	282769	08/29/18 18:30	TL1	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 14:23	APR	TAL SEA

Client Sample ID: PDI-SC-S004-7.3to9.1

Lab Sample ID: 580-79555-44
Date Collected: 08/10/18 18:50
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:36	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-7.3to9.1

Lab Sample ID: 580-79555-44
Date Collected: 08/10/18 18:50
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 70.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		1	282769	08/29/18 18:55	TL1	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 14:41	APR	TAL SEA

Client Sample ID: PDI-SC-S004-9.1to10.3

Lab Sample ID: 580-79555-45

Date Collected: 08/10/18 18:55

Matrix: Solid

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:42	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S004-9.1to10.3

Lab Sample ID: 580-79555-45

Date Collected: 08/10/18 18:55

Matrix: Solid

Date Received: 08/13/18 15:00

Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			282288	08/23/18 12:26	KMS	TAL SEA
Total/NA	Analysis	8270D SIM		1	282769	08/29/18 19:19	TL1	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 14:59	APR	TAL SEA

Client Sample ID: PDI-SC-S015-0to2

Lab Sample ID: 580-79555-46

Date Collected: 08/13/18 09:05

Matrix: Solid

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:48	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-0to2

Lab Sample ID: 580-79555-46

Date Collected: 08/13/18 09:05

Matrix: Solid

Date Received: 08/13/18 15:00

Percent Solids: 43.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:05	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 19:34	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:05	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 16:25	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 15:16	APR	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-2to4
Date Collected: 08/13/18 09:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-47
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 13:56	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-2to4
Date Collected: 08/13/18 09:10
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-47
Matrix: Solid
Percent Solids: 51.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 22:26	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 19:18	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 15:34	APR	TAL SEA

Client Sample ID: PDI-SC-S015-4to6
Date Collected: 08/13/18 09:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-48
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 14:02	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-4to6
Date Collected: 08/13/18 09:15
Date Received: 08/13/18 15:00

Lab Sample ID: 580-79555-48
Matrix: Solid
Percent Solids: 53.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:05	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 19:59	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:05	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 16:50	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 16:27	APR	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-SC-S015-6to8

Lab Sample ID: 580-79555-49
Date Collected: 08/13/18 09:20
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 14:09	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-6to8

Lab Sample ID: 580-79555-49
Date Collected: 08/13/18 09:20
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 55.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 20:48	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 17:39	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 16:45	APR	TAL SEA

Client Sample ID: PDI-SC-S015-8to10

Lab Sample ID: 580-79555-50
Date Collected: 08/13/18 09:25
Matrix: Solid
Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 14:16	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-8to10

Lab Sample ID: 580-79555-50
Date Collected: 08/13/18 09:25
Matrix: Solid
Date Received: 08/13/18 15:00
Percent Solids: 56.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 21:13	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 18:04	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 17:02	APR	TAL SEA

Client Sample ID: PDI-SC-S015-10to11.4

Lab Sample ID: 580-79555-51

Date Collected: 08/13/18 09:30

Matrix: Solid

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282429	08/24/18 14:22	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-10to11.4

Lab Sample ID: 580-79555-51

Date Collected: 08/13/18 09:30

Matrix: Solid

Date Received: 08/13/18 15:00

Percent Solids: 58.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 21:37	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 18:29	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 17:20	APR	TAL SEA

Client Sample ID: PDI-SC-S015-11.4to12.4

Lab Sample ID: 580-79555-52

Date Collected: 08/13/18 09:35

Matrix: Solid

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	282532	08/24/18 18:46	SPP	TAL SEA
Total/NA	Analysis	D 2216		1	281716	08/16/18 09:59	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	283630	08/29/18 12:03	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	282765	08/29/18 12:03	JKM	TAL SEA

Client Sample ID: PDI-SC-S015-11.4to12.4

Lab Sample ID: 580-79555-52

Date Collected: 08/13/18 09:35

Matrix: Solid

Date Received: 08/13/18 15:00

Percent Solids: 63.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM		10	285696	10/04/18 22:02	W1T	TAL SEA
Total/NA	Prep	3546	RA		285535	10/03/18 09:06	BAH	TAL SEA
Total/NA	Analysis	8270D SIM	RA	10	285848	10/06/18 18:53	ERZ	TAL SEA
Total/NA	Prep	3550B			284953	09/26/18 13:33	KMS	TAL SEA
Total/NA	Analysis	8082A		1	285172	09/28/18 17:38	APR	TAL SEA

Lab Chronicle

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

TestAmerica Job ID: 580-79555-1

Client Sample ID: PDI-RB-SS-180810-1200

Lab Sample ID: 580-79555-53

Date Collected: 08/10/18 12:00

Matrix: Water

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			281654	08/15/18 13:45	JSM	TAL SEA
Total/NA	Analysis	8270D SIM		1	281831	08/17/18 15:34	ERZ	TAL SEA
Total/NA	Prep	3510C			281801	08/16/18 18:53	JCM	TAL SEA
Total/NA	Analysis	8082A		1	282692	08/29/18 06:49	JES	TAL SEA
Total/NA	Analysis	SM 5310B		1	282342	08/22/18 14:18	TTN	TAL SEA

Client Sample ID: PDI-RB-SS-180810-1730

Lab Sample ID: 580-79555-54

Date Collected: 08/10/18 17:30

Matrix: Water

Date Received: 08/13/18 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			281654	08/15/18 13:45	JSM	TAL SEA
Total/NA	Analysis	8270D SIM		1	281831	08/17/18 15:56	ERZ	TAL SEA
Total/NA	Prep	3510C			281801	08/16/18 18:53	JCM	TAL SEA
Total/NA	Analysis	8082A		1	282692	08/29/18 07:05	JES	TAL SEA
Total/NA	Analysis	SM 5310B		1	282342	08/22/18 14:18	TTN	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: 580-79555-1
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
Nevada	State Program	9	WA000502019-1	07-31-19
Oregon	NELAP	10	WA100007	11-05-18
US Fish & Wildlife	Federal		LE058448-0	07-31-19
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: 580-79555-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-79555-1	PDI-SC-S230-0to2	Solid	08/10/18 08:45	08/13/18 15:00
580-79555-2	PDI-SC-S230-2to4	Solid	08/10/18 08:50	08/13/18 15:00
580-79555-3	PDI-SC-S230-4to6	Solid	08/10/18 08:55	08/13/18 15:00
580-79555-4	PDI-SC-S230-6to8	Solid	08/10/18 09:00	08/13/18 15:00
580-79555-5	PDI-SC-S230-8to10.0	Solid	08/10/18 09:05	08/13/18 15:00
580-79555-6	PDI-SC-S230-10.0to11.4	Solid	08/10/18 09:10	08/13/18 15:00
580-79555-7	PDI-SC-S007-0to2	Solid	08/10/18 10:45	08/13/18 15:00
580-79555-8	PDI-SC-S007-2to4	Solid	08/10/18 10:50	08/13/18 15:00
580-79555-9	PDI-SC-S007-4to6	Solid	08/10/18 10:55	08/13/18 15:00
580-79555-10	PDI-SC-S007-4to6D	Solid	08/10/18 10:55	08/13/18 15:00
580-79555-11	PDI-SC-S007-6to8	Solid	08/10/18 11:00	08/13/18 15:00
580-79555-12	PDI-SC-S007-8to10	Solid	08/10/18 11:05	08/13/18 15:00
580-79555-13	PDI-SC-S007-10to12	Solid	08/10/18 11:10	08/13/18 15:00
580-79555-14	PDI-SC-S007-12to14	Solid	08/10/18 11:15	08/13/18 15:00
580-79555-15	PDI-SC-S007-14to16	Solid	08/10/18 11:20	08/13/18 15:00
580-79555-16	PDI-SC-S010-0to2	Solid	08/10/18 14:15	08/13/18 15:00
580-79555-17	PDI-SC-S010-2to4	Solid	08/10/18 14:20	08/13/18 15:00
580-79555-18	PDI-SC-S010-4to6.4	Solid	08/10/18 14:25	08/13/18 15:00
580-79555-19	PDI-SC-S010-6.4to8.4	Solid	08/10/18 14:30	08/13/18 15:00
580-79555-20	PDI-SC-S010-8.4to10.8	Solid	08/10/18 14:35	08/13/18 15:00
580-79555-21	PDI-SC-S010-10.8to13.4	Solid	08/10/18 14:40	08/13/18 15:00
580-79555-22	PDI-SC-S010-13.4to14.4	Solid	08/10/18 14:45	08/13/18 15:00
580-79555-23	PDI-SC-S009-0to2	Solid	08/10/18 15:50	08/13/18 15:00
580-79555-24	PDI-SC-S009-2to4	Solid	08/10/18 15:55	08/13/18 15:00
580-79555-25	PDI-SC-S009-4to6	Solid	08/10/18 16:00	08/13/18 15:00
580-79555-26	PDI-SC-S009-6to8	Solid	08/10/18 16:05	08/13/18 15:00
580-79555-27	PDI-SC-S009-8to10	Solid	08/10/18 16:10	08/13/18 15:00
580-79555-28	PDI-SC-S009-10to11.4	Solid	08/10/18 16:15	08/13/18 15:00
580-79555-29	PDI-SC-S011-0to2	Solid	08/10/18 16:40	08/13/18 15:00
580-79555-30	PDI-SC-S011-2to4	Solid	08/10/18 16:45	08/13/18 15:00
580-79555-31	PDI-SC-S011-4to6	Solid	08/10/18 16:50	08/13/18 15:00
580-79555-32	PDI-SC-S011-6to8	Solid	08/10/18 16:55	08/13/18 15:00
580-79555-33	PDI-SC-S011-8to10	Solid	08/10/18 17:00	08/13/18 15:00
580-79555-34	PDI-SC-S011-10to12	Solid	08/10/18 17:05	08/13/18 15:00
580-79555-35	PDI-SC-S011-12to14.5	Solid	08/10/18 17:10	08/13/18 15:00
580-79555-36	PDI-SC-S011-14.5to16.8	Solid	08/10/18 17:15	08/13/18 15:00
580-79555-37	PDI-SC-S011-14.5to16.8D	Solid	08/10/18 17:15	08/13/18 15:00
580-79555-38	PDI-SC-S011-16.8to17.9	Solid	08/10/18 17:20	08/13/18 15:00
580-79555-39	PDI-SC-S011-17.9to18.9	Solid	08/10/18 17:25	08/13/18 15:00
580-79555-40	PDI-SC-S004-0to2	Solid	08/10/18 18:30	08/13/18 15:00
580-79555-41	PDI-SC-S004-2to4	Solid	08/10/18 18:35	08/13/18 15:00
580-79555-42	PDI-SC-S004-4to6	Solid	08/10/18 18:40	08/13/18 15:00
580-79555-43	PDI-SC-S004-6to7.3	Solid	08/10/18 18:45	08/13/18 15:00
580-79555-44	PDI-SC-S004-7.3to9.1	Solid	08/10/18 18:50	08/13/18 15:00
580-79555-45	PDI-SC-S004-9.1to10.3	Solid	08/10/18 18:55	08/13/18 15:00
580-79555-46	PDI-SC-S015-0to2	Solid	08/13/18 09:05	08/13/18 15:00
580-79555-47	PDI-SC-S015-2to4	Solid	08/13/18 09:10	08/13/18 15:00
580-79555-48	PDI-SC-S015-4to6	Solid	08/13/18 09:15	08/13/18 15:00
580-79555-49	PDI-SC-S015-6to8	Solid	08/13/18 09:20	08/13/18 15:00
580-79555-50	PDI-SC-S015-8to10	Solid	08/13/18 09:25	08/13/18 15:00
580-79555-51	PDI-SC-S015-10to11.4	Solid	08/13/18 09:30	08/13/18 15:00
580-79555-52	PDI-SC-S015-11.4to12.4	Solid	08/13/18 09:35	08/13/18 15:00
580-79555-53	PDI-RB-SS-180810-1200	Water	08/10/18 12:00	08/13/18 15:00

Sample Summary

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

TestAmerica Job ID: 580-79555-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-79555-54	PDI-RB-SS-180810-1730	Water	08/10/18 17:30	08/13/18 15:00

SUBSURFACE 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: Subsurface Sediment
Sample Type:

Project Contact: Amy Dahl / Chelsey Cook
Tel: (206) 438-2261 / (206) 438-2010
Analysis Turnaround Time
Calendar (C) or Work Days (W) _W_____
[x] 21 days
[ ] Other _____

Site Contact: Jennifer Ray
Laboratory Contact: Elaine-Walker
Date: 8/13/18
Carrier: Courier
COC No: 1
_____ of _____ pages

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S230 - 0 to 2	8/10/2018	8:45	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 2 to 4	8/10/2018	8:50	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 4 to 6	8/10/2018	8:55	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 6 to 8	8/10/2018	9:00	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S230 - 8 to ~~10.4~~ 10.0 (LE)	8/10/2018	9:05	SC		ED	4		x	x	x	x		
PDI-SC-S230 - ~~10.4~~ 10.0 to 11.4 (LE)	8/10/2018	9:10	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 0 to 2	8/10/2018	10:45	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 2 to 4	8/10/2018	10:50	SC		ED	5		x	x	x	x	x	
PDI-SC-S007 - 4 to 6	8/10/2018	~~10:50~~ 10:55 (LE)	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 4 to 6D	8/10/2018	10:55	SC		ED	LE 3		x	x		x		
PDI-SC-S007 - 6 to 8	8/10/2018	11:00	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 8 to 10	8/10/2018	11:05	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid
Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] *Return To Client* [X] *sposal By Lab* [X] *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

07, 25, 36, 10, 05, 08, 22, 21

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erin Dunbar	GeoSyntec	8/13/18 1423		M.E.	8/13/18 1425
	M.E.	8/13/18 1500		TAL OR	8/13/18 1500

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**	**Project Contact: Amy Dahl / Chelsey Cook** **Tel: (206) 438-2261 / (206) 438-2010** **Analysis Turnaround Time** Calendar (C) or Work Days (W) W	**Site Contact: Jennifer Ray** **Laboratory Contact: Elaine-Walker**	**Date: 8/13/18** **Carrier: Courier**	COC No: 1 ____ of ____ pages

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: Subsurface Sediment Sample Type:	[x] 21 days [ ] Other _____

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S007 - 10 to 12	8/10/2018	11:10	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 12 to 14	8/10/2018	11:15	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 14 to 16	8/10/2018	11:20	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 0 to 2	8/10/2018	14:15	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 2 to 4	8/10/2018	14:20	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 4 to 6.4	8/10/2018	14:25	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 6.4 to 8.4	8/10/2018	14:30	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 8.4 to 10.8	8/10/2018	14:35	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 10.8 to 13.4	8/10/2018	14:40	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 13.4 to 14.4	8/10/2018	14:45	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 0 to 2	8/10/2018	15:50	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 2 to 4	8/10/2018	15:55	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] *Return To Client* [X] *sposal By Lab* [X] *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Erin Dunbar		Company: Geosyntec	Date/Time: 8/13/18 1423	Received by: Jessica M	Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by: Jessica M		Company: M.E.	Date/Time: 8/13/18 1500	Received by:	Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:		Company:	Date/Time:	Received by:	Company:	Date/Time:

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**	**Project Contact: Amy Dahl / Chelsey Cook** **Tel: (206) 438-2261 / (206) 438-2010**	**Site Contact: Jennifer Ray** **Laboratory Contact: Elaine-Walker**	**Date: 8/13/18** **Carrier: Courier**	COC No: 1 ____ of ____ pages
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: Subsurface Sediment Sample Type:	**Analysis Turnaround Time** Calendar (C) or Work Days (W) _W_ [x] 21 days [ ] Other _____			

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S009 - 4 to 6	8/10/2018	16:00	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 6 to 8	8/10/2018	16:05	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S009 - 8 to 10	8/10/2018	16:10	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 10 to 11.4	8/10/2018	16:15	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 0 to 2	8/10/2018	16:40	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 2 to 4	8/10/2018	16:45	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 4 to 6	8/10/2018	16:50	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 6 to 8	8/10/2018	16:55	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 8 to 10	8/10/2018	17:00	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 10 to 12	8/10/2018	17:05	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 12 to 14.5	8/10/2018	17:10	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 14.5 to 16.8	8/10/2018	17:15	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	
Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid													
Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)													

Sample Disposal
[ ] *Return To Client* [X] *sposal By Lab* [X] *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Erin Dunbar	Company: Geosyntec	Date/Time: 8/13/18 1423	Received by:	Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:	Company: M.E.	Date/Time: 8/13/18 1500	Received by:	Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:

10/12/2018

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**	**Project Contact: Amy Dahl / Chelsey Cook** **Tel: (206) 438-2261 / (206) 438-2010**	**Site Contact: Jennifer Ray** **Laboratory Contact: Elaine-Walker**	**Date: 8/13/18** **Carrier: Courier**	COC No: 1 ____ of ____ pages
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: Subsurface Sediment Sample Type:	**Analysis Turnaround Time** Calendar (C) or Work Days (W) W [x] 21 days [ ] Other _____			

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S011 - 14.5 to 16.8D	8/10/2018	17:15	SC		ED	~~4~~ 3		x	x	x	x		
PDI-SC-S011 - 16.8 to 17.9	8/10/2018	17:20	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 17.9 to 18.9	8/10/2018	17:25	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 0 to 2	8/10/2018	18:30	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 2 to 4	8/10/2018	18:35	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 4 to 6	8/10/2018	18:40	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 6 to 7.3	8/10/2018	18:45	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 7.3 to 9.1	8/10/2018	18:50	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 9.1 to 10.3	8/10/2018	18:55	SC		ED	4		x	x	x	x		
PDI-SC-S015 - 0 to 2	8/13/2018	9:05	SC		ED	4		x	x	x	x		
PDI-SC-S015 - 2 to 4	8/13/2018	9:10	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S015 - 4 to 6	8/13/2018	9:15	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] Return To Client [X] sposal By Lab [X] rchive For 12 Months

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Erin Dunbar		Company: Geosyntec	Date/Time: 8/13/1423	Received by: Jessica		Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:		Company: M.E.	Date/Time: 8/13/18 1500	Received by:		Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:		Company:	Date/Time:	Received by:		Company:	Date/Time:

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**			
Client Contact	**Project Contact: Amy Dahl / Chelsey Cook**	**Site Contact: Jennifer Ray**	**Date: 8/13/18**
AECOM	**Tel: (206) 438-2261 / (206) 438-2010**	**Laboratory Contact: Elaine-Walker**	**Carrier: Courier**
1111 3rd Ave Suite 1600	**Analysis Turnaround Time**		COC No: 1
Seattle, WA 98101	Calendar (C) or Work Days (W) _W_____		_____ of _____ pages
Phone: (206) 438-2700 Fax: 1+(866) 495-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR	[x] 21 days [ ] Other _____		
Project #: 60566335 Study: Subsurface Sediment			
Sample Type:			

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	WQ-PCBA	WQ-PAHs	WQ-D/F	WQ-TOC	Sample Specific Notes:
PDI-SC-S015 - 6 to 8	8/13/2018	9:20	SC		ED	4		x	x	x	x						
PDI-SC-S015 - 8 to 10	8/13/2018	9:25	SC		ED	4		x	x	x	x						
PDI-SC-S015 - 10 to 11.4	8/13/2018	9:30	SC		ED	4		x	x	x	x						
PDI-SC-S015 - 11.4 to 12.4	8/13/2018	9:35	SC		ED	4		x	x	x	x						
PDI-RB-SS-180810-1200	8/10/2018	12:00	W		ED	7							x	x	x	x	
PDI-RB-SS-180810-1730	8/10/2018	17:30	W		ED	7							x	x	x	x	
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG					

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] Return To Client [X] sposal By Lab [X] rchive For 12 Months

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erin Dunbar	Geosyntec	8/13/18 1423		M.E.	8/13/18 1425
	M.E.	8/13/18 1500		TAPOR	8/13/18 1500
	Company:	Date/Time:	Received by:	Company:	Date/Time:

10/12/2018

SUBSURFACE 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: **Subsurface Sediment**
Sample Type:

Project Contact: Amy Dahl / Chelsey Cook
Tel: (206) 438-2261 / (206) 438-2010
Analysis Turnaround Time
Calendar (C) or Work Days (W) W
[x] 21 days
[ ] Other

Site Contact: Jennifer Ray
Laboratory Contact: Elaine-Walker
Date: 8/13/18
Carrier: Courier
COC No: 1
of pages

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S230 - 0 to 2	8/10/2018	8:45	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 2 to 4	8/10/2018	8:50	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 4 to 6	8/10/2018	8:55	SC		ED	4		x	x	x	x		
PDI-SC-S230 - 6 to 8	8/10/2018	9:00	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S230 - 8 to ~~10.4~~ 10.0 L.E.	8/10/2018	9:05	SC		ED	4		x	x	x	x		
PDI-SC-S230 - ~~10.0~~ ~~10.4~~ to 11.4 LE	8/10/2018	9:10	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 0 to 2	8/10/2018	10:45	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 2 to 4	8/10/2018	10:50	SC		ED	5		x	x	x	x	x	
PDI-SC-S007 - 4 to 6	8/10/2018	~~10:50~~ 10:55 LE	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 4 to 6D	8/10/2018	10:55	SC		ED	LE 3		x	x		x		
PDI-SC-S007 - 6 to 8	8/10/2018	11:00	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 8 to 10	8/10/2018	11:05	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid
Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

580-79555 Chain of Custody

Sample Disposal
[ ] Return To Client [X] sposal By Lab [X] rchive For 12 Months

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

07, 25, 36, 10, 05, 08, 22, 21

Relinquished by: Erin Dunbar	Company: GeoSyntec	Date/Time: 8/13/18 1423	Received by:	Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:	Company: M.E.	Date/Time: 8/13/18 1500	Received by:	Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:	Company: TAPOR	Date/Time: 8/14/18 1635	Received by: B. Lin	Company: Shaw TA	Date/Time: 8/15/18 0935

IRS = 4.8/4.8 w/c.s.
5.7/5.7
4.0/4.0 4.2/4.2

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**	**Project Contact: Amy Dahl / Chelsey Cook** **Tel: (206) 438-2261 / (206) 438-2010**	**Site Contact: Jennifer Ray** **Laboratory Contact: Elaine-Walker**	**Date: 8/13/18** **Carrier: Courier**	COC No: 1 ____ of ____ pages
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: **Subsurface Sediment**	**Analysis Turnaround Time** Calendar (C) or Work Days (W) W [x] 21 days [ ] Other _____			
Sample Type:				

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S007 - 10 to 12	8/10/2018	11:10	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 12 to 14	8/10/2018	11:15	SC		ED	4		x	x	x	x		
PDI-SC-S007 - 14 to 16	8/10/2018	11:20	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 0 to 2	8/10/2018	14:15	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 2 to 4	8/10/2018	14:20	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 4 to 6.4	8/10/2018	14:25	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 6.4 to 8.4	8/10/2018	14:30	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 8.4 to 10.8	8/10/2018	14:35	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 10.8 to 13.4	8/10/2018	14:40	SC		ED	4		x	x	x	x		
PDI-SC-S010 - 13.4 to 14.4	8/10/2018	14:45	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 0 to 2	8/10/2018	15:50	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 2 to 4	8/10/2018	15:55	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Co								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal

[ ] *Return To Client* [X] *sposal By Lab* [X] *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Erin Dunbar	Company: Geosyntec	Date/Time: 8/13/18 1423	Received by: Jessica M	Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:	Company: M.E.	Date/Time: 8/13/18 1500	Received by:	Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:	Company: TAPOR	Date/Time: 8/14/18 1635	Received by: B.	Company: SEA TA	Date/Time: 8/15/18 0935

SUBSURFACE 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: **Subsurface Sediment**
Sample Type:

Project Contact: Amy Dahl / Chelsey Cook
Tel: (206) 438-2261 / (206) 438-2010
Analysis Turnaround Time
Calendar (C) or Work Days (W) W

[x] 21 days

[ ] Other _____

Site Contact: Jennifer Ray
Laboratory Contact: Elaine-Walker

Date: 8/13/18
Carrier: Courier

COC No: 1
_____ of _____ pages

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S009 - 4 to 6	8/10/2018	16:00	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 6 to 8	8/10/2018	16:05	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S009 - 8 to 10	8/10/2018	16:10	SC		ED	4		x	x	x	x		
PDI-SC-S009 - 10 to 11.4	8/10/2018	16:15	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 0 to 2	8/10/2018	16:40	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 2 to 4	8/10/2018	16:45	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 4 to 6	8/10/2018	16:50	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 6 to 8	8/10/2018	16:55	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 8 to 10	8/10/2018	17:00	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 10 to 12	8/10/2018	17:05	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 12 to 14.5	8/10/2018	17:10	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 14.5 to 16.8	8/10/2018	17:15	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] *Return To Client* [X] *sposal By Lab* [X] *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Erin Dunbar	Company: Geosyntec	Date/Time: 8/13/18 1423	Received by:	Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:	Company: M.E.	Date/Time: 8/13/18 1500	Received by:	Company: TAPOC	Date/Time: 8/13/18 1500
Relinquished by:	Company: TAPOC	Date/Time: 8/14/18 1635	Received by:	Company: SEA TA	Date/Time: 8/15/18 0935

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

TestAmerica-Seattle 5755-8th-Street-East Tacoma, WA 98424-1317 **Ph: 253-922-2310 Fax: 253-922-5047**			
Client Contact	**Project Contact: Amy Dahl / Chelsey Cook**	**Site Contact: Jennifer Ray**	**Date: 8/13/18**
AECOM	**Tel: (206) 438-2261 / (206) 438-2010**	**Laboratory Contact: Elaine-Walker**	**Carrier: Courier**
1111 3rd Ave Suite 1600	**Analysis Turnaround Time**		COC No: 1
Seattle, WA 98101	Calendar (C) or Work Days (W) W		of pages
Phone: (206) 438-2700 Fax: 1+(866) 495-5288 Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling Portland, OR	☒ 21 days ☐ Other _____		
Project #: 60566335 Study: **Subsurface Sediment**			
Sample Type:			

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	Sample Specific Notes:
PDI-SC-S011 - 14.5 to 16.8D	8/10/2018	17:15	SC		ED	~~4~~ 3		x	x	x	x		
PDI-SC-S011 - 16.8 to 17.9	8/10/2018	17:20	SC		ED	4		x	x	x	x		
PDI-SC-S011 - 17.9 to 18.9	8/10/2018	17:25	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 0 to 2	8/10/2018	18:30	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 2 to 4	8/10/2018	18:35	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 4 to 6	8/10/2018	18:40	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 6 to 7.3	8/10/2018	18:45	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 7.3 to 9.1	8/10/2018	18:50	SC		ED	4		x	x	x	x		
PDI-SC-S004 - 9.1 to 10.3	8/10/2018	18:55	SC		ED	4		x	x	x	x		
PDI-SC-S015 - 0 to 2	8/13/2018	9:05	SC		ED	4		x	x	x	x		
PDI-SC-S015 - 2 to 4	8/13/2018	9:10	SC	MS/MSD	ED	6		x	x	x	x		
PDI-SC-S015 - 4 to 6	8/13/2018	9:15	SC		ED	4		x	x	x	x		
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG	

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal

☐ *Return To Client* ☒ *sposal By Lab* ☒ *rchive For 12 Months*

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by: Egn Dunbar		Company: Geosyntec	Date/Time: 8/13/1423	Received by: Jessica Nyn		Company: M.E.	Date/Time: 8/13/18 1425
Relinquished by:		Company: M.E.	Date/Time: 8/13/18 1500	Received by:		Company: TAPOR	Date/Time: 8/13/18 1500
Relinquished by:		Company: TAPOR	Date/Time: 8/14/18 1655	Received by: B. Lee		Company: SEA TA	Date/Time: 8/15/18 0935

TestAmerica-Seattle
5755-8th-Street-East
Tacoma, WA 98424-1317
Ph: 253-922-2310 Fax: 253-922-5047

SUBSURFACE SEDIMENT
CHAIN OF CUSTODY

Client Contact	Project Contact: Amy Dahl / Chelsey Cook	Site Contact: Jennifer Ray	Date: 8/13/18	COC No: 1
AECOM	Tel: (206) 438-2261 / (206) 438-2010	Laboratory Contact: Elaine-Walker	Carrier: Courier	of pages
1111 3rd Ave Suite 1600	Analysis Turnaround Time			
Seattle, WA 98101	Calendar (C) or Work Days (W) W			
Phone: (206) 438-2700 Fax: 1+(866) 495-5288	[x] 21 days			
Project Name: Portland Harbor Pre-Remedial Design Investigation and Baseline Sampling	[ ] Other			
Portland, OR				
Project #: 60566335 Study: **Subsurface Sediment**				
Sample Type:				

Sample Identification	Sample Date	Sample Time	Matrix	QC Sample	Sampler's Initials	Total No. of Cont.	Fraction	PCDD/Fs 1613B	Archive	Grain size ASTM D7928/D6913	PCB Aroclors, PAHs, Total Organic Carbon, Total Solids 8082A, 8270D-SIM, 9060, 160.3	Atterberg Limits ASTM D4318	WQ-PCBA	WQ-PAHs	WQ-D/F	WQ-TOC									Sample Specific Notes:
PDI-SC-S015 - 6 to 8	8/13/2018	9:20	SC		ED	4		x	x	x	x														
PDI-SC-S015 - 8 to 10	8/13/2018	9:25	SC		ED	4		x	x	x	x														
PDI-SC-S015 - 10 to 11.4	8/13/2018	9:30	SC		ED	4		x	x	x	x														
PDI-SC-S015 - 11.4 to 12.4	8/13/2018	9:35	SC		ED	4		x	x	x	x														
PDI-RB-SS-180810 -1200	8/10/2018	12:00	W		ED	4							x	x	x	x									
PDI-RB-SS-180810-1730	8/10/2018	17:30	W		ED	4							x	x	x	x									
Container Type: WMG=Wide Mouth Glass Jar, P=HDPE, PP=Polypropylene, AG=amber glass, G=glass, RC=Resin Col								AG	AG	WMG	WMG	AG													

Preservative: HCl = Hydrochloric Acid, H3PO4 = Phosphoric Acid, HNO3 = Nitric Acid

Fraction: D = Dissolved, PRT = Particulate, T = Total (unfiltered)

Sample Disposal
[ ] Return To Client [X] sposal By Lab [X] rchive For 12 Months

Special Instructions/QC Requirements & Comments: **Separate reports for each lab**

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Erin Dunbar	Geosyntec	8/13/18 1423		M.E.	8/13/18 1425
	M.E.	8/13/18 1500		TAPOR	8/13/18 1500
	TAPOR	8/14/18 1635		SEA TA	8/15/18 0835

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-79555-1

Login Number: 79555
List Number: 1
Creator: Antonson, Angeline D

List Source: TestAmerica Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	