

ANALYTICAL REPORT

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Laboratory Job ID: 580-81440-1

Client Project/Site: Head of Swan Island Lagoon Sediment
Revision: 1

For:

Pacific Groundwater Group
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Authorized for release by:
4/22/2019 3:26:35 PM

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

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Case Narrative

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

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Laboratory: Eurofins TestAmerica, Seattle

Narrative

CASE NARRATIVE

Client: Pacific Groundwater Group
Project: Head of Swan Island Lagoon Sediment
Report Number: 580-81440-1

Revision:

Report revised to remove unwanted Dioxin/Furan compounds 4/18/2019.

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

Seven samples were received on 10/25/2018 2:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 1.6° C, 3.6° C and 5.6° C.

An additional container was provided to be archived and frozen for each of the samples and they were placed in the freezer upon receipt at the laboratory.

The following sample was activated for MS/MSD analysis by the client on 10/30/2018: E-9.02-0to26-102418 (580-81440-1), This analysis was not originally requested on the chain-of-custody (COC) and a revised COC was submitted.

Samples E-9.02-0to26-102418 (580-81440-1), E-9.02-0to26-102418 (580-81440-1[MS]), E-9.02-0to26-102418 (580-81440-1[MSD]), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), B-9.15-0to30-102418 (580-81440-6) and 612-102418 (580-81440-7) were placed in the freezer on 10/31/18 @1910.

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.

DIOXIN/ FURAN

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for Dioxin/ Furan in accordance with 1613B. The samples were prepared on 11/10/2018 and analyzed on 11/15/2018 and 11/16/2018.

Several analytes were detected in method blank MB 320-258301/1-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.

EPA Method 1613B specifies a +/- 15 second retention time difference between the recovery standard in the initial calibration (ICAL) and the continuing calibration verification (CCV). The 13C-1,2,3,4-TCDD and 13C-1,2,3,7,8,9-HxCDD associated with the following samples run on instrument 10D5 exceeded this criteria: E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2),

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A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), B-9.15-0to30-102418 (580-81440-6) and (CCV 320-259245/79). This retention time shift is due to normal and reasonable column maintenance and does not affect the instrument chromatography resolution, sensitivity, or identification of target analytes. System retention times have been updated for proper analyte identification.

EPA Method 1613B specifies a +/- 15 second retention time difference between the recovery standard in the initial calibration (ICAL) and the continuing calibration verification (CCV). The 13C-1,2,3,4-TCDD and 13C-1,2,3,7,8,9-HxCDD associated with the following samples run on instrument 10D5 exceeded this criteria: (LCS 320-258301/2-A), (LCSD 320-258301/3-A) and (MB 320-258301/1-A). This retention time shift is due to normal and reasonable column maintenance and does not affect the instrument chromatography resolution, sensitivity, or identification of target analytes. System retention times have been updated for proper analyte identification.

The following sample exhibited elevated noise or matrix interferences for one or more analytes causing elevation of the detection limit (EDL): A-9.03-0to26-102418 (580-81440-3). The reporting limit (RL) for the affected analytes has been raised to be equal to the EDL, and a "G" qualifier applied.

The concentration of one or more analytes associated with the following sample exceeded the instrument calibration range: A-9.03-0to26-102418 (580-81440-3). These analytes have been qualified; however, the peak(s) did not saturate the instrument detector. Historical data indicate that for the isotope dilution method, dilution and re-analysis will not produce significantly different results from those reported above the calibration range.

Due to the matrix, the initial volume used for the following samples deviated from the standard procedure: E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6). The reporting limits (RLs) have been adjusted proportionately.

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

DIOXIN/ FURAN - WATER

Sample 612-102418 (580-81440-7) was analyzed for Dioxin/ Furan in accordance with 1613B. The sample was prepared on 11/08/2018 and analyzed on 11/13/2018.

Several analytes were detected in method blank MB 320-257820/1-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.

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

POLYCHLORINATED BIPHENYLS CONGENER (PCBS)

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for polychlorinated biphenyls congeners (PCBs) in accordance with EPA Method 1668A. The samples were prepared on 11/12/2018 and analyzed on 11/27/2018 and 11/28/2018.

Several analytes were detected in method blank MB 140-25296/11-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

One or more Ion abundance ratios are outside criteria for the Isotope Dilution Analytes (IDA) associated with the following sample: (LCSD 140-25296/13-B).

Samples E-9.02-0to26-102418 (580-81440-1)[2X], 512-0to29-102418 (580-81440-2)[2X], A-9.03-0to26-102418 (580-81440-3)[2X], D-9.09-0to29-102418 (580-81440-4)[2X], G-9.15-0to18-102418 (580-81440-5)[2X] and B-9.15-0to30-102418 (580-81440-6)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

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PCB CONGENERS - WATER

Sample 612-102418 (580-81440-7) was analyzed for PCB Congeners in accordance with 1668A. The sample was prepared on 11/01/2018 and analyzed on 11/09/2018.

Polychlorinated biphenyls, Total and Total Heptachlorobiphenyls were detected in method blank MB 140-25006/5-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.

Several analytes were detected in method blank MB 140-25006/5-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

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

POLYCHLORINATED BIPHENYLS (PCBS)

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA sw-846 method 8082A. The samples were prepared on 11/13/2018 and 11/21/2018 and analyzed on 11/14/2018 and 11/26/2018.

Tetrachloro-m-xylene failed the surrogate recovery criteria low for E-9.02-0to26-102418 (580-81440-1). DCB Decachlorobiphenyl and Tetrachloro-m-xylene failed the surrogate recovery criteria low for A-9.03-0to26-102418 (580-81440-3). Tetrachloro-m-xylene failed the surrogate recovery criteria low for B-9.15-0to30-102418MSD (580-81440-6MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

PCB-1260 failed the recovery criteria low for the MS of sample E-9.02-0to26-102418MS (580-81440-1) in batch 580-288909. PCB-1016 failed the recovery criteria high. PCB-1016 failed the recovery criteria high for the MSD of sample E-9.02-0to26-102418MSD (580-81440-1) in batch 580-288909. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

PCB-1016 failed the recovery criteria high for the MS of sample B-9.15-0to30-102418MS (580-81440-6) in batch 580-289603. PCB-1016 failed the recovery criteria high for the MSD of sample B-9.15-0to30-102418MSD (580-81440-6) in batch 580-289603. The associated laboratory control sample (LCS) met acceptance criteria.

The continuing calibration verification (CCV) associated with batch 580-288909 recovered above the upper control limit for PCB-1232. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: E-9.02-0to26-102418 (580-81440-1) and (CCV 580-288909/4).

The continuing calibration verification (CCV) associated with 580-288909 recovered high and outside the control limits for PCB-1248, PCB-1242, PCB-1221, PCB-1254, PCB-1016 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: E-9.02-0to26-102418 (580-81440-1), (CCV 580-288909/5), (CCV 580-288909/6), (CCV 580-288909/7) and (CCVIS 580-288909/8).

The continuing calibration verification (CCV) standard associated with batch 580-288909 recovered outside acceptance criteria for %D for surrogate DCB Decachlorobiphenyl and Tetrachloro-m-xylene on the confirmation column only. Since all other surrogates %D were within limits, the data has been reported.

The continuing calibration verification (CCV) associated with batch 580-288910 recovered above the upper control limit for PCB-1242. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and (CCV 580-288910/6).

The continuing calibration verification (CCV) associated with 580-288910 recovered high and outside the control limits for PCB-1232, PCB-1248, PCB-1221, PCB-1254, PCB-1016 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: 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418

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(580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), (CCV 580-288910/4), (CCV 580-288910/5), (CCV 580-288910/7) and (CCVIS 580-288910/8).

The continuing calibration verification (CCV) standard associated with batch 580-288910 recovered outside acceptance criteria for %D for surrogate DCB Decachlorobiphenyl and Tetrachloro-m-xylene on the confirmation column only. Since all the other surrogates were within %D criteria; therefore, the data have been reported.

The continuing calibration verification (CCV) standard associated with batch 580-288910 recovered outside acceptance criteria for %D for surrogate DCB Decachlorobiphenyl. Since the % recovery passes within limits, the data has been reported. The following samples have been affected: 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and (CCVIS 580-288910/8)

The continuing calibration verification (CCV) associated with 580-289603 recovered high and outside the control limits for PCB-1016, PCB-1221, 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: B-9.15-0to30-102418 (580-81440-6), (CCV 580-289603/4), (CCV 580-289603/5), (CCV 580-289603/7), (CCVIS 580-289603/8), (580-81440-I-6-B MS) and (580-81440-I-6-C MSD).

The surrogates, DCB Decachlorobiphenyl and Tetrachloro-m-xylene, for the continuous calibration verification associated with 580-289603, recovered high and outside calibration limits on the confirmation column only. Results are confirmed on both columns and reported from the passing column. The following samples are impacted: B-9.15-0to30-102418 (580-81440-6), (CCVIS 580-289603/8), (580-81440-I-6-B MS) and (580-81440-I-6-C MSD).

The following samples required a copper clean-up to reduce matrix interferences caused by sulfur: E-9.02-0to26-102418 (580-81440-1), E-9.02-0to26-102418 (580-81440-1[MS]), E-9.02-0to26-102418 (580-81440-1[MSD]), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), and B-9.15-0to30-102418 (580-81440-6).

Due to the matrix, the following samples could not be concentrated to the final method required volume of 2mL: E-9.02-0to26-102418 (580-81440-1), E-9.02-0to26-102418 (580-81440-1[MS]), E-9.02-0to26-102418 (580-81440-1[MSD]), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), and B-9.15-0to30-102418 (580-81440-6). The reporting limits (RLs) are elevated proportionately.

Extracts had aqueous layer after concentration on water bath for the following samples: E-9.02-0to26-102418 (580-81440-1), E-9.02-0to26-102418 (580-81440-1[MS]), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3) and D-9.09-0to29-102418 (580-81440-4).

A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: The project requires the starting volume of 20g to a final volume of 2mL. Due to sample matrix/viscosity the following samples were taken to a 10mL final volume instead: E-9.02-0to26-102418 (580-81440-1), E-9.02-0to26-102418 (580-81440-1[MS]), E-9.02-0to26-102418 (580-81440-1[MSD]), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5), and B-9.15-0to30-102418 (580-81440-6).

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: B-9.15-0to30-102418 (580-81440-6). The sample(s) has been quantified and reported as PCB-1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

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

POLYCHLORINATED BIPHENYLS (PCBS) - WATER

Sample 612-102418 (580-81440-7) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 10/31/2018 and analyzed on 11/02/2018.

The continuing calibration verification (CCV) associated with analytical batch 580-288090 recovered outside the control limits for PCB-1232 on one column. Results are confirmed on both columns and reported from the passing column. The following sample is

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impacted: (CCV 580-288090/3).

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

TOTAL SUSPENDED SOLIDS

Sample 612-102418 (580-81440-7) was analyzed for total suspended solids in accordance with SM20 2540D. The sample was analyzed on 10/30/2018.

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

TOTAL ORGANIC CARBON

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060. The samples were analyzed on 11/06/2018.

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

TOTAL ORGANIC CARBON - WATER

Sample 612-102418 (580-81440-7) was analyzed for total organic carbon in accordance with SM 5310B. The sample was analyzed on 11/08/2018.

Total Organic Carbon was detected in method blank MB 580-288449/3 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.

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

GRAIN SIZE

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for grain size in accordance with ASTM D7928/D6913. The samples were analyzed on 11/07/2018.

Negative silt results. Due to the difference between the actual recovered mass >63µm (#230 sieve) vs the calculated recovery and the low silt/clay content in the sample, the value for Silt is negative. This error is inherent of this method. G-9.15-0to18-102418 (580-81440-5).

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

SPECIFIC GRAVITY

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for specific gravity in accordance with ASTM D854. The samples were analyzed on 11/10/2018.

The density (or specific gravity) of the samples was determined using SOP number KNOX-WC-0015, based on ASTM Methods D1475 (replaced D1963) and D854. A Hubbard-Carmick type pycnometer is tared on a four-place analytical balance. The pycnometer filled with water is weighed to calibrate the volume at the desired temperature. The pycnometer filled with sample is weighed to determine the weight of the sample at the calibrated volume. The standard temperature for this procedure is 25°C. The density and specific gravity of the material are calculated using the following equations:

$$d(\text{SAMP}) = [C(T) - A] / V(T)$$

Where:

d(SAMP) = Density of the liquid sample at temperature T, g/cm³

C(T) = Weight of pycnometer filled with sample at temperature T, g

A = Weight of pycnometer, g

V(T) = Volume of pycnometer at temperature T, cm³

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$$d(\text{SAMP}) = [C(T) - A] / [V(T) - [(D(T) - C(T)) / dH_2O(T)]]$$

Where:

$d(\text{SAMP})$ = Density of the solid sample at temperature T, g/cm³

$D(T)$ = Weight of pycnometer filled with water and an aliquot of the sample at temperature T, g

$C(T)$ = Weight of pycnometer partially filled with an aliquot of the sample at temperature T, g

A = Weight of pycnometer, g

$dH_2O(T)$ = Density of pure water at temperature T, g/cm³

$V(T)$ = Volume of pycnometer at temperature T, cm³

$$S(T) = d(\text{SAMP}) / dH_2O(T)$$

Where:

$S(T)$ = Specific gravity of the sample at temperature T, unitless

$d(\text{SAMP})$ = Density of the sample at temperature T, g/cm³

$dH_2O(T)$ = Density of pure water at temperature T, g/cm³

T = Temperature of analysis

Conversion factors:

1 lb/gal = 0.1198 g/cm³

1 Kg/cu. m = 0.001 g/cm³

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

PERCENT SOLIDS

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for percent solids in accordance with ASTM D2216. The samples were analyzed on 11/03/2018.

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

TOTAL SOLIDS @ 70C

Samples E-9.02-0to26-102418 (580-81440-1), 512-0to29-102418 (580-81440-2), A-9.03-0to26-102418 (580-81440-3), D-9.09-0to29-102418 (580-81440-4), G-9.15-0to18-102418 (580-81440-5) and B-9.15-0to30-102418 (580-81440-6) were analyzed for Total Solids @ 70C. The samples were analyzed on 11/07/2018.

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

Definitions/Glossary

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Qualifiers

GC Semi VOA

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

Dioxin

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

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
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.

Definitions/Glossary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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 Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	29	4.9	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1221	ND		29	14	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1232	ND		29	6.8	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1242	ND		29	7.1	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1248	ND		29	2.3	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1254	ND		29	11	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1
PCB-1260	29	F1	29	4.9	ug/Kg	☼	11/13/18 10:16	11/14/18 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	54		54 - 142	11/13/18 10:16	11/14/18 18:04	1
Tetrachloro-m-xylene	51	X	58 - 122	11/13/18 10:16	11/14/18 18:04	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.0024	J	0.0071	0.00026	ug/Kg	☼	11/10/18 07:19	11/15/18 10:25	1
2,3,4,7,8-PeCDF	0.0026	J	0.0071	0.00048	ug/Kg	☼	11/10/18 07:19	11/15/18 10:25	1
2,3,7,8-TCDD	0.0011	J	0.0014	0.00011	ug/Kg	☼	11/10/18 07:19	11/15/18 10:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	55		23 - 140	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,4,6,7,8-HpCDF	49		28 - 143	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,4,7,8,9-HpCDF	56		26 - 138	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,4,7,8-HxCDD	55		32 - 141	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,4,7,8-HxCDF	53		26 - 152	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,6,7,8-HxCDD	53		28 - 130	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,6,7,8-HxCDF	53		26 - 123	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,7,8,9-HxCDF	65		29 - 147	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,7,8-PeCDD	60		25 - 181	11/10/18 07:19	11/15/18 10:25	1
13C-1,2,3,7,8-PeCDF	64		24 - 185	11/10/18 07:19	11/15/18 10:25	1
13C-2,3,4,6,7,8-HxCDF	56		28 - 136	11/10/18 07:19	11/15/18 10:25	1
13C-2,3,4,7,8-PeCDF	64		21 - 178	11/10/18 07:19	11/15/18 10:25	1
13C-2,3,7,8-TCDD	67		25 - 164	11/10/18 07:19	11/15/18 10:25	1
13C-2,3,7,8-TCDF	76		24 - 169	11/10/18 07:19	11/15/18 10:25	1
13C-OCDD	54		17 - 157	11/10/18 07:19	11/15/18 10:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	114		35 - 197	11/10/18 07:19	11/15/18 10:25	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.060		0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-10	ND		0.029	0.0062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-100	0.18	C93	0.058	0.00059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-101	5.8	B C90	0.087	0.00052	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-102	0.19	C98	0.058	0.00057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-103	0.21		0.029	0.00059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-104	ND		0.029	0.00045	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-105	0.97		0.029	0.0061	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-106	ND		0.029	0.0064	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-107	0.43		0.029	0.0068	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-108	0.11	C	0.058	0.0065	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	2.7	C86	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-11	0.14		0.058	0.0054	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-110	5.8	C B	0.058	0.00043	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-111	ND		0.029	0.00042	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-112	ND		0.029	0.00044	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-113	5.8	B C90	0.087	0.00052	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-114	0.051		0.029	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-115	5.8	B C110	0.058	0.00043	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-116	0.68	C85	0.087	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-117	0.68	C85	0.087	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-118	3.7		0.029	0.0062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-119	2.7	C86	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-12	0.040	J C q	0.058	0.0056	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-120	0.060		0.029	0.00042	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-121	ND		0.029	0.00044	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-122	0.046	q	0.029	0.0073	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-123	0.058		0.029	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-124	0.11	C108	0.058	0.0065	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-125	2.7	C86	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-126	0.023	J	0.029	0.0069	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-127	ND		0.029	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-128	1.1	C	0.058	0.0093	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-129	8.2	C B	0.12	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-13	0.040	J C12 q	0.058	0.0056	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-130	0.54		0.029	0.013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-131	0.061	q	0.029	0.013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-132	2.8		0.029	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-133	0.22		0.029	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-134	0.46	C	0.058	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-135	3.5	C	0.058	0.00079	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-136	1.2		0.029	0.00057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-137	0.24		0.029	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-138	8.2	B C129	0.12	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-139	0.16	C	0.058	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-14	ND		0.029	0.0048	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-140	0.16	C139	0.058	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-141	1.5		0.029	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-142	ND		0.029	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-143	0.46	C134	0.058	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-144	0.29		0.029	0.00071	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-145	0.011	J q	0.029	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-146	2.0		0.029	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-147	8.8	C	0.058	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-148	0.050		0.029	0.00076	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-149	8.8	C147	0.058	0.012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-15	0.20		0.029	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-150	0.033	q	0.029	0.00052	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-151	3.5	C135	0.058	0.00079	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-152	0.011	J	0.029	0.00055	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	7.9	C	0.058	0.0083	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-154	0.29		0.029	0.00061	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-155	ND		0.029	0.00052	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-156	0.69	C	0.058	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-157	0.69	C156	0.058	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-158	0.60		0.029	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-159	0.063		0.029	0.0080	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-16	0.14	q	0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-160	8.2	B C129	0.12	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-161	ND		0.029	0.0079	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-162	0.015	J q	0.029	0.0078	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-163	8.2	B C129	0.12	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-164	0.62		0.029	0.0084	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-165	ND		0.029	0.0090	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-166	1.1	C128	0.058	0.0093	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-167	0.25	B	0.029	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-168	7.9	C153	0.058	0.0083	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-169	0.024	J	0.029	0.0057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-17	0.31		0.029	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-170	2.9		0.029	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-171	0.81	C	0.058	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-172	0.48		0.029	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-173	0.81	C171	0.058	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-174	2.9		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-175	0.11		0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-176	0.35		0.029	0.00094	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-177	1.8		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-178	0.67		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-179	1.3		0.029	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-18	0.45	C	0.058	0.00091	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-180	6.1	C	0.058	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-181	0.020	J q	0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-182	0.049		0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-183	1.9	C	0.058	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-184	ND		0.029	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-185	1.9	C183	0.058	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-186	ND		0.029	0.00099	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-187	3.8		0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-188	0.011	J q	0.029	0.00084	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-189	0.085		0.029	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-19	0.11		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-190	0.46		0.029	0.00090	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-191	0.097	q	0.029	0.00094	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-192	ND		0.029	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-193	6.1	C180	0.058	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-194	1.6		0.029	0.0081	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-195	0.62		0.029	0.0089	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-196	0.70		0.029	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-197	0.053		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	1.5	C	0.058	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-199	1.5	C198	0.058	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-2	0.049		0.029	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-20	1.2	C B	0.058	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-200	0.15	q	0.029	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-201	0.15		0.029	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-202	0.29		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-203	0.90		0.029	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-204	ND		0.029	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-205	0.079		0.029	0.0069	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-206	0.63		0.029	0.0082	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-207	0.069		0.029	0.0058	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-208	0.17		0.029	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-209	0.52		0.029	0.0049	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-21	0.50	C B	0.058	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-22	0.24		0.029	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-23	ND		0.029	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-24	0.0093	J q	0.029	0.00087	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-25	0.095		0.029	0.0036	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-26	0.15	C	0.058	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-27	0.065		0.029	0.00076	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-28	1.2	B C20	0.058	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-29	0.15	C26	0.058	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-3	0.054		0.029	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-30	0.45	C18	0.058	0.00091	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-31	0.77		0.058	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-32	0.21	q	0.029	0.00072	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-33	0.50	B C21	0.058	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-34	0.016	J	0.029	0.0041	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-35	0.020	J	0.029	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-36	ND		0.029	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-37	0.32		0.029	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-38	ND		0.029	0.0041	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-39	0.012	J q	0.029	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-4	0.12		0.058	0.0077	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-40	0.76	C	0.087	0.0085	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-41	0.76	C40	0.087	0.0085	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-42	0.43		0.029	0.0085	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-43	0.045	J C	0.058	0.0079	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-44	1.9	C B	0.087	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-45	0.36	C	0.058	0.0089	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-46	0.084	q	0.029	0.011	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-47	1.9	B C44	0.087	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-48	0.22		0.029	0.0084	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-49	1.5	C	0.058	0.0069	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-5	ND		0.029	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-50	0.31	C	0.058	0.0082	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-51	0.36	C45	0.058	0.0089	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-52	2.6		0.029	0.0084	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.31	C50	0.058	0.0082	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-54	0.026	J q	0.029	0.00013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-55	0.042		0.029	0.0062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-56	0.60		0.029	0.0062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-57	ND		0.029	0.0062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-58	0.018	J q	0.029	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-59	0.15	C q	0.087	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-6	0.074	q	0.029	0.0055	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-60	0.12	q	0.029	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-61	3.0	C B	0.12	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-62	0.15	C59 q	0.087	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-63	0.073		0.029	0.0057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-64	0.62		0.029	0.0057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-65	1.9	B C44	0.087	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-66	1.9	B	0.029	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-67	0.025	J q	0.029	0.0054	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-68	0.043		0.029	0.0055	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-69	1.5	C49	0.058	0.0069	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-7	0.016	J q	0.029	0.0057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-70	3.0	C61 B	0.12	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-71	0.76	C40	0.087	0.0085	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-72	0.069		0.029	0.0061	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-73	0.045	J C43	0.058	0.0079	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-74	3.0	C61 B	0.12	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-75	0.15	C59 q	0.087	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-76	3.0	C61 B	0.12	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-77	0.17		0.029	0.0059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-78	ND		0.029	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-79	0.036		0.029	0.0055	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-8	0.23		0.058	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-80	ND		0.029	0.0054	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-81	ND		0.029	0.0058	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-82	0.47		0.029	0.00068	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-83	3.8	C	0.058	0.00062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-84	1.2		0.029	0.00069	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-85	0.68	C	0.087	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-86	2.7	C	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-87	2.7	C86	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-88	0.94	C	0.058	0.00062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-89	ND		0.029	0.00067	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-9	0.015	J q	0.029	0.0058	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-90	5.8	C B	0.087	0.00052	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-91	0.94	C88	0.058	0.00062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-92	1.3		0.029	0.00059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-93	0.18	C	0.058	0.00059	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-94	0.038		0.029	0.00067	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-95	4.7	B	0.029	0.00065	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-96	0.053		0.029	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-97	2.7	C86	0.17	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.19	C	0.058	0.00057	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
PCB-99	3.8	C83	0.058	0.00062	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Polychlorinated biphenyls, Total	130	B q	0.17	0.0046	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Monochlorobiphenyls	0.16		0.029	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Dichlorobiphenyls	0.84	q	0.058	0.0058	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Trichlorobiphenyls	4.6	B q	0.058	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Tetrachlorobiphenyls	15	B q	0.12	0.0066	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Pentachlorobiphenyls	34	B q	0.17	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Hexachlorobiphenyls	42	B q	0.12	0.0073	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Heptachlorobiphenyls	24	q	0.058	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Octachlorobiphenyls	6.0	q	0.058	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2
Total Nonachlorobiphenyls	0.87		0.029	0.0066	ng/g	☼	11/12/18 10:55	11/28/18 01:38	2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-104L	86		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-105L	92		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-114L	92		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-118L	90		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-123L	91		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-126L	87		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-155L	79		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-156L	84	C	30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-157L	84	C156	30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-15L	79		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-167L	89		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-169L	93		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-170L	88		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-188L	98		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-189L	86		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-19L	94		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-1L	70		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-202L	98		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-205L	74		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-206L	85		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-208L	85		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-209L	79		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-37L	89		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-3L	68		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-4L	82		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-54L	39		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-77L	86		30 - 140	11/12/18 10:55	11/28/18 01:38	2
PCB-81L	86		30 - 140	11/12/18 10:55	11/28/18 01:38	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-111L	90		40 - 125	11/12/18 10:55	11/28/18 01:38	2
PCB-178L	103		40 - 125	11/12/18 10:55	11/28/18 01:38	2
PCB-28L	95		40 - 125	11/12/18 10:55	11/28/18 01:38	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	35000		2000	44	mg/Kg	-		11/06/18 10:48	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	34.1		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	64	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	36	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	24.3				%			11/07/18 10:38	1
Coarse Sand	0.0				%			11/07/18 10:38	1
Fine Sand	6.6				%			11/07/18 10:38	1
Gravel	0.0				%			11/07/18 10:38	1
Medium Sand	0.7				%			11/07/18 10:38	1
Silt	68.4				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.25		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.25		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		36	6.1	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1221	ND		36	17	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1232	ND		36	8.4	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1242	ND		36	8.7	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1248	ND		36	2.9	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1254	ND		36	14	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1
PCB-1260	35	J	36	6.1	ug/Kg	☼	11/13/18 10:16	11/14/18 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	67		54 - 142	11/13/18 10:16	11/14/18 22:15	1
Tetrachloro-m-xylene	61		58 - 122	11/13/18 10:16	11/14/18 22:15	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.0027	J	0.0096	0.00018	ug/Kg	☼	11/10/18 07:19	11/15/18 11:11	1
2,3,4,7,8-PeCDF	0.0034	J	0.0096	0.00038	ug/Kg	☼	11/10/18 07:19	11/15/18 11:11	1
2,3,7,8-TCDD	0.00074	J	0.0019	0.000093	ug/Kg	☼	11/10/18 07:19	11/15/18 11:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	73		23 - 140	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,4,6,7,8-HpCDF	72		28 - 143	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,4,7,8,9-HpCDF	79		26 - 138	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,4,7,8-HxCDD	73		32 - 141	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,4,7,8-HxCDF	70		26 - 152	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,6,7,8-HxCDD	72		28 - 130	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,6,7,8-HxCDF	70		26 - 123	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,7,8,9-HxCDF	80		29 - 147	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,7,8-PeCDD	75		25 - 181	11/10/18 07:19	11/15/18 11:11	1
13C-1,2,3,7,8-PeCDF	80		24 - 185	11/10/18 07:19	11/15/18 11:11	1
13C-2,3,4,6,7,8-HxCDF	69		28 - 136	11/10/18 07:19	11/15/18 11:11	1
13C-2,3,4,7,8-PeCDF	82		21 - 178	11/10/18 07:19	11/15/18 11:11	1
13C-2,3,7,8-TCDD	81		25 - 164	11/10/18 07:19	11/15/18 11:11	1
13C-2,3,7,8-TCDF	84		24 - 169	11/10/18 07:19	11/15/18 11:11	1
13C-OCDD	75		17 - 157	11/10/18 07:19	11/15/18 11:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	115		35 - 197	11/10/18 07:19	11/15/18 11:11	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.017	J	0.037	0.00099	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-10	ND		0.037	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-100	0.21	C93	0.074	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-101	2.7	C90 B	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-102	0.12	C98	0.074	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-103	0.12		0.037	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-104	ND		0.037	0.00095	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-105	0.53		0.037	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-106	ND		0.037	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-107	0.18		0.037	0.0062	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-108	0.052	J q C	0.074	0.0059	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	1.2	C86	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-11	0.10	q	0.074	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-110	2.6	C B	0.074	0.00091	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-111	ND		0.037	0.00088	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-112	ND		0.037	0.00092	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-113	2.7	C90 B	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-114	0.027	J q	0.037	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-115	2.6	C110 B	0.074	0.00091	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-116	0.30	C85	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-117	0.30	C85	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-118	1.7		0.037	0.0055	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-119	1.2	C86	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-12	0.016	J q C	0.074	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-120	0.021	J q	0.037	0.00089	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-121	ND		0.037	0.00092	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-122	ND		0.037	0.0066	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-123	0.023	J q	0.037	0.0055	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-124	0.052	J q C108	0.074	0.0059	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-125	1.2	C86	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-126	0.0072	J q	0.037	0.0060	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-127	ND		0.037	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-128	0.59	C	0.074	0.012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-129	5.6	C B	0.15	0.013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-13	0.016	J q C12	0.074	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-130	0.31		0.037	0.017	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-131	ND		0.037	0.017	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-132	1.8		0.037	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-133	0.13		0.037	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-134	0.30	C	0.074	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-135	2.2	C	0.074	0.0018	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-136	0.77		0.037	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-137	0.15		0.037	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-138	5.6	C129 B	0.15	0.013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-139	0.089	C	0.074	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-14	ND		0.037	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-140	0.089	C139	0.074	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-141	1.1		0.037	0.015	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-142	ND		0.037	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-143	0.30	C134	0.074	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-144	0.20		0.037	0.0017	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-145	ND		0.037	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-146	1.2		0.037	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-147	5.8	C	0.074	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-148	0.027	J q	0.037	0.0018	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-149	5.8	C147	0.074	0.016	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-15	0.083		0.037	0.0048	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-150	0.030	J	0.037	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-151	2.2	C135	0.074	0.0018	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-152	0.013	J q	0.037	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	5.4	C	0.074	0.011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-154	0.17		0.037	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-155	ND		0.037	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-156	0.44	C	0.074	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-157	0.44	C156	0.074	0.014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-158	0.45		0.037	0.0099	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-159	0.049	q	0.037	0.010	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-16	0.051		0.037	0.00097	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-160	5.6	C129 B	0.15	0.013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-161	ND		0.037	0.010	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-162	ND		0.037	0.010	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-163	5.6	C129 B	0.15	0.013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-164	0.40		0.037	0.011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-165	ND		0.037	0.012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-166	0.59	C128	0.074	0.012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-167	0.15	q B	0.037	0.0076	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-168	5.4	C153	0.074	0.011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-169	ND		0.037	0.0078	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-17	0.098		0.037	0.00087	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-170	2.2		0.037	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-171	0.61	C	0.074	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-172	0.32		0.037	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-173	0.61	C171	0.074	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-174	2.0		0.037	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-175	0.078		0.037	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-176	0.25		0.037	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-177	1.2		0.037	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-178	0.44		0.037	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-179	0.88		0.037	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-18	0.15	C	0.074	0.00077	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-180	4.3	C	0.074	0.0031	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-181	ND		0.037	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-182	ND		0.037	0.0035	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-183	1.4	C	0.074	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-184	ND		0.037	0.0030	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-185	1.4	C183	0.074	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-186	ND		0.037	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-187	2.6		0.037	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-188	ND		0.037	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-189	0.072		0.037	0.0067	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-19	0.12		0.037	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-190	0.38		0.037	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-191	0.088		0.037	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-192	ND		0.037	0.0031	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-193	4.3	C180	0.074	0.0031	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-194	1.0		0.037	0.012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-195	0.44		0.037	0.013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-196	0.44		0.037	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-197	0.035	J	0.037	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	0.95	C	0.074	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-199	0.95	C198	0.074	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-2	0.032	J	0.037	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-20	0.28	C B	0.074	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-200	0.096		0.037	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-201	0.10		0.037	0.0035	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-202	0.18		0.037	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-203	0.59		0.037	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-204	ND		0.037	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-205	0.046	q	0.037	0.010	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-206	0.39		0.037	0.010	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-207	0.041		0.037	0.0074	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-208	0.12		0.037	0.0079	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-209	0.27		0.037	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-21	0.10	C B	0.074	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-22	0.057		0.037	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-23	ND		0.037	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-24	ND		0.037	0.00073	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-25	0.027	J	0.037	0.0023	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-26	0.032	J q C	0.074	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-27	0.025	J	0.037	0.00064	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-28	0.28	C20 B	0.074	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-29	0.032	J q C26	0.074	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-3	0.022	J	0.037	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-30	0.15	C18	0.074	0.00077	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-31	0.16		0.074	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-32	0.088		0.037	0.00061	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-33	0.10	C21 B	0.074	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-34	ND		0.037	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-35	0.0056	J q	0.037	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-36	ND		0.037	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-37	0.097		0.037	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-38	ND		0.037	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-39	ND		0.037	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-4	0.059	J q	0.074	0.0062	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-40	0.32	C	0.11	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-41	0.32	C40	0.11	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-42	0.12		0.037	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-43	0.035	J C	0.074	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-44	1.2	C B	0.11	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-45	0.40	C	0.074	0.0069	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-46	0.036	J	0.037	0.0083	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-47	1.2	C44 B	0.11	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-48	0.076		0.037	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-49	0.63	C	0.074	0.0053	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-5	ND		0.037	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-50	0.25	C	0.074	0.0063	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-51	0.40	C45	0.074	0.0069	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-52	0.98		0.037	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.25	C50	0.074	0.0063	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-54	0.060		0.037	0.00031	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-55	0.0096	J q	0.037	0.0048	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-56	0.20		0.037	0.0048	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-57	ND		0.037	0.0048	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-58	ND		0.037	0.0049	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-59	0.065	J C	0.11	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-6	0.016	J	0.037	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-60	0.075		0.037	0.0049	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-61	0.96	C B	0.15	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-62	0.065	J C59	0.11	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-63	0.021	J q	0.037	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-64	0.20		0.037	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-65	1.2	C44 B	0.11	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-66	0.66	B	0.037	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-67	ND		0.037	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-68	0.020	J	0.037	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-69	0.63	C49	0.074	0.0053	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-7	ND		0.037	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-70	0.96	C61 B	0.15	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-71	0.32	C40	0.11	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-72	0.017	J	0.037	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-73	0.035	J C43	0.074	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-74	0.96	C61 B	0.15	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-75	0.065	J C59	0.11	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-76	0.96	C61 B	0.15	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-77	0.058		0.037	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-78	ND		0.037	0.0049	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-79	0.012	J q	0.037	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-8	0.048	J	0.074	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-80	ND		0.037	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-81	ND		0.037	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-82	0.20		0.037	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-83	1.6	C	0.074	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-84	0.49		0.037	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-85	0.30	C	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-86	1.2	C	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-87	1.2	C86	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-88	0.54	C	0.074	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-89	ND		0.037	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-9	ND		0.037	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-90	2.7	C B	0.11	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-91	0.54	C88	0.074	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-92	0.57		0.037	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-93	0.21	C	0.074	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-94	0.042	q	0.037	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-95	2.2	B	0.037	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-96	0.036	J	0.037	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-97	1.2	C86	0.22	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.12	C	0.074	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
PCB-99	1.6	C83	0.074	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Polychlorinated biphenyls, Total	72	q B	0.22	0.0052	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Monochlorobiphenyls	0.071		0.037	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Dichlorobiphenyls	0.32	q	0.074	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Trichlorobiphenyls	1.3	q B	0.074	0.0019	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Tetrachlorobiphenyls	6.4	q B	0.15	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Pentachlorobiphenyls	15	q B	0.22	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Hexachlorobiphenyls	27	q B	0.15	0.0097	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Heptachlorobiphenyls	17		0.074	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Octachlorobiphenyls	3.9	q	0.074	0.0062	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2
Total Nonachlorobiphenyls	0.55		0.037	0.0084	ng/g	☼	11/12/18 10:55	11/27/18 19:15	2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-104L	85		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-105L	90		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-114L	92		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-118L	89		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-123L	89		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-126L	87		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-155L	87		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-156L	82	C	30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-157L	82	C156	30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-15L	78		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-167L	88		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-169L	92		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-170L	83		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-188L	98		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-189L	82		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-19L	86		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-1L	59		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-202L	105		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-205L	73		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-206L	87		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-208L	81		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-209L	82		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-37L	88		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-3L	58		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-4L	74		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-54L	53		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-77L	84		30 - 140	11/12/18 10:55	11/27/18 19:15	2
PCB-81L	83		30 - 140	11/12/18 10:55	11/27/18 19:15	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-111L	88		40 - 125	11/12/18 10:55	11/27/18 19:15	2
PCB-178L	99		40 - 125	11/12/18 10:55	11/27/18 19:15	2
PCB-28L	92		40 - 125	11/12/18 10:55	11/27/18 19:15	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	38000		2000	44	mg/Kg	-		11/06/18 11:09	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	27.0		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	72	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	28	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	30.1				%			11/07/18 10:38	1
Coarse Sand	0.1				%			11/07/18 10:38	1
Fine Sand	3.2				%			11/07/18 10:38	1
Gravel	0.0				%			11/07/18 10:38	1
Medium Sand	0.2				%			11/07/18 10:38	1
Silt	66.4				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.19		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.19		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		34	5.8	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1221	ND		34	16	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1232	ND		34	8.0	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1242	ND		34	8.4	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1248	ND		34	2.7	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1254	ND		34	14	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1
PCB-1260	32	J	34	5.8	ug/Kg	☼	11/13/18 10:16	11/14/18 22:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	52	X	54 - 142	11/13/18 10:16	11/14/18 22:32	1
Tetrachloro-m-xylene	54	X	58 - 122	11/13/18 10:16	11/14/18 22:32	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.0047	J	0.0086	0.00071	ug/Kg	☼	11/10/18 07:19	11/15/18 11:57	1
2,3,4,7,8-PeCDF	0.0063	J	0.0086	0.00090	ug/Kg	☼	11/10/18 07:19	11/15/18 11:57	1
2,3,7,8-TCDD	0.0010	J q	0.0017	0.00042	ug/Kg	☼	11/10/18 07:19	11/15/18 11:57	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	73		23 - 140	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,4,6,7,8-HpCDF	70		28 - 143	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,4,7,8,9-HpCDF	76		26 - 138	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,4,7,8-HxCDD	63		32 - 141	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,4,7,8-HxCDF	63		26 - 152	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,6,7,8-HxCDD	66		28 - 130	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,6,7,8-HxCDF	62		26 - 123	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,7,8,9-HxCDF	73		29 - 147	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,7,8-PeCDD	65		25 - 181	11/10/18 07:19	11/15/18 11:57	1
13C-1,2,3,7,8-PeCDF	68		24 - 185	11/10/18 07:19	11/15/18 11:57	1
13C-2,3,4,6,7,8-HxCDF	60		28 - 136	11/10/18 07:19	11/15/18 11:57	1
13C-2,3,4,7,8-PeCDF	66		21 - 178	11/10/18 07:19	11/15/18 11:57	1
13C-2,3,7,8-TCDD	67		25 - 164	11/10/18 07:19	11/15/18 11:57	1
13C-2,3,7,8-TCDF	71		24 - 169	11/10/18 07:19	11/15/18 11:57	1
13C-OCDD	77		17 - 157	11/10/18 07:19	11/15/18 11:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	113		35 - 197	11/10/18 07:19	11/15/18 11:57	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.099		0.034	0.00089	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-10	0.0072	J q	0.034	0.00050	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-100	0.21	C93	0.068	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-101	3.6	C90 B	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-102	0.17	C98	0.068	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-103	0.15		0.034	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-104	ND		0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-105	0.74		0.034	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-106	ND		0.034	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-107	0.23		0.034	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-108	0.090	C	0.068	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	1.6	C86	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-11	0.097	q	0.068	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-110	3.4	C B	0.068	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-111	ND		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-112	ND		0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-113	3.6	C90 B	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-114	0.040		0.034	0.0053	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-115	3.4	C110 B	0.068	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-116	0.40	C85	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-117	0.40	C85	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-118	2.4		0.034	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-119	1.6	C86	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-12	0.034	J C	0.068	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-120	0.036		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-121	ND		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-122	ND		0.034	0.0066	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-123	0.042		0.034	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-124	0.090	C108	0.068	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-125	1.6	C86	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-126	ND		0.034	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-127	ND		0.034	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-128	0.85	C	0.068	0.013	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-129	7.5	C B	0.14	0.014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-13	0.034	J C12	0.068	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-130	0.43		0.034	0.018	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-131	ND		0.034	0.019	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-132	2.4		0.034	0.018	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-133	0.15		0.034	0.017	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-134	0.39	C	0.068	0.018	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-135	2.9	C	0.068	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-136	1.0		0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-137	0.18		0.034	0.016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-138	7.5	C129 B	0.14	0.014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-139	0.11	C	0.068	0.015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-14	ND		0.034	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-140	0.11	C139	0.068	0.015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-141	1.4		0.034	0.016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-142	ND		0.034	0.017	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-143	0.39	C134	0.068	0.018	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-144	0.31		0.034	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-145	0.0053	J	0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-146	1.5		0.034	0.015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-147	7.7	C	0.068	0.017	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-148	0.038	q	0.034	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-149	7.7	C147	0.068	0.017	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-15	0.13		0.034	0.0049	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-150	0.039		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-151	2.9	C135	0.068	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-152	0.021	J	0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	7.2	C	0.068	0.012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-154	0.22		0.034	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-155	ND		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-156	0.57	C	0.068	0.016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-157	0.57	C156	0.068	0.016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-158	0.59		0.034	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-159	0.059		0.034	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-16	0.070	q	0.034	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-160	7.5	C129 B	0.14	0.014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-161	ND		0.034	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-162	ND		0.034	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-163	7.5	C129 B	0.14	0.014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-164	0.54		0.034	0.012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-165	ND		0.034	0.013	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-166	0.85	C128	0.068	0.013	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-167	0.21	B	0.034	0.0086	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-168	7.2	C153	0.068	0.012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-169	ND		0.034	0.0082	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-17	0.14		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-170	2.9		0.034	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-171	0.84	C	0.068	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-172	0.45		0.034	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-173	0.84	C171	0.068	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-174	2.7		0.034	0.0035	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-175	0.086	q	0.034	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-176	0.33		0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-177	1.6		0.034	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-178	0.60		0.034	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-179	1.2		0.034	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-18	0.21	C	0.068	0.00088	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-180	6.1	C	0.068	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-181	ND		0.034	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-182	ND		0.034	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-183	2.0	C	0.068	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-184	ND		0.034	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-185	2.0	C183	0.068	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-186	ND		0.034	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-187	3.6		0.034	0.0032	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-188	ND		0.034	0.0023	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-189	0.10		0.034	0.0073	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-19	0.15		0.034	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-190	0.55		0.034	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-191	0.12		0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-192	ND		0.034	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-193	6.1	C180	0.068	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-194	1.6		0.034	0.012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-195	0.67		0.034	0.013	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-196	0.63		0.034	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-197	0.048		0.034	0.0032	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	1.4	C	0.068	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-199	1.4	C198	0.068	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-2	0.047		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-20	0.40	C B	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-200	0.14		0.034	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-201	0.15		0.034	0.0029	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-202	0.26		0.034	0.0032	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-203	0.85		0.034	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-204	ND		0.034	0.0032	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-205	0.076		0.034	0.010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-206	0.54		0.034	0.014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-207	0.053		0.034	0.0099	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-208	0.15		0.034	0.010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-209	0.28		0.034	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-21	0.16	C B	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-22	0.088		0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-23	ND		0.034	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-24	ND		0.034	0.00084	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-25	0.038		0.034	0.0023	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-26	0.051	J C	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-27	0.037		0.034	0.00073	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-28	0.40	C20 B	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-29	0.051	J C26	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-3	0.085		0.034	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-30	0.21	C18	0.068	0.00088	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-31	0.25		0.068	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-32	0.12		0.034	0.00070	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-33	0.16	C21 B	0.068	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-34	ND		0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-35	0.0076	J	0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-36	ND		0.034	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-37	0.14		0.034	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-38	ND		0.034	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-39	ND		0.034	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-4	0.11	q	0.068	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-40	0.40	C	0.10	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-41	0.40	C40	0.10	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-42	0.16		0.034	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-43	0.048	J q C	0.068	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-44	1.5	C B	0.10	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-45	0.49	C	0.068	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-46	0.054		0.034	0.0074	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-47	1.5	C44 B	0.10	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-48	0.096		0.034	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-49	0.76	C	0.068	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-5	0.0078	J	0.034	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-50	0.31	C	0.068	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-51	0.49	C45	0.068	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-52	1.3		0.034	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.31	C50	0.068	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-54	0.060	q	0.034	0.00018	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-55	0.0068	J q	0.034	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-56	0.25		0.034	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-57	ND		0.034	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-58	0.018	J	0.034	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-59	0.077	J C	0.10	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-6	0.048	q	0.034	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-60	0.097		0.034	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-61	1.2	C B	0.14	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-62	0.077	J C59	0.10	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-63	0.029	J	0.034	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-64	0.27		0.034	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-65	1.5	C44 B	0.10	0.0051	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-66	0.81	B	0.034	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-67	0.016	J	0.034	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-68	0.018	J q	0.034	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-69	0.76	C49	0.068	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-7	0.014	J q	0.034	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-70	1.2	C61 B	0.14	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-71	0.40	C40	0.10	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-72	0.026	J	0.034	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-73	0.048	J q C43	0.068	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-74	1.2	C61 B	0.14	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-75	0.077	J C59	0.10	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-76	1.2	C61 B	0.14	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-77	0.080		0.034	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-78	ND		0.034	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-79	0.010	J q	0.034	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-8	0.15		0.068	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-80	ND		0.034	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-81	ND		0.034	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-82	0.27		0.034	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-83	2.0	C	0.068	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-84	0.67		0.034	0.0017	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-85	0.40	C	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-86	1.6	C	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-87	1.6	C86	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-88	0.68	C	0.068	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-89	ND		0.034	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-9	0.015	J q	0.034	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-90	3.6	C B	0.10	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-91	0.68	C88	0.068	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-92	0.73		0.034	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-93	0.21	C	0.068	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-94	0.062		0.034	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-95	3.0	B	0.034	0.0016	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-96	0.041	q	0.034	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-97	1.6	C86	0.20	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.17	C	0.068	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
PCB-99	2.0	C83	0.068	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Polychlorinated biphenyls, Total	98	q B	0.20	0.0055	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Monochlorobiphenyls	0.23		0.034	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Dichlorobiphenyls	0.61	q	0.068	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Trichlorobiphenyls	1.9	q B	0.068	0.0020	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Tetrachlorobiphenyls	8.1	q B	0.14	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Pentachlorobiphenyls	21	q B	0.20	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Hexachlorobiphenyls	36	q B	0.14	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Heptachlorobiphenyls	23	q	0.068	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Octachlorobiphenyls	5.8		0.068	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2
Total Nonachlorobiphenyls	0.74		0.034	0.011	ng/g	☼	11/12/18 10:55	11/27/18 20:17	2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-104L	83		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-105L	88		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-114L	89		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-118L	85		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-123L	87		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-126L	86		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-155L	85		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-156L	80	C	30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-157L	80	C156	30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-15L	79		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-167L	87		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-169L	88		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-170L	85		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-188L	97		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-189L	85		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-19L	87		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-1L	61		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-202L	106		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-205L	72		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-206L	87		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-208L	83		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-209L	82		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-37L	88		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-3L	60		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-4L	78		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-54L	57		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-77L	82		30 - 140	11/12/18 10:55	11/27/18 20:17	2
PCB-81L	83		30 - 140	11/12/18 10:55	11/27/18 20:17	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-111L	88		40 - 125	11/12/18 10:55	11/27/18 20:17	2
PCB-178L	99		40 - 125	11/12/18 10:55	11/27/18 20:17	2
PCB-28L	91		40 - 125	11/12/18 10:55	11/27/18 20:17	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	51000		2000	44	mg/Kg	-		11/06/18 11:15	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	28.6		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	71	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	29	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	26.9				%			11/07/18 10:38	1
Coarse Sand	0.3				%			11/07/18 10:38	1
Fine Sand	12.9				%			11/07/18 10:38	1
Gravel	1.3				%			11/07/18 10:38	1
Medium Sand	1.7				%			11/07/18 10:38	1
Silt	56.8				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.20		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.21		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		30	5.0	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1221	ND		30	14	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1232	ND		30	6.9	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1242	ND		30	7.2	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1248	ND		30	2.4	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1254	ND		30	12	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1
PCB-1260	35		30	5.0	ug/Kg	☼	11/13/18 10:16	11/14/18 22:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		54 - 142	11/13/18 10:16	11/14/18 22:49	1
Tetrachloro-m-xylene	59		58 - 122	11/13/18 10:16	11/14/18 22:49	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.0028	J	0.0080	0.00024	ug/Kg	☼	11/10/18 07:19	11/15/18 12:43	1
2,3,4,7,8-PeCDF	0.0027	J	0.0080	0.00042	ug/Kg	☼	11/10/18 07:19	11/15/18 12:43	1
2,3,7,8-TCDD	0.0011	J	0.0016	0.00017	ug/Kg	☼	11/10/18 07:19	11/15/18 12:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	57		23 - 140	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,4,6,7,8-HpCDF	54		28 - 143	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,4,7,8,9-HpCDF	59		26 - 138	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,4,7,8-HxCDD	60		32 - 141	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,4,7,8-HxCDF	57		26 - 152	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,6,7,8-HxCDD	58		28 - 130	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,6,7,8-HxCDF	57		26 - 123	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,7,8,9-HxCDF	66		29 - 147	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,7,8-PeCDD	64		25 - 181	11/10/18 07:19	11/15/18 12:43	1
13C-1,2,3,7,8-PeCDF	66		24 - 185	11/10/18 07:19	11/15/18 12:43	1
13C-2,3,4,6,7,8-HxCDF	57		28 - 136	11/10/18 07:19	11/15/18 12:43	1
13C-2,3,4,7,8-PeCDF	68		21 - 178	11/10/18 07:19	11/15/18 12:43	1
13C-2,3,7,8-TCDD	68		25 - 164	11/10/18 07:19	11/15/18 12:43	1
13C-2,3,7,8-TCDF	72		24 - 169	11/10/18 07:19	11/15/18 12:43	1
13C-OCDD	57		17 - 157	11/10/18 07:19	11/15/18 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	117		35 - 197	11/10/18 07:19	11/15/18 12:43	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.020	J q	0.032	0.00095	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-10	ND		0.032	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-100	0.19	C93	0.064	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-101	3.4	C90 B	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-102	0.15	C98	0.064	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-103	0.14		0.032	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-104	ND		0.032	0.00099	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-105	0.68		0.032	0.0058	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-106	ND		0.032	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-107	0.22		0.032	0.0066	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-108	0.068	q C	0.064	0.0063	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	1.4	C86	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-11	0.13		0.064	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-110	3.3	C B	0.064	0.00095	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-111	ND		0.032	0.00091	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-112	ND		0.032	0.00096	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-113	3.4	C90 B	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-114	0.028	J q	0.032	0.0057	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-115	3.3	C110 B	0.064	0.00095	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-116	0.37	C85	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-117	0.37	C85	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-118	2.1		0.032	0.0059	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-119	1.4	C86	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-12	0.023	J q C	0.064	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-120	0.044		0.032	0.00093	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-121	ND		0.032	0.00096	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-122	ND		0.032	0.0071	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-123	0.030	J	0.032	0.0063	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-124	0.068	q C108	0.064	0.0063	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-125	1.4	C86	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-126	ND		0.032	0.0064	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-127	ND		0.032	0.0061	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-128	0.81	C	0.064	0.011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-129	7.3	C B	0.13	0.012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-13	0.023	J q C12	0.064	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-130	0.43		0.032	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-131	ND		0.032	0.016	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-132	2.3		0.032	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-133	0.16		0.032	0.014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-134	0.41	C	0.064	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-135	2.8	C	0.064	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-136	1.0		0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-137	0.19		0.032	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-138	7.3	C129 B	0.13	0.012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-139	0.11	C	0.064	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-14	ND		0.032	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-140	0.11	C139	0.064	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-141	1.4		0.032	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-142	ND		0.032	0.014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-143	0.41	C134	0.064	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-144	0.26		0.032	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-145	0.0041	J q	0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-146	1.6		0.032	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-147	7.8	C	0.064	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-148	0.037		0.032	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-149	7.8	C147	0.064	0.015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-15	0.12		0.032	0.0043	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-150	0.034	q	0.032	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-151	2.8	C135	0.064	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-152	0.0097	J q	0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	7.1	C	0.064	0.010	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-154	0.20		0.032	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-155	ND		0.032	0.0010	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-156	0.58	C	0.064	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-157	0.58	C156	0.064	0.013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-158	0.58		0.032	0.0091	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-159	0.068		0.032	0.0096	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-16	0.032	q	0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-160	7.3	C129 B	0.13	0.012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-161	ND		0.032	0.0096	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-162	ND		0.032	0.0095	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-163	7.3	C129 B	0.13	0.012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-164	0.55		0.032	0.010	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-165	ND		0.032	0.011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-166	0.81	C128	0.064	0.011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-167	0.23	B	0.032	0.0073	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-168	7.1	C153	0.064	0.010	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-169	ND		0.032	0.0072	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-17	0.087		0.032	0.00094	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-170	2.8		0.032	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-171	0.80	C	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-172	0.44		0.032	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-173	0.80	C171	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-174	2.6		0.032	0.0035	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-175	0.099		0.032	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-176	0.31		0.032	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-177	1.6		0.032	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-178	0.59		0.032	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-179	1.2		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-18	0.099	S C	0.064	0.00083	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-180	5.7	C	0.064	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-181	ND		0.032	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-182	0.034	q	0.032	0.0032	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-183	1.8	C	0.064	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-184	ND		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-185	1.8	C183	0.064	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-186	ND		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-187	3.4		0.032	0.0031	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-188	ND		0.032	0.0023	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-189	0.086		0.032	0.0070	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-19	0.11		0.032	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-190	0.49		0.032	0.0024	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-191	0.10		0.032	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-192	ND		0.032	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-193	5.7	C180	0.064	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-194	1.4		0.032	0.011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-195	0.56		0.032	0.012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-196	0.58		0.032	0.0049	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-197	0.045		0.032	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	1.3	C	0.064	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-199	1.3	C198	0.064	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-2	0.035	q	0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-20	0.34	C B	0.064	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-200	0.12		0.032	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-201	0.13		0.032	0.0034	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-202	0.24		0.032	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-203	0.75		0.032	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-204	ND		0.032	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-205	0.061		0.032	0.0096	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-206	0.54		0.032	0.0089	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-207	0.061		0.032	0.0064	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-208	0.14		0.032	0.0065	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-209	0.31		0.032	0.0047	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-21	0.14	C B	0.064	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-22	0.071		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-23	ND		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-24	0.0022	J	0.032	0.00079	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-25	0.032		0.032	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-26	0.041	J C	0.064	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-27	0.030	J	0.032	0.00069	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-28	0.34	C20 B	0.064	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-29	0.041	J C26	0.064	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-3	0.019	J q	0.032	0.0012	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-30	0.099	S C18	0.064	0.00083	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-31	0.21		0.064	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-32	0.076		0.032	0.00066	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-33	0.14	C21 B	0.064	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-34	ND		0.032	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-35	0.0060	J	0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-36	ND		0.032	0.0026	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-37	0.14		0.032	0.0027	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-38	ND		0.032	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-39	ND		0.032	0.0025	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-4	0.043	J	0.064	0.0055	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-40	0.31	C	0.096	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-41	0.31	C40	0.096	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-42	0.14		0.032	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-43	0.040	J C	0.064	0.0053	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-44	1.1	C B	0.096	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-45	0.39	C	0.064	0.0059	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-46	0.047		0.032	0.0071	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-47	1.1	C44 B	0.096	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-48	0.063		0.032	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-49	0.60	C	0.064	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-5	ND		0.032	0.0045	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-50	0.27	C	0.064	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-51	0.39	C45	0.064	0.0059	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-52	1.1		0.032	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.27	C50	0.064	0.0054	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-54	0.048		0.032	0.00016	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-55	0.013	J q	0.032	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-56	0.22		0.032	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-57	ND		0.032	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-58	0.0056	J q	0.032	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-59	0.071	J C	0.096	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-6	0.020	J	0.032	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-60	0.073		0.032	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-61	1.0	C B	0.13	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-62	0.071	J C59	0.096	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-63	0.023	J	0.032	0.0038	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-64	0.20		0.032	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-65	1.1	C44 B	0.096	0.0050	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-66	0.67	B	0.032	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-67	0.014	J	0.032	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-68	0.019	J	0.032	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-69	0.60	C49	0.064	0.0046	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-7	0.0061	J q	0.032	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-70	1.0	C61 B	0.13	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-71	0.31	C40	0.096	0.0056	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-72	0.022	J	0.032	0.0041	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-73	0.040	J C43	0.064	0.0053	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-74	1.0	C61 B	0.13	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-75	0.071	J C59	0.096	0.0040	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-76	1.0	C61 B	0.13	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-77	0.086		0.032	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-78	ND		0.032	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-79	0.011	J q	0.032	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-8	0.062	J	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-80	ND		0.032	0.0036	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-81	ND		0.032	0.0039	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-82	0.24		0.032	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-83	1.9	C	0.064	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-84	0.63		0.032	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-85	0.37	C	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-86	1.4	C	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-87	1.4	C86	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-88	0.68	C	0.064	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-89	ND		0.032	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-9	ND		0.032	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-90	3.4	C B	0.096	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-91	0.68	C88	0.064	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-92	0.72		0.032	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-93	0.19	C	0.064	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-94	0.055		0.032	0.0015	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-95	2.9	B	0.032	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-96	0.043		0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-97	1.4	C86	0.19	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.15	C	0.064	0.0013	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
PCB-99	1.9	C83	0.064	0.0014	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Polychlorinated biphenyls, Total	92	q B	0.19	0.0048	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Monochlorobiphenyls	0.074	q	0.032	0.0011	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Dichlorobiphenyls	0.40	q	0.064	0.0042	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Trichlorobiphenyls	1.4	S q B	0.064	0.0020	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Tetrachlorobiphenyls	6.5	q B	0.13	0.0044	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Pentachlorobiphenyls	19	q B	0.19	0.0028	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Hexachlorobiphenyls	36	q B	0.13	0.0089	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Heptachlorobiphenyls	22	q	0.064	0.0033	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Octachlorobiphenyls	5.2		0.064	0.0060	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2
Total Nonachlorobiphenyls	0.74		0.032	0.0072	ng/g	☼	11/12/18 10:55	11/27/18 21:18	2

Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-104L	84		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-105L	89		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-114L	88		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-118L	87		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-123L	86		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-126L	84		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-155L	87		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-156L	81	C	30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-157L	81	C156	30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-15L	76		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-167L	84		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-169L	87		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-170L	82		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-188L	97		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-189L	82		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-19L	90		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-1L	60		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-202L	101		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-205L	72		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-206L	83		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-208L	80		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-209L	76		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-37L	87		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-3L	61		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-4L	75		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-54L	54		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-77L	78		30 - 140				11/12/18 10:55	11/27/18 21:18	2
PCB-81L	78		30 - 140				11/12/18 10:55	11/27/18 21:18	2

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-111L	87		40 - 125				11/12/18 10:55	11/27/18 21:18	2
PCB-178L	99		40 - 125				11/12/18 10:55	11/27/18 21:18	2
PCB-28L	91		40 - 125				11/12/18 10:55	11/27/18 21:18	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	36000		2000	44	mg/Kg	-		11/06/18 11:28	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	31.0		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	68	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	32	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	29.1				%			11/07/18 10:38	1
Coarse Sand	0.0				%			11/07/18 10:38	1
Fine Sand	9.3				%			11/07/18 10:38	1
Gravel	0.0				%			11/07/18 10:38	1
Medium Sand	0.7				%			11/07/18 10:38	1
Silt	60.8				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.23		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.24		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		13	2.2	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1221	ND		13	6.0	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1232	ND		13	3.0	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1242	ND		13	3.1	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1248	ND		13	1.0	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1254	ND		13	5.0	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1
PCB-1260	19		13	2.2	ug/Kg	☼	11/13/18 10:16	11/14/18 23:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	115		54 - 142	11/13/18 10:16	11/14/18 23:05	1
Tetrachloro-m-xylene	68		58 - 122	11/13/18 10:16	11/14/18 23:05	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.00032	J	0.0033	0.000036	ug/Kg	☼	11/10/18 07:19	11/15/18 13:29	1
2,3,4,7,8-PeCDF	0.00018	J q	0.0033	0.000044	ug/Kg	☼	11/10/18 07:19	11/15/18 13:29	1
2,3,7,8-TCDD	0.00018	J q	0.00066	0.000031	ug/Kg	☼	11/10/18 07:19	11/15/18 13:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	59		23 - 140	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,4,6,7,8-HpCDF	59		28 - 143	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,4,7,8,9-HpCDF	56		26 - 138	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,4,7,8-HxCDD	64		32 - 141	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,4,7,8-HxCDF	65		26 - 152	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,6,7,8-HxCDD	61		28 - 130	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,6,7,8-HxCDF	62		26 - 123	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,7,8,9-HxCDF	70		29 - 147	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,7,8-PeCDD	69		25 - 181	11/10/18 07:19	11/15/18 13:29	1
13C-1,2,3,7,8-PeCDF	67		24 - 185	11/10/18 07:19	11/15/18 13:29	1
13C-2,3,4,6,7,8-HxCDF	63		28 - 136	11/10/18 07:19	11/15/18 13:29	1
13C-2,3,4,7,8-PeCDF	71		21 - 178	11/10/18 07:19	11/15/18 13:29	1
13C-2,3,7,8-TCDD	68		25 - 164	11/10/18 07:19	11/15/18 13:29	1
13C-2,3,7,8-TCDF	70		24 - 169	11/10/18 07:19	11/15/18 13:29	1
13C-OCDD	60		17 - 157	11/10/18 07:19	11/15/18 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	119		35 - 197	11/10/18 07:19	11/15/18 13:29	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0027	J q	0.020	0.00029	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-10	ND		0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-100	0.018	J C93 q	0.039	0.00047	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-101	0.64	B C90	0.059	0.00041	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-102	0.020	J C98 q	0.039	0.00045	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-103	0.012	J	0.020	0.00047	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-104	ND		0.020	0.00035	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-105	0.17		0.020	0.0021	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-106	ND		0.020	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-107	0.041		0.020	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-108	0.024	J C	0.039	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	0.37	C86	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-11	0.064		0.039	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-110	0.83	C B	0.039	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-111	ND		0.020	0.00033	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-112	ND		0.020	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-113	0.64	B C90	0.059	0.00041	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-114	0.010	J	0.020	0.0021	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-115	0.83	B C110	0.039	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-116	0.094	C85	0.059	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-117	0.094	C85	0.059	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-118	0.44		0.020	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-119	0.37	C86	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-12	0.0035	J C q	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-120	0.0026	J q	0.020	0.00033	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-121	ND		0.020	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-122	0.0081	J	0.020	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-123	0.012	J	0.020	0.0021	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-124	0.024	J C108	0.039	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-125	0.37	C86	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-126	0.0076	J	0.020	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-127	ND		0.020	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-128	0.20	C	0.039	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-129	1.4	C B	0.079	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-13	0.0035	J C12 q	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-130	0.090		0.020	0.0052	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-131	0.020		0.020	0.0054	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-132	0.47		0.020	0.0050	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-133	0.021		0.020	0.0049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-134	0.074	C	0.039	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-135	0.38	C	0.039	0.00085	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-136	0.15		0.020	0.00061	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-137	0.055		0.020	0.0044	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-138	1.4	B C129	0.079	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-139	0.020	J C q	0.039	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-14	ND		0.020	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-140	0.020	J C139 q	0.039	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-141	0.28		0.020	0.0046	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-142	ND		0.020	0.0049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-143	0.074	C134	0.039	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-144	0.020	q	0.020	0.00077	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-145	0.0020	J q	0.020	0.00058	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-146	0.21		0.020	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-147	1.2	C	0.039	0.0049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-148	0.0030	J q	0.020	0.00082	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-149	1.2	C147	0.039	0.0049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-15	0.014	J q	0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-150	0.0017	J q	0.020	0.00056	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-151	0.38	C135	0.039	0.00085	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-152	0.0023	J q	0.020	0.00060	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	1.0	C	0.039	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-154	0.048		0.020	0.00066	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-155	ND		0.020	0.00056	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-156	0.13	C	0.039	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-157	0.13	C156	0.039	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-158	0.13		0.020	0.0031	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-159	0.010	J	0.020	0.0033	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-16	0.023		0.020	0.00055	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-160	1.4	B C129	0.079	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-161	ND		0.020	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-162	0.0060	J	0.020	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-163	1.4	B C129	0.079	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-164	0.10		0.020	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-165	ND		0.020	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-166	0.20	C128	0.039	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-167	0.055	B	0.020	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-168	1.0	C153	0.039	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-169	0.0067	J	0.020	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-17	0.037		0.020	0.00049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-170	0.42		0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-171	0.12	C	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-172	0.073		0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-173	0.12	C171	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-174	0.40		0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-175	0.018	J	0.020	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-176	0.050		0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-177	0.23		0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-178	0.086		0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-179	0.16		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-18	0.057	C	0.039	0.00043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-180	0.83	C	0.039	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-181	0.0065	J	0.020	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-182	0.0087	J	0.020	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-183	0.27	C	0.039	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-184	ND		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-185	0.27	C183	0.039	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-186	ND		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-187	0.47		0.020	0.0014	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-188	ND		0.020	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-189	0.018	J	0.020	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-19	0.021	q	0.020	0.00060	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-190	0.070		0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-191	0.019	J	0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-192	ND		0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-193	0.83	C180	0.039	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-194	0.24		0.020	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-195	0.088		0.020	0.0042	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-196	0.098		0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-197	0.0075	J q	0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	0.21	C	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-199	0.21	C198	0.039	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-2	0.0049	J q	0.020	0.00033	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-20	0.091	C B	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-200	0.022		0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-201	0.027		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-202	0.044		0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-203	0.12		0.020	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-204	ND		0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-205	0.0087	J q	0.020	0.0033	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-206	0.095		0.020	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-207	0.011	J	0.020	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-208	0.023		0.020	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-209	0.042		0.020	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-21	0.044	C B	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-22	0.029		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-23	ND		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-24	0.0014	J q	0.020	0.00041	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-25	0.0068	J q	0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-26	0.014	J C	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-27	0.0058	J	0.020	0.00036	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-28	0.091	B C20	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-29	0.014	J C26	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-3	0.0023	J q	0.020	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-30	0.057	C18	0.039	0.00043	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-31	0.070		0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-32	0.024		0.020	0.00034	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-33	0.044	B C21	0.039	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-34	ND		0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-35	0.0027	J q	0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-36	ND		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-37	0.028		0.020	0.0012	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-38	ND		0.020	0.0013	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-39	ND		0.020	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-4	0.016	J	0.039	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-40	0.070	C	0.059	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-41	0.070	C40	0.059	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-42	0.031		0.020	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-43	0.0093	J C	0.039	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-44	0.19	C B	0.059	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-45	0.045	C	0.039	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-46	0.0097	J q	0.020	0.0031	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-47	0.19	B C44	0.059	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-48	0.022	q	0.020	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-49	0.10	C	0.039	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-5	ND		0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-50	0.033	J C	0.039	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-51	0.045	C45	0.039	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-52	0.28		0.020	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.033	J C50	0.039	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-54	0.0081	J	0.020	0.00031	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-55	0.0027	J q	0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-56	0.040		0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-57	ND		0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-58	ND		0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-59	0.014	J C	0.059	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-6	0.0061	J	0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-60	0.014	J q	0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-61	0.21	C B	0.079	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-62	0.014	J C59	0.059	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-63	0.0043	J	0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-64	0.053		0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-65	0.19	B C44	0.059	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-66	0.099	B	0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-67	0.0027	J q	0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-68	0.0028	J	0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-69	0.10	C49	0.039	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-7	0.0018	J q	0.020	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-70	0.21	C61 B	0.079	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-71	0.070	C40	0.059	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-72	0.0043	J	0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-73	0.0093	J C43	0.039	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-74	0.21	C61 B	0.079	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-75	0.014	J C59	0.059	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-76	0.21	C61 B	0.079	0.0017	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-77	0.018	J	0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-78	ND		0.020	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-79	0.0040	J q	0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-8	0.015	J q	0.039	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-80	ND		0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-81	ND		0.020	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-82	0.081		0.020	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-83	0.30	C	0.039	0.00049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-84	0.19		0.020	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-85	0.094	C	0.059	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-86	0.37	C	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-87	0.37	C86	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-88	0.11	C	0.039	0.00049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-89	0.0071	J	0.020	0.00053	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-9	0.0020	J q	0.020	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-90	0.64	C B	0.059	0.00041	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-91	0.11	C88	0.039	0.00049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-92	0.098		0.020	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-93	0.018	J C q	0.039	0.00047	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-94	ND		0.020	0.00053	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-95	0.68	B	0.020	0.00051	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-96	0.0070	J	0.020	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-97	0.37	C86	0.12	0.00040	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.020	J C q	0.039	0.00045	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
PCB-99	0.30	C83	0.039	0.00049	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Polychlorinated biphenyls, Total	16	B q	0.12	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Monochlorobiphenyls	0.0099	J q	0.020	0.00032	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Dichlorobiphenyls	0.12	q	0.039	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Trichlorobiphenyls	0.45	B q	0.039	0.00094	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Tetrachlorobiphenyls	1.3	B q	0.079	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Pentachlorobiphenyls	4.2	B q	0.12	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Hexachlorobiphenyls	6.1	B q	0.079	0.0031	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Heptachlorobiphenyls	3.2		0.039	0.0015	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Octachlorobiphenyls	0.87	q	0.039	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2
Total Nonachlorobiphenyls	0.13		0.020	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 02:40	2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-104L	88		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-105L	91		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-114L	91		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-118L	90		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-123L	89		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-126L	87		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-155L	79		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-156L	83	C	30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-157L	83	C156	30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-15L	77		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-167L	87		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-169L	87		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-170L	87		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-188L	103		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-189L	85		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-19L	100		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-1L	84		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-202L	98		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-205L	71		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-206L	77		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-208L	81		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-209L	71		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-37L	88		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-3L	79		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-4L	84		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-54L	42		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-77L	84		30 - 140	11/12/18 10:55	11/28/18 02:40	2
PCB-81L	85		30 - 140	11/12/18 10:55	11/28/18 02:40	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-111L	89		40 - 125	11/12/18 10:55	11/28/18 02:40	2
PCB-178L	104		40 - 125	11/12/18 10:55	11/28/18 02:40	2
PCB-28L	93		40 - 125	11/12/18 10:55	11/28/18 02:40	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	6200		2000	44	mg/Kg	-		11/06/18 11:33	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	76.7		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	23	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	77	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	2.6				%			11/07/18 10:38	1
Coarse Sand	8.5				%			11/07/18 10:38	1
Fine Sand	35.4				%			11/07/18 10:38	1
Gravel	1.9				%			11/07/18 10:38	1
Medium Sand	52.3				%			11/07/18 10:38	1
Silt	-0.6				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.81		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.81		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1	22	3.7	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1221	ND		22	10	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1232	ND		22	5.2	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1242	ND		22	5.4	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1248	ND		22	1.8	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1254	ND		22	8.7	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1
PCB-1260	34		22	3.7	ug/Kg	☼	11/21/18 09:51	11/26/18 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		54 - 142	11/21/18 09:51	11/26/18 13:43	1
Tetrachloro-m-xylene	75		58 - 122	11/21/18 09:51	11/26/18 13:43	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	0.0020	J	0.0056	0.00022	ug/Kg	☼	11/10/18 07:19	11/15/18 14:15	1
2,3,4,7,8-PeCDF	0.0017	J	0.0056	0.00031	ug/Kg	☼	11/10/18 07:19	11/15/18 14:15	1
2,3,7,8-TCDD	0.00068	J	0.0011	0.000099	ug/Kg	☼	11/10/18 07:19	11/15/18 14:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	49		23 - 140	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,4,6,7,8-HpCDF	46		28 - 143	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,4,7,8,9-HpCDF	54		26 - 138	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,4,7,8-HxCDD	53		32 - 141	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,4,7,8-HxCDF	52		26 - 152	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,6,7,8-HxCDD	49		28 - 130	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,6,7,8-HxCDF	51		26 - 123	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,7,8,9-HxCDF	59		29 - 147	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,7,8-PeCDD	59		25 - 181	11/10/18 07:19	11/15/18 14:15	1
13C-1,2,3,7,8-PeCDF	60		24 - 185	11/10/18 07:19	11/15/18 14:15	1
13C-2,3,4,6,7,8-HxCDF	50		28 - 136	11/10/18 07:19	11/15/18 14:15	1
13C-2,3,4,7,8-PeCDF	65		21 - 178	11/10/18 07:19	11/15/18 14:15	1
13C-2,3,7,8-TCDD	66		25 - 164	11/10/18 07:19	11/15/18 14:15	1
13C-2,3,7,8-TCDF	69		24 - 169	11/10/18 07:19	11/15/18 14:15	1
13C-OCDD	48		17 - 157	11/10/18 07:19	11/15/18 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	118		35 - 197	11/10/18 07:19	11/15/18 14:15	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.065		0.021	0.00074	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-10	0.0071	J q	0.021	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-100	0.10	C93 q	0.043	0.00063	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-101	4.7	B C90	0.064	0.00055	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-102	0.16	C98	0.043	0.00061	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-103	0.15		0.021	0.00063	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-104	ND		0.021	0.00048	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-105	0.91		0.021	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-106	ND		0.021	0.0044	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-107	0.38		0.021	0.0047	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-108	0.11	C	0.043	0.0045	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-109	2.3	C86	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-11	0.15		0.043	0.0028	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-110	4.5	C B	0.043	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-111	0.019	J	0.021	0.00044	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-112	ND		0.021	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-113	4.7	B C90	0.064	0.00055	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-114	0.056		0.021	0.0042	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-115	4.5	B C110	0.043	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-116	0.54	C85	0.064	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-117	0.54	C85	0.064	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-118	3.1		0.021	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-119	2.3	C86	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-12	0.038	J C	0.043	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-120	0.048		0.021	0.00045	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-121	ND		0.021	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-122	0.051		0.021	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-123	0.044		0.021	0.0044	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-124	0.11	C108	0.043	0.0045	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-125	2.3	C86	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-126	0.011	J q	0.021	0.0047	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-127	ND		0.021	0.0044	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-128	0.83	C	0.043	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-129	6.7	C B	0.086	0.0077	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-13	0.038	J C12	0.043	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-130	0.46		0.021	0.010	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-131	0.064		0.021	0.011	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-132	2.3		0.021	0.0099	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-133	0.18		0.021	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-134	0.38	C	0.043	0.010	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-135	2.5	C	0.043	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-136	0.98		0.021	0.00080	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-137	0.20	q	0.021	0.0087	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-138	6.7	B C129	0.086	0.0077	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-139	0.13	C	0.043	0.0086	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-14	0.0026	J q	0.021	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-140	0.13	C139	0.043	0.0086	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-141	1.2		0.021	0.0090	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-142	ND		0.021	0.0096	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-143	0.38	C134	0.043	0.010	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-144	0.22		0.021	0.0010	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-145	0.0040	J q	0.021	0.00076	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-146	1.6		0.021	0.0085	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-147	7.4	C	0.043	0.0097	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-148	0.043		0.021	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-149	7.4	C147	0.043	0.0097	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-15	0.18		0.021	0.0031	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-150	0.039		0.021	0.00073	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-151	2.5	C135	0.043	0.0011	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-152	0.0051	J q	0.021	0.00079	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-153	6.5	C	0.043	0.0067	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-154	0.18	q	0.021	0.00087	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-155	ND		0.021	0.00073	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-156	0.54	C	0.043	0.0094	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-157	0.54	C156	0.043	0.0094	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-158	0.49		0.021	0.0061	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-159	0.046		0.021	0.0064	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-16	0.24		0.021	0.00074	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-160	6.7	B C129	0.086	0.0077	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-161	ND		0.021	0.0064	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-162	0.016	J	0.021	0.0063	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-163	6.7	B C129	0.086	0.0077	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-164	0.48		0.021	0.0068	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-165	ND		0.021	0.0072	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-166	0.83	C128	0.043	0.0075	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-167	0.19	B	0.021	0.0046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-168	6.5	C153	0.043	0.0067	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-169	0.019	J q	0.021	0.0045	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-17	0.44		0.021	0.00066	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-170	2.1		0.021	0.0031	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-171	0.51	C	0.043	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-172	0.32		0.021	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-173	0.51	C171	0.043	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-174	2.0		0.021	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-175	0.080		0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-176	0.25		0.021	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-177	1.2		0.021	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-178	0.46		0.021	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-179	0.92		0.021	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-18	0.67	C	0.043	0.00058	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-180	4.1	C	0.043	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-181	0.012	J q	0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-182	0.035		0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-183	1.4	C	0.043	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-184	ND		0.021	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-185	1.4	C183	0.043	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-186	ND		0.021	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-187	2.8		0.021	0.0023	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-188	0.0091	J	0.021	0.0016	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-189	0.058		0.021	0.0046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-19	0.12		0.021	0.00081	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-190	0.30		0.021	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-191	0.074		0.021	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-192	ND		0.021	0.0021	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-193	4.1	C180	0.043	0.0020	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-194	1.1		0.021	0.0080	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-195	0.43		0.021	0.0088	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-196	0.40		0.021	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-197	0.034		0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-198	0.99	C	0.043	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-199	0.99	C198	0.043	0.0032	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-2	0.038		0.021	0.00085	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-20	1.3	C B	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-200	0.10		0.021	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-201	0.10		0.021	0.0022	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-202	0.22		0.021	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-203	0.58		0.021	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-204	ND		0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-205	0.053		0.021	0.0067	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-206	0.49		0.021	0.0050	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-207	0.054		0.021	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-208	0.13		0.021	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-209	0.37		0.021	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-21	0.57	C B	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-22	0.29		0.021	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-23	ND		0.021	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-24	0.0055	J	0.021	0.00056	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-25	0.11		0.021	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-26	0.18	C	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-27	0.075		0.021	0.00048	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-28	1.3	B C20	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-29	0.18	C26	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-3	0.044		0.021	0.00093	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-30	0.67	C18	0.043	0.00058	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-31	0.91		0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-32	0.24		0.021	0.00046	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-33	0.57	B C21	0.043	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-34	0.016	J	0.021	0.0028	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-35	0.022		0.021	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-36	ND		0.021	0.0026	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-37	0.31		0.021	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-38	ND		0.021	0.0028	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-39	0.015	J q	0.021	0.0025	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-4	0.13		0.043	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-40	0.90	C	0.064	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-41	0.90	C40	0.064	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-42	0.50		0.021	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-43	0.044	C q	0.043	0.0050	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-44	2.2	C B	0.064	0.0047	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-45	0.37	C	0.043	0.0056	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-46	0.099		0.021	0.0067	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-47	2.2	B C44	0.064	0.0047	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-48	0.28		0.021	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-49	1.6	C	0.043	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-5	0.0060	J q	0.021	0.0033	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-50	0.33	C	0.043	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-51	0.37	C45	0.043	0.0056	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-52	2.8		0.021	0.0052	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-53	0.33	C50	0.043	0.0051	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-54	0.024	q	0.021	0.00017	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-55	0.022	q	0.021	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-56	0.70		0.021	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-57	ND		0.021	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-58	0.025		0.021	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-59	0.16	C	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-6	0.087		0.021	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-60	0.18		0.021	0.0039	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-61	3.3	C B	0.086	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-62	0.16	C59	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-63	0.073		0.021	0.0036	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-64	0.66		0.021	0.0035	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-65	2.2	B C44	0.064	0.0047	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-66	2.0	B	0.021	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-67	0.037		0.021	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-68	0.053		0.021	0.0035	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-69	1.6	C49	0.043	0.0043	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-7	0.016	J q	0.021	0.0029	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-70	3.3	C61 B	0.086	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-71	0.90	C40	0.064	0.0053	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-72	0.071		0.021	0.0038	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-73	0.044	C43 q	0.043	0.0050	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-74	3.3	C61 B	0.086	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-75	0.16	C59	0.064	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-76	3.3	C61 B	0.086	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-77	0.15		0.021	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-78	ND		0.021	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-79	0.035		0.021	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-8	0.24		0.043	0.0027	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-80	ND		0.021	0.0034	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-81	ND		0.021	0.0037	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-82	0.38		0.021	0.00072	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-83	3.0	C	0.043	0.00066	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-84	1.1		0.021	0.00073	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-85	0.54	C	0.064	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-86	2.3	C	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-87	2.3	C86	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-88	0.83	C	0.043	0.00065	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-89	0.035		0.021	0.00071	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-9	0.020	J q	0.021	0.0030	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-90	4.7	C B	0.064	0.00055	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-91	0.83	C88	0.043	0.00065	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-92	0.99		0.021	0.00062	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-93	0.10	C q	0.043	0.00063	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-94	0.031	q	0.021	0.00071	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-95	4.0	B	0.021	0.00068	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-96	0.042		0.021	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-97	2.3	C86	0.13	0.00054	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-98	0.16	C	0.043	0.00061	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
PCB-99	3.0	C83	0.043	0.00066	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Polychlorinated biphenyls, Total	110	B q	0.13	0.0035	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Monochlorobiphenyls	0.15		0.021	0.00084	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Dichlorobiphenyls	0.88	q	0.043	0.0030	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Trichlorobiphenyls	5.5	B q	0.043	0.0019	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Tetrachlorobiphenyls	17	B q	0.086	0.0041	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Pentachlorobiphenyls	28	B q	0.13	0.0018	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Hexachlorobiphenyls	34	B q	0.086	0.0060	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Heptachlorobiphenyls	17	q	0.043	0.0024	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Octachlorobiphenyls	4.0		0.043	0.0040	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2
Total Nonachlorobiphenyls	0.67		0.021	0.0042	ng/g	☼	11/12/18 10:55	11/28/18 03:41	2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-104L	85		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-105L	90		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-114L	90		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-118L	91		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-123L	90		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-126L	87		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-155L	74		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-156L	75	C	30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-157L	75	C156	30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-15L	79		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-167L	87		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-169L	87		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-170L	82		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-188L	104		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-189L	87		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-19L	94		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-1L	66		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-202L	98		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-205L	73		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-206L	79		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-208L	75		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-209L	68		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-37L	90		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-3L	70		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-4L	77		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-54L	33		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-77L	82		30 - 140	11/12/18 10:55	11/28/18 03:41	2
PCB-81L	82		30 - 140	11/12/18 10:55	11/28/18 03:41	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-111L	85		40 - 125	11/12/18 10:55	11/28/18 03:41	2
PCB-178L	98		40 - 125	11/12/18 10:55	11/28/18 03:41	2
PCB-28L	93		40 - 125	11/12/18 10:55	11/28/18 03:41	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Duplicates	34000		2000	44	mg/Kg	-		11/06/18 11:38	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	45.2		0.1	0.1	%			11/03/18 10:42	1
Percent Moisture	54	H	0.10	0.10	%			11/07/18 10:38	1
Percent Solids	46	H	0.10	0.10	%			11/07/18 10:38	1

Method: D7928/D6913 - ASTM D7928/D6913

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Clay	12.7				%			11/07/18 10:38	1
Coarse Sand	0.2				%			11/07/18 10:38	1
Fine Sand	35.1				%			11/07/18 10:38	1
Gravel	0.0				%			11/07/18 10:38	1
Medium Sand	2.1				%			11/07/18 10:38	1
Silt	49.9				%			11/07/18 10:38	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	1.36		0.0100	0.0100	g/cm3			11/10/18 00:00	1
Specific Gravity	1.37		0.0100	0.0100	NONE			11/10/18 00:00	1

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.45	0.061	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1221	ND		0.45	0.075	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1232	ND		0.45	0.063	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1242	ND		0.45	0.059	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1248	ND		0.45	0.052	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1254	ND		0.45	0.075	ug/L		10/31/18 12:41	11/02/18 19:05	1
PCB-1260	ND		0.45	0.061	ug/L		10/31/18 12:41	11/02/18 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	56		38 - 140	10/31/18 12:41	11/02/18 19:05	1
Tetrachloro-m-xylene	72		40 - 120	10/31/18 12:41	11/02/18 19:05	1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	ND		56	1.8	pg/L		11/08/18 09:16	11/13/18 14:46	1
2,3,4,7,8-PeCDF	ND		56	1.2	pg/L		11/08/18 09:16	11/13/18 14:46	1
2,3,7,8-TCDD	7.4	J q	11	1.8	pg/L		11/08/18 09:16	11/13/18 14:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	55		23 - 140	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,4,6,7,8-HpCDF	56		28 - 143	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,4,7,8,9-HpCDF	58		26 - 138	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,4,7,8-HxCDD	62		32 - 141	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,4,7,8-HxCDF	70		26 - 152	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,6,7,8-HxCDD	63		28 - 130	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,6,7,8-HxCDF	63		26 - 123	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,7,8,9-HxCDF	66		29 - 147	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,7,8-PeCDD	76		25 - 181	11/08/18 09:16	11/13/18 14:46	1
13C-1,2,3,7,8-PeCDF	62		24 - 185	11/08/18 09:16	11/13/18 14:46	1
13C-2,3,4,6,7,8-HxCDF	64		28 - 136	11/08/18 09:16	11/13/18 14:46	1
13C-2,3,4,7,8-PeCDF	85		21 - 178	11/08/18 09:16	11/13/18 14:46	1
13C-2,3,7,8-TCDD	65		25 - 164	11/08/18 09:16	11/13/18 14:46	1
13C-2,3,7,8-TCDF	70		24 - 169	11/08/18 09:16	11/13/18 14:46	1
13C-OCDD	59		17 - 157	11/08/18 09:16	11/13/18 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl-2,3,7,8-TCDD	82		35 - 197	11/08/18 09:16	11/13/18 14:46	1

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.0016	J B q	0.045	0.00027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-2	0.0043	J B	0.045	0.00031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-3	0.0024	J B q	0.045	0.00033	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-4	ND		0.068	0.0033	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-5	ND		0.045	0.0027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-6	ND		0.045	0.0024	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-7	ND		0.045	0.0025	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-8	0.0040	J B q	0.068	0.0022	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-9	ND		0.045	0.0025	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-10	ND		0.045	0.0027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-11	0.019	J B	0.068	0.0023	ng/L		11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-12	0.0026	J C q	0.091	0.0024	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-13	0.0026	J C12 q	0.091	0.0024	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-14	ND		0.045	0.0021	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-15	ND		0.045	0.0026	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-16	0.0016	J q	0.045	0.00023	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-17	0.0012	J q	0.045	0.00020	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-18	0.0042	J C B	0.091	0.00018	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-19	0.0019	J q	0.045	0.00025	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-20	0.0038	J C B q	0.091	0.00039	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-21	0.0026	J C B q	0.091	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-22	0.0029	J B q	0.045	0.00040	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-23	ND		0.045	0.00039	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-24	ND		0.045	0.00017	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-25	ND		0.045	0.00036	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-26	0.0014	J C B q	0.091	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-27	ND		0.045	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-28	0.0038	J B C20 q	0.091	0.00039	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-29	0.0014	J C26 B q	0.091	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-30	0.0042	J C18 B	0.091	0.00018	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-31	0.0031	J B	0.045	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-32	0.0018	J B q	0.045	0.00014	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-33	0.0026	J B C21 q	0.091	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-34	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-35	0.00099	J B q	0.045	0.00040	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-36	ND		0.045	0.00038	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-37	ND		0.045	0.00039	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-38	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-39	ND		0.045	0.00037	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-40	ND	C	0.14	0.00078	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-41	ND	C40	0.14	0.00078	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-42	ND		0.045	0.00078	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-43	ND	C	0.091	0.00073	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-44	0.022	J C B q	0.14	0.00069	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-45	0.0040	J C B q	0.091	0.00082	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-46	ND		0.045	0.00099	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-47	0.022	J B C44 q	0.14	0.00069	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-48	ND		0.045	0.00078	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-49	0.0040	J C	0.091	0.00064	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-50	0.0013	J C q	0.091	0.00075	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-51	0.0040	J C45 B q	0.091	0.00082	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-52	0.0064	J B	0.045	0.00077	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-53	0.0013	J C50 q	0.091	0.00075	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-54	ND		0.045	0.000043	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-55	ND		0.045	0.00057	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-56	ND		0.045	0.00057	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-57	ND		0.045	0.00058	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-58	ND		0.045	0.00058	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-59	ND	C	0.14	0.00055	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-60	ND		0.045	0.00058	ng/L		11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-61	0.0051	J C B	0.18	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-62	ND	C59	0.14	0.00055	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-63	ND		0.045	0.00053	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-64	0.0023	J B	0.045	0.00052	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-65	0.022	J B C44 q	0.14	0.00069	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-66	0.0033	J B q	0.045	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-67	ND		0.045	0.00050	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-68	0.0024	J B	0.045	0.00051	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-69	0.0040	J C49	0.091	0.00064	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-70	0.0051	J C61 B	0.18	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-71	ND	C40	0.14	0.00078	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-72	ND		0.045	0.00056	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-73	ND	C43	0.091	0.00073	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-74	0.0051	J C61 B	0.18	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-75	ND	C59	0.14	0.00055	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-76	0.0051	J C61 B	0.18	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-77	0.0013	J B q	0.045	0.00055	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-78	ND		0.045	0.00058	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-79	ND		0.045	0.00050	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-80	ND		0.045	0.00050	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-81	ND		0.045	0.00053	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-82	ND		0.045	0.00018	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-83	0.0031	J C B q	0.091	0.00016	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-84	0.0016	J B	0.045	0.00018	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-85	0.0025	J C B	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-86	0.0051	J C B	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-87	0.0051	J B C86	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-88	0.0016	J C B q	0.091	0.00016	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-89	ND		0.045	0.00017	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-90	0.011	J C B	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-91	0.0016	J C88 B q	0.091	0.00016	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-92	0.0019	J B	0.045	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-93	ND	C	0.091	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-94	ND		0.045	0.00017	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-95	0.0088	J B	0.045	0.00017	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-96	ND		0.045	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-97	0.0051	J B C86	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-98	ND	C	0.091	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-99	0.0031	J C83 B q	0.091	0.00016	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-100	ND	C93	0.091	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-101	0.011	J B C90	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-102	ND	C98	0.091	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-103	ND		0.045	0.00015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-104	ND		0.045	0.00012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-105	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-106	ND		0.045	0.00043	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-107	ND		0.045	0.00047	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-108	ND	C	0.091	0.00045	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-109	0.0051	J B C86	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-110	0.0074	J C B	0.091	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-111	ND		0.045	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-112	ND		0.045	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-113	0.011	J B C90	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-114	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-115	0.0074	J B C110	0.091	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-116	0.0025	J C85 B	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-117	0.0025	J C85 B	0.14	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-118	0.0038	J B q	0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-119	0.0051	J B C86	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-120	ND		0.045	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-121	ND		0.045	0.00011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-122	ND		0.045	0.00050	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-123	ND		0.045	0.00044	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-124	ND	C108	0.091	0.00045	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-125	0.0051	J B C86	0.27	0.00013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-126	ND		0.045	0.00046	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-127	ND		0.045	0.00043	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-128	ND	C	0.091	0.0010	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-129	0.037	J C B	0.18	0.0011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-130	ND		0.045	0.0014	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-131	ND		0.045	0.0015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-132	0.0090	J	0.045	0.0014	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-133	ND		0.045	0.0013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-134	ND	C	0.091	0.0014	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-135	0.011	J C B	0.091	0.000047	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-136	0.0034	J q	0.045	0.000034	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-137	ND		0.045	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-138	0.037	J B C129	0.18	0.0011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-139	ND	C	0.091	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-140	ND	C139	0.091	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-141	0.0064	J B q	0.045	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-142	ND		0.045	0.0013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-143	ND	C134	0.091	0.0014	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-144	0.00083	J q	0.045	0.000043	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-145	0.00060	J B	0.045	0.000032	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-146	0.0048	J B	0.045	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-147	0.033	J C B	0.091	0.0013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-148	ND		0.045	0.000045	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-149	0.033	J B C147	0.091	0.0013	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-150	ND		0.045	0.000031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-151	0.011	J C135 B	0.091	0.000047	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-152	ND		0.045	0.000033	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-153	0.033	J C B	0.091	0.00093	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-154	ND		0.045	0.000037	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-155	0.00049	J	0.045	0.000031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-156	0.0041	J C B	0.091	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-157	0.0041	J C156 B	0.091	0.0012	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-158	0.0036	J B	0.045	0.00084	ng/L		11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-159	ND		0.045	0.00089	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-160	0.037	J B C129	0.18	0.0011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-161	ND		0.045	0.00088	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-162	ND		0.045	0.00087	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-163	0.037	J B C129	0.18	0.0011	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-164	ND		0.045	0.00093	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-165	ND		0.045	0.0010	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-166	ND	C128	0.091	0.0010	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-167	ND		0.045	0.00066	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-168	0.033	J B C153	0.091	0.00093	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-169	ND		0.045	0.00064	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-170	0.019	J B q	0.045	0.00032	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-171	0.0054	J C	0.091	0.00031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-172	0.0038	J B q	0.045	0.00031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-173	0.0054	J C171	0.091	0.00031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-174	0.018	J B	0.045	0.00029	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-175	ND		0.045	0.00028	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-176	0.0021	J B	0.045	0.00021	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-177	0.010	J B	0.045	0.00030	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-178	0.0033	J B	0.045	0.00030	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-179	0.0076	J B	0.045	0.00022	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-180	0.046	J C B	0.091	0.00023	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-181	ND		0.045	0.00028	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-182	ND		0.045	0.00027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-183	0.014	J C B	0.091	0.00027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-184	ND		0.045	0.00023	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-185	0.014	J B C183	0.091	0.00027	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-186	ND		0.045	0.00022	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-187	0.019	J B	0.045	0.00026	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-188	ND		0.045	0.00020	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-189	ND		0.045	0.0015	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-190	0.0038	J B q	0.045	0.00020	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-191	0.0013	J B q	0.045	0.00021	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-192	0.0018	J B q	0.045	0.00024	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-193	0.046	J C180 B	0.091	0.00023	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-194	ND		0.045	0.0031	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-195	ND		0.045	0.0034	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-196	0.0051	J B	0.045	0.00053	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-197	ND		0.045	0.00040	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-198	0.0066	J C B	0.091	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-199	0.0066	J C198 B	0.091	0.00054	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-200	ND		0.045	0.00036	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-201	ND		0.045	0.00037	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-202	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-203	0.0053	J B	0.045	0.00048	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-204	ND		0.045	0.00041	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-205	ND		0.045	0.0026	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-206	ND		0.045	0.0033	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-207	ND		0.045	0.0024	ng/L		11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-208	ND		0.045	0.0025	ng/L		11/01/18 12:40	11/09/18 20:21	1
PCB-209	0.0049	J B	0.045	0.00022	ng/L		11/01/18 12:40	11/09/18 20:21	1
Total Monochlorobiphenyls	0.0083	J B q	0.045	0.0000003	ng/L		11/01/18 12:40	11/09/18 20:21	1
				0					
Total Dichlorobiphenyls	0.026	J B q	0.091	0.0000025	ng/L		11/01/18 12:40	11/09/18 20:21	1
Total Trichlorobiphenyls	0.025	J B q	0.091	0.0000003	ng/L		11/01/18 12:40	11/09/18 20:21	1
				2					
Total Tetrachlorobiphenyls	0.052	J B q	0.18	0.0000006	ng/L		11/01/18 12:40	11/09/18 20:21	1
				1					
Total Pentachlorobiphenyls	0.047	J B q	0.27	0.0000002	ng/L		11/01/18 12:40	11/09/18 20:21	1
				4					
Total Hexachlorobiphenyls	0.15	J B q	0.18	0.0000008	ng/L		11/01/18 12:40	11/09/18 20:21	1
				0					
Total Heptachlorobiphenyls	0.16	B q	0.091	0.0000003	ng/L		11/01/18 12:40	11/09/18 20:21	1
				2					
Total Octachlorobiphenyls	0.017	J B	0.091	0.0000011	ng/L		11/01/18 12:40	11/09/18 20:21	1
Total Nonachlorobiphenyls	ND		0.045	0.0000033	ng/L		11/01/18 12:40	11/09/18 20:21	1
Polychlorinated biphenyls, Total	0.48	B q	0.27	0.0000011	ng/L		11/01/18 12:40	11/09/18 20:21	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	71		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-3L	67		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-4L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-15L	78		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-19L	92		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-37L	86		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-54L	77		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-77L	80		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-81L	79		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-104L	81		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-105L	91		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-114L	86		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-118L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-123L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-126L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-155L	88		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-156L	85	C	30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-157L	85	C156	30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-167L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-169L	93		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-170L	82		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-188L	84		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-189L	75		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-202L	100		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-205L	73		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-206L	85		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-208L	82		30 - 140	11/01/18 12:40	11/09/18 20:21	1
PCB-209L	89		30 - 140	11/01/18 12:40	11/09/18 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	88		40 - 125	11/01/18 12:40	11/09/18 20:21	1
PCB-111L	89		40 - 125	11/01/18 12:40	11/09/18 20:21	1

Eurofins TestAmerica, Seattle

Client Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-178L	94		40 - 125	11/01/18 12:40	11/09/18 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0	2.0	mg/L			10/30/18 21:13	1
Total Organic Carbon	0.47	J B	1.0	0.19	mg/L			11/08/18 12:19	1

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 580-287880/1-A

Matrix: Water

Analysis Batch: 288090

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 287880

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.45	0.061	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1221	ND		0.45	0.075	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1232	ND		0.45	0.063	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1242	ND		0.45	0.059	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1248	ND		0.45	0.052	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1254	ND		0.45	0.075	ug/L		10/31/18 12:41	11/02/18 18:12	1
PCB-1260	ND		0.45	0.061	ug/L		10/31/18 12:41	11/02/18 18:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		38 - 140	10/31/18 12:41	11/02/18 18:12	1
Tetrachloro-m-xylene	82		40 - 120	10/31/18 12:41	11/02/18 18:12	1

Lab Sample ID: LCS 580-287880/2-A

Matrix: Water

Analysis Batch: 288090

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 287880

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	0.800	0.736		ug/L		92	50 - 121
PCB-1260	0.800	0.797		ug/L		100	55 - 132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	75		38 - 140
Tetrachloro-m-xylene	83		40 - 120

Lab Sample ID: LCSD 580-287880/3-A

Matrix: Water

Analysis Batch: 288090

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 287880

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	0.800	0.751		ug/L		94	50 - 121	2	25
PCB-1260	0.800	0.868		ug/L		109	55 - 132	9	22

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	78		38 - 140
Tetrachloro-m-xylene	87		40 - 120

Lab Sample ID: MB 580-288730/1-A

Matrix: Solid

Analysis Batch: 288909

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 288730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.0	0.34	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1221	ND		2.0	0.95	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1232	ND		2.0	0.47	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1242	ND		2.0	0.49	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1248	ND		2.0	0.16	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1254	ND		2.0	0.79	ug/Kg		11/13/18 10:16	11/14/18 15:00	1
PCB-1260	ND		2.0	0.34	ug/Kg		11/13/18 10:16	11/14/18 15:00	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	116		54 - 142	11/13/18 10:16	11/14/18 15:00	1
Tetrachloro-m-xylene	75		58 - 122	11/13/18 10:16	11/14/18 15:00	1

Lab Sample ID: LCS 580-288730/2-A
Matrix: Solid
Analysis Batch: 288909

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288730
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	10.0	10.0		ug/Kg		100	64 - 120
PCB-1260	10.0	10.3		ug/Kg		103	63 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	121		54 - 142
Tetrachloro-m-xylene	68		58 - 122

Lab Sample ID: 580-81440-1 MS
Matrix: Solid
Analysis Batch: 288909

Client Sample ID: E-9.02-0to26-102418
Prep Type: Total/NA
Prep Batch: 288730
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND	F1	27.8	44.3	F1	ug/Kg	☼	159	64 - 120
PCB-1260	29	F1	27.8	43.6	F1	ug/Kg	☼	53	63 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	79		54 - 142
Tetrachloro-m-xylene	63		58 - 122

Lab Sample ID: 580-81440-1 MSD
Matrix: Solid
Analysis Batch: 288909

Client Sample ID: E-9.02-0to26-102418
Prep Type: Total/NA
Prep Batch: 288730
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND	F1	28.9	51.5	F1	ug/Kg	☼	178	64 - 120	15	21
PCB-1260	29	F1	28.9	50.3		ug/Kg	☼	74	63 - 130	14	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	92		54 - 142
Tetrachloro-m-xylene	67		58 - 122

Lab Sample ID: MB 580-289426/1-A
Matrix: Solid
Analysis Batch: 289603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 289426

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		2.0	0.34	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1221	ND		2.0	0.95	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1232	ND		2.0	0.47	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1242	ND		2.0	0.49	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1248	ND		2.0	0.16	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1254	ND		2.0	0.79	ug/Kg		11/21/18 09:51	11/26/18 13:09	1
PCB-1260	ND		2.0	0.34	ug/Kg		11/21/18 09:51	11/26/18 13:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	69		54 - 142	11/21/18 09:51	11/26/18 13:09	1
Tetrachloro-m-xylene	66		58 - 122	11/21/18 09:51	11/26/18 13:09	1

Lab Sample ID: LCS 580-289426/2-A

Matrix: Solid

Analysis Batch: 289603

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 289426

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1016	10.0	7.76		ug/Kg		78	64 - 120
PCB-1260	10.0	7.59		ug/Kg		76	63 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	66		54 - 142
Tetrachloro-m-xylene	58		58 - 122

Lab Sample ID: 580-81440-6 MS

Matrix: Solid

Analysis Batch: 289603

Client Sample ID: B-9.15-0to30-102418

Prep Type: Total/NA

Prep Batch: 289426

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
PCB-1016	ND	F1	21.8	64.8	F1	ug/Kg	☼	297	64 - 120
PCB-1260	34		21.8	54.6		ug/Kg	☼	93	63 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl	87		54 - 142
Tetrachloro-m-xylene	69		58 - 122

Lab Sample ID: 580-81440-6 MSD

Matrix: Solid

Analysis Batch: 289603

Client Sample ID: B-9.15-0to30-102418

Prep Type: Total/NA

Prep Batch: 289426

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
PCB-1016	ND	F1	21.9	74.5	F1	ug/Kg	☼	340	64 - 120	14	21
PCB-1260	34		21.9	50.9		ug/Kg	☼	75	63 - 130	7	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl	75		54 - 142
Tetrachloro-m-xylene	56	X	58 - 122

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-257820/1-A

Matrix: Water

Analysis Batch: 259030

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 257820

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	ND		50	8.1	pg/L		11/08/18 09:16	11/13/18 10:24	1
2,3,4,7,8-PeCDF	ND		50	5.1	pg/L		11/08/18 09:16	11/13/18 10:24	1
2,3,7,8-TCDD	ND		10	3.5	pg/L		11/08/18 09:16	11/13/18 10:24	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

<i>Isotope Dilution</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C-1,2,3,4,6,7,8-HpCDD	71		23 - 140	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,4,6,7,8-HpCDF	69		28 - 143	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,4,7,8,9-HpCDF	76		26 - 138	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,4,7,8-HxCDD	88		32 - 141	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,4,7,8-HxCDF	84		26 - 152	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,6,7,8-HxCDD	82		28 - 130	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,6,7,8-HxCDF	81		26 - 123	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,7,8,9-HxCDF	84		29 - 147	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,7,8-PeCDD	82		25 - 181	11/08/18 09:16	11/13/18 10:24	1
13C-1,2,3,7,8-PeCDF	78		24 - 185	11/08/18 09:16	11/13/18 10:24	1
13C-2,3,4,6,7,8-HxCDF	84		28 - 136	11/08/18 09:16	11/13/18 10:24	1
13C-2,3,4,7,8-PeCDF	84		21 - 178	11/08/18 09:16	11/13/18 10:24	1
13C-2,3,7,8-TCDD	78		25 - 164	11/08/18 09:16	11/13/18 10:24	1
13C-2,3,7,8-TCDF	79		24 - 169	11/08/18 09:16	11/13/18 10:24	1
13C-OCDD	94		17 - 157	11/08/18 09:16	11/13/18 10:24	1
<i>Surrogate</i>	<i>MB</i> <i>%Recovery</i>	<i>MB</i> <i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
37Cl4-2,3,7,8-TCDD	106		35 - 197	11/08/18 09:16	11/13/18 10:24	1

Lab Sample ID: LCS 320-257820/2-A

Matrix: Water

Analysis Batch: 259030

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 257820

<i>Analyte</i>	<i>Spike</i> <i>Added</i>	<i>LCS</i> <i>Result</i>	<i>LCS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i> <i>Limits</i>
1,2,3,7,8-PeCDD	1000	1290		pg/L		129	70 - 142
2,3,4,7,8-PeCDF	1000	1300		pg/L		130	68 - 160
2,3,7,8-TCDD	200	257		pg/L		128	67 - 158
<i>Isotope Dilution</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>				
13C-1,2,3,4,6,7,8-HpCDD	52		26 - 166				
13C-1,2,3,4,6,7,8-HpCDF	52		21 - 158				
13C-1,2,3,4,7,8,9-HpCDF	58		20 - 186				
13C-1,2,3,4,7,8-HxCDD	67		21 - 193				
13C-1,2,3,4,7,8-HxCDF	71		19 - 202				
13C-1,2,3,6,7,8-HxCDD	61		25 - 163				
13C-1,2,3,6,7,8-HxCDF	69		21 - 159				
13C-1,2,3,7,8,9-HxCDF	69		17 - 205				
13C-1,2,3,7,8-PeCDD	36		21 - 227				
13C-1,2,3,7,8-PeCDF	40		21 - 192				
13C-2,3,4,6,7,8-HxCDF	73		22 - 176				
13C-2,3,4,7,8-PeCDF	41		13 - 328				
13C-2,3,7,8-TCDD	63		20 - 175				
13C-2,3,7,8-TCDF	64		22 - 152				
13C-OCDD	56		13 - 199				
<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>LCS</i> <i>Qualifier</i>	<i>Limits</i>				
37Cl4-2,3,7,8-TCDD	87		31 - 191				

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-257820/3-A

Matrix: Water

Analysis Batch: 259030

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 257820

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3,7,8-PeCDD	1000	1310		pg/L		131	70 - 142	2	50
2,3,4,7,8-PeCDF	1000	1230		pg/L		123	68 - 160	6	50
2,3,7,8-TCDD	200	263		pg/L		131	67 - 158	2	50

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C-1,2,3,4,6,7,8-HpCDD	31		26 - 166
13C-1,2,3,4,6,7,8-HpCDF	35		21 - 158
13C-1,2,3,4,7,8,9-HpCDF	33		20 - 186
13C-1,2,3,4,7,8-HxCDD	66		21 - 193
13C-1,2,3,4,7,8-HxCDF	67		19 - 202
13C-1,2,3,6,7,8-HxCDD	62		25 - 163
13C-1,2,3,6,7,8-HxCDF	67		21 - 159
13C-1,2,3,7,8,9-HxCDF	68		17 - 205
13C-1,2,3,7,8-PeCDD	74		21 - 227
13C-1,2,3,7,8-PeCDF	87		21 - 192
13C-2,3,4,6,7,8-HxCDF	70		22 - 176
13C-2,3,4,7,8-PeCDF	88		13 - 328
13C-2,3,7,8-TCDD	62		20 - 175
13C-2,3,7,8-TCDF	68		22 - 152
13C-OCDD	42		13 - 199

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
37Cl4-2,3,7,8-TCDD	87		31 - 191

Lab Sample ID: MB 320-258301/1-A

Matrix: Solid

Analysis Batch: 259161

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 258301

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3,7,8-PeCDD	ND		0.0050	0.000026	ug/Kg		11/10/18 07:19	11/14/18 20:07	1
2,3,4,7,8-PeCDF	ND		0.0050	0.000028	ug/Kg		11/10/18 07:19	11/14/18 20:07	1
2,3,7,8-TCDD	ND		0.0010	0.000042	ug/Kg		11/10/18 07:19	11/14/18 20:07	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-1,2,3,4,6,7,8-HpCDD	89		23 - 140	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,4,6,7,8-HpCDF	91		28 - 143	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,4,7,8,9-HpCDF	91		26 - 138	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,4,7,8-HxCDD	79		32 - 141	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,4,7,8-HxCDF	78		26 - 152	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,6,7,8-HxCDD	83		28 - 130	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,6,7,8-HxCDF	79		26 - 123	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,7,8,9-HxCDF	87		29 - 147	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,7,8-PeCDD	81		25 - 181	11/10/18 07:19	11/14/18 20:07	1
13C-1,2,3,7,8-PeCDF	86		24 - 185	11/10/18 07:19	11/14/18 20:07	1
13C-2,3,4,6,7,8-HxCDF	77		28 - 136	11/10/18 07:19	11/14/18 20:07	1
13C-2,3,4,7,8-PeCDF	85		21 - 178	11/10/18 07:19	11/14/18 20:07	1
13C-2,3,7,8-TCDD	83		25 - 164	11/10/18 07:19	11/14/18 20:07	1
13C-2,3,7,8-TCDF	87		24 - 169	11/10/18 07:19	11/14/18 20:07	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: MB 320-258301/1-A

Matrix: Solid

Analysis Batch: 259161

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 258301

		MB	MB			
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C-OCDD	82		17 - 157	11/10/18 07:19	11/14/18 20:07	1
		MB	MB			
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
37Cl4-2,3,7,8-TCDD	118		35 - 197	11/10/18 07:19	11/14/18 20:07	1

Lab Sample ID: LCS 320-258301/2-A

Matrix: Solid

Analysis Batch: 259161

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 258301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2,3,7,8-PeCDD	0.100	0.113		ug/Kg		113	70 - 142
2,3,4,7,8-PeCDF	0.100	0.111		ug/Kg		111	68 - 160
2,3,7,8-TCDD	0.0200	0.0210		ug/Kg		105	67 - 158
		LCS	LCS				
Isotope Dilution	%Recovery	Qualifier	Limits				
13C-1,2,3,4,6,7,8-HpCDD	89		26 - 166				
13C-1,2,3,4,6,7,8-HpCDF	85		21 - 158				
13C-1,2,3,4,7,8,9-HpCDF	94		20 - 186				
13C-1,2,3,4,7,8-HxCDD	75		21 - 193				
13C-1,2,3,4,7,8-HxCDF	76		19 - 202				
13C-1,2,3,6,7,8-HxCDD	79		25 - 163				
13C-1,2,3,6,7,8-HxCDF	78		21 - 159				
13C-1,2,3,7,8,9-HxCDF	79		17 - 205				
13C-1,2,3,7,8-PeCDD	72		21 - 227				
13C-1,2,3,7,8-PeCDF	74		21 - 192				
13C-2,3,4,6,7,8-HxCDF	76		22 - 176				
13C-2,3,4,7,8-PeCDF	73		13 - 328				
13C-2,3,7,8-TCDD	74		20 - 175				
13C-2,3,7,8-TCDF	77		22 - 152				
13C-OCDD	87		13 - 199				
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
37Cl4-2,3,7,8-TCDD	109		31 - 191				

Lab Sample ID: LCSD 320-258301/3-A

Matrix: Solid

Analysis Batch: 259161

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 258301

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
1,2,3,7,8-PeCDD	0.100	0.113		ug/Kg		113	70 - 142	1	50
2,3,4,7,8-PeCDF	0.100	0.111		ug/Kg		111	68 - 160	0	50
2,3,7,8-TCDD	0.0200	0.0215		ug/Kg		108	67 - 158	2	50
		LCSD	LCSD						
Isotope Dilution	%Recovery	Qualifier	Limits						
13C-1,2,3,4,6,7,8-HpCDD	97		26 - 166						
13C-1,2,3,4,6,7,8-HpCDF	97		21 - 158						
13C-1,2,3,4,7,8,9-HpCDF	102		20 - 186						
13C-1,2,3,4,7,8-HxCDD	87		21 - 193						

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCSD 320-258301/3-A

Matrix: Solid

Analysis Batch: 259161

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 258301

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C-1,2,3,4,7,8-HxCDF	82		19 - 202
13C-1,2,3,6,7,8-HxCDD	85		25 - 163
13C-1,2,3,6,7,8-HxCDF	83		21 - 159
13C-1,2,3,7,8,9-HxCDF	93		17 - 205
13C-1,2,3,7,8-PeCDD	82		21 - 227
13C-1,2,3,7,8-PeCDF	88		21 - 192
13C-2,3,4,6,7,8-HxCDF	82		22 - 176
13C-2,3,4,7,8-PeCDF	86		13 - 328
13C-2,3,7,8-TCDD	85		20 - 175
13C-2,3,7,8-TCDF	81		22 - 152
13C-OCDD	94		13 - 199

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
37Cl-4,2,3,7,8-TCDD	118		31 - 191

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	0.00183	J q	0.040	0.00035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-10	ND		0.040	0.0036	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-11	0.0200	J q	0.060	0.0032	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-12	ND	C	0.080	0.0033	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-13	ND	C12	0.080	0.0033	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-14	ND		0.040	0.0028	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-15	0.00433	J q	0.040	0.0035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-16	ND		0.040	0.00064	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-100	ND	C93	0.080	0.00035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-101	0.00937	J C90	0.12	0.00031	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-102	0.00278	J C98 q	0.080	0.00034	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-103	ND		0.040	0.00035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-17	ND		0.040	0.00057	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-104	ND		0.040	0.00027	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-105	0.00502	J	0.040	0.00045	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-106	0.00234	J q	0.040	0.00047	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-107	0.00305	J q	0.040	0.00051	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-108	0.00593	J C q	0.080	0.00049	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-109	0.0193	J C86	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-110	0.00781	J C	0.080	0.00025	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-111	ND		0.040	0.00025	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-112	0.00140	J q	0.040	0.00026	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-113	0.00937	J C90	0.12	0.00031	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-114	0.00329	J q	0.040	0.00044	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-115	0.00781	J C110	0.080	0.00025	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-116	0.00639	J C85 q	0.12	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-117	0.00639	J C85 q	0.12	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-18	0.00344	J C	0.080	0.00050	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-118	0.00761	J	0.040	0.00044	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-119	0.0193	J C86	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-120	0.00168	J	0.040	0.00025	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-121	0.00121	J q	0.040	0.00026	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-122	0.00268	J q	0.040	0.00055	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-123	0.00304	J q	0.040	0.00048	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-124	0.00593	J q C108	0.080	0.00049	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-125	0.0193	J C86	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-126	0.00675	J	0.040	0.00051	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-127	0.00418	J q	0.040	0.00047	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-128	0.00786	J C	0.080	0.00067	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-129	0.0190	J C	0.16	0.00069	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-130	0.00481	J	0.040	0.00092	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-131	ND		0.040	0.00095	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-132	ND		0.040	0.00089	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-133	0.00178	J q	0.040	0.00087	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-19	ND		0.040	0.00070	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-134	0.00356	J C q	0.080	0.00090	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-135	0.00600	J C q	0.080	0.00033	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-136	ND		0.040	0.00024	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-137	0.00421	J	0.040	0.00078	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-138	0.0190	J C129	0.16	0.00069	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-139	0.00388	J C q	0.080	0.00077	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-140	0.00388	J C139 q	0.080	0.00077	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-141	0.00367	J q	0.040	0.00081	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-142	ND		0.040	0.00086	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-143	0.00356	J C134 q	0.080	0.00090	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-144	ND		0.040	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-145	0.000880	J q	0.040	0.00023	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-146	0.00472	J	0.040	0.00076	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-147	0.00776	J C q	0.080	0.00087	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-2	0.00313	J	0.040	0.00039	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-148	0.00206	J q	0.040	0.00032	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-20	0.00399	J C q	0.080	0.00062	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-149	0.00776	J C147 q	0.080	0.00087	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-150	ND		0.040	0.00022	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-151	0.00600	J C135 q	0.080	0.00033	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-152	ND		0.040	0.00023	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-153	0.00869	J C	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-154	0.00118	J q	0.040	0.00026	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-155	ND		0.040	0.00022	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-156	0.0122	J C	0.080	0.00077	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-157	0.0122	J C156	0.080	0.00077	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-158	0.00441	J	0.040	0.00055	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-159	0.00487	J	0.040	0.00058	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-160	0.0190	J C129	0.16	0.00069	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-161	0.00297	J q	0.040	0.00057	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-162	0.00280	J q	0.040	0.00057	ng/L		11/01/18 12:40	11/10/18 00:17	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-163	0.0190	J C129	0.16	0.00069	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-164	0.00256	J q	0.040	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-165	ND		0.040	0.00065	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-21	0.00315	J C q	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-166	0.00786	J C128	0.080	0.00067	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-167	0.00480	J q	0.040	0.00044	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-22	0.00309	J	0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-168	0.00869	J C153	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-23	ND		0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-169	0.00857	J	0.040	0.00042	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-24	ND		0.040	0.00048	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-170	0.00518	J q	0.040	0.00072	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-25	ND		0.040	0.00057	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-171	ND	C	0.080	0.00070	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-26	0.00255	J C	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-172	0.00501	J	0.040	0.00070	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-173	ND	C171	0.080	0.00070	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-27	ND		0.040	0.00042	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-174	0.00340	J q	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-28	0.00399	J C20 q	0.080	0.00062	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-175	0.00262	J q	0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-176	0.00171	J q	0.040	0.00048	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-29	0.00255	J C26	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-177	0.00458	J q	0.040	0.00067	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-3	0.00212	J q	0.040	0.00041	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-178	0.00219	J q	0.040	0.00069	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-30	0.00344	J C18	0.080	0.00050	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-179	0.00320	J q	0.040	0.00051	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-31	0.00398	J	0.040	0.00060	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-180	0.0109	J C q	0.080	0.00053	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-32	0.00352	J	0.040	0.00040	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-181	0.00409	J q	0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-33	0.00315	J C21 q	0.080	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-182	0.00253	J q	0.040	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-34	ND		0.040	0.00065	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-183	0.00738	J C q	0.080	0.00062	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-35	0.00307	J	0.040	0.00064	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-184	0.00216	J q	0.040	0.00052	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-36	ND		0.040	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-185	0.00738	J C183 q	0.080	0.00062	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-37	0.00356	J q	0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-186	0.00267	J	0.040	0.00050	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-187	0.00541	J	0.040	0.00059	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-38	0.00166	J q	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-188	0.00246	J	0.040	0.00045	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-39	0.00152	J q	0.040	0.00059	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-189	0.00729	J q	0.040	0.00022	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-190	0.00514	J	0.040	0.00046	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-4	ND		0.060	0.0044	ng/L		11/01/18 12:40	11/10/18 00:17	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-191	0.00601	J	0.040	0.00048	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-40	0.00615	J C	0.12	0.00091	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-192	0.00545	J	0.040	0.00053	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-193	0.0109	J C180 q	0.080	0.00053	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-41	0.00615	J C40	0.12	0.00091	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-194	0.0132	J	0.040	0.00045	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-42	ND		0.040	0.00091	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-195	0.00538	J	0.040	0.00050	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-43	0.00191	J C	0.080	0.00085	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-196	0.00485	J q	0.040	0.00020	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-197	0.00327	J	0.040	0.00015	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-44	0.0262	J C	0.12	0.00080	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-198	0.00829	J C q	0.080	0.00020	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-199	0.00829	J C198 q	0.080	0.00020	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-45	0.00763	J C	0.080	0.00096	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-200	0.00222	J q	0.040	0.00014	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-201	0.00276	J	0.040	0.00014	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-46	ND		0.040	0.0012	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-202	0.00291	J	0.040	0.00016	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-47	0.0262	J C44	0.12	0.00080	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-203	0.00585	J	0.040	0.00018	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-48	0.00206	J	0.040	0.00091	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-204	0.00293	J q	0.040	0.00015	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-49	ND	C	0.080	0.00074	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-205	0.0115	J	0.040	0.00038	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-206	0.00678	J q	0.040	0.0019	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-207	0.00335	J q	0.040	0.0014	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-5	ND		0.040	0.0037	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-208	0.00358	J q	0.040	0.0015	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-50	ND	C	0.080	0.00088	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-209	0.00938	J	0.040	0.000077	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-51	0.00763	J C45	0.080	0.00096	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-52	0.00349	J	0.040	0.00090	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-53	ND	C50	0.080	0.00088	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-54	0.00125	J q	0.040	0.000097	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-55	0.00176	J q	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-56	0.00440	J q	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-57	ND		0.040	0.00067	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-58	0.00189	J	0.040	0.00068	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-59	0.00442	J C	0.12	0.00064	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-6	ND		0.040	0.0032	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-60	0.00330	J q	0.040	0.00068	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-61	0.00859	J C q	0.16	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-62	0.00442	J C59	0.12	0.00064	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-63	0.00291	J	0.040	0.00062	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-64	0.00296	J q	0.040	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-65	0.0262	J C44	0.12	0.00080	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-66	0.00455	J q	0.040	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-67	ND		0.040	0.00058	ng/L		11/01/18 12:40	11/10/18 00:17	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-68	0.00362	J q	0.040	0.00060	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-69	ND	C49	0.080	0.00074	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-7	ND		0.040	0.0033	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-70	0.00859	J C61 q	0.16	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-71	0.00615	J C40	0.12	0.00091	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-72	0.00215	J	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-73	0.00191	J C43	0.080	0.00085	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-74	0.00859	J C61 q	0.16	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-75	0.00442	J C59	0.12	0.00064	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-76	0.00859	J C61 q	0.16	0.00063	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-77	0.00474	J	0.040	0.00066	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-78	0.00210	J q	0.040	0.00068	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-79	0.00139	J q	0.040	0.00059	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-8	0.00309	J q	0.060	0.0030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-80	0.00260	J	0.040	0.00058	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-81	ND		0.040	0.00061	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-82	0.00257	J q	0.040	0.00040	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-83	0.00471	J C q	0.080	0.00037	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-84	0.00173	J q	0.040	0.00041	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-85	0.00639	J C q	0.12	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-86	0.0193	J C	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-87	0.0193	J C86	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-88	0.00473	J C q	0.080	0.00036	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-89	ND		0.040	0.00040	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-9	ND		0.040	0.0034	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-90	0.00937	J C	0.12	0.00031	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-91	0.00473	J C88 q	0.080	0.00036	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-92	0.00162	J q	0.040	0.00035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-93	ND	C	0.080	0.00035	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-94	ND		0.040	0.00040	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-95	0.00413	J q	0.040	0.00038	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-96	0.00149	J	0.040	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-97	0.0193	J C86	0.24	0.00030	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-98	0.00278	J C q	0.080	0.00034	ng/L		11/01/18 12:40	11/10/18 00:17	1
PCB-99	0.00471	J C83 q	0.080	0.00037	ng/L		11/01/18 12:40	11/10/18 00:17	1
Total Monochlorobiphenyls	0.00708	J q	0.040	0.0000003	ng/L		11/01/18 12:40	11/10/18 00:17	1
				8					
Total Dichlorobiphenyls	0.0274	J q	0.080	0.0000034	ng/L		11/01/18 12:40	11/10/18 00:17	1
Total Trichlorobiphenyls	0.0335	J q	0.080	0.0000005	ng/L		11/01/18 12:40	11/10/18 00:17	1
				9					
Total Tetrachlorobiphenyls	0.100	J q	0.16	0.0000007	ng/L		11/01/18 12:40	11/10/18 00:17	1
				1					
Total Pentachlorobiphenyls	0.115	J q	0.24	0.0000003	ng/L		11/01/18 12:40	11/10/18 00:17	1
				8					
Total Hexachlorobiphenyls	0.123	J q	0.16	0.0000005	ng/L		11/01/18 12:40	11/10/18 00:17	1
				9					
Total Heptachlorobiphenyls	0.0894	q	0.080	0.0000005	ng/L		11/01/18 12:40	11/10/18 00:17	1
				7					
Total Octachlorobiphenyls	0.0632	J q	0.080	0.0000002	ng/L		11/01/18 12:40	11/10/18 00:17	1
				4					

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QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25006/5-A

Matrix: Water

Analysis Batch: 25281

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25006

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
Polychlorinated biphenyls, Total	0.582	q	0.24	0.0000009	ng/L		11/01/18 12:40	11/10/18 00:17	1
Total Nonachlorobiphenyls	0.0137	J q	0.040	0.0000016	ng/L		11/01/18 12:40	11/10/18 00:17	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-1L	63		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-3L	61		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-4L	77		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-15L	74		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-19L	82		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-37L	83		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-54L	70		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-104L	72		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-105L	88		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-114L	83		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-118L	83		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-123L	82		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-126L	82		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-155L	75		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-156L	80	C	30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-157L	80	C156	30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-167L	81		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-169L	87		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-170L	76		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-188L	78		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-189L	69		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-202L	95		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-205L	65		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-206L	76		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-208L	73		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-209L	78		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-77L	79		30 - 140				11/01/18 12:40	11/10/18 00:17	1
PCB-81L	78		30 - 140				11/01/18 12:40	11/10/18 00:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
PCB-28L	86		40 - 125				11/01/18 12:40	11/10/18 00:17	1
PCB-111L	83		40 - 125				11/01/18 12:40	11/10/18 00:17	1
PCB-178L	91		40 - 125				11/01/18 12:40	11/10/18 00:17	1

Lab Sample ID: LCS 140-25006/6-A

Matrix: Water

Analysis Batch: 25243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25006

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	1.00	0.793	B	ng/L		79	50 - 150
PCB-15	1.00	0.962	B	ng/L		96	50 - 150
PCB-104	1.00	1.00		ng/L		100	50 - 150
PCB-105	1.00	0.986	B	ng/L		99	50 - 150
PCB-114	1.00	1.04	B	ng/L		104	50 - 150

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: LCS 140-25006/6-A

Matrix: Water

Analysis Batch: 25243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25006

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-118	1.00	0.994	B	ng/L		99	50 - 150
PCB-123	1.00	1.11	B	ng/L		111	50 - 150
PCB-126	1.00	1.07	B	ng/L		107	50 - 150
PCB-19	1.00	1.12		ng/L		112	50 - 150
PCB-155	1.00	0.990		ng/L		99	50 - 150
PCB-156	2.00	1.99	C B	ng/L		100	50 - 150
PCB-157	2.00	1.99	C156 B	ng/L		100	50 - 150
PCB-167	1.00	0.998	B	ng/L		100	50 - 150
PCB-169	1.00	0.910	B	ng/L		91	50 - 150
PCB-3	1.00	0.826	B	ng/L		83	50 - 150
PCB-37	1.00	0.968	B	ng/L		97	50 - 150
PCB-188	1.00	0.991	B	ng/L		99	50 - 150
PCB-189	1.00	1.01	B	ng/L		101	50 - 150
PCB-4	1.00	0.898		ng/L		90	50 - 150
PCB-202	1.00	0.868	B	ng/L		87	50 - 150
PCB-205	1.00	1.10	B	ng/L		110	50 - 150
PCB-206	1.00	0.940	B	ng/L		94	50 - 150
PCB-208	1.00	0.975	B	ng/L		98	50 - 150
PCB-209	1.00	0.975	B	ng/L		98	50 - 150
PCB-54	1.00	1.05	B	ng/L		105	50 - 150
PCB-77	1.00	0.943	B	ng/L		94	50 - 150
PCB-81	1.00	0.899		ng/L		90	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	65		30 - 140
PCB-3L	64		30 - 140
PCB-4L	80		30 - 140
PCB-15L	74		30 - 140
PCB-19L	83		30 - 140
PCB-37L	84		30 - 140
PCB-54L	69		30 - 140
PCB-104L	74		30 - 140
PCB-105L	87		30 - 140
PCB-114L	83		30 - 140
PCB-118L	83		30 - 140
PCB-123L	81		30 - 140
PCB-126L	82		30 - 140
PCB-155L	78		30 - 140
PCB-156L	80	C	30 - 140
PCB-157L	80	C156	30 - 140
PCB-167L	81		30 - 140
PCB-169L	87		30 - 140
PCB-170L	76		30 - 140
PCB-188L	76		30 - 140
PCB-189L	69		30 - 140
PCB-202L	92		30 - 140
PCB-205L	65		30 - 140
PCB-206L	77		30 - 140
PCB-208L	74		30 - 140

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QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: LCS 140-25006/6-A

Matrix: Water

Analysis Batch: 25243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25006

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-209L	80		30 - 140
PCB-77L	80		30 - 140
PCB-81L	79		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	90		40 - 125
PCB-111L	88		40 - 125
PCB-178L	94		40 - 125

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1	ND		0.010	0.000088	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-10	ND		0.010	0.0017	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-11	ND		0.020	0.0015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-12	ND	C	0.020	0.0015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-13	ND	C12	0.020	0.0015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-14	ND		0.010	0.0013	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-15	ND		0.010	0.0017	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-16	ND		0.010	0.00014	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-100	ND	C93	0.020	0.000059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-101	0.000896	J q C90	0.030	0.000052	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-102	ND	C98	0.020	0.000057	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-103	ND		0.010	0.000059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-17	ND		0.010	0.00013	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-104	ND		0.010	0.000045	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-105	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-106	ND		0.010	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-107	ND		0.010	0.00030	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-108	ND	C	0.020	0.00029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-109	ND	C86	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-110	0.000484	J q C	0.020	0.000043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-111	ND		0.010	0.000041	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-112	ND		0.010	0.000044	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-113	0.000896	J q C90	0.030	0.000052	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-114	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-115	0.000484	J q C110	0.020	0.000043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-116	ND	C85	0.030	0.000050	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-117	ND	C85	0.030	0.000050	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-18	ND	C	0.020	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-118	ND		0.010	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-119	ND	C86	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-120	ND		0.010	0.000042	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-121	ND		0.010	0.000043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-122	ND		0.010	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-123	ND		0.010	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-124	ND	C108	0.020	0.00029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-125	ND	C86	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-126	ND		0.010	0.00031	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-127	ND		0.010	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-128	ND	C	0.020	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-129	0.00107	J q C	0.040	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-130	ND		0.010	0.00044	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-131	ND		0.010	0.00046	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-132	ND		0.010	0.00043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-133	ND		0.010	0.00042	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-19	ND		0.010	0.00015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-134	ND	C	0.020	0.00044	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-135	ND	C	0.020	0.000043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-136	ND		0.010	0.000031	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-137	ND		0.010	0.00038	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-138	0.00107	J q C129	0.040	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-139	ND	C	0.020	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-140	ND	C139	0.020	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-141	ND		0.010	0.00039	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-142	ND		0.010	0.00042	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-143	ND	C134	0.020	0.00044	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-144	ND		0.010	0.000039	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-145	ND		0.010	0.000029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-146	ND		0.010	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-147	ND	C	0.020	0.00042	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-2	ND		0.010	0.00010	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-148	ND		0.010	0.000041	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-20	0.000874	J q C	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-149	ND	C147	0.020	0.00042	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-150	ND		0.010	0.000028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-151	ND	C135	0.020	0.000043	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-152	ND		0.010	0.000030	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-153	ND	C	0.020	0.00029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-154	ND		0.010	0.000033	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-155	ND		0.010	0.000028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-156	ND	C	0.020	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-157	ND	C156	0.020	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-158	ND		0.010	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-159	ND		0.010	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-160	0.00107	J q C129	0.040	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-161	ND		0.010	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-162	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-163	0.00107	J q C129	0.040	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-164	ND		0.010	0.00029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-165	ND		0.010	0.00031	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-21	0.000605	J q C	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-166	ND	C128	0.020	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-167	0.000387	J	0.010	0.00020	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-22	ND		0.010	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-168	ND	C153	0.020	0.00029	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-23	ND		0.010	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-169	ND		0.010	0.00022	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-24	ND		0.010	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-170	ND		0.010	0.000090	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-25	ND		0.010	0.00017	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-171	ND	C	0.020	0.000087	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-26	ND	C	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-172	ND		0.010	0.000086	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-173	ND	C171	0.020	0.000087	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-27	ND		0.010	0.000091	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-174	ND		0.010	0.000081	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-28	0.000874	J q C20	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-175	ND		0.010	0.000078	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-176	ND		0.010	0.000059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-29	ND	C26	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-177	ND		0.010	0.000083	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-3	ND		0.010	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-178	ND		0.010	0.000085	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-30	ND	C18	0.020	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-179	ND		0.010	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-31	ND		0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-180	ND	C	0.020	0.000065	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-32	ND		0.010	0.000087	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-181	ND		0.010	0.000078	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-33	0.000605	J q C21	0.020	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-182	ND		0.010	0.000075	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-34	ND		0.010	0.00019	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-183	ND	C	0.020	0.000076	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-35	ND		0.010	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-184	ND		0.010	0.000064	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-36	ND		0.010	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-185	ND	C183	0.020	0.000076	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-37	ND		0.010	0.00018	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-186	ND		0.010	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-187	ND		0.010	0.000072	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-38	ND		0.010	0.00019	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-188	ND		0.010	0.000055	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-39	ND		0.010	0.00017	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-189	ND		0.010	0.00031	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-190	ND		0.010	0.000056	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-4	ND		0.020	0.0020	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-191	ND		0.010	0.000059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-40	ND	C	0.030	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-192	ND		0.010	0.000066	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-193	ND	C180	0.020	0.000065	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-41	ND	C40	0.030	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-194	ND		0.010	0.00070	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-42	ND		0.010	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-195	ND		0.010	0.00077	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-43	ND	C	0.020	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-196	ND		0.010	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-197	ND		0.010	0.000085	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-44	0.00205	J C	0.030	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-198	ND	C	0.020	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-199	ND	C198	0.020	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-45	ND	C	0.020	0.00038	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-200	ND		0.010	0.000076	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-201	ND		0.010	0.000078	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-46	ND		0.010	0.00046	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-202	ND		0.010	0.000087	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-47	0.00205	J C44	0.030	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-203	ND		0.010	0.00010	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-48	ND		0.010	0.00036	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-204	ND		0.010	0.000086	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-49	ND	C	0.020	0.00030	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-205	ND		0.010	0.00059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-206	ND		0.010	0.0013	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-207	ND		0.010	0.00093	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-5	ND		0.010	0.0017	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-208	ND		0.010	0.00097	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-50	ND	C	0.020	0.00035	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-209	ND		0.010	0.00088	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-51	ND	C45	0.020	0.00038	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-52	ND		0.010	0.00036	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-53	ND	C50	0.020	0.00035	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-54	ND		0.010	0.000022	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-55	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-56	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-57	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-58	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-59	ND	C	0.030	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-6	ND		0.010	0.0015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-60	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-61	0.000571	J q C	0.040	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-62	ND	C59	0.030	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-63	ND		0.010	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-64	ND		0.010	0.00024	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-65	0.00205	J C44	0.030	0.00032	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-66	0.00100	J q	0.010	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-67	ND		0.010	0.00023	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-68	ND		0.010	0.00024	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-69	ND	C49	0.020	0.00030	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-7	ND		0.010	0.0015	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-70	0.000571	J q C61	0.040	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-71	ND	C40	0.030	0.00037	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-72	ND		0.010	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-73	ND	C43	0.020	0.00034	ng/g		11/12/18 10:55	11/27/18 15:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-74	0.000571	J q C61	0.040	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-75	ND	C59	0.030	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-76	0.000571	J q C61	0.040	0.00025	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-77	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-78	ND		0.010	0.00027	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-79	ND		0.010	0.00024	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-8	ND		0.020	0.0014	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-80	ND		0.010	0.00023	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-81	ND		0.010	0.00024	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-82	ND		0.010	0.000068	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-83	ND	C	0.020	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-84	ND		0.010	0.000069	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-85	ND	C	0.030	0.000050	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-86	ND	C	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-87	ND	C86	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-88	ND	C	0.020	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-89	ND		0.010	0.000067	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-9	ND		0.010	0.0016	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-90	0.000896	J q C	0.030	0.000052	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-91	ND	C88	0.020	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-92	ND		0.010	0.000058	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-93	ND	C	0.020	0.000059	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-94	ND		0.010	0.000067	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-95	0.000344	J	0.010	0.000064	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-96	ND		0.010	0.000050	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-97	ND	C86	0.060	0.000051	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-98	ND	C	0.020	0.000057	ng/g		11/12/18 10:55	11/27/18 15:09	1
PCB-99	ND	C83	0.020	0.000062	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Monochlorobiphenyls	ND		0.010	0.00011	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Dichlorobiphenyls	ND		0.020	0.0020	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Trichlorobiphenyls	0.00148	J q	0.020	0.00016	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Tetrachlorobiphenyls	0.00362	J q	0.040	0.00028	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Pentachlorobiphenyls	0.00172	J q	0.060	0.00013	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Hexachlorobiphenyls	0.00146	J q	0.040	0.00026	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Heptachlorobiphenyls	ND		0.020	0.00031	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Octachlorobiphenyls	ND		0.020	0.00077	ng/g		11/12/18 10:55	11/27/18 15:09	1
Polychlorinated biphenyls, Total	0.00828	J q	0.060	0.00067	ng/g		11/12/18 10:55	11/27/18 15:09	1
Total Nonachlorobiphenyls	ND		0.010	0.0013	ng/g		11/12/18 10:55	11/27/18 15:09	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-1L	53		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-3L	53		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-4L	68		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-15L	65		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-19L	76		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-37L	75		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-54L	48		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-104L	71		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-105L	87		30 - 140	11/12/18 10:55	11/27/18 15:09	1

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: MB 140-25296/11-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 25296

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-114L	86		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-118L	86		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-123L	84		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-126L	84		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-155L	83		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-156L	87	C	30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-157L	87	C156	30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-167L	87		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-169L	92		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-170L	86		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-188L	86		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-189L	76		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-202L	107		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-205L	75		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-206L	89		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-208L	88		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-209L	96		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-77L	78		30 - 140	11/12/18 10:55	11/27/18 15:09	1
PCB-81L	77		30 - 140	11/12/18 10:55	11/27/18 15:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
PCB-28L	87		40 - 125	11/12/18 10:55	11/27/18 15:09	1
PCB-111L	88		40 - 125	11/12/18 10:55	11/27/18 15:09	1
PCB-178L	96		40 - 125	11/12/18 10:55	11/27/18 15:09	1

Lab Sample ID: LCS 140-25296/12-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1	0.500	0.401		ng/g		80	50 - 150
PCB-15	0.500	0.488		ng/g		98	50 - 150
PCB-104	0.500	0.506		ng/g		101	50 - 150
PCB-105	0.500	0.499		ng/g		100	50 - 150
PCB-114	0.500	0.537		ng/g		107	50 - 150
PCB-118	0.500	0.520		ng/g		104	50 - 150
PCB-123	0.500	0.562		ng/g		112	50 - 150
PCB-126	0.500	0.528		ng/g		106	50 - 150
PCB-19	0.500	0.531		ng/g		106	50 - 150
PCB-155	0.500	0.517		ng/g		103	50 - 150
PCB-156	1.00	0.997	C	ng/g		100	50 - 150
PCB-157	1.00	0.997	C156	ng/g		100	50 - 150
PCB-167	0.500	0.506		ng/g		101	50 - 150
PCB-169	0.500	0.446		ng/g		89	50 - 150
PCB-3	0.500	0.424		ng/g		85	50 - 150
PCB-37	0.500	0.497		ng/g		99	50 - 150
PCB-188	0.500	0.498		ng/g		100	50 - 150
PCB-189	0.500	0.511		ng/g		102	50 - 150

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: LCS 140-25296/12-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 25296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-4	0.500	0.447		ng/g		89	50 - 150
PCB-202	0.500	0.455		ng/g		91	50 - 150
PCB-205	0.500	0.557		ng/g		111	50 - 150
PCB-206	0.500	0.486		ng/g		97	50 - 150
PCB-208	0.500	0.499		ng/g		100	50 - 150
PCB-209	0.500	0.521		ng/g		104	50 - 150
PCB-54	0.500	0.561		ng/g		112	50 - 150
PCB-77	0.500	0.454		ng/g		91	50 - 150
PCB-81	0.500	0.453		ng/g		91	50 - 150

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
PCB-1L	54		30 - 140
PCB-3L	53		30 - 140
PCB-4L	68		30 - 140
PCB-15L	68		30 - 140
PCB-19L	82		30 - 140
PCB-37L	76		30 - 140
PCB-54L	52		30 - 140
PCB-104L	72		30 - 140
PCB-105L	87		30 - 140
PCB-114L	86		30 - 140
PCB-118L	86		30 - 140
PCB-123L	84		30 - 140
PCB-126L	83		30 - 140
PCB-155L	79		30 - 140
PCB-156L	88	C	30 - 140
PCB-157L	88	C156	30 - 140
PCB-167L	88		30 - 140
PCB-169L	92		30 - 140
PCB-170L	85		30 - 140
PCB-188L	84		30 - 140
PCB-189L	79		30 - 140
PCB-202L	104		30 - 140
PCB-205L	76		30 - 140
PCB-206L	90		30 - 140
PCB-208L	89		30 - 140
PCB-209L	93		30 - 140
PCB-77L	81		30 - 140
PCB-81L	78		30 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
PCB-28L	88		40 - 125
PCB-111L	86		40 - 125
PCB-178L	96		40 - 125

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: LCSD 140-25296/13-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25296

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1	0.500	0.395		ng/g		79	50 - 150	1	50
PCB-15	0.500	0.476		ng/g		95	50 - 150	3	50
PCB-104	0.500	0.508		ng/g		102	50 - 150	0	50
PCB-105	0.500	0.497		ng/g		99	50 - 150	0	50
PCB-114	0.500	0.528		ng/g		106	50 - 150	2	50
PCB-118	0.500	0.525		ng/g		105	50 - 150	1	50
PCB-123	0.500	0.549		ng/g		110	50 - 150	2	50
PCB-126	0.500	0.523		ng/g		105	50 - 150	1	50
PCB-19	0.500	0.531		ng/g		106	50 - 150	0	50
PCB-155	0.500	0.505		ng/g		101	50 - 150	2	50
PCB-156	1.00	1.02	C	ng/g		102	50 - 150	2	50
PCB-157	1.00	1.02	C156	ng/g		102	50 - 150	2	50
PCB-167	0.500	0.491		ng/g		98	50 - 150	3	50
PCB-169	0.500	0.457		ng/g		91	50 - 150	3	50
PCB-3	0.500	0.407		ng/g		81	50 - 150	4	50
PCB-37	0.500	0.494		ng/g		99	50 - 150	1	50
PCB-188	0.500	0.507		ng/g		101	50 - 150	2	50
PCB-189	0.500	0.509		ng/g		102	50 - 150	0	50
PCB-4	0.500	0.442		ng/g		88	50 - 150	1	50
PCB-202	0.500	0.454		ng/g		91	50 - 150	0	50
PCB-205	0.500	0.562		ng/g		112	50 - 150	1	50
PCB-206	0.500	0.470		ng/g		94	50 - 150	3	50
PCB-208	0.500	0.492		ng/g		98	50 - 150	1	50
PCB-209	0.500	0.517		ng/g		103	50 - 150	1	50
PCB-54	0.500	0.571		ng/g		114	50 - 150	2	50
PCB-77	0.500	0.459		ng/g		92	50 - 150	1	50
PCB-81	0.500	0.435		ng/g		87	50 - 150	4	50

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
PCB-1L	49		30 - 140
PCB-3L	49		30 - 140
PCB-4L	62		30 - 140
PCB-15L	62		30 - 140
PCB-19L	74		30 - 140
PCB-37L	70		30 - 140
PCB-54L	43	q	30 - 140
PCB-104L	65		30 - 140
PCB-105L	84		30 - 140
PCB-114L	83		30 - 140
PCB-118L	81		30 - 140
PCB-123L	80		30 - 140
PCB-126L	81		30 - 140
PCB-155L	75		30 - 140
PCB-156L	85	C	30 - 140
PCB-157L	85	C156	30 - 140
PCB-167L	85		30 - 140
PCB-169L	88		30 - 140
PCB-170L	82		30 - 140

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Lab Sample ID: LCSD 140-25296/13-B

Matrix: Solid

Analysis Batch: 25705

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 25296

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
PCB-188L	79		30 - 140
PCB-189L	74		30 - 140
PCB-202L	100		30 - 140
PCB-205L	72		30 - 140
PCB-206L	87		30 - 140
PCB-208L	85		30 - 140
PCB-209L	91		30 - 140
PCB-77L	76		30 - 140
PCB-81L	75		30 - 140

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
PCB-28L	81		40 - 125
PCB-111L	84		40 - 125
PCB-178L	92		40 - 125

Method: 9060_PSEP - TOC (Puget Sound)

Lab Sample ID: MB 580-288296/5

Matrix: Solid

Analysis Batch: 288296

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			11/06/18 10:27	1

Lab Sample ID: LCS 580-288296/6

Matrix: Solid

Analysis Batch: 288296

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	3540		mg/Kg		83	68 - 149

Lab Sample ID: LCSD 580-288296/7

Matrix: Solid

Analysis Batch: 288296

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	3600		mg/Kg		84	68 - 149	2	32

Lab Sample ID: 580-81440-1 MS

Matrix: Solid

Analysis Batch: 288296

Client Sample ID: E-9.02-0to26-102418

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon - Duplicates	35000		120000	130000		mg/Kg		79	68 - 149

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 9060_PSEP - TOC (Puget Sound) (Continued)

Lab Sample ID: 580-81440-1 MSD

Matrix: Solid

Analysis Batch: 288296

Client Sample ID: E-9.02-0to26-102418

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	35000		120000	133000		mg/Kg		82	68 - 149	2	32

Lab Sample ID: 580-81440-1 DU

Matrix: Solid

Analysis Batch: 288296

Client Sample ID: E-9.02-0to26-102418

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon - Duplicates	35000		33900		mg/Kg		2	50

Lab Sample ID: 580-81440-1 TRL

Matrix: Solid

Analysis Batch: 288296

Client Sample ID: E-9.02-0to26-102418

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	TRL Result	TRL Qualifier	Unit	D	RSD	RSD Limit
Total Organic Carbon - Duplicates	35000		34200		mg/Kg		1	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 580-287824/1

Matrix: Water

Analysis Batch: 287824

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0	2.0	mg/L			10/30/18 21:13	1

Lab Sample ID: LCS 580-287824/2

Matrix: Water

Analysis Batch: 287824

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	27.6	26.8		mg/L		97	70.6 - 120

Method: SM 5310B - Organic Carbon, Total (TOC)

Lab Sample ID: MB 580-288449/3

Matrix: Water

Analysis Batch: 288449

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	0.640	J	1.0	0.19	mg/L			11/07/18 15:21	1

Lab Sample ID: LCS 580-288449/4

Matrix: Water

Analysis Batch: 288449

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	10.0	10.9		mg/L		109	85 - 115

Eurofins TestAmerica, Seattle

QC Sample Results

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: D854 - Specific Gravity

Lab Sample ID: LCS 140-25285/1

Matrix: Solid

Analysis Batch: 25285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Density	0.997	0.9973		g/cm3		100	99 - 101

Lab Sample ID: LCS 140-25297/1

Matrix: Solid

Analysis Batch: 25297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Specific Gravity	1.00	1.000		NONE		100	99 - 101

Lab Chronicle

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 10:48	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: E-9.02-0to26-102418

Lab Sample ID: 580-81440-1

Date Collected: 10/24/18 12:07

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 34.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			288730	11/13/18 10:16	BAH	TAL SEA
Total/NA	Analysis	8082A		1	288909	11/14/18 18:04	TL1	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 10:25	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25734	11/28/18 01:38	LKM	TAL KNX

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 11:09	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: 512-0to29-102418

Lab Sample ID: 580-81440-2

Date Collected: 10/24/18 11:19

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 27.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			288730	11/13/18 10:16	BAH	TAL SEA
Total/NA	Analysis	8082A		1	288910	11/14/18 22:15	TL1	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 11:11	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25705	11/27/18 19:15	JMN	TAL KNX

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 11:15	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: A-9.03-0to26-102418

Lab Sample ID: 580-81440-3

Date Collected: 10/24/18 13:28

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 28.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			288730	11/13/18 10:16	BAH	TAL SEA
Total/NA	Analysis	8082A		1	288910	11/14/18 22:32	TL1	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 11:57	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25705	11/27/18 20:17	JMN	TAL KNX

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 11:28	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: D-9.09-0to29-102418

Lab Sample ID: 580-81440-4

Date Collected: 10/24/18 14:05

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 31.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			288730	11/13/18 10:16	BAH	TAL SEA
Total/NA	Analysis	8082A		1	288910	11/14/18 22:49	TL1	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 12:43	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25705	11/27/18 21:18	JMN	TAL KNX

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 11:33	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: G-9.15-0to18-102418

Lab Sample ID: 580-81440-5

Date Collected: 10/24/18 14:46

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			288730	11/13/18 10:16	BAH	TAL SEA
Total/NA	Analysis	8082A		1	288910	11/14/18 23:05	TL1	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 13:29	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25734	11/28/18 02:40	LKM	TAL KNX

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9060_PSEP		1	288296	11/06/18 11:38	A1K	TAL SEA
Total/NA	Analysis	D 2216		1	288128	11/03/18 10:42	BAH	TAL SEA
Total/NA	Analysis	Moisture 70C		1	289006	11/07/18 10:38	HJM	TAL SEA
Total/NA	Analysis	D7928/D6913		1	288355	11/07/18 10:38	A1K	TAL SEA
Total/NA	Analysis	D854		1	25285	11/10/18 00:00	JAH	TAL KNX
Total/NA	Analysis	D854		1	25297	11/10/18 00:00	JAH	TAL KNX

Client Sample ID: B-9.15-0to30-102418

Lab Sample ID: 580-81440-6

Date Collected: 10/24/18 15:47

Matrix: Solid

Date Received: 10/25/18 14:15

Percent Solids: 45.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550B			289426	11/21/18 09:51	BAH	TAL SEA
Total/NA	Analysis	8082A		1	289603	11/26/18 13:43	APR	TAL SEA
Total/NA	Prep	HRMS-Sox			258301	11/10/18 07:19	A1A	TAL SAC
Total/NA	Analysis	1613B		1	259245	11/15/18 14:15	AS	TAL SAC
Total/NA	Prep	HRMS-Sox			25296	11/12/18 10:55	CLI	TAL KNX
Total/NA	Cleanup	Split			25395	11/14/18 15:05	ALS	TAL KNX
Total/NA	Analysis	1668A		2	25734	11/28/18 03:41	LKM	TAL KNX

Eurofins TestAmerica, Seattle

Lab Chronicle

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Client Sample ID: 612-102418

Lab Sample ID: 580-81440-7

Date Collected: 10/24/18 16:35

Matrix: Water

Date Received: 10/25/18 14:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			287880	10/31/18 12:41	KO	TAL SEA
Total/NA	Analysis	8082A		1	288090	11/02/18 19:05	APR	TAL SEA
Total/NA	Prep	1613B			257820	11/08/18 09:16	ITH	TAL SAC
Total/NA	Analysis	1613B		1	259030	11/13/18 14:46	AS	TAL SAC
Total/NA	Prep	HRMS-Sepf			25006	11/01/18 12:40	SMA	TAL KNX
Total/NA	Analysis	1668A		1	25243	11/09/18 20:21	JMN	TAL KNX
Total/NA	Analysis	SM 2540D		1	287824	10/30/18 21:13	EMM	TAL SEA
Total/NA	Analysis	SM 5310B		1	288449	11/08/18 12:19	HJM	TAL SEA

Laboratory References:

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

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

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

Accreditation/Certification Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Laboratory: Eurofins 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	01-19-20
ANAB	DoD / DOE		L2236	01-19-22
ANAB	ISO/IEC 17025		L2236	01-19-22
California	State Program	9	2901	11-05-19
Montana (UST)	State Program	8	N/A	04-30-20
Nevada	State Program	9	WA000502019-1	04-05-19
Oregon	NELAP	10	WA100007	11-05-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
USDA	Federal		P330-14-00126	02-10-20
Washington	State Program	10	C553	02-17-20

Laboratory: Eurofins TestAmerica, Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		N/A	
ANAB	DoD / DOE		L2311	02-13-22
ANAB	DoD / DOE		L2311.01	02-13-22
Arkansas DEQ	State Program	6	88-0688	06-16-19
California	State Program	9	2423	06-30-19
Colorado	State Program	8	TN00009	02-28-20
Connecticut	State Program	1	PH-0223	09-30-19
Florida	NELAP	4	E87177	06-30-19
Georgia	State Program	4	906	04-13-20
Hawaii	State Program	9	N/A	04-13-20
Kansas	NELAP	7	E-10349	10-31-19
Kentucky (DW)	State Program	4	90101	12-31-19
Louisiana	NELAP	6	83979	06-30-19
Louisiana (DW)	NELAP	6	LA160005	12-31-19
Maryland	State Program	3	277	03-31-20
Michigan	State Program	5	9933	04-13-20
Nevada	State Program	9	TN00009	07-31-19
New Hampshire	NELAP	1	2999	01-17-20
New Jersey	NELAP	2	TN001	06-30-19
New York	NELAP	2	10781	03-31-20
North Carolina (DW)	State Program	4	21705	07-31-19
North Carolina (WW/SW)	State Program	4	64	12-31-19
Ohio VAP	State Program	5	CL0059	08-28-20
Oklahoma	State Program	6	9415	08-31-19
Oregon	NELAP	10	TNI0189	06-30-19
Pennsylvania	NELAP	3	68-00576	12-31-19
Tennessee	State Program	4	2014	04-13-20
Texas	NELAP	6	T104704380-16-9	08-31-19
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-16-00262	08-20-19
Utah	NELAP	8	TN00009	07-31-19
Virginia	NELAP	3	460176	09-14-19
Washington	State Program	10	C593	01-19-20
West Virginia (DW)	State Program	3	9955C	12-31-19
West Virginia DEP	State Program	3	345	04-30-20

Eurofins TestAmerica, Seattle

Accreditation/Certification Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Laboratory: Eurofins TestAmerica, Knoxville (Continued)

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
Wisconsin	State Program	5	998044300	08-31-19

Laboratory: Eurofins TestAmerica, Sacramento

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	17-020	01-20-21
ANAB	DoD / DOE		L2468	01-20-21
Arizona	State Program	9	AZ0708	08-11-19
Arkansas DEQ	State Program	6	88-0691	06-17-19
California	State Program	9	2897	01-31-20
Colorado	State Program	8	CA00044	08-31-19
Connecticut	State Program	1	PH-0691	06-30-19
Florida	NELAP	4	E87570	06-30-19
Georgia	State Program	4	N/A	01-28-19 *
Hawaii	State Program	9	N/A	01-29-20
Illinois	NELAP	5	200060	03-17-19 *
Kansas	NELAP	7	E-10375	10-31-19
Louisiana	NELAP	6	30612	06-30-19
Maine	State Program	1	CA0004	04-14-20
Michigan	State Program	5	9947	01-31-20
Nevada	State Program	9	CA00044	07-31-19
New Hampshire	NELAP	1	2997	04-18-19
New Jersey	NELAP	2	CA005	06-30-19
New York	NELAP	2	11666	04-01-20
Oregon	NELAP	10	4040	01-29-20
Pennsylvania	NELAP	3	68-01272	03-31-20
Texas	NELAP	6	T104704399	05-31-19
US Fish & Wildlife	Federal		LE148388-0	07-31-19
USDA	Federal		P330-18-00239	01-17-21
USEPA UCMR	Federal	1	CA00044	12-31-20
Utah	NELAP	8	CA00044	02-29-20
Vermont	State Program	1	VT-4040	04-16-20
Virginia	NELAP	3	460278	03-14-20 *
Washington	State Program	10	C581	05-05-19
West Virginia (DW)	State Program	3	9930C	12-31-19
Wyoming	State Program	8	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins TestAmerica, Seattle

Sample Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-81440-1	E-9.02-0to26-102418	Solid	10/24/18 12:07	10/25/18 14:15
580-81440-2	512-0to29-102418	Solid	10/24/18 11:19	10/25/18 14:15
580-81440-3	A-9.03-0to26-102418	Solid	10/24/18 13:28	10/25/18 14:15
580-81440-4	D-9.09-0to29-102418	Solid	10/24/18 14:05	10/25/18 14:15
580-81440-5	G-9.15-0to18-102418	Solid	10/24/18 14:46	10/25/18 14:15
580-81440-6	B-9.15-0to30-102418	Solid	10/24/18 15:47	10/25/18 14:15
580-81440-7	612-102418	Water	10/24/18 16:35	10/25/18 14:15

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

Loc: 580
81440

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THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

5755 8th Street East
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Page 93 of 111

Loc: 580
81440

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Matt Luxon Phone: (360) 296-6712 Company: Pacific Groundwater Group Address: 2377 Eastlake Avenue E City: Seattle State, Zip: WA, 98102 Phone: 206-329-0141(Tel) 206-329-6968(Fax) Email: jeff@pgwg.com; janet@pgwg.com Project Name: Head of Swan Island Lagoon Sediment Investigation Site:		Lab PM: Walker, Elaine M E-Mail: elaine.walker@testamericainc.com Carrier Tracking No(s): Job #:		Due Date Requested: TAT Requested (days): Standard PO #: Purchase Order Requested WO #: JK1807-01 Project #: 55042007 SSOW#:		Sample Identification E-9.02 - 0 to 26 - 102410 G12 - 0 to 29 - 102418 A-9.03 - 0 to 26 - 102410		Sample Date 10/24/18 10/24/18 10/24/18		Sample Time 1207 1119 1328		Sample Type (C=Comp, G=grab) G G G		Matrix (Weigher, Liquid, Other) Solid S S		Preservation Code: 102418 1119 1328		Field Filtered Sample (Yes or No) X X X		168A - PCB Congeners 808A - PCB Aroclors 161B - Dioxin/Furans 6020A Metals - As, Cd, Cu, Pb, Zn 7471A - Mercury D422 - Grain Size D854 - Specific Gravity Total Solids NMTPH-Diesel Extended SM5310 - TOC 2540D - Total Suspended Solids Frozen Archive Total Number of Containers		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydral U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Special Instructions/Note: 12 Archive Splits 4 for each sample ID 12		Therm. ID: A2 Cor: 5.6 ° Unc: 5.3 ° Cooler Desc: kg Blue Packing: other FedEx: UPS: Cust. Seal: Yes No X Lab Cour: Wet/Packs/Dry Ice/None Other: Pri Can		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 6 Months Special Instructions/QC Requirements: 2378-TCDD, 12378-PCDD 2378-PCDD		Date/Time: 10/25/18 12:30 Date/Time: 10/25/18 14:15 Date/Time:		Received by: David Walker Received by: Andy Vickery Received by:		Company: PGW Company: MGS RWR Company:		Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:	
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Chain of Custody Record

Client Information Client Contact: Jeff Parker & Janet Knox Company: Pacific Groundwater Group Address: 2377 Eastlake Avenue E City: Seattle State, Zip: WA, 98102 Phone: 206-329-0141 (Tel) 206-329-6968 (Fax) Email: jeff@pgwg.com; janet@pgwg.com Project Name: Head of Swan Island Lagoon Sediment Investigation Site:		Sampler: Matt Luxon Phone: (360) 296-6712 Lab PM: Walker, Elaine M E-Mail: elaine.walker@testamericainc.com		Carrier Tracking No(s): COG No: 680-30864-10084 1 Page: _____ of _____ Job #: _____																																																																																	
Analysis Requested Due Date Requested: TAT Requested (days): Standard PO #: _____ Purchase Order Requested WO #: _____ Project #: 680-30864-10084-01 SSOW#: JK1307.01																																																																																					
<table border="1"> <thead> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=comp, G=grab)</th> <th>Matrix (W=water, B=soil, O=material)</th> <th>Preservation Code:</th> <th>Field Filtered Sample (Yes or No)</th> <th>168A - PCB Congeners</th> <th>808A - PCB Aroclors</th> <th>161B - Dioxin/Furans</th> <th>602A Metals - As, Cd, Cu, Pb, Zn</th> <th>7471A - Mercury</th> <th>D422 - Grain Size</th> <th>D854 - Specific Gravity</th> <th>Total Solids</th> <th>NWTPH-Diesel Extended</th> <th>SM5310 - TOC</th> <th>2540D - Total Suspended Solids</th> <th>Frozen Archive</th> <th>Total Number of Containers</th> </tr> </thead> <tbody> <tr> <td>D-9.09-0 to 29-102418</td> <td>10/24/18</td> <td>1405</td> <td>G</td> <td>S</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>G-9.15-0 to 18-102418</td> <td>10/24/18</td> <td>1446</td> <td>G</td> <td>S</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>B-9.15-0 to 30-102418</td> <td>10/24/18</td> <td>1547</td> <td>G</td> <td>S</td> <td>S</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>						Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, B=soil, O=material)	Preservation Code:	Field Filtered Sample (Yes or No)	168A - PCB Congeners	808A - PCB Aroclors	161B - Dioxin/Furans	602A Metals - As, Cd, Cu, Pb, Zn	7471A - Mercury	D422 - Grain Size	D854 - Specific Gravity	Total Solids	NWTPH-Diesel Extended	SM5310 - TOC	2540D - Total Suspended Solids	Frozen Archive	Total Number of Containers	D-9.09-0 to 29-102418	10/24/18	1405	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X		G-9.15-0 to 18-102418	10/24/18	1446	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X		B-9.15-0 to 30-102418	10/24/18	1547	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, B=soil, O=material)	Preservation Code:	Field Filtered Sample (Yes or No)	168A - PCB Congeners	808A - PCB Aroclors	161B - Dioxin/Furans	602A Metals - As, Cd, Cu, Pb, Zn	7471A - Mercury	D422 - Grain Size	D854 - Specific Gravity	Total Solids	NWTPH-Diesel Extended	SM5310 - TOC	2540D - Total Suspended Solids	Frozen Archive	Total Number of Containers																																																																		
D-9.09-0 to 29-102418	10/24/18	1405	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X																																																																			
G-9.15-0 to 18-102418	10/24/18	1446	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X																																																																			
B-9.15-0 to 30-102418	10/24/18	1547	G	S	S	X	X	X	X	X	X	X	X	X	X	X	X	X																																																																			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____ Empty Kit Relinquished by: _____ Date: _____ Relinquished by: David Wampler Date: Oct 25, 2018 12:20 Company: PGW Relinquished by: Andy Vickery Date: 10/25/18 1420 Company: KNR Relinquished by: _____ Date: _____ Company: _____ Custody Seals Intact: ☐ Yes ☐ No ☐ Delta No Custody Seal No.: _____																																																																																					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 6 Months Special Instructions/QC Requirements: * DIFS - 12378-10084-23478-10084 Therm. ID: 124 Corr: 3.6 ° Unc: 3.6 ° Cooler Dsc: 19 Blue FedEx: Packing: 19 Blue UPS: Cust. Seal: Yes No Lab Court: Wet/Packs/Dry Ice/None Other: 19 Blue																																																																																					

Chain of Custody Record

Client Information Client Contact: Jeff Parker & Janet Knox Company: Pacific Groundwater Group Address: 2377 Eastlake Avenue E City: Seattle State, Zip: WA, 98102 Phone: 206-329-0141(Tel) 206-329-6968(Fax) Email: jeff@pgwg.com; janet@pgwg.com Project Name: Head of Swan Island Lagoon Sediment Investigation Site:		Lab PM: Walker, Elaine M E-Mail: elaine.walker@testamericainc.com Carrier Tracking No(s): COC No: 688-98884-10094-1 Page: 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Standard PO #: Purchase Order Requested WO #:		Analysis Requested Perform MS-MSD (Yes or No) Field Filtered Sample (Yes or No) 1668A - PCB Congeners 8082A - PCB Aroclors 1613B - Dioxin/Furans 6020A Metals - As, Cd, Cu, Pb, Zn 7471A - Mercury D422 - Grain Size D854 - Specific Gravity Total Solids NMTPH-Diesel Extended SM5310 - TOC Zs40D - Total Suspended Solids Frozen Archive Total Number of Containers	
Sample Identification Sample ID: 612-102418 Sample Date: 10/24/18 Sample Time: 1635 Sample Type: (C=Comp, G=grab) Matrix: (Weaker, Stronger, On-wash, Off-wash) Preservation Code:		Special Instructions/Note: will add 1 bottle	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: Relinquished by: David Wampler Relinquished by: Andy Vickery Relinquished by:			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☒ Archive For 6 Months Special Instructions/QC Requirements: P/Fs - 12375-02007, 2378-TCOD			
Date/Time: Oct 25, 2018 12:20 Date/Time: 10/25/18 14:15 Date/Time:		Date/Time: 10/25/18 12:20 Date/Time: 10/25/18 1415 Date/Time:	
Company: PGWG Company: KVR Company:		Company: KVR Company: A-Sea Company:	
Custody Seal Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:	

TestAmerica Seattle

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

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:			
Client Contact:		Walker, Elaine M		E-Mail:		State of Origin:		580-60859.1			
Shipping/Receiving		Phone:		elaine.walker@testamericainc.com		Oregon		Page: 1 of 1			
Company:		TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #:		580-81440-1			
Address:		5815 Middlebrook Pike,		Due Date Requested:		Analysis Requested		Preservation Codes:			
City:		Knoxville		TAT Requested (days):				A - HCL B - NaOH C - None			
State/Zip:		TN, 37921		PO #:				M - Hexane N - None			
Phone:		865-291-3000(Tel) 865-584-4315(Fax)		WO #:				Barcode 580-81440 Chain of Custody			
Email:				Project #:				ydrate			
Project Name:		Head of Swan Island Lagoon Sediment		58013007							
Site:		SSOWH:						Other:			
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Preservation Code	Matrix (W=Water, S=solid, O=oil, E=Extraction)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Screen 1668/Screen PCB_P_S	BS64/Specific Gravity	Total Number of Cores	Special Instructions/Note:
E-9.02-0to26-102418 (580-81440-1)	10/24/18	12:07 Pacific	Solid		Solid	X	X	X	X	1	LOST ON SEALS INSTRUCT
512-0to29-102418 (580-81440-2)	10/24/18	11:19 Pacific	Solid		Solid	X	X	X	X	1	RECEIVED AT
A-9.03-0to26-102418 (580-81440-3)	10/24/18	13:28 Pacific	Solid		Solid	X	X	X	X	1	RT 0.9/CT0.5C
D-9.09-0to29-102418 (580-81440-4)	10/24/18	14:05 Pacific	Solid		Solid	X	X	X	X	1	0.9/1.28
G-9.15-0to18-102418 (580-81440-5)	10/24/18	14:46 Pacific	Solid		Solid	X	X	X	X	1	100% FEA X#
B-9.15-0to30-102418 (580-81440-6)	10/24/18	15:47 Pacific	Solid		Solid	X	X	X	X	1	4668 8717 4643 PD
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.											
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2											
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <i>B. Hall</i> Date/Time: <i>10/31/18 1240</i> Company: <i>SEA TA</i> Relinquished by: _____ Date/Time: _____ Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____ Custody Seals Intact: _____ Custody Seal No.: _____											

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	☒			☐ Containers, Broken	
2. Were ambient air containers received intact?				☐ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	☒			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID : <u>5668</u> Correction factor: <u>+0.1 °C</u>	☒			☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	☒			☐ Containers, Broken	
6. Were samples received in appropriate containers?	☒			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	☒			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	☒			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	☒			☐ COC; No Date/Time; Client Contacted	Labeling Verified by: _____ Date: _____
10. Was the sampler identified on the COC?	☒			☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	☒			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	☒			☐ COC No tests on COC	pH test strip lot number: _____
13. Is the matrix of the samples noted?	☒			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	☒			☐ COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	☒			☐ Holding Time - Receipt	Preservative: _____
16. Were samples received with correct chemical preservative (excluding Encore)?	☒			☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	Lot Number: _____ Exp Date: _____ Analyst: _____
17. Were VOA samples received without headspace?				☐ Headspace (VOA only)	Date: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____				☐ Residual Chlorine	Time: _____
19. For 1613B water samples is pH<9?				☐ If no, lab will adjust	
20. For rad samples was sample activity info. Provided?				☐ Project missing info	
Project #: _____ PM Instructions: _____					

Sample Receiving Associate: Ryan DannerDate: 11-1-18

QA026R30.doc, 080916

TestAmerica Seattle

5755 8th Street East
Tacoma, WA 98424

Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:	Lab P/M:	Carrier Tracking No(s):	COG No:							
Client Contact:		Walker, Elaine M	Walker, Elaine M		580-60807.1							
Shipping/Receiving		Phone:	Ex-Mail:	State of Origin:	Page: 1 of 1							
Company:		TestAmerica Laboratories, Inc.		Accreditations Required (See note):	Job #: 580-81440-1							
Address:		5815 Middlebrook Pike,		Preservation Codes:								
City:		Knoxville		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:								
State/Zip:		TN, 37921		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)								
Phone:		865-291-3000(Tel) 865-584-4315(Fax)										
Email:												
Project Name:		Head of Swan Island Lagoon Sediment										
Site:												
Due Date Requested:		11/13/2018										
TAT Requested (days):												
PO #:												
WO #:												
Project #:		58013007										
SSOW#:												
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=other, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	1668A/1668_P_Sox (MOD) 209 PCBs plus Totals	Screen_1668/Screen_PCB_P_S	D54/ Specific Gravity	1668A/1668_P_Sep 209 PCBs plus Totals	Screen_1668/Screen_PCB_P_W	Total Number of Containers	Special Instructions/Note:
E-9.02-0to26-102418 (580-81440-1)	10/24/18	12:07 Pacific		Solid		X	X	X			3	CUSTOMY SEAL INTACT
512-0to29-102418 (580-81440-2)	10/24/18	11:19 Pacific		Solid		X	X	X			1	ESSENTIAL AT 85 07/CTD 8' 2
A-9.03-0to26-102418 (580-81440-3)	10/24/18	13:28 Pacific		Solid		X	X	X			3	BRO ID-31-18
D-9.09-0to29-102418 (580-81440-4)	10/24/18	14:05 Pacific		Solid		X	X	X			3	100% F50X#
G-9.15-0to18-102418 (580-81440-5)	10/24/18	15:47 Pacific		Solid		X	X	X			3	41688717 4573 80
B-9.15-0to30-102418 (580-81440-6)	10/24/18	16:35 Pacific		Solid		X	X	X			3	
612-102418 (580-81440-7)	10/24/18			Water					X	X	2	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I, II, III, IV, Other (specify)												
Primary Deliverable Rank: 2												
Date: _____ Time: _____												
Empty Kit Relinquished by: _____												
Relinquished by: _____												
Relinquished by: _____												
Relinquished by: _____												
Custody Seal Intact: _____												
Custody Seal No.: _____												
Cooler Temperature(s) °C and Other Remarks: _____												

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	S. ALL CONTAINERS WERE RECEIVED SUBMERGED IN MUDDY DIRTY WATER. ALL SOLID CONTAINERS MAY BE CRACK MAYBE CRACK-CONTAMINATED 50 10-31-18
2. Were ambient air containers received intact?			/	☐ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	/			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10 °C) Thermometer ID : <u>5668</u> Correction factor: <u>+0.1°C</u>	/			☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/	/		☒ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	Labeling Verified by: _____ Date: _____
10. Was the sampler identified on the COC?	/		/	☐ Sampler Not Listed on COC	pH test strip lot number: _____
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	Preservative: _____
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A)	Lot Number: _____
17. Were VOA samples received without headspace?			/	☐ Incorrect Preservative	Exp Date: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668)	/			☐ Headspace (VOA only) ☐ Residual Chlorine	Analyst: _____
Chlorine test strip lot number: _____					Date: _____
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust	Time: _____
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info	
Project #: <u>71942020/04</u> PM Instructions: _____					

Sample Receiving Associate: *[Signature]*Date: 10-31-18

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[illegible]

Login Sample Receipt Checklist

Client: Pacific Groundwater Group

Job Number: 580-81440-1

Login Number: 81440

List Source: Eurofins TestAmerica, Seattle

List Number: 1

Creator: Gall, Brandon A

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

Login Sample Receipt Checklist

Client: Pacific Groundwater Group

Job Number: 580-81440-1

Login Number: 81440

List Number: 2

Creator: Her, David A

List Source: Eurofins TestAmerica, Sacramento

List Creation: 10/31/18 07:05 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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	4.4c
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Pacific Groundwater Group

Job Number: 580-81440-1

Login Number: 81440

List Number: 3

Creator: Her, David A

List Source: Eurofins TestAmerica, Sacramento

List Creation: 10/31/18 07:07 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sacramento



580-81440 Field Sheet

Job: _____

Tracking # 1668 8717 4584

SO (PO) FO / 2-Day / SAT / Ground / UPS / Courier /

Drop Off / GSO / OnTrac / Goldstreak / USPS / Other _____

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

Notes:

Placed in
Freezer 10/31/19 @ 1910
DH

Therm. ID: AK-2 / AK-3 / AK-5 / AK-6 / HACCP / Other _____
(+0.7°C)

Ice _____ Wet _____ Gel _____ Other _____

Cooler Custody Seal: 478996

Sample Custody Seal: _____

Cooler ID: _____

Temp: Observed 4.4 Corrected 4.4

From: Temp Blank ☒ Sample ☐

NCM Filed: Yes ☐ No ☐

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

Initials: WFI Date: 10-31-18

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

WFI

Isotope Dilution Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		HpCDD	HpCDF	HpCDF2	HxCDD	HxCDF	HxDD	HxDF	HxCF
Lab Sample ID	Client Sample ID	(23-140)	(28-143)	(26-138)	(32-141)	(26-152)	(28-130)	(26-123)	(29-147)
580-81440-1	E-9.02-0to26-102418	55	49	56	55	53	53	53	65
580-81440-2	512-0to29-102418	73	72	79	73	70	72	70	80
580-81440-3	A-9.03-0to26-102418	73	70	76	63	63	66	62	73
580-81440-4	D-9.09-0to29-102418	57	54	59	60	57	58	57	66
580-81440-5	G-9.15-0to18-102418	59	59	56	64	65	61	62	70
580-81440-6	B-9.15-0to30-102418	49	46	54	53	52	49	51	59
MB 320-258301/1-A	Method Blank	89	91	91	79	78	83	79	87

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	PeCDD (25-181)	PeCDF (24-185)	13CHxCF (28-136)	PeCF (21-178)	TCDD (25-164)	TCDF (24-169)	OCDD (17-157)
580-81440-1	E-9.02-0to26-102418	60	64	56	64	67	76	54
580-81440-2	512-0to29-102418	75	80	69	82	81	84	75
580-81440-3	A-9.03-0to26-102418	65	68	60	66	67	71	77
580-81440-4	D-9.09-0to29-102418	64	66	57	68	68	72	57
580-81440-5	G-9.15-0to18-102418	69	67	63	71	68	70	60
580-81440-6	B-9.15-0to30-102418	59	60	50	65	66	69	48
MB 320-258301/1-A	Method Blank	81	86	77	85	83	87	82

Surrogate Legend

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
 HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
 HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
 HxCDD = 13C-1,2,3,4,7,8-HxCDD
 HxCDF = 13C-1,2,3,4,7,8-HxCDF
 HxDD = 13C-1,2,3,6,7,8-HxCDD
 HxDF = 13C-1,2,3,6,7,8-HxCDF
 HxCF = 13C-1,2,3,7,8,9-HxCDF
 PeCDD = 13C-1,2,3,7,8-PeCDD
 PeCDF = 13C-1,2,3,7,8-PeCDF
 13CHxCF = 13C-2,3,4,6,7,8-HxCDF
 PeCF = 13C-2,3,4,7,8-PeCDF
 TCDD = 13C-2,3,7,8-TCDD
 TCDF = 13C-2,3,7,8-TCDF
 OCDD = 13C-OCDD

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Solid

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HpCDD (26-166)	HpCDF (21-158)	HpCDF2 (20-186)	HxCDD (21-193)	HxCDF (19-202)	HxDD (25-163)	HxDF (21-159)	HxCF (17-205)
LCS 320-258301/2-A	Lab Control Sample	89	85	94	75	76	79	78	79
LCSD 320-258301/3-A	Lab Control Sample Dup	97	97	102	87	82	85	83	93

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	PeCDD (21-227)	PeCDF (21-192)	13CHxCF (22-176)	PeCF (13-328)	TCDD (20-175)	TCDF (22-152)	OCDD (13-199)
LCS 320-258301/2-A	Lab Control Sample	72	74	76	73	74	77	87
LCSD 320-258301/3-A	Lab Control Sample Dup	82	88	82	86	85	81	94

Surrogate Legend

Eurofins TestAmerica, Seattle

Isotope Dilution Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxDF = 13C-1,2,3,6,7,8-HxCDF
HxCF = 13C-1,2,3,7,8,9-HxCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF
PeCF = 13C-2,3,4,7,8-PeCDF
TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
OCDD = 13C-OCDD

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HpCDD (23-140)	HpCDF (28-143)	HpCDF2 (26-138)	HxCDD (32-141)	HxCDF (26-152)	HxDD (28-130)	HxDF (26-123)	HxCF (29-147)
580-81440-7	612-102418	55	56	58	62	70	63	63	66
MB 320-257820/1-A	Method Blank	71	69	76	88	84	82	81	84

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PeCDD (25-181)	PeCDF (24-185)	13CHxCF (28-136)	PeCF (21-178)	TCDD (25-164)	TCDF (24-169)	OCDD (17-157)
580-81440-7	612-102418	76	62	64	85	65	70	59
MB 320-257820/1-A	Method Blank	82	78	84	84	78	79	94

Surrogate Legend

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxDF = 13C-1,2,3,6,7,8-HxCDF
HxCF = 13C-1,2,3,7,8,9-HxCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF
PeCF = 13C-2,3,4,7,8-PeCDF
TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
OCDD = 13C-OCDD

Method: 1613B - Dioxins and Furans (HRGC/HRMS)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HpCDD (26-166)	HpCDF (21-158)	HpCDF2 (20-186)	HxCDD (21-193)	HxCDF (19-202)	HxDD (25-163)	HxDF (21-159)	HxCF (17-205)
LCS 320-257820/2-A	Lab Control Sample	52	52	58	67	71	61	69	69
LCSD 320-257820/3-A	Lab Control Sample Dup	31	35	33	66	67	62	67	68

Eurofins TestAmerica, Seattle

Isotope Dilution Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

Method: 1613B - Dioxins and Furans (HRGC/HRMS) (Continued)

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PeCDD (21-227)	PeCDF (21-192)	13CHxCF (22-176)	PeCF (13-328)	TCDD (20-175)	TCDF (22-152)	OCDD (13-199)
LCS 320-257820/2-A	Lab Control Sample	36	40	73	41	63	64	56
LCSD 320-257820/3-A	Lab Control Sample Dup	74	87	70	88	62	68	42

Surrogate Legend

HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF = 13C-1,2,3,4,6,7,8-HpCDF
HpCDF2 = 13C-1,2,3,4,7,8,9-HpCDF
HxCDD = 13C-1,2,3,4,7,8-HxCDD
HxCDF = 13C-1,2,3,4,7,8-HxCDF
HxDD = 13C-1,2,3,6,7,8-HxCDD
HxDF = 13C-1,2,3,6,7,8-HxCDF
HxCF = 13C-1,2,3,7,8,9-HxCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF = 13C-1,2,3,7,8-PeCDF
13CHxCF = 13C-2,3,4,6,7,8-HxCDF
PeCF = 13C-2,3,4,7,8-PeCDF
TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
OCDD = 13C-OCDD

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

Matrix: Solid

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB104L (30-140)	PCB105L (30-140)	P114L (30-140)	PCB118L (30-140)	PCB123L (30-140)	PCB126L (30-140)	PCB155L (30-140)	PCB156L (30-140)
580-81440-1	E-9.02-0to26-102418	86	92	92	90	91	87	79	84 C
580-81440-2	512-0to29-102418	85	90	92	89	89	87	87	82 C
580-81440-3	A-9.03-0to26-102418	83	88	89	85	87	86	85	80 C
580-81440-4	D-9.09-0to29-102418	84	89	88	87	86	84	87	81 C
580-81440-5	G-9.15-0to18-102418	88	91	91	90	89	87	79	83 C
580-81440-6	B-9.15-0to30-102418	85	90	90	91	90	87	74	75 C
LCS 140-25296/12-B	Lab Control Sample	72	87	86	86	84	83	79	88 C
LCSD 140-25296/13-B	Lab Control Sample Dup	65	84	83	81	80	81	75	85 C
MB 140-25296/11-B	Method Blank	71	87	86	86	84	84	83	87 C

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB157L (30-140)	PCB15L (30-140)	PCB167L (30-140)	PCB169L (30-140)	PCB170L (30-140)	PCB188L (30-140)	PCB189L (30-140)	PCB19L (30-140)
580-81440-1	E-9.02-0to26-102418	84 C156	79	89	93	88	98	86	94
580-81440-2	512-0to29-102418	82 C156	78	88	92	83	98	82	86
580-81440-3	A-9.03-0to26-102418	80 C156	79	87	88	85	97	85	87
580-81440-4	D-9.09-0to29-102418	81 C156	76	84	87	82	97	82	90
580-81440-5	G-9.15-0to18-102418	83 C156	77	87	87	87	103	85	100
580-81440-6	B-9.15-0to30-102418	75 C156	79	87	87	82	104	87	94
LCS 140-25296/12-B	Lab Control Sample	88 C156	68	88	92	85	84	79	82
LCSD 140-25296/13-B	Lab Control Sample Dup	85 C156	62	85	88	82	79	74	74
MB 140-25296/11-B	Method Blank	87 C156	65	87	92	86	86	76	76

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Isotope Dilution Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment

Job ID: 580-81440-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB1L (30-140)	PCB202L (30-140)	PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)	PCB37L (30-140)	PCB3L (30-140)
580-81440-1	E-9.02-0to26-102418	70	98	74	85	85	79	89	68
580-81440-2	512-0to29-102418	59	105	73	87	81	82	88	58
580-81440-3	A-9.03-0to26-102418	61	106	72	87	83	82	88	60
580-81440-4	D-9.09-0to29-102418	60	101	72	83	80	76	87	61
580-81440-5	G-9.15-0to18-102418	84	98	71	77	81	71	88	79
580-81440-6	B-9.15-0to30-102418	66	98	73	79	75	68	90	70
LCS 140-25296/12-B	Lab Control Sample	54	104	76	90	89	93	76	53
LCSD 140-25296/13-B	Lab Control Sample Dup	49	100	72	87	85	91	70	49
MB 140-25296/11-B	Method Blank	53	107	75	89	88	96	75	53

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB4L (30-140)	PCB54L (30-140)	PCB77L (30-140)	PCB81L (30-140)
580-81440-1	E-9.02-0to26-102418	82	39	86	86
580-81440-2	512-0to29-102418	74	53	84	83
580-81440-3	A-9.03-0to26-102418	78	57	82	83
580-81440-4	D-9.09-0to29-102418	75	54	78	78
580-81440-5	G-9.15-0to18-102418	84	42	84	85
580-81440-6	B-9.15-0to30-102418	77	33	82	82
LCS 140-25296/12-B	Lab Control Sample	68	52	81	78
LCSD 140-25296/13-B	Lab Control Sample Dup	62	43 q	76	75
MB 140-25296/11-B	Method Blank	68	48	78	77

Surrogate Legend

PCB104L = PCB-104L
PCB105L = PCB-105L
P114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
PCB157L = PCB-157L
PCB15L = PCB-15L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB170L = PCB-170L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB19L = PCB-19L
PCB1L = PCB-1L
PCB202L = PCB-202L
PCB205L = PCB-205L
PCB206L = PCB-206L
PCB208L = PCB-208L
PCB209L = PCB-209L
PCB37L = PCB-37L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB54L = PCB-54L
PCB77L = PCB-77L

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Isotope Dilution Summary

Client: Pacific Groundwater Group
Project/Site: Head of Swan Island Lagoon Sediment
PCB81L = PCB-81L

Job ID: 580-81440-1

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB1L (30-140)	PCB3L (30-140)	PCB4L (30-140)	PCB15L (30-140)	PCB19L (30-140)	PCB37L (30-140)	PCB54L (30-140)	PCB77L (30-140)
580-81440-7	612-102418	71	67	85	78	92	86	77	80
LCS 140-25006/6-A	Lab Control Sample	65	64	80	74	83	84	69	80
MB 140-25006/5-A	Method Blank	63	61	77	74	82	83	70	79

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB81L (30-140)	PCB104L (30-140)	PCB105L (30-140)	P114L (30-140)	PCB118L (30-140)	PCB123L (30-140)	PCB126L (30-140)	PCB155L (30-140)
580-81440-7	612-102418	79	81	91	86	85	85	85	88
LCS 140-25006/6-A	Lab Control Sample	79	74	87	83	83	81	82	78
MB 140-25006/5-A	Method Blank	78	72	88	83	83	82	82	75

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB156L (30-140)	PCB157L (30-140)	PCB167L (30-140)	PCB169L (30-140)	PCB170L (30-140)	PCB188L (30-140)	PCB189L (30-140)	PCB202L (30-140)
580-81440-7	612-102418	85 C	85 C156	85	93	82	84	75	100
LCS 140-25006/6-A	Lab Control Sample	80 C	80 C156	81	87	76	76	69	92
MB 140-25006/5-A	Method Blank	80 C	80 C156	81	87	76	78	69	95

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PCB205L (30-140)	PCB206L (30-140)	PCB208L (30-140)	PCB209L (30-140)
580-81440-7	612-102418	73	85	82	89
LCS 140-25006/6-A	Lab Control Sample	65	77	74	80
MB 140-25006/5-A	Method Blank	65	76	73	78

Surrogate Legend

PCB1L = PCB-1L
PCB3L = PCB-3L
PCB4L = PCB-4L
PCB15L = PCB-15L
PCB19L = PCB-19L
PCB37L = PCB-37L
PCB54L = PCB-54L
PCB77L = PCB-77L
PCB81L = PCB-81L
PCB104L = PCB-104L
PCB105L = PCB-105L
P114L = PCB-114L
PCB118L = PCB-118L
PCB123L = PCB-123L
PCB126L = PCB-126L
PCB155L = PCB-155L
PCB156L = PCB-156L
PCB157L = PCB-157L
PCB167L = PCB-167L
PCB169L = PCB-169L
PCB170L = PCB-170L
PCB188L = PCB-188L
PCB189L = PCB-189L
PCB202L = PCB-202L
PCB205L = PCB-205L

Eurofins TestAmerica, Seattle

Isotope Dilution Summary

Client: Pacific Groundwater Group

Project/Site: Head of Swan Island Lagoon Sediment

PCB206L = PCB-206L

PCB208L = PCB-208L

PCB209L = PCB-209L

Job ID: 580-81440-1

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