REPORT

DATA SUMMARY REPORT
YEAR 3 EVENT 2 LONG-TERM PILOT CAP MONITORING

REMOVAL ACTION
NW NATURAL "GASCO" SITE

Prepared by
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April 2010

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REMOVAL ACTION
NW NATURAL "GASCO" SITE

Prepared for Submittal to

U.S. Environmental Protection Agency, Region 10
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LIST OF ACRONYMS AND ABBREVIATIONS

AP	Analytical Perspectives
BTEX	benzene, toluene, ethylbenzene, and xylene
CAS	Columbia Analytical Services, Inc.
CDD	chlorinated dibenzo-p-dioxin
CDF	chlorinated dibenzofurans
COC	chain-of-custody
DOC	dissolved organic carbon
EPA	U.S. Environmental Protection Agency
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LDC	Laboratory Data Consultants, Inc.
MARP	*Monitoring and Reporting Plan*
MDL	method detection limit
MRL	method reporting limit
MS/MSD	matrix spike and matrix spike duplicate
NELAP	National Environmental Laboratory Accreditation Program
OPR	ongoing precision and recovery analysis
Order	Administrative Order on Consent
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PCM	pilot cap monitoring
QA/QC	quality assurance/quality control
RAOs	Removal Action Objectives
RAPP	*Removal Action Project Plan*
RPD	relative percent difference
Site	NW Natural "Gasco" Site
SOW	Statement of Work
SVOC	semivolatile organic compound
TOC	total organic carbon
TPH-Dx	total petroleum hydrocarbons – diesel range
TPH-G	gasoline-range total petroleum hydrocarbons
TSS	total suspended solids
VOC	volatile organic compound

1 INTRODUCTION

NW Natural entered into an Administrative Order on Consent (Order) with the U.S. Environmental Protection Agency (EPA) on April 28, 2004, to perform a time-critical removal action at the NW Natural "Gasco" site (Site; EPA 2004a; Figure 1). The Order requires that NW Natural perform a number of actions associated with removing a tar body (as defined in the Order) from the riverbank and nearshore sediment adjacent to the Site. The extent of the tar body was defined during the design characterization sampling (Figure 2). In accordance with the EPA-approved *Final Removal Action Project Plan* (RAPP; Anchor 2005), removal of the tar body was initiated in August 2005 and was completed in late October 2005.

Pending future implementation of a site-wide remedy, long-term monitoring of the tar body removal occurred in 2006, 2007, and 2008 (referred to as Year 0, Year 1, and Year 2 long-term monitoring) in accordance with the EPA-approved *Monitoring and Reporting Plan* (MARP; Anchor 2006). Evaluation of the first two years of post-removal long-term monitoring results showed that a revised monitoring approach was warranted to continue to collect useful information relevant to the identified post-removal monitoring objectives. The revised monitoring approach was summarized in a letter to EPA dated March 26, 2008, with the subject "Proposed Revised Long-Term Pilot Cap Monitoring Approach – NW Natural 'Gasco' Site." EPA approved this approach in a letter to NW Natural dated April 30, 2008.

In summary, the revised monitoring approach consisted of the following activities and a reporting procedure and schedule identical to those defined in the MARP (Anchor 2006):

- Diver reconnaissance surveys once per summer during low river elevations
- Bathymetric surveys during summer low and winter high river elevation conditions
- Continued monitoring for the presence of product (i.e., tar or oil) in the hydraulic low spot created by the removal action during the annual low river elevation diver reconnaissance surveys
- Continued monitoring of the stability of the pilot cap armor and adjacent fringe through completion of the semi-annual bathymetry surveys and annual diver reconnaissance surveys
- Continued monitoring of depositional sediment concentrations both within the pilot cap area and fringe cover area

- Continued monitoring of the discrete near-bottom surface water concentrations at the nine pilot cap monitoring stations and downstream and upstream "background" stations

In accordance with the reporting requirements identified in the MARP (Anchor 2006), the remainder of this Data Summary Report provides the Year 3 Event 2 monitoring results. As requested by EPA, this Data Summary Report includes a summary of the monitoring conducted, methods used during monitoring, tabulated results, data validation reports, and sampling location maps. No evaluation of the data is provided. Data evaluation for this monitoring event will be summarized in the Annual Data Evaluation Monitoring Report – Year 3 Long-Term Pilot Cap Monitoring.

2 SUMMARY OF MONITORING ACTIVITIES AND ANALYSES

This section summarizes the Year 3 Event 2 sampling activities. Monitoring related to meeting the Removal Action Objectives (RAOs) of the project Statement of Work (SOW) versus evaluation of the pilot cap are noted in the heading of each of the following subsections. The results of sampling activities are described in Section 3.

2.1 Visual Inspection (RAO-specific)

Visual monitoring has been conducted since completion of the removal action to identify any areas of sheen or product release, per the RAOs in the project SOW. Visual monitoring was conducted from August 2009 to March 2010 following submittal of the Data Summary Report - Year 3 Event 1 Long-Term Pilot Cap Monitoring (Anchor QEA 2009a). Monitoring was conducted either from the waterside, the top of the bank, the beach, and/or the adjacent pipeline structure to ensure visual coverage of the removal action area.

Results of the visual surveys are discussed in Section 3.1.

2.2 Bathymetric Survey (RAO-specific)

A bathymetry survey was performed during the Year 3 Event 2 monitoring activities on December 8, 2009, within the entire area previously bounded by the outer area containment system to monitor changes in mudline elevation and assess changes in cap and fringe cover thickness.

Results of the bathymetry survey are discussed in Section 3.2.

2.3 Recent Depositional Sediment Sampling (Site-specific)

As identified during the Year 0, Year 1, and Year 2 long-term monitoring activities, a depositional layer of surface sediment was identified that overlaid the pilot cap armor layer and fringe cover outside of the pilot cap area. This layer ranged in thickness from approximately 2 to 10 centimeters across the entire pilot cap area (Table 1). Although not required by the MARP (Anchor 2006), NW Natural has continued to sample these sediments to determine the chemical characteristics of the river-wide sediment loading to the pilot cap area and perimeter fringe cover area and evaluate the potential concentration differences in these two areas. This material was sampled on December 9 and 10, 2009, at four pilot cap monitoring stations (PCM-02, PCM-

04, PCM-06, and PCM-09) and at three stations (PCM-14, PCM-15, and PCM-22) in the fringe cover area (Figure 3). Sampling stations PCM-04 and PCM-22 were added to the revised monitoring approach to further evaluate depositional sediment concentration trends within the pilot cap and fringe cover areas, respectively. The samples were analyzed for the full list of Portland Harbor Superfund Site contaminants of interest (Integral 2004), including dioxins/furans and polychlorinated biphenyl (PCB) congeners, rather than site-specific contaminants of interest.

Results of the depositional surface sediment sampling are provided in Section 3.3.

2.4 Near-bottom Surface Water Sampling (Pilot Cap-specific)

Discrete near-bottom surface water samples were collected directly overlying the cap and at locations downstream and upstream from the removal action area. Nine near-bottom surface water samples were collected within the pilot cap area (PCM-02 to PCM-06, PCM-08 to PCM-10, and PCM-21). In addition, discrete samples were collected from three upstream stations (PCM-13, PCM-19, and PCM-20) and one downstream station (PCM-01). The sampling locations are shown on Figure 3.

The discrete samples were collected on December 9, 2009, in accordance with the MARP (Anchor 2006) protocols. The discrete samples were collected first thing in the morning prior to any monitoring activities with the potential to disturb the mudline and increase suspended solids in the water column. The discrete samples were analyzed for total organic carbon (TOC); dissolved organic carbon (DOC); total suspended solids (TSS); total, free and amenable cyanide; sulfides; total and dissolved iron; polycyclic aromatic hydrocarbons (PAHs); and benzene, toluene, ethylbenzene, and xylene (BTEX). The DOC and dissolved iron were laboratory-filtered so the results are in dissolved concentrations. The BTEX samples were not field- or laboratory-filtered.

Results of the discrete near-bottom surface water sampling are discussed in Section 3.4.

2.5 Chemical Analysis

Columbia Analytical Services, Inc. (CAS), a National Environmental Laboratory Accreditation Program (NELAP) -certified laboratory located in Kelso, Washington, conducted all bulk sediment and water chemical analyses except for PCB congeners and dioxin/furan analyses.

Analytical Perspectives (AP), a NELAP-certified laboratory located in Wilmington, North Carolina conducted the PCB congener and dioxin/furan analyses. Chemical testing adhered to the procedures defined in the MARP (Anchor 2006).

2.6 Quality Assurance/Quality Control

2.6.1 Field QA/QC

Field quality assurance/quality control (QA/QC) samples were used to evaluate the efficiency of field decontamination procedures. One trip blank accompanied samples submitted to the laboratory on December 10, 2009. One rinsate blank each was submitted in conjunction with depositional sediment sampling and near-bottom surface water sampling. In addition, one field blank, consisting of analysis of the deionized water used for the rinsate blanks, was submitted and analyzed.

2.6.2 Laboratory QA/QC

Matrix spike and matrix spike duplicates (MS/MSD) were analyzed with each organic analytical method with the exceptions of NWTPH-G, NWTPH-DX, PCB congeners, and dioxin/furans. NWTPH-G and NWTPH-DX require sample duplicates only. PCB congeners and dioxin/furans are spiked with labeled standards in every sample which evaluate the matrix bias of every sample and thus do not require a separate MS/MSD analysis. An MS and a sample duplicate were analyzed with each inorganic analytical method with the exception of total solids, TSS, and grain size analyses. For these three analyses, a duplicate or triplicate analysis was performed and a relative percent difference (RPD) was used to evaluate control. Additional quality control included method blanks, surrogate compound analysis, and laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) analyses, and ongoing precision and recovery analysis (OPR). Analyses which deviated from the suggested QA/QC guidelines are discussed below.

Analyses of the discrete surface water samples that deviated from the QA/QC guidelines listed above were PAHs, which had insufficient sample volume to prepare MS/MSD samples. An LCS/LCSD was analyzed in lieu of an MS/MSD to assess precision.

There were no deviations from the QA/QC guidelines in the depositional sediment samples.

2.6.3 Chain-of-Custody

Chain-of-custody (COC) forms were used to track sample custody and document the proper handling and integrity of all field samples. All sediment and water samples were delivered directly to the laboratory by Anchor QEA personnel. All samples were packed in chilled coolers. Copies of the COC forms for all sampling media are provided in Appendix A.

2.7 Data Validation

All data submitted in this report were validated by Laboratory Data Consultants, Inc. (LDC) of Carlsbad, California. The level 3 data validation was performed under EPA guidelines, as described in the MARP (Anchor 2006). The analyses were validated using the following documents, as applicable to each method:

- Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA 2004b)
- National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) and Chlorinated Dibenzofurans (CDFs) Data Review (EPA 2005)
- Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2008)

3 MONITORING RESULTS

3.1 Visual Inspection

The visual monitoring forms are provided in Appendix B. No erosion or deposition was evident along the shoreline during any of the visual inspections. No areas of sheen or product release were identified in the cap area or downriver of the cap during any of the visual inspections. A small area of spotty sheen (2 feet by 2 feet) was observed at the shoreline, just upriver of the cap area, adjacent to a group of pilings during the September 14 visual inspection.

3.2 Bathymetry Survey

The results of the bathymetry survey are provided in Figure 4. The isopach surface comparing the elevation differences identified between the post-cap placement (conducted in October 2005) and the Year 3 Event 2 surveys is provided in Figure 5. This isopach surface continues to document that the pilot cap area is, in general, a stable depositional environment and has withstood erosive forces during the high winter flows. Consistent with the Year 0, Year 1, and Year 2 survey results (Anchor 2007, Anchor 2008a, and Anchor 2008b), a small area within the protected area (i.e., area with no dredging) just upstream from the channelward pipeline support continues to show elevations below the as-built capping elevations. The lower elevations are in the same general footprint and depths as the Year 0, Year 1, and Year 2 surveys, indicating no significant additional erosion in this area. As discussed in previous monitoring reports, it is anticipated that these lower elevations are due to slope failure into the dredged area just upstream. Note that the accuracy of the bathymetry survey is estimated to be plus or minus 0.5 feet.

3.3 Recent Depositional Sediment Sampling

The depositional surface sediment collection forms are provided in Appendix C and the analytical results are provided in Table 2. A number of metals, PAHs, and pesticides yielded concentrations above the identified screening levels in the recently deposited sediments at the pilot cap and fringe cover stations. Additionally, several PCB Aroclors, semi-volatile organic compounds (SVOCs), and volatile organic compound (VOCs) had non-detect reporting limits that exceeded one or more screening levels.

3.4 Near-Bottom Surface Water

The discrete near-bottom surface water analytical results are provided in Table 3. Total PAH concentrations at all of the pilot cap stations were above the identified screening levels. In addition, the benzo(a)pyrene concentration at PCM-10 was above at least one of the identified screening levels. Also, some samples had non-detect reporting limits for total and free cyanide, benzo(a)pyrene, dibenzo(a,h)anthracene, and benzene that exceeded one or more screening level.

3.5 Quality Assurance/Quality Control

The overall data QA/QC results for the Year 3 Event 2 monitoring effort are described below. In summary, the completeness goal of 90 percent was met and other data quality objectives were generally met, with the exceptions discussed in the data validation section below.

3.5.1 Field QA/QC

The field QA/QC analytical results are provided in Table 4. Overall, because there were very low level detections of common target analytes, the equipment decontamination protocols were successful.

3.5.2 Laboratory QA/QC

Data qualifiers assigned because of the data validation and their definitions are shown on each of the respective analytical results tables (i.e., Table 2 through 4).

3.5.3 Data Validation

Data qualifiers assigned because of the data validation and their definitions are shown on each of the respective analytical results tables (i.e., Table 2 through 4). Data validation reports are provided in Appendix D. These reports verified the analytical accuracy and precision of the chemical analyses performed during this monitoring effort. The Year 3 Event 2 monitoring data may have been qualified as estimated for a particular analysis based on method or technical criterion as stated in the functional guidelines (EPA 2004b, 2008). Data qualified with a "J" indicates that the associated numerical value is the approximate concentration of the analyte. Data qualified with a "UJ" indicates the approximate reporting limit below which the analyte was not detected. Consequently, these data qualifications are not expected to alter the data

quality objectives defined in the MARP (Anchor 2006). Data qualified with an "R" has been rejected and was not considered valid for the purpose of assessing completeness.

A brief description of the data usability for each of the media monitored is provided in the following section.

3.5.3.1 Depositional Sediment Results

Six depositional sediment samples were collected on December 9 and 10, 2009. All chemical analyses were analyzed by CAS except PCB congeners and dioxin/furans which were analyzed by AP. The CAS data were reported under the lab report IDs K0911973 and K0911919 and the AP data were reported under the lab report IDs P1904 and P1905. There were no problems encountered with total solids, ammonia, total sulfides, TOC, total cyanide, grainsize, gasoline-range total petroleum hydrocarbons (TPH-Gx), diesel- and residual-range total petroleum hydrocarbons (TPH-Dx), PAHs, PCBs, and phenols. Remaining analyses (VOCs, SVOCs, pesticides, herbicides, metals, hexavalent chromium, butyltins, dioxin/furans, and PCB-congeners analyses) contained QA/QC-related issues pertaining to method or technical criteria. Associated sample results were qualified as estimated based on these findings. Given the complex matrix of these samples, and the extensive target analyte list, QA/QC outliers were inevitable. The laboratories followed their standard operating procedures (SOPs) and diluted and re-analyzed samples as necessary. All data were determined to be useable as qualified in this data report except a zero percent LCS recovery of SVOC analyte 3,3'-dichlorobenzidine which resulted in the rejection of this analyte in samples PCM-DSRB-091210 and PCM-FB-091210. Because these were field QA/QC samples, the data quality objectives were not impacted by this rejection.

3.5.3.2 Discrete Surface Water Results

Thirteen surface water samples were collected December 9, 2009. The samples were submitted to CAS and reported under the lab report ID K0911918. There were no problems encountered with the VOC, PAHs, iron, total cyanide, amenable cyanide, free cyanide, sulfide, TSS, TOC, and DOC analyses with the exception of method blank concentrations detected below the reporting limit which resulted in some detect values becoming non-detects. All data were deemed useable as reported.

3.5.3.3 QA/QC Analytical Results

Four QA/QC samples were submitted to CAS on December 11, 2009 and reported under the lab report ID K0911973. One QA/QC sample was submitted to AP and reported under the lab report ID P1904.

Analysis of the depositional sediment rinsate blank (i.e., sample PCM-DSRB-091210) resulted in the detection of methylene chloride, chloroform, chloromethane, diethylphthalate, several PCB congeners, aluminum, and gasoline range organics below the method reporting limit (MRL) but above the method detection limit (MDL). Toluene and lead were detected above the MRL.

Analysis of the discrete surface water rinsate blank (i.e., sample PCM-DRB-091210) resulted in the detection of naphthalene, and phenanthrene, below the MRL but above the MDL. Total cyanide and amenable cyanide were detected above the MRL.

Analysis of the field blank (i.e., sample PCM-FB-081210) resulted in the detection of methylene chloride, diethylphthalate, and aluminum below the MRL, but above the MDL. Chloroform and toluene were detected above the MRL.

One trip blank (PCM-TB-091210) was analyzed in association with sample collection. Chloromethane was detected in this analysis below the MRL, but above the MDL.

Chloroform, chloromethane, total cyanide, and amenable cyanide were not detected in any associated field samples. PCB congeners, naphthalene, aluminum, and lead concentrations were significantly less (less than 5 times) than the concentrations present in the associated field samples. Methylene chloride and diethylphthalate are common laboratory contaminants and were detected at similar concentrations in several associated field samples indicating possible laboratory or field contamination. Toluene, phenanthrene, and gasoline range organics were present in several associated samples at similar concentrations indicating possible field contamination. None of the depositional sediment or discrete surface water results were qualified based on the rinsate or field blank analytical results.

3.5.3.4 Reporting Limits

As shown in Table 5, the target laboratory MRLs for all of the depositional sediment samples were generally achieved, with the exception of hexavalent chromium, tri-butytin, PCB aroclors,

chlorinated phenols pesticides, herbicides, SVOCs, and VOCs in some samples. For PCB aroclor and chlorinated phenol analyses, the reporting limits were elevated for multiple target aroclors due to the presence of non-target background components. For herbicide analyses the reporting limits were raised in several samples due to high levels of non-target background components; appropriate method clean-up procedures were attempted prior to dilution of the sample extracts but did not eliminate the need for a dilution. For VOC analyses the lab performed a screening prior to analysis which indicated that high concentrations of non-target VOCs were present. This prompted a medium-level analysis (which is essentially a dilution) on some samples. For SVOC analyses, all samples required dilutions due to high levels of non-target background components; appropriate method clean-up procedures were attempted prior to dilution of the sample extracts, but did not eliminate the need for a dilution. Hexavalent chromium analyses had raised MRLs due to the concentration of the initial calibration's low-end standard, which did not support a lower reporting limit. Pesticide, VOCs (non-diluted), and tri-butyltin MRLs were generally met; there were slight MRL exceedances due to percent moisture (dry weight conversion) and matrix interferences. Due to the difficult matrix of these samples, the achieved reporting limits were deemed adequate.

The target laboratory MRLs for the discrete surface water samples were achieved with the exception of total, amenable, and free cyanide in all samples, and PAHs in some samples. The laboratory cannot achieve lower MRLs for total, amenable, and free cyanide due to instrument or equipment constraints. PAH MRLs were generally met; there were just a few insignificant exceedances due to initial sample size volumes. Achieved reporting limits were deemed adequate.

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TABLES

Table 1
Sample Collection Information – Year 3 Event 2 Long-term Monitoring

Station	Proposed (NAD 83)		Actual (NAD 83)[a]		Depositional Surface Sediment			Surface Water	
	Latitude	Longitude	Latitude	Longitude	Date	Time	Depositional Layer (cm)	Date	Time
PCM-01	45.5815213	-122.7611330	45.5815213	-122.7611330	--	--	--	12/9/2009	8:57
PCM-02[b]	45.5801345	-122.7583817	45.5801345	-122.7583817	12/9/2009	13:00	7/7	12/9/2009	9:50
PCM-03	45.5800443	-122.7584068	45.5800443	-122.7584068	--	--	--	12/9/2009	10:00
PCM-04[b,c]	45.5799599	-122.7584167	45.5799599	-122.7584167	12/9/2009	14:00	2/4/3	12/9/2009	10:25
PCM-05	45.5801330	-122.7582274	45.5801330	-122.7582274	--	--	--	12/9/2009	10:50
PCM-06[b]	45.5800349	-122.7582066	45.5800349	-122.7582066	12/9/2009	14:45	6/5	12/9/2009	11:05
PCM-21[d]	45.5798940	-122.7582338	45.5798940	-122.7582338	--	--	--	12/9/2009	11:15
PCM-08	45.5800056	-122.7580492	45.5800056	-122.7580492	--	--	--	12/9/2009	11:45
PCM-09	45.5798946	-122.7581036	45.5798946	-122.7581036	12/9/2009	15:00	8	12/9/2009	11:35
PCM-10	45.5798427	-122.7582100	45.5798427	-122.7582100	--	--	--	12/9/2009	11:25
PCM-13	45.5789664	-122.7548505	45.5789664	-122.7548505	--	--	--	12/9/2009	9:25
PCM-14[b]	45.5804451	-122.7578888	45.5804451	-122.7578888	12/10/2009	10:00	3/4/4	--	--
PCM-15[b]	45.5802183	-122.7572758	45.5802183	-122.7572758	12/10/2009	9:30	2/3/3	--	--
PCM-19	45.5787667	-122.7548054	45.5787667	-122.7548054	--	--	--	12/9/2009	9:40
PCM-20	45.5791756	-122.7549144	45.5791756	-122.7549144	--	--	--	12/9/2009	9:15
PCM-22[e]	45.5802003	-122.7579525	45.5802003	-122.7579525	12/10/2009	11:00	10	--	--

Notes:

a The actual sampling stations were collected when the vessel was on station.

b The grab sampler was deployed multiple times at the same location to retrieve sufficient sample volume for analysis.

c Additional depositional sediment sampling station collected during the Year 2 Event 1, Year 2 Event 2, Year 3 Event 1, and Year 3 Event 2 sampling to better evaluate depositional sediment concentrations within the pilot cap area.

d This station was offset approximately 15 feet southwest from station PCM-18 sampled during Year 0 Event 3. Gravel placed at the target station location as part of the Phase 2 offshore drilling actitivies precluded sampling at PCM-18.

e Additional depositional sediment sampling station collected during the Year 2 Event 1, Year 2 Event 2, Year 3 Event 1, and Year 3 Event 2 sampling to better evaluate fringe cover depositional sediment concentrations.

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
Conventional Parameters (mg/kg)									
Ammonia			**77.3**	**44.6**	**87**	**86.7**	**53.7**	**28**	**91.6**
Cyanide			**1.77**	**0.65**	0.57 U	0.59 U	0.4 U	**1.19**	0.57 U
Sulfide			**158**	**95**	**122**	**130**	**139**	**102**	**173**
Conventional Parameters (pct)									
Total organic carbon			**3.25**	**2.18**	**2.9**	**3.01**	**1.65**	**1.79**	**2.39**
Total solids			**42.9**	**46.9**	**36**	**39.2**	**44.7**	**42.3**	**39.2**
Grain Size (pct)									
Gravel			**0**	**0.81**	**0.04**	**0.04**	**1.56**	**4.84**	**0.09**
Sand, Very Coarse			**0.12**	**3.67**	**0.84**	**0.53**	**2.96**	**2.09**	**0.77**
Sand, Coarse			**1.12**	**9.67**	**1.64**	**1.06**	**7.39**	**4.32**	**1.59**
Sand, Medium			**3.7**	**18.9**	**3.13**	**2.34**	**27.4**	**20.6**	**3.65**
Sand, Fine			**11.2**	**25.1**	**5.62**	**4.74**	**9.31**	**6.08**	**5.52**
Sand, Very Fine			**32.9**	**7.5**	**16.9**	**19.9**	**7.42**	**5.89**	**13**
Silt			**48.4**	**30.2**	**66.3**	**47.4**	**47.8**	**54.5**	**67.9**
Clay			**4.2**	**2.14**	**3.45**	**21.2**	**3.34**	**2.98**	**5.09**
Metals (mg/kg)									
Aluminum			**19700**	**12500**	**19600**	**21100**	**18400**	**17900**	**27000**
Antimony	10	64	**0.171 J**	**0.232 J**	**0.155 J**	**0.169 J**	**0.115**	**0.104**	**0.154**
Arsenic	4	33	**3.07**	**2.7**	**3.45**	**3.62**	**3.56**	**3.61**	**4.57**
Cadmium	0.003	4.98	**0.189**	**0.152**	**0.196**	**0.195**	**0.25**	**0.21**	**0.265**
Chromium	4200	11.1	**21.9**	**27.8**	**23.3**	**25.6**	**19.9**	**23**	**31.1**
Chromium VI			1.2 UJ	1.1 UJ	**0.26 J**	**0.27 J**	**0.18 J**	**0.22 J**	**0.24 J**
Copper	10	149	**30.6 J**	**24.4 J**	**31.8 J**	**35.2 J**	**26.4**	**29.4**	**43.8**
Lead	128	128	**12 J**	**10.8 J**	**12.5 J**	**12 J**	**8.32 J**	**11.2 J**	**13.1 J**
Mercury		1.06	**0.064**	**0.04**	**0.064**	**0.061**	**0.06**	**0.049**	**0.069**
Nickel	316	48.6	**18.8**	**15.8**	**17.9**	**20.2**	**18.2**	**18.7**	**25.2**
Selenium	0.1	5	**0.23**	0.16 U	0.2 U	0.22 U	**0.15**	**0.2**	**0.18**
Silver		5	**0.244**	**0.077**	**0.123**	**0.115**	**0.096**	**0.098**	**0.142**
Zinc	3	459	**110**	**92.2**	**111**	**108**	**86.8**	**91.1**	**121**
Organometallic Compounds (µg/kg)									
n-Butyltin (ion)			**0.89 J**	**0.87 J**	**2.4 J**	**1.4 J**	**1.6 J**	**1.4 J**	**1.6 J**
Dibutyltin (ion)			**2.1 J**	**2.1 J**	**1.7 J**	**1.5 J**	**1.7 J**	**1.6 J**	**1.8 J**
Tetrabutyltin (ion)			2.4 UJ	2.2 UJ	2.8 UJ	2.6 UJ	2.3 UJ	2.4 UJ	2.6 UJ
Tributyltin (ion)	190		**4.3 J**	**5.1**	**2.8 J**	2.6 U	**3.6 J**	**5.1 J**	**3.5**
Volatile Organics (µg/kg)									
1,1-Dichloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,1-Dichloroethene			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,1,1-Trichloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,1,1,2-Tetrachloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,1,2-Trichloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,1,2,2-Tetrachloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,2-Dibromoethane (Ethylene dibromide)			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
1,2-Dichloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,2-Dichloroethene, trans-			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,2-Dichloropropane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,2,3-Trichloropropane			3700 U	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 UJ
1,3-Dichloropropene, cis-			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,3-Dichloropropene, trans-			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
1,4-Dichlorobenzene		300.0000000000	3700 U	1.1 U	1.4 U	1.3 U	**0.83 J**	1.2 U	1.3 U
2-Butanone (MEK)			7400 U	4.2 U	5.6 U	5.1 U	4.5 U	**4.2 J**	**13**
2-Chloroethylvinyl ether			7400 UJ	5.3 U	6.9 U	6.4 U	5.6 U	5.8 U	6.4 U
2-Hexanone (Methyl butyl ketone)			7400 U	4.2 U	5.6 U	5.1 U	4.5 U	4.7 U	5.1 UJ
Acetone			37000 U	11 U	14 U	13 U	12 U	**75**	**120**
Acrolein			9200 UJ	11 UJ	14 UJ	13 UJ	12 UJ	12 UJ	13 UJ
Acrylonitrile			7400 UJ	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 U
Benzene			3700 U	**1.9**	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Bromochloromethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Bromodichloromethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Bromoform			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Bromomethane			3700 U	1.1 UJ	1.4 UJ	1.3 UJ	1.2 UJ	1.2 UJ	1.3 UJ
Carbon disulfide			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	**0.9 J**	**1.4**
Carbon tetrachloride (Tetrachloromethane)			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 UJ
Chlorobenzene			3700 U	1.1 U	1.4 U	1.3 U	**0.78 J**	1.2 U	1.3 UJ
Chloroethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Chloroform			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Chloromethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Dibromochloromethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Dibromomethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Dichlorodifluoromethane			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Dichloromethane (Methylene chloride)			19000 U	5.3 U	6.9 U	6.4 U	5.6 U	5.8 U	6.4 U
Ethylbenzene			3700 U	1.1 U	**1.9**	1.3 U	**0.27 J**	1.2 U	**0.39 J**
Iodomethane (Methyl iodide)			7400 UJ	4.2 UJ	5.6 UJ	5.1 UJ	4.5 UJ	4.7 UJ	5.1 UJ
Isopropylbenzene (Cumene)			**190 J**	**0.16 J**	**0.77 J**	1.3 U	**5.5**	1.2 U	1.3 U
Methyl isobutyl ketone (4-Methyl-2-pentanone or			7400 U	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 U
Methyl tert-butyl ether (MTBE)			3700 U	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 U
m,p-Xylene			3700 U	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 U
o-Xylene			3700 U	1.1 U	**1.9**	1.3 U	**2.2**	1.2 U	**0.39 J**
Styrene			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Tetrachloroethene (PCE)		500.0000000000	3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Toluene			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	**0.31 J**	**0.57 J**
trans-1,4-Dichloro-2-butene			7400 U	2.1 U	2.8 U	2.6 U	2.3 U	2.4 U	2.6 U
Trichloroethene (TCE)		2100.0000000000	3700 U	1.1 U	1.4 U	1.3 U	1.2 U	**0.36 J**	1.3 U
Trichlorofluoromethane (Fluorotrichloromethane)			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Vinyl acetate			3700 UJ	2.1 UJ	2.8 UJ	2.6 UJ	2.3 UJ	2.4 UJ	2.6 UJ
Vinyl chloride			3700 U	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U

Table 2

Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene		200	**1300**	**890**	**140**	**100**	**35**	**60**	**120**
Acenaphthene		300	**6500**	**6400**	**770**	**330**	**410**	**80**	**410**
Acenaphthylene		200	**1500**	**4300**	**310**	**530**	**40**	**180**	**140**
Anthracene		845	**6200**	**10000**	**930**	**690**	**110**	**1100**	**520**
Benzo(a)anthracene		1050	**11000**	**27000**	**2600**	**2800**	**300**	**1600**	**1600**
Benzo(a)pyrene		1450	**17000**	**43000**	**4100**	**5000**	**530**	**2400**	**2500**
Benzo(b)fluoranthene			**15000**	**37000**	**3600**	**4100**	**460**	**2000**	**2100**
Benzo(g,h,i)perylene		300	**15000**	**35000**	**3700**	**5100**	**510**	**2100**	**2300**
Benzo(k)fluoranthene		13000	**5000**	**14000**	**1300**	**1400**	**170**	**550**	**590**
Chrysene		1290	**13000**	**31000**	**3000**	**3200**	**380**	**2600**	**1800**
Dibenzo(a,h)anthracene		1300	**1600**	**3900**	**400**	**510**	**57**	**230**	**250**
Fluoranthene		2230	**29000**	**76000**	**5600**	**5200**	**530**	**3800**	**3100**
Fluorene		536	**3100**	**4400**	**290**	**200**	**140**	**76**	**250**
Indeno(1,2,3-c,d)pyrene		100	**13000**	**30000**	**3100**	**4000**	**400**	**1800**	**2000**
Naphthalene		561	**11000**	**4500**	**5500**	**460**	**120**	**250**	**280**
Phenanthrene		1170	**23000**	**42000**	**3000**	**1800**	**410**	**1500**	**2200**
Pyrene		1520	**37000**	**110000**	**7200**	**6800**	**620**	**5200**	**4000**
Total 6 of 16 LPAH (U = 0)			**51300**	**71600**	**10800**	**4010**	**1230**	**3186**	**3800**
Total 10 of 16 HPAH (U = 0)			**156600**	**406900**	**34600**	**38110**	**3957**	**22280**	**20240**
Total 16 PAH (U = 0)			**207900**	**478500**	**45400**	**42120**	**5187**	**25466**	**24040**
Semivolatile Organics (µg/kg)									
1,2,4-Trichlorobenzene		9200.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
1,2-Dichlorobenzene		1700.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
1,3-Dichlorobenzene		300.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
1,4-Dichlorobenzene		300.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	**5.6 J**
2,3,4,5-Tetrachlorophenol			12 U	11 U	14 U	13 U	12 U	12 U	13 U
2,3,5,6-Tetrachlorophenol			12 U	11 U	14 U	13 U	12 U	12 U	13 U
2,4,5-Trichlorophenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2,4,6-Trichlorophenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2,4-Dichlorophenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2,4-Dimethylphenol			1500 UJ	2700 UJ	350 UJ	320 UJ	56 UJ	59 UJ	64 UJ
2,4-Dinitrophenol			5900 U	11000 U	1400 U	1300 U	230 U	240 U	260 U
2,4-Dinitrotoluene			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2,6-Dinitrotoluene			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2-Chloronaphthalene			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2-Chlorophenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
2-Methylphenol (o-Cresol)			300 UJ	540 UJ	70 UJ	64 UJ	12 UJ	12 UJ	13 UJ
2-Nitroaniline			590 U	1100 U	140 U	130 U	23 U	24 U	26 U
2-Nitrophenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
3,3'-Dichlorobenzidine			3000 U	5400 U	700 U	640 U	120 U	120 U	130 U
3-Nitroaniline			590 U	1100 U	140 U	130 U	23 U	24 U	26 U
4-Bromophenyl-phenyl ether			300 U	540 U	70 U	64 U	12 U	12 U	13 U

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
4-Chloro-3-methylphenol			300 U	540 U	70 U	64 U	12 U	12 U	13 U
4-Chloroaniline			300 U	540 U	70 U	64 U	12 U	12 U	13 U
4-Chlorophenyl phenyl ether			300 U	540 U	70 U	64 U	12 U	12 U	13 U
4-Methylphenol (p-Cresol)			300 U	540 U	70 U	64 U	12 U	**5.1 J**	**9.2 J**
4-Nitroaniline			590 UJ	1100 UJ	140 UJ	130 UJ	23 U	24 U	26 U
4-Nitrophenol			3000 U	5400 U	700 U	640 U	120 U	120 U	130 U
Aniline			590 U	1100 U	140 U	130 U	23 U	24 U	26 U
Azobenzene			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Benzoic acid			5900 UJ	11000 UJ	1400 UJ	1300 UJ	**240 J**	**270 J**	**140 J**
Benzyl alcohol			590 U	1100 U	140 U	130 U	23 U	24 U	26 U
bis(2-Chloroethoxy)methane			300 U	540 U	70 U	64 U	12 U	12 U	13 U
bis(2-Chloroethyl)ether			300 U	540 U	70 U	64 U	12 U	12 U	13 U
bis(2-Chloroisopropyl) ether			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Bis(2-ethylhexyl) phthalate	330.0000000000	800.0000000000	3000 U	5400 U	**77 J**	**110 J**	**39 J**	**62 J**	**110 J**
Diethyl phthalate		600.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
Butylbenzyl phthalate			300 U	540 U	70 U	64 U	12 U	12 U	**12 J**
Dimethyl phthalate			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Di-n-butyl phthalate		100.0000000000	590 U	1100 U	140 U	130 U	23 U	24 U	26 U
Carbazole		1600.0000000000	**960**	**920**	**200**	**77**	**140**	**45**	**56**
Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)			3000 U	5400 U	700 U	640 U	120 U	120 U	130 U
Di-n-octyl phthalate			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Hexachlorobenzene		100.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
Hexachlorobutadiene		600.0000000000	300 U	540 U	70 U	64 U	12 U	12 U	13 U
Hexachlorocyclopentadiene		400.0000000000	1500 U	2700 U	350 U	320 U	56 U	59 U	64 U
Hexachloroethane			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Isophorone			300 U	540 U	70 U	64 U	12 U	12 U	13 U
Nitrobenzene			300 U	540 U	70 U	64 U	12 U	12 U	13 U
N-Nitrosodi-N-propylamine			300 U	540 U	70 U	64 U	12 U	12 U	13 U
N-Nitrosodiphenylamine			300 U	**520 J**	**41 J**	**20 J**	12 U	12 U	13 U
Pentachlorophenol		1000	3000 U	5400 U	700 U	640 U	120 U	120 U	130 U
Phenol		50	880 U	1600 U	210 U	200 U	**2.9 J**	**5 J**	**4.6 J**
PCB Aroclors (µg/kg)									
Aroclor 1016	420	530	12 U	11 U	14 U	13 U	12 U	12 U	13 U
Aroclor 1221			24 U	22 U	28 U	26 U	23 U	24 U	26 U
Aroclor 1232			18 U	41 U	14 U	13 U	12 U	12 U	13 U
Aroclor 1242	2		12 U	11 U	14 U	13 U	12 U	12 U	13 U
Aroclor 1248	4	1500	12 U	11 U	14 U	13 U	12 U	12 U	13 U
Aroclor 1254	10	300	60 U	29 U	29 U	24 U	12 U	13 U	25 U
Aroclor 1260		200	12 U	11 U	14 U	14 U	12 U	12 U	13 U
Aroclor 1262			12 U	11 U	14 U	13 U	12 U	12 U	13 U
Aroclor 1268			12 U	11 U	14 U	13 U	12 U	12 U	13 U
Total PCB Aroclors (U = 0)		676	60 U	41 U	29 U	26 U	23 U	24 U	26 U

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
PCB Congeners (ng/kg)									
PCB-001			**24.3**	**6.05**	**10.6**	**19.2**	**8.46**	**7.47**	**9.78**
PCB-002			**14.4**	**7.95**	**11.2**	**10.1**	**6.57**	**6.76**	**9.57**
PCB-003			**21 J**	**11.1**	**11.1**	**18.6**	**7.52**	**5.77 J**	**9.41**
PCB-004			**50 J**	**30 J**	**44.7 J**	**46.8 J**	**26.1 J**	**24.4 J**	**28.9 J**
PCB-005			**135 J**	0.949 U	**1.7 J**	**1.55 J**	**0.752 J**	**0.718 J**	**0.861 J**
PCB-006			**27.3 J**	**11.5 J**	**16.5 J**	**22.9 J**	**7.63 J**	**7.62 J**	**10.4 J**
PCB-007			**5.06 J**	**1.86 J**	**2.62 J**	**3.87 J**	**1.31 J**	**1.29 J**	**1.85 J**
PCB-008			**26.8 J**	**53.2 J**	**81.1 J**	**110 J**	**40.2 J**	**36.4 J**	**52.1 J**
PCB-009			**8.08 J**	**3.26 J**	**4.77 J**	**5.36 J**	**2.34 J**	**2.16 J**	**3.01 J**
PCB-010			0.979 U	0.949 U	**2.02 J**	**1.88 J**	**1.32 J**	**1.11 J**	**1.4 J**
PCB-011			0.979 U	**167 J**	**221 J**	**193 J**	**146 J**	**161 J**	**190 J**
PCB-012/013			1.96 U	**4.98 J**	**10.8 J**	**11.9 J**	**5.56 J**	**6.11 J**	**8 J**
PCB-014			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-015			0.979 U	**68.7 J**	**89 J**	**99.2 J**	**48.7 J**	**49.5 J**	**66.2 J**
PCB-016			0.979 U	0.949 U	**65.3**	**61.6**	**33.2**	**24.4**	**42.5**
PCB-017			0.979 U	**77.6**	**79**	**68**	**43.8**	**36.3**	**54**
PCB-018/030			1.96 U	**197**	**172**	**153**	**94.4**	**69.4**	**120**
PCB-019			**50.7**	**41.4**	**43.6**	**35.6**	**25.4**	**25.7**	**31.2**
PCB-020/028			**559**	**298**	**318**	**283**	**172**	**168**	**245**
PCB-021/033			**191**	**104**	**120**	**110**	**62.7**	**58.3**	**90.4**
PCB-022			**146**	**78.1**	**89.7**	**82.5**	**45.1**	**42.4**	**65.8**
PCB-023			**0.344**	0.949 U	0.999 U	**0.181**	0.974 U	0.952 U	0.973 U
PCB-024			0.979 U	0.949 U	**1.41**	**1.42**	**0.898 J**	**0.717 J**	**0.916 J**
PCB-025			**39**	**20.5**	**25.7**	**24.1**	**14.2**	**15.1**	**19.8**
PCB-026/029			**95.6**	**51.2**	**54.8**	**51.1**	**28.4**	**28.7**	**40.4**
PCB-027			0.979 U	0.949 U	**17.1**	**15**	**10.1**	**8.79**	**11.5**
PCB-031			**450**	**250**	**271**	**243**	**141**	**136**	**212**
PCB-032			0.979 U	0.949 U	**62**	**55.8**	**33**	**26.4**	**41.7**
PCB-034			**3.63**	**1.86**	**2.07**	**1.86**	**1.12**	**1.27**	**1.72**
PCB-035			0.979 U	0.949 U	**7.89**	**6.92**	**4.45**	**4.82**	**6.37**
PCB-036			0.979 U	0.949 U	**1.66**	**1.5**	**0.715 J**	**0.815 J**	**0.948 J**
PCB-037			**120**	**105**	**118**	**110**	**65.9**	**67.7**	**95.3**
PCB-038			0.979 U	0.949 U	0.999 U	**0.604 J**	0.974 U	**0.406 J**	**0.403 J**
PCB-039			0.979 U	**1.32 J**	**1.6**	**1.62**	**1.19**	**0.9 J**	**1.45**
PCB-040/071			**258**	**175**	**185**	**152**	**83.7**	**93.4**	**147**
PCB-041			0.979 U	**38.2**	**30.1**	**27.6**	**16.1**	**13.8**	**26.9**
PCB-042			0.979 U	0.949 U	**121**	**99.7**	**57**	**61.8**	**101**
PCB-043			0.979 U	**12.1**	**14.7**	**11.5**	**6.51**	**6.89**	**11.4**
PCB-044/047/065			2.94 U	**470**	**532**	**431**	**260**	**298**	**452**
PCB-045			**64**	**47.7**	**46.4**	**38.8**	**19**	**19.9**	**35.6**
PCB-046			**28**	**24.8**	**21.9**	**17.7**	**9.91**	**10.3**	**16.9**
PCB-048			**99.3**	**72.5**	**73.1**	**59.8**	**33.3**	**34.1**	**59**

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
PCB-049/069			1.96 U	**270**	**303**	**242**	**153**	**175**	**251**
PCB-050/053			**99.2**	**83.2**	**85.4**	**65.7**	**45.1**	**54**	**68.4**
PCB-051			**38.4**	**37.1**	**38.2**	**30.3**	**23.9**	**30**	**32.1**
PCB-052			0.979 U	**462**	**513**	**415**	**249**	**275**	**441**
PCB-054			0.979 U	**7.63**	**8.7**	**6.53**	**5.94**	**7.05**	**7.03**
PCB-055			0.979 U	0.949 U	**4.19**	**4.31**	**2.38**	**2.07**	**3.47**
PCB-056			0.979 U	0.949 U	**179**	**156**	**93.7**	**96.7**	**157**
PCB-057			0.979 U	0.949 U	**2.04**	**1.66**	**0.991**	**1.19**	**1.68**
PCB-058			0.979 U	0.949 U	**1.6 J**	**1.75**	**1.42**	**1.02**	**1.61**
PCB-059/062/075			2.94 U	**26.5**	**32.9**	**27.7**	**15.7**	**16.7**	**26.3**
PCB-060			**232**	**295**	**82**	**73.4**	**40.2**	**39.9**	**65**
PCB-061/070/074/076			3.92 U	3.8 U	**758**	**631**	**395**	**409**	**661**
PCB-063			0.979 U	0.949 U	**14.9**	**12.4**	**7.39**	**8.33**	**12.6**
PCB-064			**189**	**161**	**165**	**137**	**76.1**	**82.5**	**136**
PCB-066			0.979 U	0.949 U	**397**	**329**	**210**	**217**	**340**
PCB-067			0.979 U	0.949 U	**11.1**	**9.72**	**5.9**	**5.83**	**9.33**
PCB-068			**1.03 J**	0.949 U	**4.74**	**3.75**	**2.52**	**2.89**	**3.77**
PCB-072			**3.84**	0.949 U	**7.56**	**6.74**	**4.1**	**4.24**	**6.37**
PCB-073			0.979 U	0.949 U	**1.92 J**	**1.68**	**1.59 J**	**1.71**	**1.65**
PCB-077			**64.5**	**46.7**	**51.9**	**47.3**	**30.6**	**31.7**	**44.3**
PCB-078			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-079			**4.76**	**3.51**	**5.24**	**4.16**	**5.53**	**3.24**	**4.08**
PCB-080			**326**	**267**	0.999 U	0.957 U	0.974 U	0.952 U	**1.7**
PCB-081			**2.1**	**1.44**	**1.89**	**1.61**	**1.01**	**1.05**	**1.12**
PCB-082			**110**	**80.3**	**89.1**	**73.9**	**46.6**	**47.5**	**75.9**
PCB-083			**53.7**	**43.9**	**57.1**	**38.1**	**27.4**	**30.6**	**39.9**
PCB-084			0.979 U	0.949 U	**175**	**140**	**86.5**	**95.9**	**149**
PCB-085/116			**114**	**90.4**	**109**	**91.4**	**52.2**	**59**	**84.5**
PCB-086/087/097/108/119/125			**559**	**417**	**529**	**418**	**274**	**282**	**433**
PCB-088			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-089			0.979 U	0.949 U	**10**	**7.78**	**4.42**	**4.82**	**7.8**
PCB-090/101/113			**1040**	**760**	**1060**	**765**	**604**	**556**	**811**
PCB-091			0.979 U	0.949 U	**98.7**	**77.5**	**54.3**	**61.3**	**82.5**
PCB-092			0.979 U	**153**	**204**	**147**	**110**	**110**	**154**
PCB-093/100			1.96 U	1.9 U	**20.7**	**15.2**	**13.9**	**17.4**	**18.2**
PCB-094			0.979 U	**5.26**	**5.78**	**4.57**	**3.36**	**4.06**	**5.57**
PCB-095			0.979 U	0.949 U	**603**	**469**	**318**	**343**	**495**
PCB-096			**9.87**	**7.1**	**10.2**	**7.67**	**6.32**	**6.87**	**8.63**
PCB-098			0.979 U	0.949 U	**2.21**	**0.623 J**	**0.624 J**	**0.815 J**	**1.91**
PCB-099			**372**	**277**	**426**	**294**	**214**	**206**	**299**
PCB-102			0.979 U	0.949 U	**28.4**	**23.9**	**15.2**	**16.9**	**24.1**
PCB-103			0.979 U	**11**	**17.7**	**12.3**	**11.7**	**13.8**	**14.7**
PCB-104			**0.999**	**0.825 J**	**1.15**	**0.936 J**	**1.11**	**1.26**	**1.28**

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
PCB-105			**286**	**203**	**269**	**244**	**156**	**155**	**225**
PCB-106			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-107/124			**27.3**	**19.7**	**26.9**	**24.1**	**15**	**14.7**	**22.3**
PCB-109			**51**	**36.6**	**67.4**	**45.8**	**33.3**	**30.6**	**42.8**
PCB-110			**928**	**718**	**928**	**727**	**512**	**508**	**745**
PCB-111			**0.817 J**	**0.672 J**	**1.18**	**0.723 J**	**1.7**	**0.614 J**	**0.707 J**
PCB-112			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	**0.719 J**
PCB-114			**15.4**	**10.2**	**14.3**	**12.5**	**8.67**	**7.76**	**11.8**
PCB-115			**16.9**	**11.9**	**13.2**	**8.2**	**5.29**	**2.85**	**6.66**
PCB-117			**22.3**	**17.8**	**22.5**	**15.4**	**16.5**	**9.6**	**18.2**
PCB-118			**668**	**471**	**763**	**582**	**387**	**385**	**558**
PCB-120			**4.42**	**3.43**	**8.29**	**3.88**	**5.17**	**3.18**	**4.09**
PCB-121			0.979 U	0.949 U	**0.719 J**	**0.65 J**	**0.752 J**	**0.716 J**	**0.627 J**
PCB-122			**9.5**	**6.41**	**9.37**	**7.82**	**4.92**	**5.44**	**7.88**
PCB-123			**12.8**	**8.4**	**11.8**	**10.6**	**6.72**	**6.77**	**10.2**
PCB-126			**3.44**	**3.59**	**3.44**	**2.99**	**2.29**	**2.21**	**2.69**
PCB-127			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-128/166			**162**	**125**	**203**	**176**	**118**	**115**	**146**
PCB-129/138/163			**1110**	**768**	**1590**	**1070**	**982**	**709**	**945**
PCB-130			**64.5**	**46.6**	**81**	**66.8**	**52.2**	**42.4**	**55.8**
PCB-131			**10.8**	**7.73**	**12.3**	**9.68**	**6.77**	**6.17**	**8.4**
PCB-132			**326**	**236**	**432**	**290**	**275**	**201**	**265**
PCB-133			**26.4**	**18.1**	**32**	**22.6**	**44.7**	**17.5**	**21.5**
PCB-134			**59.9**	**45.9**	**77.8**	**54.9**	**48**	**38.4**	**47.6**
PCB-135/151			**450**	**322**	**620**	**374**	**417**	**284**	**356**
PCB-136			**200**	**135**	**246**	**150**	**170**	**122**	**157**
PCB-137			**28.6**	**21**	**32.9**	**38.9**	**19.1**	**20.1**	**28.2**
PCB-139/140			**16**	**12.2**	**18.3**	**15.7**	**26.6**	**10.3**	**13.6**
PCB-141			**210**	**142**	**334**	**182**	**180**	**128**	**171**
PCB-142			**1.23**	**0.779 J**	**0.764 J**	**0.793 J**	0.974 U	**0.456 J**	**0.52 J**
PCB-143			**1.43**	**0.633 J**	**2.25**	0.957 U	**0.932 J**	0.952 U	**1.9**
PCB-144			**58.5**	**41.7**	**83.3**	**47.6**	**46.1**	**33.5**	**43.7**
PCB-145			0.979 U	0.949 U	0.999 U	**0.374 J**	0.974 U	0.952 U	**0.32 J**
PCB-146			**181**	**128**	**254**	**168**	**290**	**125**	**158**
PCB-147/149			**865**	**614**	**1220**	**742**	**782**	**548**	**700**
PCB-148			**3.84**	**2.98**	**4.08**	**3.39**	**10.4**	**3.15**	**3.52**
PCB-150			**3.31**	**2.46**	**4.24**	**3.08**	**4.39**	**3.32**	**3.45**
PCB-152			**1.54**	**1.12**	**1.76 J**	**1.3 J**	**1.2**	**1.28**	**1.68**
PCB-153/168			**892**	**612**	**1420**	**810**	**917**	**584**	**746**
PCB-154			**23.7**	**17.1**	**27.4**	**20.2**	**50.9**	**18**	**21.4**
PCB-155			**0.528 J**	**0.398 J**	**0.683 J**	**0.505 J**	**0.512 J**	**0.522 J**	**0.559 J**
PCB-156/157			**116**	**78.4**	**153**	**128**	**87.4**	**73.3**	**96.3**
PCB-158			**99**	**70.7**	**146**	**101**	**86.2**	**62.2**	**86.7**

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
PCB-159			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-160			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-161			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-162			**7.81**	0.949 U	**3.4**	**3.13**	**1.95**	**1.47**	**2.53**
PCB-164			**72.1**	**50.5**	**103**	**63.8**	**64**	**43.9**	**57.5**
PCB-165			**1**	**0.725 J**	**0.953 J**	**0.817 J**	**1.44 J**	**0.941 J**	**0.974**
PCB-167			**40.2**	**27.2**	**56.3**	**44.3**	**32.3**	**26.6**	**34.5**
PCB-169			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-170			**313**	**198**	**614**	**274**	**302**	**217**	**261**
PCB-171/173			**106**	**71.3**	**200**	**88.8**	**92.8**	**68.8**	**85.8**
PCB-172			**55.4**	**37.4**	**108**	**49.5**	**48.9**	**40.1**	**47.3**
PCB-174			**371**	**257**	**686**	**298**	**307**	**241**	**275**
PCB-175			**17.1**	**11.7**	**31.6**	**14.5**	**13.4**	**11.4**	**12.8**
PCB-176			**43.5**	**28.2**	**82.3**	**34.5**	**46.1**	**28.1**	**34.6**
PCB-177			**212**	**139**	**383**	**176**	**210**	**140**	**168**
PCB-178			**81.7**	**53.2**	**140**	**66.3**	**85.2**	**56.5**	**67.5**
PCB-179			**162**	**107**	**293**	**132**	**165**	**111**	**136**
PCB-180/193			**713**	**459**	**1440**	**605**	**657**	**508**	**592**
PCB-181			**11.9**	**9.39**	**13.8**	**9.17**	**5.82**	**4.77**	**7.29**
PCB-182			**2.57**	**1.69**	**2.62**	**2.15**	**2.7**	**1.92**	**1.96**
PCB-183			**212**	**140**	**429**	**179**	**181**	**139**	**173**
PCB-184			**0.74 J**	**0.522 J**	**1.04**	**0.737 J**	**0.562 J**	**0.612 J**	**0.816 J**
PCB-185			**33.2**	**26.8**	**52.1**	**21**	**31.7**	**19.2**	**15.8**
PCB-186			**0.477 J**	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-187			**492**	**331**	**858**	**402**	**449**	**335**	**375**
PCB-188			**0.93 J**	**0.706 J**	**1.26**	**1.13**	**0.869 J**	**0.986**	**1.03**
PCB-189			**13**	**8.49**	**24.8**	**12**	**12.5**	**9.01**	**11**
PCB-190			**68.9**	**42.4**	**136**	**61.7**	**67.9**	**49.1**	**57.6**
PCB-191			**14.1**	**9.09**	**26.7**	**11.9**	**12.9**	**9.56**	**11.8**
PCB-192			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-194			**211**	**142**	**447**	**187**	**192**	**175**	**187**
PCB-195			**91.8**	**61.7**	**194**	**75.9**	**77**	**72.3**	**77.2**
PCB-196			**74.6**	**55.1**	**187**	**79.1**	**90.9**	**70.2**	**82.4**
PCB-197			**6.74**	**5.33**	0.999 U	**5.56**	**7.62**	**4.59**	**6.31**
PCB-198/199			**185**	**107**	**358**	**166**	**186**	**147**	**182**
PCB-200			**30**	**18.7**	**74.1**	**23.2**	**25.9**	**22.4**	**25**
PCB-201			**26.6**	**18.6**	**56.1**	**24.8**	**27.1**	**21.5**	**24.4**
PCB-202			**50.3**	**32.7**	**83.6**	**42.5**	**42.5**	**37.2**	**42.7**
PCB-203			**96.9**	**75.4**	**246**	**110**	**118**	**95.5**	**117**
PCB-204			0.979 U	0.949 U	0.999 U	0.957 U	0.974 U	0.952 U	0.973 U
PCB-205			**10.4**	**6.9**	**21.8**	**8.99**	**8.93**	**8.04**	**9.42**
PCB-206			**269**	**93**	**263**	**127**	**100**	**101**	**152**
PCB-207			**16.9**	**11.1**	**23.7**	**14.9**	**12.7**	**12.3**	**16.9**

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
PCB-208			**53.9**	**27.4**	**55.5**	**38**	**30.9**	**28.7**	**49.9**
PCB-209			**722**	**103**	**505**	**150**	**101**	**120**	**241**
Monochlorobiphenyls (total)			**59.7 J**	**25.1**	**32.8**	**47.9**	**22.6**	**20 J**	**28.8**
Dichlorobiphenyls (total)			**253**	**340**	**474**	**497**	**280**	**291**	**362**
Trichlorobiphenyls (total)			**1660**	**1230 J**	**1450**	**1310**	**777 J**	**717**	**1080**
Tetrachlorobiphenyls (total)			**1410**	**2500**	**3690**	**3050**	**1860**	**2000**	**3130**
Pentachlorobiphenyls (total)			**4300**	**3360**	**5590**	**4270**	**3000**	**2990**	**4360**
Hexachlorobiphenyls (total)			**5040**	**3530**	**7160**	**4590**	**4720 J**	**3220**	**4180 J**
Heptachlorobiphenyls (total)			**2920**	**1930**	**5530**	**2440**	**2690**	**1990**	**2340**
Octachlorobiphenyls (total)			**783**	**524**	**1670**	**722**	**777**	**653**	**753**
Nonachlorobiphenyls (total)			**340**	**132**	**342**	**180**	**144**	**142**	**218**
Total PCB Congener (U=0)			**17484.835**	**13667.49**	**26436.009**	**17251.723**	**14364.567**	**12146.698**	**16685.04**
Pesticides (µg/kg)									
2,4'-DDD (o,p'-DDD)			**10**	**5.6 J**	**6.1 J**	**4.5**	**1.8**	**2.4 J**	**4.5 J**
2,4'-DDE (o,p'-DDE)			1.2 U	1.1 U	1.4 UJ	1.3 U	1.2 U	1.2 U	1.3 U
2,4'-DDT (o,p'-DDT)			**5.5 J**	**3.1 J**	1.4 U	**1.6**	**1.5**	**0.8 J**	**1.1 J**
4,4'-DDD (p,p'-DDD)	0.3	28	**29 J**	**15**	**12**	**8.7**	**4 J**	**4.6**	**11**
4,4'-DDE (p,p'-DDE)	0.3	31.3	**6.4 J**	**2.9**	**3.5**	**2.4**	**1.8**	**1.4**	**2.9**
4,4'-DDT (p,p'-DDT)	0.3	62.9	**7.3 J**	**8**	**5.9**	**72**	**16**	**3.1**	**6.2**
Aldrin		40	3.4 U	1.2 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
alpha-BHC			1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
beta-BHC			1.3 UJ	2.9 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
alpha-Chlordane (cis-Chlordane)			1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
beta-Chlordane (trans-Chlordane)			2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	**0.22 J**	1.3 U
cis-Nonachlor			3.4 U	1.1 U	1.7 U	1.3 U	1.2 U	1.2 U	1.3 U
trans-Nonachlor			1.2 U	1.1 U	1.4 UJ	1.3 U	1.2 U	1.2 U	1.3 U
delta-BHC			1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Dieldrin		61.8	1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Endosulfan-alpha (I)			1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Endosulfan-beta (II)			1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Endosulfan sulfate			3.4 U	2.4 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Endrin		207	1.2 UJ	**1.9 J**	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Endrin aldehyde			2.4 UJ	1.5 U	1.4 U	1.3 U	1.2 U	**0.25 J**	1.3 U
Endrin ketone			3.1 UJ	**5.5**	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
gamma-BHC (Lindane)		4.99	**3.9 J**	2.1 U	**1.2 J**	**1.5**	**0.61 J**	**0.77 J**	**2.2 J**
Heptachlor		10	1.2 U	**0.76 J**	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Heptachlor epoxide		16	1.2 UJ	1.1 U	1.4 U	1.3 U	1.2 U	1.2 U	1.4 U
Hexachloroethane			1.2 U	1.1 U	1.4 UJ	1.3 U	1.2 U	1.2 U	1.3 U
Methoxychlor			1.2 UJ	4.2 U	1.4 U	1.3 U	1.2 U	1.2 U	1.3 U
Mirex			**3.2 J**	3.3 UJ	1.4 UJ	1.3 U	1.2 UJ	1.2 UJ	1.3 UJ
Oxychlordane			1.2 U	1.1 U	1.4 UJ	1.3 U	1.2 U	1.2 U	1.3 U
Toxaphene			360 U	270 U	70 UJ	150 U	61 U	60 U	180 U
Hexachlorobenzene		100	1.2 UJ	1.1 UJ	1.4 UJ	1.3 UJ	1.2 UJ	1.2 UJ	1.3 UJ

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
Hexachlorobutadiene		600	1.2 U	1.1 U	1.4 UJ	1.3 U	1.2 U	1.2 U	1.3 U
Sum DDD (U=0)	0.3	28	**39**	**20.6**	**18.1**	**13.2**	**5.8**	**7**	**15.5**
Sum DDE (U=0)	0.3	31.3	**6.4**	**2.9**	**3.5**	**2.4**	**1.8**	**1.4**	**2.9**
Sum DDT (U=0)	0.3	62.9	**12.8 J**	**11.1**	**5.9**	**73.6**	**17.5**	**3.9**	**7.3**
Total DDx (U = 0)	0.3		**58.2**	**34.6**	**27.5**	**89.2**	**25.1**	**12.3**	**25.7**
Herbicides (µg/kg)									
2,2-Dichloropropionic acid (Dalapon)			350 UJ	320 UJ	420 UJ	390 UJ	140 UJ	150 UJ	160 UJ
2,4-D (2,4-Dichlorophenoxyacetic acid)			350 U	320 U	420 U	390 U	140 U	150 U	160 U
2,4-DB (2,4-D derivative)			350 U	320 U	420 U	390 U	140 U	150 U	160 U
2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)			350 U	320 U	420 U	390 U	140 U	150 U	160 U
2,4,5-TP (Silvex)			350 U	320 U	420 U	390 U	140 U	150 U	160 U
2,4,5-Trichlorophenol			12 U	11 U	14 U	13 U	**6 J**	**6.1 J**	**5.7 J**
2,4,6-Trichlorophenol			12 U	11 U	14 U	13 U	12 U	12 U	13 U
Dicamba			350 U	320 U	420 U	390 U	140 U	150 U	160 U
Dichlorprop			350 U	320 U	420 U	390 U	140 U	150 U	160 U
Dinoseb			350 U	320 U	420 U	390 U	140 U	150 U	160 U
MCPA			70000 U	64000 U	84000 U	77000 U	27000 U	29000 U	31000 U
Mecoprop (MCPP)			70000 U	64000 U	84000 U	77000 U	27000 U	29000 U	31000 U
Pentachlorophenol		1000	12 U	11 U	14 U	**5 J**	12 U	**5.3 J**	13 U
Dioxin Furans (ng/kg)									
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)		9	**0.608 J**	**0.377 J**	**0.671**	**0.599**	**0.241 J**	**0.308 J**	**0.435 J**
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)			**1.13 J**	**1.08 J**	**1.26 J**	**1.37 J**	**0.55 J**	**0.925 J**	**0.94 J**
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)			**2.12 J**	**1.46 J**	**1.58 J**	**1.97 J**	**1.06 J**	**0.983 J**	**1.19 J**
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)			**8.96**	**11.8**	**6.34**	**5.6 J**	**3.82**	**4.53**	**6.11**
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)			**3.83**	**4.54**	**3.05**	**4.2**	**1.79 J**	**2.24 J**	**3.83**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)			**303**	**458**	**162**	**185**	**86.2**	**110**	**143**
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)			**2700**	**3630**	**1450**	**2400**	**828**	**1020**	**1290**
2,3,7,8-Tetrachlorodibenzofuran (TCDF)			**24**	**15.2**	**14.8**	**20.3**	**6.13**	**13.3**	**12.7**
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)			**25.8**	**13**	**14.2**	**12.4**	**6.64**	**18.8**	**12.2**
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)			**16.7**	**8.37**	**9.38**	**8.89**	**4.21**	**9.42**	**7.89**
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)			**58.6**	**19.7**	**26.1**	**20.5**	**18**	**34.2**	**28.5**
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)			**10.6**	**4.08 J**	**7.96**	**5.55**	**4.52**	**8.03**	**6.54**
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)			**6.97**	**2.92**	0.3198 U	0.1607 U	0.2908 U	0.2164 U	**2.82**
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)			0.7105 U	**2.58 J**	**3.1**	**2.67**	**1.58 J**	**2.8**	**2.78**
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)			**52.5**	**37.9**	**34.9**	**33.6**	**21.2**	**29.7**	**31.5**
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)			**9.49**	**5.58**	**6.98**	**5.44**	**4.31**	**5.82**	**5.53**
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)			**156**	**162**	**97.7**	**142**	**62.8**	**73.9**	**96.2**
Total Tetrachlorodibenzo-p-dioxin (TCDD)			**10.8 J**	**9.05 J**	**12.4 J**	**11.6 J**	**8.85 J**	**10.2 J**	**12 J**
Total Pentachlorodibenzo-p-dioxin (PeCDD)			**9.18 J**	**9.48 J**	**10.8 J**	**10.6 J**	**5 J**	**6.81 J**	**9.09 J**
Total Hexachlorodibenzo-p-dioxin (HxCDD)			**73.7 J**	**103**	**52.7**	**54.3 J**	**29.1 J**	**36.2**	**49.5 J**
Total Heptachlorodibenzo-p-dioxin (HpCDD)			**710**	**1080**	**387**	**425**	**197**	**251**	**322**
Total Tetrachlorodibenzofuran (TCDF)			**83.1 J**	**55.2 J**	**55.4 J**	**66.4 J**	**22.9 J**	**37.6 J**	**46.4 J**
Total Pentachlorodibenzofuran (PeCDF)			**82.8 J**	**43.3 J**	**52.8**	**48.3 J**	**24.5**	**50.2**	**44.5 J**

Table 2
Depositional Surface Sediment Analytical Results — Year 3 Event 2 Long-term Monitoring

Monitoring Event:	DEQ (2001) Bioaccumulative Level II Screening Level Values (SLV)	MacDonald et al. (2000) Consensus Based Toxicity Probable Effects Concentration (PEC)	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:			PCM-02	PCM-04	PCM-06	PCM-09	PCM-14	PCM-15	PCM-22
Sample Date:			12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/10/2009	12/10/2009	12/10/2009
Sample ID:			PCM-02-DS-091209	PCM-04-DS-091209	PCM-06-DS-091209	PCM-09-DS-091209	PCM-14-DS-091210	PCM-15-DS-091210	PCM-22-DS-091210
Depth:			0 to 7 centimeters	0 to 2 centimeters	0 to 5 centimeters	0 to 8 centimeters	0 to 3 centimeters	0 to 3 centimeters	0 to 10 centimeters
Total Hexachlorodibenzofuran (HxCDF)			**127 J**	**70.4 J**	**76.7**	**65.9 J**	**47.2 J**	**75.6 J**	**73.5**
Total Heptachlorodibenzofuran (HpCDF)			**156**	**148**	**96.7**	**113**	**61.2**	**81.2**	**88.8**
Total Dioxin/Furan TEQ 2005 (Mammal) (U = 0)			**23.5367**	**16.7384**	**13.96711**	**14.09**	**7.32754**	**13.01467**	**12.77116**
Total Petroleum Hydrocarbons (mg/kg)									
Diesel Range Hydrocarbons			**1900**	**1400**	**280**	**120**	**64**	**59 J**	**86**
Gasoline Range Hydrocarbons			**46**	**11 J**	**14 J**	17 U	**9.6 J**	15 U	17 U
Residual Range Hydrocarbons			**2300**	**2500**	**790**	**440**	**240**	**260**	**270**

Notes:

Detected concentration is greater than BIOACC_II_2001 screening level

Detected concentration is greater than Gasco_PEC2000_OTHER_SQVs screening level

Bold Detected result

J Estimated value

U Compound analyzed, but not detected above detection limit

UJ Compound analyzed, but not detected above estimated detection limit

Total 6 of 16 LPAH (Low PAH) are the total of Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene and Anthracene

Total 10 of 16 HPAH (High PAH) are the total of Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3-c,d)pyrene, Dibenzo(a,h)anthracene and Benzo(g,h,i)perylene

Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest reporting limit value is reported as the sum.

Level III validation applied to data.

Table 3

Discrete Near-bottom Surface Water Analytical Results – Year 3 Event 2 Long-term Monitoring

Monitoring Event:	Ecological			Human Health	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:	DEQ 2004 Chronic Ambient Water Quality Criteria (AWQC)	EPA 2004 National Recommended Water Quality Criteria (NRWQC) Criterion Continuous Concentration (CCC)	Oakridge National Lab 1996 Tier II Sediment Concentration Values (SCV)	EPA 2004 Drinking Water Region 9 PRGs	PCM-01	PCM-02	PCM-03	PCM-04	PCM-05
Sample Date:					12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/9/2009
Sample ID:					PCM-01-DSW-091209	PCM-02-DSW-091209	PCM-03-DSW-091209	PCM-04-DSW-091209	PCM-05-DSW-091209
Conventional Parameters (mg/l)									
Cyanide, amenable					0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cyanide	0.0052			0.73	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cyanide, Free		0.0052			0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sulfide					0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Conventional Parameters (pct)									
Dissolved organic carbon					**0.000216**	**0.000204**	**0.000212**	**0.000228**	**0.000211**
Total organic carbon					**0.000608**	**0.000581**	**0.000499**	**0.000561**	**0.000575**
Total Suspended Solids					0.0005 U	0.0005 U	0.0005 U	0.0005 U	**0.0005**
Metals (µg/l)									
Iron					**376**	**379**	**393**	**369**	**365**
Dissolved Metals (µg/l)									
Iron					29.2 U	**42.5**	**30.5**	**41.2**	**40.3**
Volatile Organics (µg/l)									
Benzene			130	0.35	**0.04 J**	**0.05 J**	**0.05 J**	**0.05 J**	0.5 U
Ethylbenzene			7.3	1300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene			1.8		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene			13		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene			9.8	720	**0.08 J**	**0.11 J**	**0.08 J**	**0.08 J**	**0.08 J**
Aromatic Hydrocarbons (µg/l)									
2-Methylnaphthalene			2.1		**0.0032 J**	**0.0073 J**	**0.0055 J**	**0.0078 J**	**0.0082 J**
Acenaphthene	520			370	**0.0047 J**	**0.019 J**	**0.014 J**	**0.013 J**	**0.02 J**
Acenaphthylene					0.021 U	0.02 U	0.02 U	**0.0041 J**	0.02 U
Anthracene			0.73	1800	0.021 U	**0.0075 J**	**0.0051 J**	**0.0047 J**	**0.007 J**
Benzo(a)anthracene			0.027	0.092	0.021 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(a)pyrene			0.014	0.0092	0.021 U	**0.0067 J**	**0.0048 J**	0.02 U	**0.0065 J**
Benzo(b)fluoranthene				0.092	0.021 U	**0.0064 J**	**0.0042 J**	**0.0053 J**	**0.0061 J**
Benzo(g,h,i)perylene					0.021 U	0.02 U	0.02 U	0.02 U	0.02 U
Benzo(k)fluoranthene				0.9200000000	0.021 U	0.02 U	0.02 U	0.02 U	0.02 U
Chrysene				9.2000000000	0.021 U	**0.0061 J**	**0.0052 J**	**0.0048 J**	**0.008 J**
Dibenzo(a,h)anthracene				0.0092000000	0.021 U	0.02 U	0.02 U	0.02 U	0.02 U
Fluoranthene				1500.0000000000	**0.0066 J**	**0.025**	**0.015 J**	**0.019 J**	**0.025**
Fluorene			3.9	240.0000000000	0.021 U	**0.012 J**	**0.0066 J**	**0.0058 J**	**0.011 J**
Indeno(1,2,3-c,d)pyrene				0.0920000000	0.021 U	**0.0047 J**	**0.0035 J**	**0.0039 J**	**0.0038 J**
Naphthalene	620		12	6.2000000000	**0.031**	**0.067**	**0.077**	**0.075**	**0.096**
Phenanthrene					**0.0083 J**	**0.029**	**0.02**	**0.02 J**	**0.027**
Pyrene				180.0000000000	**0.0053 J**	**0.024**	**0.017 J**	**0.021**	**0.027**
Total 6 of 16 LPAH (U = 0)					**0.044**	**0.1345**	**0.1227**	**0.1226**	**0.161**
Total 10 of 16 HPAH (U = 0)					**0.0119**	**0.0729**	**0.0497**	**0.054**	**0.0764**
Total 16 PAH (U = 0)	0.014		0.14		**0.0559**	**0.2074**	**0.1724**	**0.1766**	**0.2374**

Table 3

Discrete Near-bottom Surface Water Analytical Results – Year 3 Event 2 Long-term Monitoring

Monitoring Event:	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2	Year 3 Event 2
Location ID:	PCM-06	PCM-08	PCM-09	PCM-10	PCM-13	PCM-19	PCM-20	PCM-21
Sample Date:	12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/9/2009	12/9/2009
Sample ID:	PCM-06-DSW-091209	PCM-08-DSW-091209	PCM-09-DSW-091209	PCM-10-DSW-091209	PCM-13-DSW-091209	PCM-19-DSW-091209	PCM-20-DSW-091209	PCM-21-DSW-091209
Conventional Parameters (mg/l)								
Cyanide, amenable	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cyanide	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Cyanide, Free	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Sulfide	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Conventional Parameters (pct)								
Dissolved organic carbon	**0.0002**	**0.000217**	**0.000216**	**0.0002**	**0.000199**	**0.000196**	**0.000219**	**0.000247**
Total organic carbon	**0.000421**	**0.000616**	**0.000544**	**0.000667**	**0.000603**	**0.000625**	**0.000615**	**0.000622**
Total Suspended Solids	0.0005 U	0.0005 U	0.0005 U	0.0005 U	**0.0005**	0.0005 U	**0.00065**	0.0005 U
Metals (µg/l)								
Iron	**365**	**332**	**375**	**383**	**379**	**382**	**369**	**345**
Dissolved Metals (µg/l)								
Iron	**40.3**	**40.2**	**39.1**	**39**	**39.6**	**38.5**	**30.9**	**39.3**
Volatile Organics (µg/l)								
Benzene	0.5 U	0.5 U	**0.05 J**	0.5 U	**0.05 J**	**0.06 J**	**0.04 J**	0.5 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	**0.06 J**	**0.07 J**	**0.08 J**	**0.07 J**	**0.13 J**	**0.12 J**	**0.1 J**	**0.08 J**
Aromatic Hydrocarbons (µg/l)								
2-Methylnaphthalene	**0.0046 J**	**0.004 J**	**0.007 J**	**0.0053 J**	**0.0049 J**	**0.0059 J**	**0.0046 J**	**0.0041 J**
Acenaphthene	**0.0073 J**	**0.0055 J**	**0.014 J**	**0.01 J**	**0.0082 J**	**0.014 J**	**0.0063 J**	**0.0046 J**
Acenaphthylene	0.02 U	0.02 U	**0.0039 J**	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U
Anthracene	0.02 U	0.02 U	**0.0062 J**	**0.007 J**	0.02 U	**0.0051 J**	**0.0038 J**	0.02 U
Benzo(a)anthracene	0.02 U	0.02 U	0.02 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U
Benzo(a)pyrene	0.02 U	0.02 U	**0.0081 J**	**0.011 J**	**0.0056 J**	**0.0048 J**	**0.0066 J**	0.02 U
Benzo(b)fluoranthene	0.02 U	0.02 U	**0.01 J**	**0.013 J**	**0.0044 J**	**0.0034 J**	**0.0058 J**	**0.0029 J**
Benzo(g,h,i)perylene	0.02 U	0.02 U	0.02 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U
Benzo(k)fluoranthene	0.02 U	0.02 U	**0.0042 J**	**0.0055 J**	0.02 U	0.02 U	0.021 U	0.02 U
Chrysene	0.02 U	0.02 U	**0.0079 J**	**0.015 J**	**0.0053 J**	**0.0042 J**	**0.0049 J**	0.02 U
Dibenzo(a,h)anthracene	0.02 U	0.02 U	0.02 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U
Fluoranthene	**0.0091 J**	**0.0095 J**	**0.022**	**0.029**	**0.018 J**	**0.016 J**	**0.02 J**	**0.0091 J**
Fluorene	**0.0041 J**	0.02 U	**0.0062 J**	**0.0052 J**	0.02 U	**0.0053 J**	**0.0045 J**	0.02 U
Indeno(1,2,3-c,d)pyrene	0.02 U	0.02 U	**0.0065 J**	**0.01 J**	**0.0038 J**	**0.0033 J**	**0.0043 J**	0.02 U
Naphthalene	**0.057**	**0.038**	**0.051**	**0.08**	**0.042**	**0.074**	**0.066**	**0.074**
Phenanthrene	**0.011 J**	**0.0099 J**	**0.019 J**	**0.02 J**	**0.018 J**	**0.019 J**	**0.015 J**	**0.011 J**
Pyrene	**0.0094 J**	**0.0077 J**	**0.021**	**0.028**	**0.018 J**	**0.016 J**	**0.023**	**0.007 J**
Total 6 of 16 LPAH (U = 0)	**0.0794**	**0.0534**	**0.1003**	**0.1222**	**0.0682**	**0.1174**	**0.0956**	**0.0896**
Total 10 of 16 HPAH (U = 0)	**0.0185**	**0.0172**	**0.0797**	**0.1115**	**0.0551**	**0.0477**	**0.0646**	**0.019**
Total 16 PAH (U = 0)	**0.0979**	**0.0706**	**0.18**	**0.2337**	**0.1233**	**0.1651**	**0.1602**	**0.1086**

Table 3
Discrete Near-bottom Surface Water Analytical Results - Year 3 Event 2 Long-term Monitoring

Notes:

Detected concentration is greater than AWQC_CH_2004 screening level

Detected concentration is greater than NRWQC_CCC_2004 screening level

Detected concentration is greater than OAK_TII_2006 screening level

Detected concentration is greater than R9_2004_DRWAT screening level

Bold Detected result

J Estimated value

U Compound analyzed, but not detected above detection limit

Total 6 of 16 LPAH (Low PAH) are the total of Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene and Anthracene.

Total 10 of 16 HPAH (High PAH) are the total of Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3-c,d)pyrene, Dibenzo(a,h)anthracene and Benzo(g,h,i)perylene

Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest reporting limit value is reported as the sum.

Level III validation applied to data.

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
Conventional Parameters (mg/l)				
Cyanide	--	**0.015**	--	--
Cyanide, amenable	--	**0.015 J**	--	--
Cyanide, Free	--	0.01 UJ	--	--
Metals (µg/l)				
Aluminum	**0.9 J**	--	**1.5 J**	--
Antimony	0.05 U	--	0.05 U	--
Arsenic	0.5 U	--	0.5 U	--
Cadmium	0.02 U	--	0.02 U	--
Chromium	0.54 U	--	0.57 U	--
Copper	0.1 U	--	0.1 U	--
Iron	--	20 U	--	--
Lead	0.02 U	--	**0.042**	--
Mercury	0.2 U	--	0.2 U	--
Nickel	0.2 U	--	0.2 U	--
Selenium	1 U	--	1 U	--
Silver	0.02 U	--	0.02 U	--
Zinc	0.5 U	--	0.52 U	--
Organometallic Compounds (µg/l)				
n-Butyltin (ion)	0.05 UJ	--	0.05 UJ	--
Dibutyltin (ion)	0.05 U	--	0.05 U	--
Tetrabutyltin (ion)	0.05 UJ	--	0.05 UJ	--
Tributyltin (ion)	0.05 U	--	0.05 U	--
Volatile Organics (µg/l)				
1,1-Dichloroethane	0.5 U	--	0.5 U	0.5 U
1,1-Dichloroethene	0.5 U	--	0.5 U	0.5 U
1,1,1-Trichloroethane	0.5 U	--	0.5 U	0.5 U
1,1,1,2-Tetrachloroethane	0.5 U	--	0.5 U	0.5 U
1,1,2-Trichloroethane	0.5 U	--	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	0.5 U	--	0.5 U	0.5 U
1,2-Dibromoethane (Ethylene dibromide	2 U	--	2 U	2 U
1,2-Dichloroethane	0.5 U	--	0.5 U	0.5 U
1,2-Dichloroethene, trans-	0.5 U	--	0.5 U	0.5 U
1,2-Dichloropropane	0.5 U	--	0.5 U	0.5 U
1,2,3-Trichloropropane	0.5 U	--	0.5 U	0.5 U
1,3-Dichloropropene, cis-	0.5 U	--	0.5 U	0.5 U
1,3-Dichloropropene, trans-	0.5 U	--	0.5 U	0.5 U
1,4-Dichlorobenzene	0.5 U	--	0.5 U	0.5 U
2-Butanone (MEK)	20 U	--	20 U	20 U
2-Chloroethylvinyl ether	5 UJ	--	5 UJ	5 UJ
2-Hexanone (Methyl butyl ketone)	20 U	--	20 U	20 U
Acetone	20 U	--	20 U	20 U
Acrolein	20 UJ	--	20 UJ	20 UJ
Acrylonitrile	5 U	--	5 U	5 U
Benzene	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	0.5 U	--	0.5 U	0.5 U
Bromodichloromethane	0.5 U	--	0.5 U	0.5 U
Bromoform	0.5 U	--	0.5 U	0.5 U
Bromomethane	0.5 U	--	0.5 U	0.5 U
Carbon disulfide	0.5 U	--	0.5 U	0.5 U
Carbon tetrachloride (Tetrachlorometha	0.5 U	--	0.5 U	0.5 U
Chlorobenzene	0.5 U	--	0.5 U	0.5 U
Chloroethane	0.5 U	--	0.5 U	0.5 U
Chloroform	**3.9**	--	**3.9**	0.5 U
Chloromethane	0.5 U	--	**0.06 J**	**0.06 J**
Dibromochloromethane	0.5 U	--	0.5 U	0.5 U
Dibromomethane	0.5 U	--	0.5 U	0.5 U
Dichlorodifluoromethane	0.5 U	--	0.5 U	0.5 U
Dichloromethane (Methylene chloride)	**0.78 J**	--	**1.1 J**	2 U
Ethylbenzene	0.5 U	0.5 U	0.5 U	0.5 U
Iodomethane (Methyl iodide)	5 U	--	5 U	5 U
Isopropylbenzene (Cumene)	2 U	--	2 U	2 U
Methyl isobutyl ketone (4-Methyl-2-pen	20 U	--	20 U	20 U
Methyl tert-butyl ether (MTBE)	0.5 U	--	0.5 U	0.5 U
m,p-Xylene	0.5 U	0.5 U	0.5 U	0.5 U
o-Xylene	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	0.5 U	--	0.5 U	0.5 U
Tetrachloroethene (PCE)	0.5 U	--	0.5 U	0.5 U
Toluene	**1.7**	0.5 U	**1.9**	0.5 U
trans-1,4-Dichloro-2-butene	10 U	--	10 U	10 U
Trichloroethene (TCE)	0.5 U	--	0.5 U	0.5 U
Trichlorofluoromethane (Fluorotrichlorc	0.5 U	--	0.5 U	0.5 U
Vinyl acetate	5 UJ	--	5 UJ	5 UJ
Vinyl chloride	0.5 U	--	0.5 U	0.5 U

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
Aromatic Hydrocarbons (µg/l)				
2-Methylnaphthalene	--	0.02 U	--	--
Acenaphthene	0.2 U	0.02 U	0.21 U	--
Acenaphthylene	0.2 U	0.02 U	0.21 U	--
Anthracene	0.2 U	0.02 U	0.21 U	--
Benzo(a)anthracene	0.2 U	0.02 U	0.21 U	--
Benzo(a)pyrene	0.2 U	0.02 U	0.21 U	--
Benzo(b)fluoranthene	0.2 U	0.02 U	0.21 U	--
Benzo(g,h,i)perylene	0.2 U	0.02 U	0.21 U	--
Benzo(k)fluoranthene	0.2 U	0.02 U	0.21 U	--
Chrysene	0.2 U	0.02 U	0.21 U	--
Dibenzo(a,h)anthracene	0.2 U	0.02 U	0.21 U	--
Fluoranthene	0.2 U	0.02 U	0.21 U	--
Fluorene	0.2 U	0.02 U	0.21 U	--
Indeno(1,2,3-c,d)pyrene	0.2 U	0.02 U	0.21 U	--
Naphthalene	0.2 U	**0.0042 J**	0.21 U	--
Phenanthrene	0.2 U	**0.005 J**	0.21 U	--
Pyrene	0.2 U	0.02 U	0.21 U	--
Total 6 of 16 LPAH (U = 0)	0.2 U	**0.0092**	0.21 U	--
Total 10 of 16 HPAH (U = 0)	0.2 U	0.02 U	0.21 U	--
Total 16 PAH (U = 0)	0.2 U	**0.0092**	0.21 U	--
Semivolatile Organics (µg/l)				
1,2,4-Trichlorobenzene	0.2 UJ	--	0.21 UJ	--
1,2-Dichlorobenzene	0.2 UJ	--	0.21 UJ	--
1,3-Dichlorobenzene	0.2 UJ	--	0.21 UJ	--
1,4-Dichlorobenzene	0.2 UJ	--	0.21 UJ	--
2,3,4,5-Tetrachlorophenol	0.5 U	--	0.5 U	--
2,3,5,6-Tetrachlorophenol	0.5 U	--	0.5 U	--
2,4,5-Trichlorophenol	0.49 U	--	0.52 U	--
2,4,6-Trichlorophenol	0.49 U	--	0.52 U	--
2,4-Dichlorophenol	0.49 U	--	0.52 U	--
2,4-Dimethylphenol	3.9 UJ	--	4.2 UJ	--
2,4-Dinitrophenol	3.9 UJ	--	4.2 UJ	--
2,4-Dinitrotoluene	0.2 U	--	0.21 U	--
2,6-Dinitrotoluene	0.2 U	--	0.21 U	--
2-Chloronaphthalene	0.2 U	--	0.21 U	--
2-Chlorophenol	0.49 U	--	0.52 U	--
2-Methylphenol (o-Cresol)	0.49 U	--	0.52 U	--
2-Nitroaniline	0.2 U	--	0.21 U	--
2-Nitrophenol	0.49 U	--	0.52 U	--
3,3'-Dichlorobenzidine	**-- R**	--	**-- R**	--
3-Nitroaniline	0.97 U	--	1.1 U	--
4-Bromophenyl-phenyl ether	0.2 U	--	0.21 U	--
4-Chloro-3-methylphenol	0.49 U	--	0.52 U	--
4-Chloroaniline	0.2 UJ	--	0.21 UJ	--
4-Chlorophenyl phenyl ether	0.2 U	--	0.21 U	--
4-Methylphenol (p-Cresol)	0.49 U	--	0.52 U	--
4-Nitroaniline	0.97 U	--	1.1 U	--
4-Nitrophenol	2 U	--	2.1 U	--
Aniline	0.97 UJ	--	1.1 UJ	--
Azobenzene	0.2 U	--	0.21 U	--
Benzoic acid	4.9 UJ	--	5.2 UJ	--
Benzyl alcohol	0.49 U	--	0.52 U	--
bis(2-Chloroethoxy)methane	0.2 U	--	0.21 U	--
bis(2-Chloroethyl)ether	0.2 U	--	0.21 U	--
bis(2-Chloroisopropyl) ether	0.2 U	--	0.21 U	--
Bis(2-ethylhexyl) phthalate	0.97 U	--	1.1 U	--
Diethyl phthalate	**0.056 J**	--	**0.14 J**	--
Butylbenzyl phthalate	0.2 U	--	0.21 U	--
Dimethyl phthalate	0.2 U	--	0.21 U	--
Di-n-butyl phthalate	0.2 U	--	0.21 U	--
Carbazole	0.2 U	--	0.21 U	--
Dinitro-o-cresol (4,6-Dinitro-2-methylph	2 U	--	2.1 U	--
Di-n-octyl phthalate	0.2 U	--	0.21 U	--
Hexachlorobenzene	0.2 U	--	0.21 U	--
Hexachlorobutadiene	0.2 UJ	--	0.21 UJ	--
Dibenzofuran	0.2 U	--	0.21 U	--
Hexachlorocyclopentadiene	0.97 UJ	--	1.1 UJ	--
Hexachloroethane	0.2 UJ	--	0.21 UJ	--
Isophorone	0.2 U	--	0.21 U	--
Nitrobenzene	0.2 U	--	0.21 U	--
N-Nitrosodi-N-propylamine	0.2 U	--	0.21 U	--
N-Nitrosodiphenylamine	0.2 U	--	0.21 U	--
Phenol	0.49 U	--	0.52 U	--

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
PCB Aroclors (µg/l)				
Aroclor 1016	0.2 U	--	0.22 U	--
Aroclor 1221	0.4 U	--	0.43 U	--
Aroclor 1232	0.2 U	--	0.22 U	--
Aroclor 1242	0.2 U	--	0.22 U	--
Aroclor 1248	0.2 U	--	0.22 U	--
Aroclor 1254	0.2 U	--	0.22 U	--
Aroclor 1260	0.2 U	--	0.22 U	--
Aroclor 1262	0.2 U	--	0.22 U	--
Aroclor 1268	0.2 U	--	0.22 U	--
Total PCB Aroclors (U = 0)	0.4 U	--	0.43 U	--
PCB Congeners (ng/l)				
PCB-001	--	--	**0.000931 J**	--
PCB-002	--	--	0.00926 U	--
PCB-003	--	--	0.00926 U	--
PCB-004	--	--	**0.00136 J**	--
PCB-005	--	--	0.00926 U	--
PCB-006	--	--	0.00926 U	--
PCB-007	--	--	0.00926 U	--
PCB-008	--	--	**0.00239 J**	--
PCB-009	--	--	0.00926 U	--
PCB-010	--	--	0.00926 U	--
PCB-011	--	--	**0.00722 J**	--
PCB-012/013	--	--	0.0185 U	--
PCB-014	--	--	0.00926 U	--
PCB-015	--	--	0.00926 U	--
PCB-016	--	--	0.00926 U	--
PCB-017	--	--	0.00926 U	--
PCB-018/030	--	--	**0.00229 J**	--
PCB-019	--	--	0.00926 U	--
PCB-020/028	--	--	**0.00353 J**	--
PCB-021/033	--	--	**0.00113 J**	--
PCB-022	--	--	**0.000566**	--
PCB-023	--	--	0.00926 U	--
PCB-024	--	--	0.00926 U	--
PCB-025	--	--	0.00926 U	--
PCB-026/029	--	--	0.0185 U	--
PCB-027	--	--	0.00926 U	--
PCB-031	--	--	**0.00143 J**	--
PCB-032	--	--	**0.00183 J**	--
PCB-034	--	--	0.00926 U	--
PCB-035	--	--	0.00926 U	--
PCB-036	--	--	0.00926 U	--
PCB-037	--	--	0.00926 U	--
PCB-038	--	--	0.00926 U	--
PCB-039	--	--	**0.000716 J**	--
PCB-040/071	--	--	**0.000616 J**	--
PCB-041	--	--	0.00926 U	--
PCB-042	--	--	0.00926 U	--
PCB-043	--	--	0.00926 U	--
PCB-044/047/065	--	--	**0.00268 J**	--
PCB-045	--	--	0.00926 U	--
PCB-046	--	--	0.00926 U	--
PCB-048	--	--	0.00926 U	--
PCB-049/069	--	--	**0.000716 J**	--
PCB-050/053	--	--	0.0185 U	--
PCB-051	--	--	0.00926 U	--
PCB-052	--	--	**0.00192 J**	--
PCB-054	--	--	0.00926 U	--
PCB-055	--	--	0.00926 U	--
PCB-056	--	--	0.00926 U	--
PCB-057	--	--	0.00926 U	--
PCB-058	--	--	0.00926 U	--
PCB-059/062/075	--	--	0.0278 U	--
PCB-060	--	--	0.00926 U	--
PCB-061/070/074/076	--	--	**0.00149 J**	--
PCB-063	--	--	0.00926 U	--
PCB-064	--	--	**0.000591 J**	--
PCB-066	--	--	**0.000573**	--
PCB-067	--	--	0.00926 U	--
PCB-068	--	--	0.00926 U	--
PCB-072	--	--	0.00926 U	--

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
PCB-073	--	--	0.00926 U	--
PCB-077	--	--	0.00926 U	--
PCB-078	--	--	0.00926 U	--
PCB-079	--	--	0.00926 U	--
PCB-080	--	--	0.00926 U	--
PCB-081	--	--	0.00926 U	--
PCB-082	--	--	0.00926 U	--
PCB-083	--	--	0.00926 U	--
PCB-084	--	--	0.00926 U	--
PCB-085/116	--	--	0.0185 U	--
PCB-086/087/097/108/119/125	--	--	0.0556 U	--
PCB-088	--	--	0.00926 U	--
PCB-089	--	--	0.00926 U	--
PCB-090/101/113	--	--	**0.00201 J**	--
PCB-091	--	--	0.00926 U	--
PCB-092	--	--	0.00926 U	--
PCB-093/100	--	--	0.0185 U	--
PCB-094	--	--	0.00926 U	--
PCB-095	--	--	**0.00125 J**	--
PCB-096	--	--	0.00926 U	--
PCB-098	--	--	0.00926 U	--
PCB-099	--	--	0.00926 U	--
PCB-102	--	--	0.00926 U	--
PCB-103	--	--	0.00926 U	--
PCB-104	--	--	0.00926 U	--
PCB-105	--	--	**0.000816 J**	--
PCB-106	--	--	0.00926 U	--
PCB-107/124	--	--	0.0185 U	--
PCB-109	--	--	0.00926 U	--
PCB-110	--	--	**0.00216 J**	--
PCB-111	--	--	0.00926 U	--
PCB-112	--	--	0.00926 U	--
PCB-114	--	--	0.00926 U	--
PCB-115	--	--	0.00926 U	--
PCB-117	--	--	0.00926 U	--
PCB-118	--	--	**0.00197 J**	--
PCB-120	--	--	0.00926 U	--
PCB-121	--	--	0.00926 U	--
PCB-122	--	--	0.00926 U	--
PCB-123	--	--	0.00926 U	--
PCB-126	--	--	0.00926 U	--
PCB-127	--	--	0.00926 U	--
PCB-128/166	--	--	0.0185 U	--
PCB-129/138/163	--	--	**0.0025 J**	--
PCB-130	--	--	0.00926 U	--
PCB-131	--	--	0.00926 U	--
PCB-132	--	--	0.00926 U	--
PCB-133	--	--	0.00926 U	--
PCB-134	--	--	0.00926 U	--
PCB-135/151	--	--	0.0185 U	--
PCB-136	--	--	0.00926 U	--
PCB-137	--	--	0.00926 U	--
PCB-139/140	--	--	0.0185 U	--
PCB-141	--	--	0.00926 U	--
PCB-142	--	--	0.00926 U	--
PCB-143	--	--	0.00926 U	--
PCB-144	--	--	0.00926 U	--
PCB-145	--	--	0.00926 U	--
PCB-146	--	--	0.00926 U	--
PCB-147/149	--	--	0.0185 U	--
PCB-148	--	--	0.00926 U	--
PCB-150	--	--	0.00926 U	--
PCB-152	--	--	0.00926 U	--
PCB-153/168	--	--	**0.000962 J**	--
PCB-154	--	--	0.00926 U	--
PCB-155	--	--	0.00926 U	--
PCB-156/157	--	--	0.0185 U	--
PCB-158	--	--	0.00926 U	--
PCB-159	--	--	0.00926 U	--
PCB-160	--	--	0.00926 U	--
PCB-161	--	--	0.00926 U	--
PCB-162	--	--	0.00926 U	--

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
PCB-164	--	--	0.00926 U	--
PCB-165	--	--	0.00926 U	--
PCB-167	--	--	0.00926 U	--
PCB-169	--	--	0.00926 U	--
PCB-170	--	--	0.00926 U	--
PCB-171/173	--	--	0.0185 U	--
PCB-172	--	--	0.00926 U	--
PCB-174	--	--	0.00926 U	--
PCB-175	--	--	0.00926 U	--
PCB-176	--	--	0.00926 U	--
PCB-177	--	--	0.00926 U	--
PCB-178	--	--	0.00926 U	--
PCB-179	--	--	0.00926 U	--
PCB-180/193	--	--	**0.000819 J**	--
PCB-181	--	--	0.00926 U	--
PCB-182	--	--	0.00926 U	--
PCB-183	--	--	0.00926 U	--
PCB-184	--	--	0.00926 U	--
PCB-185	--	--	0.00926 U	--
PCB-186	--	--	0.00926 U	--
PCB-187	--	--	0.00926 U	--
PCB-188	--	--	0.00926 U	--
PCB-189	--	--	0.00926 U	--
PCB-190	--	--	0.00926 U	--
PCB-191	--	--	0.00926 U	--
PCB-192	--	--	0.00926 U	--
PCB-194	--	--	**0.000902 J**	--
PCB-195	--	--	0.00926 U	--
PCB-196	--	--	0.00926 U	--
PCB-197	--	--	0.00926 U	--
PCB-198/199	--	--	0.0185 U	--
PCB-200	--	--	0.00926 U	--
PCB-201	--	--	0.00926 U	--
PCB-202	--	--	0.00926 U	--
PCB-203	--	--	0.00926 U	--
PCB-204	--	--	0.00926 U	--
PCB-205	--	--	0.00926 U	--
PCB-206	--	--	0.00926 U	--
PCB-207	--	--	0.00926 U	--
PCB-208	--	--	0.00926 U	--
PCB-209	--	--	0.00926 U	--
Monochlorobiphenyls (total)	--	--	**0.000931 J**	--
Dichlorobiphenyls (total)	--	--	0.011 U	--
Trichlorobiphenyls (total)	--	--	0.0115 U	--
Tetrachlorobiphenyls (total)	--	--	**0.00859 J**	--
Pentachlorobiphenyls (total)	--	--	**0.00821 J**	--
Hexachlorobiphenyls (total)	--	--	**0.00346 J**	--
Heptachlorobiphenyls (total)	--	--	**0.000819**	--
Octachlorobiphenyls (total)	--	--	**0.000902**	--
Nonachlorobiphenyls (total)	--	--	0 U	--
Total PCB Congener (U=0)	--	--	**0.045368**	--
Pesticides (µg/l)				
2,4'-DDD (o,p'-DDD)	0.01 U	--	0.011 U	--
2,4'-DDE (o,p'-DDE)	0.01 U	--	0.011 U	--
2,4'-DDT (o,p'-DDT)	0.01 U	--	0.011 U	--
4,4'-DDD (p,p'-DDD)	0.01 U	--	0.011 U	--
4,4'-DDE (p,p'-DDE)	0.01 U	--	0.011 U	--
4,4'-DDT (p,p'-DDT)	0.01 U	--	0.011 U	--
Aldrin	0.01 U	--	0.011 U	--
alpha-BHC	0.01 U	--	0.011 U	--
beta-BHC	0.01 U	--	0.011 U	--
alpha-Chlordane (cis-Chlordane)	0.01 U	--	0.011 U	--
beta-Chlordane (trans-Chlordane)	0.01 U	--	0.011 U	--
cis-Nonachlor	0.01 U	--	0.011 U	--
trans-Nonachlor	0.01 U	--	0.011 U	--
delta-BHC	0.01 U	--	0.011 U	--
Dieldrin	0.01 U	--	0.011 U	--
Endosulfan-alpha (I)	0.01 U	--	0.011 U	--
Endosulfan-beta (II)	0.01 U	--	0.011 U	--
Endosulfan sulfate	0.01 U	--	0.011 U	--
Endrin	0.01 U	--	0.011 U	--
Endrin aldehyde	0.01 U	--	0.011 U	--

Table 4
QA/QC Analytical Results – Gasco Year 3 Event 2 Long-term Monitoring

Sample ID:	PCM-FB-091210	PCM-DRB-091210	PCM-DSRB-091210	PCM-TB-091209
Sample Date:	12/10/2009	12/10/2009	12/10/2009	12/9/2009
	Field Blank	Discrete Near-Bottom Surface Water Rinsate Blank	Depositional Sediment Rinsate Blank	Trip Blank
Endrin ketone	0.01 U	--	0.011 U	--
gamma-BHC (Lindane)	0.01 U	--	0.011 U	--
Heptachlor	0.01 U	--	0.011 U	--
Heptachlor epoxide	0.01 U	--	0.011 U	--
Hexachloroethane	0.01 U	--	0.011 U	--
Methoxychlor	0.01 U	--	0.011 U	--
Mirex	0.01 U	--	0.011 U	--
Oxychlordane	0.01 U	--	0.011 U	--
Toxaphene	0.5 U	--	0.53 U	--
Hexachlorobenzene	0.01 U	--	0.011 U	--
Hexachlorobutadiene	0.01 U	--	0.011 U	--
Sum DDD (U=0)	0.01 U	--	0.011 U	--
Sum DDE (U=0)	0.01 U	--	0.011 U	--
Sum DDT (U=0)	0.01 U	--	0.011 U	--
Total DDx (U = 0)	0.01 U	--	0.011 U	--
Herbicides (µg/l)				
2,2-Dichloropropionic acid (Dalapon)	0.4 U	--	0.44 U	--
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.4 U	--	0.44 U	--
2,4-DB (2,4-D derivative)	0.4 U	--	0.44 U	--
2,4,5-T (2,4,5-Trichlorophenoxyacetic ac	0.2 U	--	0.22 U	--
2,4,5-TP (Silvex)	0.2 U	--	0.22 U	--
2,4,5-Trichlorophenol	1 U	--	1 U	--
2,4,6-Trichlorophenol	0.5 U	--	0.5 U	--
Dicamba	0.2 U	--	0.22 U	--
Dichlorprop	0.4 U	--	0.44 U	--
Dinoseb	0.2 U	--	0.22 U	--
MCPA	100 UJ	--	110 UJ	--
Mecoprop (MCPP)	100 U	--	110 U	--
Pentachlorophenol	0.5 U	--	0.5 U	--
Dioxin Furans (ng/l)				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TC	--	--	0.0005854 U	--
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (	--	--	0.0007597 U	--
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	--	--	0.0014294 U	--
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	--	--	0.0014376 U	--
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	--	--	0.0016099 U	--
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dio	--	--	0.0012864 U	--
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dio	--	--	0.00274 U	--
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	--	--	0.0003202 U	--
1,2,3,7,8-Pentachlorodibenzofuran (PeC	--	--	0.0004738 U	--
2,3,4,7,8-Pentachlorodibenzofuran (PeC	--	--	0.0004736 U	--
1,2,3,4,7,8-Hexachlorodibenzofuran (Hx	--	--	0.0004887 U	--
1,2,3,6,7,8-Hexachlorodibenzofuran (Hx	--	--	0.0005007 U	--
1,2,3,7,8,9-Hexachlorodibenzofuran (Hx	--	--	0.0007433 U	--
2,3,4,6,7,8-Hexachlorodibenzofuran (Hx	--	--	0.0005976 U	--
1,2,3,4,6,7,8-Heptachlorodibenzofuran (	--	--	0.0007339 U	--
1,2,3,4,7,8,9-Heptachlorodibenzofuran (	--	--	0.0011461 U	--
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	--	--	0.0013993 U	--
Total Tetrachlorodibenzo-p-dioxin (TCDI	--	--	0.0005854 U	--
Total Pentachlorodibenzo-p-dioxin (PeC	--	--	0.0007597 U	--
Total Hexachlorodibenzo-p-dioxin (HxCD	--	--	0.0014871 U	--
Total Heptachlorodibenzo-p-dioxin (HpC	--	--	0.0012864 U	--
Total Tetrachlorodibenzofuran (TCDF)	--	--	0.0003202 U	--
Total Pentachlorodibenzofuran (PeCDF)	--	--	0.0004738 U	--
Total Hexachlorodibenzofuran (HxCDF)	--	--	0.0005678 U	--
Total Heptachlorodibenzofuran (HpCDF)	--	--	0.0008972 U	--
Total Dioxin/Furan TEQ 2005 (Mammal)	--	--	8.22E-07 U	--
Total Petroleum Hydrocarbons (mg/l)				
Diesel Range Hydrocarbons	0.27 U	--	0.27 U	--
Gasoline Range Hydrocarbons	0.25 U	--	**0.013 J**	--
Residual Range Hydrocarbons	0.53 U	--	0.53 U	--

Notes:

Bold Detected result

J Estimated value

U Compound analyzed, but not detected above detection limit

UJ Compound analyzed, but not detected above estimated detection limit

R Rejected

Total 6 of 16 LPAH (Low PAH) are the total of Naphthalene, Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene and Anthracene

Total 10 of 16 HPAH (High PAH) are the total of Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene, Benzofluoranthenes, Benzo(a)pyrene, Indeno(1,2,3-c,d)pyrene, Dibenzo(a,h)anthracene and Benzo(g,h,i)perylene

Totals are calculated as the sum of all detected results (U=0). If all results are not detected, the highest reporting limit value is reported as the sum.

Level III validation applied to data.

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-01	PCM-01-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-02	PCM-02-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-03	PCM-03-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-04	PCM-04-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-05	PCM-05-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-06	PCM-06-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-08	PCM-08-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-09	PCM-09-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-10	PCM-10-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-13	PCM-13-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-19	PCM-19-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-20	PCM-20-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-21	PCM-21-DSW-091209	Cyanide	0.0052	0.01	0.003	mg/l
PCM-01	PCM-01-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-02	PCM-02-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-03	PCM-03-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-04	PCM-04-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-05	PCM-05-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-06	PCM-06-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-08	PCM-08-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-09	PCM-09-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-10	PCM-10-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-13	PCM-13-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-19	PCM-19-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-20	PCM-20-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-21	PCM-21-DSW-091209	Cyanide, amenable	0.0052	0.01	0.003	mg/l
PCM-01	PCM-01-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-02	PCM-02-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-03	PCM-03-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-04	PCM-04-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-05	PCM-05-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-06	PCM-06-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-08	PCM-08-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-09	PCM-09-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-10	PCM-10-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-13	PCM-13-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-19	PCM-19-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-20	PCM-20-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-21	PCM-21-DSW-091209	Cyanide, Free	5.2	10	5	ug/l
PCM-09	PCM-09-DS-091209	Tributyltin (ion)	1	2.6	1.1	ug/kg
PCM-02	PCM-02-DS-091209	Chromium VI	0.5	1.2	0.19	mg/kg
PCM-04	PCM-04-DS-091209	Chromium VI	0.5	1.1	1.18	mg/kg
PCM-02	PCM-02-DS-091209	2,4'-DDE (o,p'-DDE)	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	2,4'-DDE (o,p'-DDE)	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	2,4'-DDE (o,p'-DDE)	1	1.4	0.23	ug/kg
PCM-09	PCM-09-DS-091209	2,4'-DDE (o,p'-DDE)	1	1.3	0.81	ug/kg
PCM-14	PCM-14-DS-091210	2,4'-DDE (o,p'-DDE)	1	1.2	0.32	ug/kg
PCM-15	PCM-15-DS-091210	2,4'-DDE (o,p'-DDE)	1	1.2	0.28	ug/kg
PCM-22	PCM-22-DS-091210	2,4'-DDE (o,p'-DDE)	1	1.3	0.36	ug/kg
PCM-06	PCM-06-DS-091209	2,4'-DDT (o,p'-DDT)	1	1.4	1.4	ug/kg
PCM-02	PCM-02-DS-091209	Aldrin	1	3.4	3.4	ug/kg
PCM-04	PCM-04-DS-091209	Aldrin	1	1.2	1.2	ug/kg
PCM-06	PCM-06-DS-091209	Aldrin	1	1.4	0.23	ug/kg
PCM-09	PCM-09-DS-091209	Aldrin	1	1.3	0.21	ug/kg
PCM-14	PCM-14-DS-091210	Aldrin	1	1.2	0.18	ug/kg
PCM-15	PCM-15-DS-091210	Aldrin	1	1.2	0.19	ug/kg
PCM-22	PCM-22-DS-091210	Aldrin	1	1.3	0.54	ug/kg
PCM-02	PCM-02-DS-091209	alpha-BHC	1	1.2	0.41	ug/kg
PCM-04	PCM-04-DS-091209	alpha-BHC	1	1.1	0.12	ug/kg
PCM-06	PCM-06-DS-091209	alpha-BHC	1	1.4	0.16	ug/kg
PCM-09	PCM-09-DS-091209	alpha-BHC	1	1.3	0.15	ug/kg
PCM-14	PCM-14-DS-091210	alpha-BHC	1	1.2	0.13	ug/kg
PCM-15	PCM-15-DS-091210	alpha-BHC	1	1.2	0.13	ug/kg
PCM-22	PCM-22-DS-091210	alpha-BHC	1	1.3	0.15	ug/kg
PCM-02	PCM-02-DS-091209	alpha-Chlordane (cis-Chlordane)	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	alpha-Chlordane (cis-Chlordane)	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	alpha-Chlordane (cis-Chlordane)	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	alpha-Chlordane (cis-Chlordane)	1	1.3	0.13	ug/kg
PCM-14	PCM-14-DS-091210	alpha-Chlordane (cis-Chlordane)	1	1.2	0.12	ug/kg
PCM-15	PCM-15-DS-091210	alpha-Chlordane (cis-Chlordane)	1	1.2	0.12	ug/kg
PCM-22	PCM-22-DS-091210	alpha-Chlordane (cis-Chlordane)	1	1.3	0.13	ug/kg
PCM-02	PCM-02-DS-091209	beta-BHC	1	1.3	1.3	ug/kg
PCM-04	PCM-04-DS-091209	beta-BHC	1	2.9	2.9	ug/kg
PCM-06	PCM-06-DS-091209	beta-BHC	1	1.4	0.25	ug/kg
PCM-09	PCM-09-DS-091209	beta-BHC	1	1.3	0.23	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-14	PCM-14-DS-091210	beta-BHC	1	1.2	0.21	ug/kg
PCM-15	PCM-15-DS-091210	beta-BHC	1	1.2	0.3	ug/kg
PCM-22	PCM-22-DS-091210	beta-BHC	1	1.3	0.23	ug/kg
PCM-02	PCM-02-DS-091209	cis-Nonachlor	1	3.4	3.4	ug/kg
PCM-04	PCM-04-DS-091209	cis-Nonachlor	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	cis-Nonachlor	1	1.7	1.7	ug/kg
PCM-09	PCM-09-DS-091209	cis-Nonachlor	1	1.3	1.3	ug/kg
PCM-14	PCM-14-DS-091210	cis-Nonachlor	1	1.2	0.9	ug/kg
PCM-15	PCM-15-DS-091210	cis-Nonachlor	1	1.2	1.2	ug/kg
PCM-22	PCM-22-DS-091210	cis-Nonachlor	1	1.3	1.3	ug/kg
PCM-02	PCM-02-DS-091209	delta-BHC	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	delta-BHC	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	delta-BHC	1	1.4	0.11	ug/kg
PCM-09	PCM-09-DS-091209	delta-BHC	1	1.3	0.14	ug/kg
PCM-14	PCM-14-DS-091210	delta-BHC	1	1.2	0.083	ug/kg
PCM-15	PCM-15-DS-091210	delta-BHC	1	1.2	0.088	ug/kg
PCM-22	PCM-22-DS-091210	delta-BHC	1	1.3	0.095	ug/kg
PCM-02	PCM-02-DS-091209	Dieldrin	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Dieldrin	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	Dieldrin	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	Dieldrin	1	1.3	0.18	ug/kg
PCM-14	PCM-14-DS-091210	Dieldrin	1	1.2	0.16	ug/kg
PCM-15	PCM-15-DS-091210	Dieldrin	1	1.2	0.17	ug/kg
PCM-22	PCM-22-DS-091210	Dieldrin	1	1.3	0.18	ug/kg
PCM-02	PCM-02-DS-091209	Endosulfan sulfate	1	3.4	3.4	ug/kg
PCM-04	PCM-04-DS-091209	Endosulfan sulfate	1	2.4	2.4	ug/kg
PCM-06	PCM-06-DS-091209	Endosulfan sulfate	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	Endosulfan sulfate	1	1.3	1.3	ug/kg
PCM-14	PCM-14-DS-091210	Endosulfan sulfate	1	1.2	1.2	ug/kg
PCM-15	PCM-15-DS-091210	Endosulfan sulfate	1	1.2	1.2	ug/kg
PCM-22	PCM-22-DS-091210	Endosulfan sulfate	1	1.3	1.3	ug/kg
PCM-02	PCM-02-DS-091209	Endosulfan-alpha (I)	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Endosulfan-alpha (I)	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	Endosulfan-alpha (I)	1	1.4	0.088	ug/kg
PCM-09	PCM-09-DS-091209	Endosulfan-alpha (I)	1	1.3	0.081	ug/kg
PCM-14	PCM-14-DS-091210	Endosulfan-alpha (I)	1	1.2	0.071	ug/kg
PCM-15	PCM-15-DS-091210	Endosulfan-alpha (I)	1	1.2	0.075	ug/kg
PCM-22	PCM-22-DS-091210	Endosulfan-alpha (I)	1	1.3	0.081	ug/kg
PCM-02	PCM-02-DS-091209	Endosulfan-beta (II)	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Endosulfan-beta (II)	1	1.1	1.1	ug/kg
PCM-06	PCM-06-DS-091209	Endosulfan-beta (II)	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	Endosulfan-beta (II)	1	1.3	0.18	ug/kg
PCM-14	PCM-14-DS-091210	Endosulfan-beta (II)	1	1.2	0.16	ug/kg
PCM-15	PCM-15-DS-091210	Endosulfan-beta (II)	1	1.2	0.3	ug/kg
PCM-22	PCM-22-DS-091210	Endosulfan-beta (II)	1	1.3	1.3	ug/kg
PCM-02	PCM-02-DS-091209	Endrin	1	1.2	0.59	ug/kg
PCM-06	PCM-06-DS-091209	Endrin	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	Endrin	1	1.3	0.19	ug/kg
PCM-14	PCM-14-DS-091210	Endrin	1	1.2	0.11	ug/kg
PCM-15	PCM-15-DS-091210	Endrin	1	1.2	0.12	ug/kg
PCM-22	PCM-22-DS-091210	Endrin	1	1.3	0.12	ug/kg
PCM-02	PCM-02-DS-091209	Endrin aldehyde	1	2.4	2.4	ug/kg
PCM-04	PCM-04-DS-091209	Endrin aldehyde	1	1.5	1.5	ug/kg
PCM-06	PCM-06-DS-091209	Endrin aldehyde	1	1.4	0.62	ug/kg
PCM-09	PCM-09-DS-091209	Endrin aldehyde	1	1.3	0.82	ug/kg
PCM-14	PCM-14-DS-091210	Endrin aldehyde	1	1.2	0.18	ug/kg
PCM-22	PCM-22-DS-091210	Endrin aldehyde	1	1.3	0.21	ug/kg
PCM-02	PCM-02-DS-091209	Endrin ketone	1	3.1	3.1	ug/kg
PCM-06	PCM-06-DS-091209	Endrin ketone	1	1.4	0.3	ug/kg
PCM-09	PCM-09-DS-091209	Endrin ketone	1	1.3	0.12	ug/kg
PCM-14	PCM-14-DS-091210	Endrin ketone	1	1.2	0.11	ug/kg
PCM-15	PCM-15-DS-091210	Endrin ketone	1	1.2	0.16	ug/kg
PCM-22	PCM-22-DS-091210	Endrin ketone	1	1.3	0.12	ug/kg
PCM-04	PCM-04-DS-091209	gamma-BHC (Lindane)	1	2.1	2.1	ug/kg
PCM-02	PCM-02-DS-091209	Heptachlor	1	1.2	1.2	ug/kg
PCM-06	PCM-06-DS-091209	Heptachlor	1	1.4	0.17	ug/kg
PCM-09	PCM-09-DS-091209	Heptachlor	1	1.3	1.3	ug/kg
PCM-14	PCM-14-DS-091210	Heptachlor	1	1.2	0.14	ug/kg
PCM-15	PCM-15-DS-091210	Heptachlor	1	1.2	0.15	ug/kg
PCM-22	PCM-22-DS-091210	Heptachlor	1	1.3	0.16	ug/kg
PCM-02	PCM-02-DS-091209	Heptachlor epoxide	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Heptachlor epoxide	1	1.1	0.52	ug/kg
PCM-06	PCM-06-DS-091209	Heptachlor epoxide	1	1.4	1.4	ug/kg
PCM-09	PCM-09-DS-091209	Heptachlor epoxide	1	1.3	1.3	ug/kg
PCM-14	PCM-14-DS-091210	Heptachlor epoxide	1	1.2	1.2	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-15	PCM-15-DS-091210	Heptachlor epoxide	1	1.2	0.1	ug/kg
PCM-22	PCM-22-DS-091210	Heptachlor epoxide	1	1.4	1.4	ug/kg
PCM-02	PCM-02-DS-091209	Methoxychlor	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Methoxychlor	1	4.2	4.2	ug/kg
PCM-06	PCM-06-DS-091209	Methoxychlor	1	1.4	0.27	ug/kg
PCM-09	PCM-09-DS-091209	Methoxychlor	1	1.3	0.25	ug/kg
PCM-14	PCM-14-DS-091210	Methoxychlor	1	1.2	0.27	ug/kg
PCM-15	PCM-15-DS-091210	Methoxychlor	1	1.2	0.23	ug/kg
PCM-22	PCM-22-DS-091210	Methoxychlor	1	1.3	1.3	ug/kg
PCM-04	PCM-04-DS-091209	Mirex	1	3.3	3.3	ug/kg
PCM-06	PCM-06-DS-091209	Mirex	1	1.4	0.22	ug/kg
PCM-09	PCM-09-DS-091209	Mirex	1	1.3	0.23	ug/kg
PCM-14	PCM-14-DS-091210	Mirex	1	1.2	0.12	ug/kg
PCM-15	PCM-15-DS-091210	Mirex	1	1.2	0.12	ug/kg
PCM-22	PCM-22-DS-091210	Mirex	1	1.3	0.13	ug/kg
PCM-02	PCM-02-DS-091209	Oxychlordane	1	1.2	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Oxychlordane	1	1.1	0.85	ug/kg
PCM-06	PCM-06-DS-091209	Oxychlordane	1	1.4	0.12	ug/kg
PCM-09	PCM-09-DS-091209	Oxychlordane	1	1.3	0.11	ug/kg
PCM-14	PCM-14-DS-091210	Oxychlordane	1	1.2	0.22	ug/kg
PCM-15	PCM-15-DS-091210	Oxychlordane	1	1.2	0.11	ug/kg
PCM-22	PCM-22-DS-091210	Oxychlordane	1	1.3	0.11	ug/kg
PCM-02	PCM-02-DS-091209	Toxaphene	50	360	360	ug/kg
PCM-04	PCM-04-DS-091209	Toxaphene	50	270	270	ug/kg
PCM-06	PCM-06-DS-091209	Toxaphene	50	70	26	ug/kg
PCM-09	PCM-09-DS-091209	Toxaphene	50	150	150	ug/kg
PCM-14	PCM-14-DS-091210	Toxaphene	50	61	61	ug/kg
PCM-15	PCM-15-DS-091210	Toxaphene	50	60	57	ug/kg
PCM-22	PCM-22-DS-091210	Toxaphene	50	180	180	ug/kg
PCM-02	PCM-02-DS-091209	trans-Nonachlor	1	1.2	1.1	ug/kg
PCM-04	PCM-04-DS-091209	trans-Nonachlor	1	1.1	0.62	ug/kg
PCM-06	PCM-06-DS-091209	trans-Nonachlor	1	1.4	0.13	ug/kg
PCM-09	PCM-09-DS-091209	trans-Nonachlor	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	trans-Nonachlor	1	1.2	0.097	ug/kg
PCM-15	PCM-15-DS-091210	trans-Nonachlor	1	1.2	0.11	ug/kg
PCM-22	PCM-22-DS-091210	trans-Nonachlor	1	1.3	0.13	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1016	10	12	7.6	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1016	10	11	4	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1016	10	14	3.3	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1016	10	13	3.6	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1016	10	12	3.1	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1016	10	12	2.5	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1016	10	13	5.9	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1221	10	24	24	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1221	10	22	13	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1221	10	28	28	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1221	10	26	26	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1221	10	23	3.3	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1221	10	24	9.3	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1221	10	26	26	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1232	10	18	18	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1232	10	41	41	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1232	10	14	14	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1232	10	13	7.8	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1232	10	12	12	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1232	10	12	4.4	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1232	10	13	8.8	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1242	10	12	4.6	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1242	10	11	3.2	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1242	10	14	3	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1242	10	13	4.1	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1242	10	12	2.4	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1242	10	12	2.5	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1242	10	13	4.9	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1248	10	12	8.3	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1248	10	11	3.5	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1248	10	14	3.5	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1248	10	13	3.1	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1248	10	12	2.4	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1248	10	12	4.9	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1248	10	13	5.2	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1254	10	60	60	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1254	10	29	29	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1254	10	29	29	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1254	10	24	24	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-14	PCM-14-DS-091210	Aroclor 1254	10	12	12	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1254	10	13	13	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1254	10	25	25	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1260	10	12	8.1	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1260	10	11	8.4	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1260	10	14	8.4	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1260	10	14	14	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1260	10	12	3.8	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1260	10	12	5.1	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1260	10	13	6.4	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1262	10	12	4.8	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1262	10	11	6	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1262	10	14	6.1	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1262	10	13	6.2	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1262	10	12	3	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1262	10	12	4	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1262	10	13	4.9	ug/kg
PCM-02	PCM-02-DS-091209	Aroclor 1268	10	12	2.5	ug/kg
PCM-04	PCM-04-DS-091209	Aroclor 1268	10	11	2.3	ug/kg
PCM-06	PCM-06-DS-091209	Aroclor 1268	10	14	3.7	ug/kg
PCM-09	PCM-09-DS-091209	Aroclor 1268	10	13	2.7	ug/kg
PCM-14	PCM-14-DS-091210	Aroclor 1268	10	12	2.4	ug/kg
PCM-15	PCM-15-DS-091210	Aroclor 1268	10	12	2.5	ug/kg
PCM-22	PCM-22-DS-091210	Aroclor 1268	10	13	2.7	ug/kg
PCM-02	PCM-02-DS-091209	2,2-Dichloropropionic acid (Dalapon)	50	350	43	ug/kg
PCM-04	PCM-04-DS-091209	2,2-Dichloropropionic acid (Dalapon)	50	320	40	ug/kg
PCM-06	PCM-06-DS-091209	2,2-Dichloropropionic acid (Dalapon)	50	420	51	ug/kg
PCM-09	PCM-09-DS-091209	2,2-Dichloropropionic acid (Dalapon)	50	390	47	ug/kg
PCM-14	PCM-14-DS-091210	2,2-Dichloropropionic acid (Dalapon)	50	140	17	ug/kg
PCM-15	PCM-15-DS-091210	2,2-Dichloropropionic acid (Dalapon)	50	150	18	ug/kg
PCM-22	PCM-22-DS-091210	2,2-Dichloropropionic acid (Dalapon)	50	160	19	ug/kg
PCM-02	PCM-02-DS-091209	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	350	28	ug/kg
PCM-04	PCM-04-DS-091209	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	320	26	ug/kg
PCM-06	PCM-06-DS-091209	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	420	34	ug/kg
PCM-09	PCM-09-DS-091209	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	390	31	ug/kg
PCM-14	PCM-14-DS-091210	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	140	11	ug/kg
PCM-15	PCM-15-DS-091210	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	150	12	ug/kg
PCM-22	PCM-22-DS-091210	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	50	160	13	ug/kg
PCM-02	PCM-02-DS-091209	2,4,5-TP (Silvex)	50	350	32	ug/kg
PCM-04	PCM-04-DS-091209	2,4,5-TP (Silvex)	50	320	29	ug/kg
PCM-06	PCM-06-DS-091209	2,4,5-TP (Silvex)	50	420	38	ug/kg
PCM-09	PCM-09-DS-091209	2,4,5-TP (Silvex)	50	390	35	ug/kg
PCM-14	PCM-14-DS-091210	2,4,5-TP (Silvex)	50	140	13	ug/kg
PCM-15	PCM-15-DS-091210	2,4,5-TP (Silvex)	50	150	13	ug/kg
PCM-22	PCM-22-DS-091210	2,4,5-TP (Silvex)	50	160	14	ug/kg
PCM-02	PCM-02-DS-091209	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	350	28	ug/kg
PCM-04	PCM-04-DS-091209	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	320	26	ug/kg
PCM-06	PCM-06-DS-091209	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	420	34	ug/kg
PCM-09	PCM-09-DS-091209	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	390	31	ug/kg
PCM-14	PCM-14-DS-091210	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	140	11	ug/kg
PCM-15	PCM-15-DS-091210	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	150	12	ug/kg
PCM-22	PCM-22-DS-091210	2,4-D (2,4-Dichlorophenoxyacetic acid)	50	160	13	ug/kg
PCM-02	PCM-02-DS-091209	2,4-DB (2,4-D derivative)	50	350	26	ug/kg
PCM-04	PCM-04-DS-091209	2,4-DB (2,4-D derivative)	50	320	24	ug/kg
PCM-06	PCM-06-DS-091209	2,4-DB (2,4-D derivative)	50	420	35	ug/kg
PCM-09	PCM-09-DS-091209	2,4-DB (2,4-D derivative)	50	390	29	ug/kg
PCM-14	PCM-14-DS-091210	2,4-DB (2,4-D derivative)	50	140	10	ug/kg
PCM-15	PCM-15-DS-091210	2,4-DB (2,4-D derivative)	50	150	11	ug/kg
PCM-22	PCM-22-DS-091210	2,4-DB (2,4-D derivative)	50	160	12	ug/kg
PCM-02	PCM-02-DS-091209	Dicamba	50	350	31	ug/kg
PCM-04	PCM-04-DS-091209	Dicamba	50	320	29	ug/kg
PCM-06	PCM-06-DS-091209	Dicamba	50	420	37	ug/kg
PCM-09	PCM-09-DS-091209	Dicamba	50	390	34	ug/kg
PCM-14	PCM-14-DS-091210	Dicamba	50	140	12	ug/kg
PCM-15	PCM-15-DS-091210	Dicamba	50	150	13	ug/kg
PCM-22	PCM-22-DS-091210	Dicamba	50	160	14	ug/kg
PCM-02	PCM-02-DS-091209	Dichlorprop	50	350	64	ug/kg
PCM-04	PCM-04-DS-091209	Dichlorprop	50	320	59	ug/kg
PCM-06	PCM-06-DS-091209	Dichlorprop	50	420	76	ug/kg
PCM-09	PCM-09-DS-091209	Dichlorprop	50	390	70	ug/kg
PCM-14	PCM-14-DS-091210	Dichlorprop	50	140	25	ug/kg
PCM-15	PCM-15-DS-091210	Dichlorprop	50	150	26	ug/kg
PCM-22	PCM-22-DS-091210	Dichlorprop	50	160	28	ug/kg
PCM-02	PCM-02-DS-091209	Dinoseb	80	350	19	ug/kg
PCM-04	PCM-04-DS-091209	Dinoseb	80	320	18	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-06	PCM-06-DS-091209	Dinoseb	80	420	23	ug/kg
PCM-09	PCM-09-DS-091209	Dinoseb	80	390	21	ug/kg
PCM-14	PCM-14-DS-091210	Dinoseb	80	140	7.3	ug/kg
PCM-15	PCM-15-DS-091210	Dinoseb	80	150	7.7	ug/kg
PCM-22	PCM-22-DS-091210	Dinoseb	80	160	8.3	ug/kg
PCM-02	PCM-02-DS-091209	MCPA	10000	70000	19000	ug/kg
PCM-04	PCM-04-DS-091209	MCPA	10000	64000	17000	ug/kg
PCM-06	PCM-06-DS-091209	MCPA	10000	84000	22000	ug/kg
PCM-09	PCM-09-DS-091209	MCPA	10000	77000	20000	ug/kg
PCM-14	PCM-14-DS-091210	MCPA	10000	27000	7000	ug/kg
PCM-15	PCM-15-DS-091210	MCPA	10000	29000	7400	ug/kg
PCM-22	PCM-22-DS-091210	MCPA	10000	31000	8000	ug/kg
PCM-02	PCM-02-DS-091209	Mecoprop (MCPP)	10000	70000	19000	ug/kg
PCM-04	PCM-04-DS-091209	Mecoprop (MCPP)	10000	64000	17000	ug/kg
PCM-06	PCM-06-DS-091209	Mecoprop (MCPP)	10000	84000	22000	ug/kg
PCM-09	PCM-09-DS-091209	Mecoprop (MCPP)	10000	77000	20000	ug/kg
PCM-14	PCM-14-DS-091210	Mecoprop (MCPP)	10000	27000	12000	ug/kg
PCM-15	PCM-15-DS-091210	Mecoprop (MCPP)	10000	29000	12000	ug/kg
PCM-22	PCM-22-DS-091210	Mecoprop (MCPP)	10000	31000	13000	ug/kg
PCM-02	PCM-02-DS-091209	2,3,4,5-Tetrachlorophenol	5	12	0.91	ug/kg
PCM-04	PCM-04-DS-091209	2,3,4,5-Tetrachlorophenol	5	11	0.84	ug/kg
PCM-06	PCM-06-DS-091209	2,3,4,5-Tetrachlorophenol	5	14	1.3	ug/kg
PCM-09	PCM-09-DS-091209	2,3,4,5-Tetrachlorophenol	5	13	1.3	ug/kg
PCM-14	PCM-14-DS-091210	2,3,4,5-Tetrachlorophenol	5	12	0.87	ug/kg
PCM-15	PCM-15-DS-091210	2,3,4,5-Tetrachlorophenol	5	12	0.9	ug/kg
PCM-22	PCM-22-DS-091210	2,3,4,5-Tetrachlorophenol	5	13	0.97	ug/kg
PCM-02	PCM-02-DS-091209	2,3,5,6-Tetrachlorophenol	5	12	0.79	ug/kg
PCM-04	PCM-04-DS-091209	2,3,5,6-Tetrachlorophenol	5	11	0.73	ug/kg
PCM-06	PCM-06-DS-091209	2,3,5,6-Tetrachlorophenol	5	14	0.95	ug/kg
PCM-09	PCM-09-DS-091209	2,3,5,6-Tetrachlorophenol	5	13	0.85	ug/kg
PCM-14	PCM-14-DS-091210	2,3,5,6-Tetrachlorophenol	5	12	0.76	ug/kg
PCM-15	PCM-15-DS-091210	2,3,5,6-Tetrachlorophenol	5	12	0.79	ug/kg
PCM-22	PCM-22-DS-091210	2,3,5,6-Tetrachlorophenol	5	13	0.85	ug/kg
PCM-02	PCM-02-DS-091209	2,4,5-Trichlorophenol	5	12	0.82	ug/kg
PCM-04	PCM-04-DS-091209	2,4,5-Trichlorophenol	5	11	0.75	ug/kg
PCM-06	PCM-06-DS-091209	2,4,5-Trichlorophenol	5	14	1.5	ug/kg
PCM-09	PCM-09-DS-091209	2,4,5-Trichlorophenol	5	13	0.88	ug/kg
PCM-02	PCM-02-DS-091209	2,4,6-Trichlorophenol	5	12	1.1	ug/kg
PCM-04	PCM-04-DS-091209	2,4,6-Trichlorophenol	5	11	0.94	ug/kg
PCM-06	PCM-06-DS-091209	2,4,6-Trichlorophenol	5	14	1.3	ug/kg
PCM-09	PCM-09-DS-091209	2,4,6-Trichlorophenol	5	13	1.1	ug/kg
PCM-14	PCM-14-DS-091210	2,4,6-Trichlorophenol	5	12	0.98	ug/kg
PCM-15	PCM-15-DS-091210	2,4,6-Trichlorophenol	5	12	1.1	ug/kg
PCM-22	PCM-22-DS-091210	2,4,6-Trichlorophenol	5	13	1.1	ug/kg
PCM-02	PCM-02-DS-091209	Pentachlorophenol	5	12	1.7	ug/kg
PCM-04	PCM-04-DS-091209	Pentachlorophenol	5	11	11	ug/kg
PCM-06	PCM-06-DS-091209	Pentachlorophenol	5	14	3.3	ug/kg
PCM-14	PCM-14-DS-091210	Pentachlorophenol	5	12	1.6	ug/kg
PCM-22	PCM-22-DS-091210	Pentachlorophenol	5	13	1.8	ug/kg
PCM-04	PCM-04-DS-091209	1,1,1,2-Tetrachloroethane	1	1.1	0.27	ug/kg
PCM-06	PCM-06-DS-091209	1,1,1,2-Tetrachloroethane	1	1.4	0.35	ug/kg
PCM-09	PCM-09-DS-091209	1,1,1,2-Tetrachloroethane	1	1.3	0.32	ug/kg
PCM-14	PCM-14-DS-091210	1,1,1,2-Tetrachloroethane	1	1.2	0.28	ug/kg
PCM-15	PCM-15-DS-091210	1,1,1,2-Tetrachloroethane	1	1.2	0.29	ug/kg
PCM-22	PCM-22-DS-091210	1,1,1,2-Tetrachloroethane	1	1.3	0.32	ug/kg
PCM-04	PCM-04-DS-091209	1,1,1-Trichloroethane	1	1.1	0.37	ug/kg
PCM-06	PCM-06-DS-091209	1,1,1-Trichloroethane	1	1.4	0.49	ug/kg
PCM-09	PCM-09-DS-091209	1,1,1-Trichloroethane	1	1.3	0.45	ug/kg
PCM-14	PCM-14-DS-091210	1,1,1-Trichloroethane	1	1.2	0.39	ug/kg
PCM-15	PCM-15-DS-091210	1,1,1-Trichloroethane	1	1.2	0.41	ug/kg
PCM-22	PCM-22-DS-091210	1,1,1-Trichloroethane	1	1.3	0.45	ug/kg
PCM-04	PCM-04-DS-091209	1,1,2,2-Tetrachloroethane	1	1.1	0.38	ug/kg
PCM-06	PCM-06-DS-091209	1,1,2,2-Tetrachloroethane	1	1.4	0.5	ug/kg
PCM-09	PCM-09-DS-091209	1,1,2,2-Tetrachloroethane	1	1.3	0.46	ug/kg
PCM-14	PCM-14-DS-091210	1,1,2,2-Tetrachloroethane	1	1.2	0.4	ug/kg
PCM-15	PCM-15-DS-091210	1,1,2,2-Tetrachloroethane	1	1.2	0.42	ug/kg
PCM-22	PCM-22-DS-091210	1,1,2,2-Tetrachloroethane	1	1.3	0.46	ug/kg
PCM-04	PCM-04-DS-091209	1,1-Dichloroethane	1	1.1	0.21	ug/kg
PCM-06	PCM-06-DS-091209	1,1-Dichloroethane	1	1.4	0.28	ug/kg
PCM-09	PCM-09-DS-091209	1,1-Dichloroethane	1	1.3	0.26	ug/kg
PCM-14	PCM-14-DS-091210	1,1-Dichloroethane	1	1.2	0.23	ug/kg
PCM-15	PCM-15-DS-091210	1,1-Dichloroethane	1	1.2	0.24	ug/kg
PCM-22	PCM-22-DS-091210	1,1-Dichloroethane	1	1.3	0.26	ug/kg
PCM-04	PCM-04-DS-091209	1,1-Dichloroethene	1	1.1	0.25	ug/kg
PCM-06	PCM-06-DS-091209	1,1-Dichloroethene	1	1.4	0.32	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-09	PCM-09-DS-091209	1,1-Dichloroethene	1	1.3	0.3	ug/kg
PCM-14	PCM-14-DS-091210	1,1-Dichloroethene	1	1.2	0.26	ug/kg
PCM-15	PCM-15-DS-091210	1,1-Dichloroethene	1	1.2	0.27	ug/kg
PCM-22	PCM-22-DS-091210	1,1-Dichloroethene	1	1.3	0.3	ug/kg
PCM-04	PCM-04-DS-091209	1,2,3-Trichloropropane	1	2.1	0.4	ug/kg
PCM-06	PCM-06-DS-091209	1,2,3-Trichloropropane	1	2.8	0.53	ug/kg
PCM-09	PCM-09-DS-091209	1,2,3-Trichloropropane	1	2.6	0.48	ug/kg
PCM-14	PCM-14-DS-091210	1,2,3-Trichloropropane	1	2.3	0.43	ug/kg
PCM-15	PCM-15-DS-091210	1,2,3-Trichloropropane	1	2.4	0.44	ug/kg
PCM-22	PCM-22-DS-091210	1,2,3-Trichloropropane	1	2.6	0.49	ug/kg
PCM-04	PCM-04-DS-091209	1,2-Dibromoethane (Ethylene dibromide)	1	1.1	0.29	ug/kg
PCM-06	PCM-06-DS-091209	1,2-Dibromoethane (Ethylene dibromide)	1	1.4	0.38	ug/kg
PCM-09	PCM-09-DS-091209	1,2-Dibromoethane (Ethylene dibromide)	1	1.3	0.35	ug/kg
PCM-14	PCM-14-DS-091210	1,2-Dibromoethane (Ethylene dibromide)	1	1.2	0.3	ug/kg
PCM-15	PCM-15-DS-091210	1,2-Dibromoethane (Ethylene dibromide)	1	1.2	0.32	ug/kg
PCM-22	PCM-22-DS-091210	1,2-Dibromoethane (Ethylene dibromide)	1	1.3	0.35	ug/kg
PCM-04	PCM-04-DS-091209	1,2-Dichloroethane	1	1.1	0.063	ug/kg
PCM-06	PCM-06-DS-091209	1,2-Dichloroethane	1	1.4	0.083	ug/kg
PCM-09	PCM-09-DS-091209	1,2-Dichloroethane	1	1.3	0.076	ug/kg
PCM-14	PCM-14-DS-091210	1,2-Dichloroethane	1	1.2	0.067	ug/kg
PCM-15	PCM-15-DS-091210	1,2-Dichloroethane	1	1.2	0.07	ug/kg
PCM-22	PCM-22-DS-091210	1,2-Dichloroethane	1	1.3	0.076	ug/kg
PCM-04	PCM-04-DS-091209	1,2-Dichloroethene, trans-	1	1.1	0.37	ug/kg
PCM-06	PCM-06-DS-091209	1,2-Dichloroethene, trans-	1	1.4	0.49	ug/kg
PCM-09	PCM-09-DS-091209	1,2-Dichloroethene, trans-	1	1.3	0.45	ug/kg
PCM-14	PCM-14-DS-091210	1,2-Dichloroethene, trans-	1	1.2	0.39	ug/kg
PCM-15	PCM-15-DS-091210	1,2-Dichloroethene, trans-	1	1.2	0.41	ug/kg
PCM-22	PCM-22-DS-091210	1,2-Dichloroethene, trans-	1	1.3	0.45	ug/kg
PCM-04	PCM-04-DS-091209	1,2-Dichloropropane	1	1.1	0.24	ug/kg
PCM-06	PCM-06-DS-091209	1,2-Dichloropropane	1	1.4	0.31	ug/kg
PCM-09	PCM-09-DS-091209	1,2-Dichloropropane	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	1,2-Dichloropropane	1	1.2	0.25	ug/kg
PCM-15	PCM-15-DS-091210	1,2-Dichloropropane	1	1.2	0.26	ug/kg
PCM-22	PCM-22-DS-091210	1,2-Dichloropropane	1	1.3	0.28	ug/kg
PCM-04	PCM-04-DS-091209	1,3-Dichloropropene, cis-	1	1.1	0.24	ug/kg
PCM-06	PCM-06-DS-091209	1,3-Dichloropropene, cis-	1	1.4	0.31	ug/kg
PCM-09	PCM-09-DS-091209	1,3-Dichloropropene, cis-	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	1,3-Dichloropropene, cis-	1	1.2	0.25	ug/kg
PCM-15	PCM-15-DS-091210	1,3-Dichloropropene, cis-	1	1.2	0.26	ug/kg
PCM-22	PCM-22-DS-091210	1,3-Dichloropropene, cis-	1	1.3	0.28	ug/kg
PCM-04	PCM-04-DS-091209	1,3-Dichloropropene, trans-	1	1.1	0.36	ug/kg
PCM-06	PCM-06-DS-091209	1,3-Dichloropropene, trans-	1	1.4	0.47	ug/kg
PCM-09	PCM-09-DS-091209	1,3-Dichloropropene, trans-	1	1.3	0.43	ug/kg
PCM-14	PCM-14-DS-091210	1,3-Dichloropropene, trans-	1	1.2	0.38	ug/kg
PCM-15	PCM-15-DS-091210	1,3-Dichloropropene, trans-	1	1.2	0.4	ug/kg
PCM-22	PCM-22-DS-091210	1,3-Dichloropropene, trans-	1	1.3	0.43	ug/kg
PCM-04	PCM-04-DS-091209	2-Butanone (MEK)	4	4.2	1.1	ug/kg
PCM-06	PCM-06-DS-091209	2-Butanone (MEK)	4	5.6	1.4	ug/kg
PCM-09	PCM-09-DS-091209	2-Butanone (MEK)	4	5.1	1.3	ug/kg
PCM-14	PCM-14-DS-091210	2-Butanone (MEK)	4	4.5	1.1	ug/kg
PCM-04	PCM-04-DS-091209	2-Chloroethylvinyl ether	2	5.3	0.51	ug/kg
PCM-06	PCM-06-DS-091209	2-Chloroethylvinyl ether	2	6.9	0.67	ug/kg
PCM-09	PCM-09-DS-091209	2-Chloroethylvinyl ether	2	6.4	0.61	ug/kg
PCM-14	PCM-14-DS-091210	2-Chloroethylvinyl ether	2	5.6	0.54	ug/kg
PCM-15	PCM-15-DS-091210	2-Chloroethylvinyl ether	2	5.8	0.56	ug/kg
PCM-22	PCM-22-DS-091210	2-Chloroethylvinyl ether	2	6.4	0.61	ug/kg
PCM-04	PCM-04-DS-091209	2-Hexanone (Methyl butyl ketone)	2	4.2	0.98	ug/kg
PCM-06	PCM-06-DS-091209	2-Hexanone (Methyl butyl ketone)	2	5.6	1.3	ug/kg
PCM-09	PCM-09-DS-091209	2-Hexanone (Methyl butyl ketone)	2	5.1	1.2	ug/kg
PCM-14	PCM-14-DS-091210	2-Hexanone (Methyl butyl ketone)	2	4.5	1.1	ug/kg
PCM-15	PCM-15-DS-091210	2-Hexanone (Methyl butyl ketone)	2	4.7	1.1	ug/kg
PCM-22	PCM-22-DS-091210	2-Hexanone (Methyl butyl ketone)	2	5.1	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Acetone	10	11	1.8	ug/kg
PCM-06	PCM-06-DS-091209	Acetone	10	14	2.4	ug/kg
PCM-09	PCM-09-DS-091209	Acetone	10	13	2.2	ug/kg
PCM-14	PCM-14-DS-091210	Acetone	10	12	1.9	ug/kg
PCM-04	PCM-04-DS-091209	Acrolein	2.5	11	2.8	ug/kg
PCM-06	PCM-06-DS-091209	Acrolein	2.5	14	3.6	ug/kg
PCM-09	PCM-09-DS-091209	Acrolein	2.5	13	3.3	ug/kg
PCM-14	PCM-14-DS-091210	Acrolein	2.5	12	2.9	ug/kg
PCM-15	PCM-15-DS-091210	Acrolein	2.5	12	3	ug/kg
PCM-22	PCM-22-DS-091210	Acrolein	2.5	13	3.3	ug/kg
PCM-04	PCM-04-DS-091209	Acrylonitrile	2	2.1	1.3	ug/kg
PCM-06	PCM-06-DS-091209	Acrylonitrile	2	2.8	1.7	ug/kg
PCM-09	PCM-09-DS-091209	Acrylonitrile	2	2.6	1.6	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-14	PCM-14-DS-091210	Acrylonitrile	2	2.3	1.4	ug/kg
PCM-15	PCM-15-DS-091210	Acrylonitrile	2	2.4	1.4	ug/kg
PCM-22	PCM-22-DS-091210	Acrylonitrile	2	2.6	1.6	ug/kg
PCM-06	PCM-06-DS-091209	Benzene	1	1.4	0.31	ug/kg
PCM-09	PCM-09-DS-091209	Benzene	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	Benzene	1	1.2	0.25	ug/kg
PCM-15	PCM-15-DS-091210	Benzene	1	1.2	0.26	ug/kg
PCM-22	PCM-22-DS-091210	Benzene	1	1.3	0.28	ug/kg
PCM-04	PCM-04-DS-091209	Bromochloromethane	1	1.1	0.15	ug/kg
PCM-06	PCM-06-DS-091209	Bromochloromethane	1	1.4	0.2	ug/kg
PCM-09	PCM-09-DS-091209	Bromochloromethane	1	1.3	0.18	ug/kg
PCM-14	PCM-14-DS-091210	Bromochloromethane	1	1.2	0.16	ug/kg
PCM-15	PCM-15-DS-091210	Bromochloromethane	1	1.2	0.17	ug/kg
PCM-22	PCM-22-DS-091210	Bromochloromethane	1	1.3	0.18	ug/kg
PCM-04	PCM-04-DS-091209	Bromodichloromethane	1	1.1	0.16	ug/kg
PCM-06	PCM-06-DS-091209	Bromodichloromethane	1	1.4	0.21	ug/kg
PCM-09	PCM-09-DS-091209	Bromodichloromethane	1	1.3	0.19	ug/kg
PCM-14	PCM-14-DS-091210	Bromodichloromethane	1	1.2	0.17	ug/kg
PCM-15	PCM-15-DS-091210	Bromodichloromethane	1	1.2	0.18	ug/kg
PCM-22	PCM-22-DS-091210	Bromodichloromethane	1	1.3	0.19	ug/kg
PCM-04	PCM-04-DS-091209	Bromoform	1	1.1	0.32	ug/kg
PCM-06	PCM-06-DS-091209	Bromoform	1	1.4	0.42	ug/kg
PCM-09	PCM-09-DS-091209	Bromoform	1	1.3	0.38	ug/kg
PCM-14	PCM-14-DS-091210	Bromoform	1	1.2	0.34	ug/kg
PCM-15	PCM-15-DS-091210	Bromoform	1	1.2	0.35	ug/kg
PCM-22	PCM-22-DS-091210	Bromoform	1	1.3	0.38	ug/kg
PCM-04	PCM-04-DS-091209	Bromomethane	1	1.1	0.66	ug/kg
PCM-06	PCM-06-DS-091209	Bromomethane	1	1.4	0.86	ug/kg
PCM-09	PCM-09-DS-091209	Bromomethane	1	1.3	0.79	ug/kg
PCM-14	PCM-14-DS-091210	Bromomethane	1	1.2	0.69	ug/kg
PCM-15	PCM-15-DS-091210	Bromomethane	1	1.2	0.72	ug/kg
PCM-22	PCM-22-DS-091210	Bromomethane	1	1.3	0.79	ug/kg
PCM-04	PCM-04-DS-091209	Carbon disulfide	1	1.1	0.28	ug/kg
PCM-06	PCM-06-DS-091209	Carbon disulfide	1	1.4	0.36	ug/kg
PCM-09	PCM-09-DS-091209	Carbon disulfide	1	1.3	0.33	ug/kg
PCM-14	PCM-14-DS-091210	Carbon disulfide	1	1.2	0.29	ug/kg
PCM-04	PCM-04-DS-091209	Carbon tetrachloride (Tetrachloromethane)	1	1.1	0.38	ug/kg
PCM-06	PCM-06-DS-091209	Carbon tetrachloride (Tetrachloromethane)	1	1.4	0.5	ug/kg
PCM-09	PCM-09-DS-091209	Carbon tetrachloride (Tetrachloromethane)	1	1.3	0.46	ug/kg
PCM-14	PCM-14-DS-091210	Carbon tetrachloride (Tetrachloromethane)	1	1.2	0.4	ug/kg
PCM-15	PCM-15-DS-091210	Carbon tetrachloride (Tetrachloromethane)	1	1.2	0.42	ug/kg
PCM-22	PCM-22-DS-091210	Carbon tetrachloride (Tetrachloromethane)	1	1.3	0.46	ug/kg
PCM-04	PCM-04-DS-091209	Chlorobenzene	1	1.1	0.27	ug/kg
PCM-06	PCM-06-DS-091209	Chlorobenzene	1	1.4	0.35	ug/kg
PCM-09	PCM-09-DS-091209	Chlorobenzene	1	1.3	0.32	ug/kg
PCM-15	PCM-15-DS-091210	Chlorobenzene	1	1.2	0.29	ug/kg
PCM-22	PCM-22-DS-091210	Chlorobenzene	1	1.3	0.32	ug/kg
PCM-04	PCM-04-DS-091209	Chloroethane	1	1.1	0.25	ug/kg
PCM-06	PCM-06-DS-091209	Chloroethane	1	1.4	0.32	ug/kg
PCM-09	PCM-09-DS-091209	Chloroethane	1	1.3	0.3	ug/kg
PCM-14	PCM-14-DS-091210	Chloroethane	1	1.2	0.26	ug/kg
PCM-15	PCM-15-DS-091210	Chloroethane	1	1.2	0.27	ug/kg
PCM-22	PCM-22-DS-091210	Chloroethane	1	1.3	0.3	ug/kg
PCM-04	PCM-04-DS-091209	Chloroform	1	1.1	0.24	ug/kg
PCM-06	PCM-06-DS-091209	Chloroform	1	1.4	0.31	ug/kg
PCM-09	PCM-09-DS-091209	Chloroform	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	Chloroform	1	1.2	0.25	ug/kg
PCM-15	PCM-15-DS-091210	Chloroform	1	1.2	0.26	ug/kg
PCM-22	PCM-22-DS-091210	Chloroform	1	1.3	0.28	ug/kg
PCM-04	PCM-04-DS-091209	Chloromethane	1	1.1	0.39	ug/kg
PCM-06	PCM-06-DS-091209	Chloromethane	1	1.4	0.51	ug/kg
PCM-09	PCM-09-DS-091209	Chloromethane	1	1.3	0.47	ug/kg
PCM-14	PCM-14-DS-091210	Chloromethane	1	1.2	0.42	ug/kg
PCM-15	PCM-15-DS-091210	Chloromethane	1	1.2	0.43	ug/kg
PCM-22	PCM-22-DS-091210	Chloromethane	1	1.3	0.47	ug/kg
PCM-04	PCM-04-DS-091209	Dibromochloromethane	1	1.1	0.2	ug/kg
PCM-06	PCM-06-DS-091209	Dibromochloromethane	1	1.4	0.27	ug/kg
PCM-09	PCM-09-DS-091209	Dibromochloromethane	1	1.3	0.24	ug/kg
PCM-14	PCM-14-DS-091210	Dibromochloromethane	1	1.2	0.22	ug/kg
PCM-15	PCM-15-DS-091210	Dibromochloromethane	1	1.2	0.22	ug/kg
PCM-22	PCM-22-DS-091210	Dibromochloromethane	1	1.3	0.25	ug/kg
PCM-04	PCM-04-DS-091209	Dibromomethane	1	1.1	0.3	ug/kg
PCM-06	PCM-06-DS-091209	Dibromomethane	1	1.4	0.39	ug/kg
PCM-09	PCM-09-DS-091209	Dibromomethane	1	1.3	0.36	ug/kg
PCM-14	PCM-14-DS-091210	Dibromomethane	1	1.2	0.32	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-15	PCM-15-DS-091210	Dibromomethane	1	1.2	0.33	ug/kg
PCM-22	PCM-22-DS-091210	Dibromomethane	1	1.3	0.36	ug/kg
PCM-04	PCM-04-DS-091209	Dichlorodifluoromethane	1	1.1	0.24	ug/kg
PCM-06	PCM-06-DS-091209	Dichlorodifluoromethane	1	1.4	0.31	ug/kg
PCM-09	PCM-09-DS-091209	Dichlorodifluoromethane	1	1.3	0.28	ug/kg
PCM-14	PCM-14-DS-091210	Dichlorodifluoromethane	1	1.2	0.25	ug/kg
PCM-15	PCM-15-DS-091210	Dichlorodifluoromethane	1	1.2	0.26	ug/kg
PCM-22	PCM-22-DS-091210	Dichlorodifluoromethane	1	1.3	0.28	ug/kg
PCM-04	PCM-04-DS-091209	Dichloromethane (Methylene chloride)	5	5.3	0.13	ug/kg
PCM-06	PCM-06-DS-091209	Dichloromethane (Methylene chloride)	5	6.9	0.17	ug/kg
PCM-09	PCM-09-DS-091209	Dichloromethane (Methylene chloride)	5	6.4	0.16	ug/kg
PCM-14	PCM-14-DS-091210	Dichloromethane (Methylene chloride)	5	5.6	0.14	ug/kg
PCM-15	PCM-15-DS-091210	Dichloromethane (Methylene chloride)	5	5.8	0.14	ug/kg
PCM-22	PCM-22-DS-091210	Dichloromethane (Methylene chloride)	5	6.4	0.16	ug/kg
PCM-04	PCM-04-DS-091209	Ethylbenzene	1	1.1	0.24	ug/kg
PCM-09	PCM-09-DS-091209	Ethylbenzene	1	1.3	0.28	ug/kg
PCM-15	PCM-15-DS-091210	Ethylbenzene	1	1.2	0.26	ug/kg
PCM-04	PCM-04-DS-091209	Iodomethane (Methyl iodide)	2	4.2	0.6	ug/kg
PCM-06	PCM-06-DS-091209	Iodomethane (Methyl iodide)	2	5.6	0.79	ug/kg
PCM-09	PCM-09-DS-091209	Iodomethane (Methyl iodide)	2	5.1	0.72	ug/kg
PCM-14	PCM-14-DS-091210	Iodomethane (Methyl iodide)	2	4.5	0.64	ug/kg
PCM-15	PCM-15-DS-091210	Iodomethane (Methyl iodide)	2	4.7	0.66	ug/kg
PCM-22	PCM-22-DS-091210	Iodomethane (Methyl iodide)	2	5.1	0.73	ug/kg
PCM-09	PCM-09-DS-091209	Isopropylbenzene (Cumene)	1	1.3	0.17	ug/kg
PCM-15	PCM-15-DS-091210	Isopropylbenzene (Cumene)	1	1.2	0.15	ug/kg
PCM-22	PCM-22-DS-091210	Isopropylbenzene (Cumene)	1	1.3	0.17	ug/kg
PCM-04	PCM-04-DS-091209	m,p-Xylene	1	2.1	0.39	ug/kg
PCM-06	PCM-06-DS-091209	m,p-Xylene	1	2.8	0.51	ug/kg
PCM-09	PCM-09-DS-091209	m,p-Xylene	1	2.6	0.47	ug/kg
PCM-14	PCM-14-DS-091210	m,p-Xylene	1	2.3	0.42	ug/kg
PCM-15	PCM-15-DS-091210	m,p-Xylene	1	2.4	0.43	ug/kg
PCM-22	PCM-22-DS-091210	m,p-Xylene	1	2.6	0.47	ug/kg
PCM-04	PCM-04-DS-091209	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.1	0.78	ug/kg
PCM-06	PCM-06-DS-091209	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.8	1.1	ug/kg
PCM-09	PCM-09-DS-091209	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.6	0.94	ug/kg
PCM-14	PCM-14-DS-091210	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.3	0.83	ug/kg
PCM-15	PCM-15-DS-091210	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.4	0.86	ug/kg
PCM-22	PCM-22-DS-091210	Methyl isobutyl ketone (4-Methyl-2-pentanone or (M	2	2.6	0.94	ug/kg
PCM-04	PCM-04-DS-091209	Methyl tert-butyl ether (MTBE)	1	2.1	0.19	ug/kg
PCM-06	PCM-06-DS-091209	Methyl tert-butyl ether (MTBE)	1	2.8	0.25	ug/kg
PCM-09	PCM-09-DS-091209	Methyl tert-butyl ether (MTBE)	1	2.6	0.23	ug/kg
PCM-14	PCM-14-DS-091210	Methyl tert-butyl ether (MTBE)	1	2.3	0.2	ug/kg
PCM-15	PCM-15-DS-091210	Methyl tert-butyl ether (MTBE)	1	2.4	0.21	ug/kg
PCM-22	PCM-22-DS-091210	Methyl tert-butyl ether (MTBE)	1	2.6	0.23	ug/kg
PCM-04	PCM-04-DS-091209	o-Xylene	1	1.1	0.14	ug/kg
PCM-09	PCM-09-DS-091209	o-Xylene	1	1.3	0.17	ug/kg
PCM-15	PCM-15-DS-091210	o-Xylene	1	1.2	0.15	ug/kg
PCM-04	PCM-04-DS-091209	Styrene	1	1.1	0.14	ug/kg
PCM-06	PCM-06-DS-091209	Styrene	1	1.4	0.18	ug/kg
PCM-09	PCM-09-DS-091209	Styrene	1	1.3	0.17	ug/kg
PCM-14	PCM-14-DS-091210	Styrene	1	1.2	0.15	ug/kg
PCM-15	PCM-15-DS-091210	Styrene	1	1.2	0.15	ug/kg
PCM-22	PCM-22-DS-091210	Styrene	1	1.3	0.17	ug/kg
PCM-04	PCM-04-DS-091209	Tetrachloroethene (PCE)	1	1.1	0.28	ug/kg
PCM-06	PCM-06-DS-091209	Tetrachloroethene (PCE)	1	1.4	0.36	ug/kg
PCM-09	PCM-09-DS-091209	Tetrachloroethene (PCE)	1	1.3	0.33	ug/kg
PCM-14	PCM-14-DS-091210	Tetrachloroethene (PCE)	1	1.2	0.29	ug/kg
PCM-15	PCM-15-DS-091210	Tetrachloroethene (PCE)	1	1.2	0.3	ug/kg
PCM-22	PCM-22-DS-091210	Tetrachloroethene (PCE)	1	1.3	0.33	ug/kg
PCM-04	PCM-04-DS-091209	Toluene	1	1.1	0.19	ug/kg
PCM-06	PCM-06-DS-091209	Toluene	1	1.4	0.25	ug/kg
PCM-09	PCM-09-DS-091209	Toluene	1	1.3	0.23	ug/kg
PCM-14	PCM-14-DS-091210	Toluene	1	1.2	0.2	ug/kg
PCM-04	PCM-04-DS-091209	trans-1,4-Dichloro-2-butene	2	2.1	0.29	ug/kg
PCM-06	PCM-06-DS-091209	trans-1,4-Dichloro-2-butene	2	2.8	0.38	ug/kg
PCM-09	PCM-09-DS-091209	trans-1,4-Dichloro-2-butene	2	2.6	0.35	ug/kg
PCM-14	PCM-14-DS-091210	trans-1,4-Dichloro-2-butene	2	2.3	0.3	ug/kg
PCM-15	PCM-15-DS-091210	trans-1,4-Dichloro-2-butene	2	2.4	0.32	ug/kg
PCM-22	PCM-22-DS-091210	trans-1,4-Dichloro-2-butene	2	2.6	0.35	ug/kg
PCM-04	PCM-04-DS-091209	Trichloroethene (TCE)	1	1.1	0.29	ug/kg
PCM-06	PCM-06-DS-091209	Trichloroethene (TCE)	1	1.4	0.38	ug/kg
PCM-09	PCM-09-DS-091209	Trichloroethene (TCE)	1	1.3	0.35	ug/kg
PCM-14	PCM-14-DS-091210	Trichloroethene (TCE)	1	1.2	0.3	ug/kg
PCM-22	PCM-22-DS-091210	Trichloroethene (TCE)	1	1.3	0.35	ug/kg
PCM-04	PCM-04-DS-091209	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.1	0.23	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-06	PCM-06-DS-091209	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.4	0.29	ug/kg
PCM-09	PCM-09-DS-091209	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.3	0.27	ug/kg
PCM-14	PCM-14-DS-091210	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.2	0.24	ug/kg
PCM-15	PCM-15-DS-091210	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.2	0.25	ug/kg
PCM-22	PCM-22-DS-091210	Trichlorofluoromethane (Fluorotrichloromethane)	1	1.3	0.27	ug/kg
PCM-04	PCM-04-DS-091209	Vinyl acetate	1	2.1	0.97	ug/kg
PCM-06	PCM-06-DS-091209	Vinyl acetate	1	2.8	1.3	ug/kg
PCM-09	PCM-09-DS-091209	Vinyl acetate	1	2.6	1.2	ug/kg
PCM-14	PCM-14-DS-091210	Vinyl acetate	1	2.3	1.1	ug/kg
PCM-15	PCM-15-DS-091210	Vinyl acetate	1	2.4	1.1	ug/kg
PCM-22	PCM-22-DS-091210	Vinyl acetate	1	2.6	1.2	ug/kg
PCM-04	PCM-04-DS-091209	Vinyl chloride	1	1.1	0.15	ug/kg
PCM-06	PCM-06-DS-091209	Vinyl chloride	1	1.4	0.2	ug/kg
PCM-09	PCM-09-DS-091209	Vinyl chloride	1	1.3	0.18	ug/kg
PCM-14	PCM-14-DS-091210	Vinyl chloride	1	1.2	0.16	ug/kg
PCM-15	PCM-15-DS-091210	Vinyl chloride	1	1.2	0.17	ug/kg
PCM-22	PCM-22-DS-091210	Vinyl chloride	1	1.3	0.18	ug/kg
PCM-02	PCM-02-DS-091209	1,2,4-Trichlorobenzene	10	300	76	ug/kg
PCM-04	PCM-04-DS-091209	1,2,4-Trichlorobenzene	10	540	140	ug/kg
PCM-06	PCM-06-DS-091209	1,2,4-Trichlorobenzene	10	70	19	ug/kg
PCM-09	PCM-09-DS-091209	1,2,4-Trichlorobenzene	10	64	17	ug/kg
PCM-14	PCM-14-DS-091210	1,2,4-Trichlorobenzene	10	12	3	ug/kg
PCM-15	PCM-15-DS-091210	1,2,4-Trichlorobenzene	10	12	3.1	ug/kg
PCM-22	PCM-22-DS-091210	1,2,4-Trichlorobenzene	10	13	3.4	ug/kg
PCM-02	PCM-02-DS-091209	1,2-Dichlorobenzene	10	300	85	ug/kg
PCM-04	PCM-04-DS-091209	1,2-Dichlorobenzene	10	540	160	ug/kg
PCM-06	PCM-06-DS-091209	1,2-Dichlorobenzene	10	70	21	ug/kg
PCM-09	PCM-09-DS-091209	1,2-Dichlorobenzene	10	64	19	ug/kg
PCM-14	PCM-14-DS-091210	1,2-Dichlorobenzene	10	12	3.3	ug/kg
PCM-15	PCM-15-DS-091210	1,2-Dichlorobenzene	10	12	3.5	ug/kg
PCM-22	PCM-22-DS-091210	1,2-Dichlorobenzene	10	13	3.7	ug/kg
PCM-02	PCM-02-DS-091209	1,3-Dichlorobenzene	10	300	88	ug/kg
PCM-04	PCM-04-DS-091209	1,3-Dichlorobenzene	10	540	160	ug/kg
PCM-06	PCM-06-DS-091209	1,3-Dichlorobenzene	10	70	21	ug/kg
PCM-09	PCM-09-DS-091209	1,3-Dichlorobenzene	10	64	20	ug/kg
PCM-14	PCM-14-DS-091210	1,3-Dichlorobenzene	10	12	3.4	ug/kg
PCM-15	PCM-15-DS-091210	1,3-Dichlorobenzene	10	12	3.6	ug/kg
PCM-22	PCM-22-DS-091210	1,3-Dichlorobenzene	10	13	3.9	ug/kg
PCM-02	PCM-02-DS-091209	1,4-Dichlorobenzene	10	300	85	ug/kg
PCM-04	PCM-04-DS-091209	1,4-Dichlorobenzene	10	540	160	ug/kg
PCM-06	PCM-06-DS-091209	1,4-Dichlorobenzene	10	70	21	ug/kg
PCM-09	PCM-09-DS-091209	1,4-Dichlorobenzene	10	64	19	ug/kg
PCM-14	PCM-14-DS-091210	1,4-Dichlorobenzene	10	12	3.3	ug/kg
PCM-15	PCM-15-DS-091210	1,4-Dichlorobenzene	10	12	3.5	ug/kg
PCM-02	PCM-02-DS-091209	2,4,5-Trichlorophenol	5	300	44	ug/kg
PCM-04	PCM-04-DS-091209	2,4,5-Trichlorophenol	5	540	80	ug/kg
PCM-06	PCM-06-DS-091209	2,4,5-Trichlorophenol	5	70	11	ug/kg
PCM-09	PCM-09-DS-091209	2,4,5-Trichlorophenol	5	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	2,4,5-Trichlorophenol	5	12	1.7	ug/kg
PCM-15	PCM-15-DS-091210	2,4,5-Trichlorophenol	5	12	1.8	ug/kg
PCM-22	PCM-22-DS-091210	2,4,5-Trichlorophenol	5	13	2	ug/kg
PCM-02	PCM-02-DS-091209	2,4,6-Trichlorophenol	5	300	41	ug/kg
PCM-04	PCM-04-DS-091209	2,4,6-Trichlorophenol	5	540	75	ug/kg
PCM-06	PCM-06-DS-091209	2,4,6-Trichlorophenol	5	70	9.8	ug/kg
PCM-09	PCM-09-DS-091209	2,4,6-Trichlorophenol	5	64	9	ug/kg
PCM-14	PCM-14-DS-091210	2,4,6-Trichlorophenol	5	12	1.6	ug/kg
PCM-15	PCM-15-DS-091210	2,4,6-Trichlorophenol	5	12	1.7	ug/kg
PCM-22	PCM-22-DS-091210	2,4,6-Trichlorophenol	5	13	1.8	ug/kg
PCM-02	PCM-02-DS-091209	2,4-Dichlorophenol	10	300	30	ug/kg
PCM-04	PCM-04-DS-091209	2,4-Dichlorophenol	10	540	54	ug/kg
PCM-06	PCM-06-DS-091209	2,4-Dichlorophenol	10	70	7	ug/kg
PCM-09	PCM-09-DS-091209	2,4-Dichlorophenol	10	64	6.4	ug/kg
PCM-14	PCM-14-DS-091210	2,4-Dichlorophenol	10	12	1.2	ug/kg
PCM-15	PCM-15-DS-091210	2,4-Dichlorophenol	10	12	1.2	ug/kg
PCM-22	PCM-22-DS-091210	2,4-Dichlorophenol	10	13	1.3	ug/kg
PCM-02	PCM-02-DS-091209	2,4-Dimethylphenol	20	1500	170	ug/kg
PCM-04	PCM-04-DS-091209	2,4-Dimethylphenol	20	2700	300	ug/kg
PCM-06	PCM-06-DS-091209	2,4-Dimethylphenol	20	350	39	ug/kg
PCM-09	PCM-09-DS-091209	2,4-Dimethylphenol	20	320	35	ug/kg
PCM-14	PCM-14-DS-091210	2,4-Dimethylphenol	20	56	6.2	ug/kg
PCM-15	PCM-15-DS-091210	2,4-Dimethylphenol	20	59	6.5	ug/kg
PCM-22	PCM-22-DS-091210	2,4-Dimethylphenol	20	64	7	ug/kg
PCM-02	PCM-02-DS-091209	2,4-Dinitrophenol	200	5900	500	ug/kg
PCM-04	PCM-04-DS-091209	2,4-Dinitrophenol	200	11000	910	ug/kg
PCM-06	PCM-06-DS-091209	2,4-Dinitrophenol	200	1400	120	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-09	PCM-09-DS-091209	2,4-Dinitrophenol	200	1300	110	ug/kg
PCM-14	PCM-14-DS-091210	2,4-Dinitrophenol	200	230	19	ug/kg
PCM-15	PCM-15-DS-091210	2,4-Dinitrophenol	200	240	21	ug/kg
PCM-22	PCM-22-DS-091210	2,4-Dinitrophenol	200	260	22	ug/kg
PCM-02	PCM-02-DS-091209	2,4-Dinitrotoluene	10	300	44	ug/kg
PCM-04	PCM-04-DS-091209	2,4-Dinitrotoluene	10	540	80	ug/kg
PCM-06	PCM-06-DS-091209	2,4-Dinitrotoluene	10	70	11	ug/kg
PCM-09	PCM-09-DS-091209	2,4-Dinitrotoluene	10	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	2,4-Dinitrotoluene	10	12	1.7	ug/kg
PCM-15	PCM-15-DS-091210	2,4-Dinitrotoluene	10	12	1.8	ug/kg
PCM-22	PCM-22-DS-091210	2,4-Dinitrotoluene	10	13	2	ug/kg
PCM-02	PCM-02-DS-091209	2,6-Dinitrotoluene	10	300	59	ug/kg
PCM-04	PCM-04-DS-091209	2,6-Dinitrotoluene	10	540	110	ug/kg
PCM-06	PCM-06-DS-091209	2,6-Dinitrotoluene	10	70	14	ug/kg
PCM-09	PCM-09-DS-091209	2,6-Dinitrotoluene	10	64	13	ug/kg
PCM-14	PCM-14-DS-091210	2,6-Dinitrotoluene	10	12	2.3	ug/kg
PCM-15	PCM-15-DS-091210	2,6-Dinitrotoluene	10	12	2.4	ug/kg
PCM-22	PCM-22-DS-091210	2,6-Dinitrotoluene	10	13	2.6	ug/kg
PCM-02	PCM-02-DS-091209	2-Chloronaphthalene	10	300	47	ug/kg
PCM-04	PCM-04-DS-091209	2-Chloronaphthalene	10	540	85	ug/kg
PCM-06	PCM-06-DS-091209	2-Chloronaphthalene	10	70	12	ug/kg
PCM-09	PCM-09-DS-091209	2-Chloronaphthalene	10	64	11	ug/kg
PCM-14	PCM-14-DS-091210	2-Chloronaphthalene	10	12	1.8	ug/kg
PCM-15	PCM-15-DS-091210	2-Chloronaphthalene	10	12	1.9	ug/kg
PCM-22	PCM-22-DS-091210	2-Chloronaphthalene	10	13	2.1	ug/kg
PCM-02	PCM-02-DS-091209	2-Chlorophenol	10	300	59	ug/kg
PCM-04	PCM-04-DS-091209	2-Chlorophenol	10	540	110	ug/kg
PCM-06	PCM-06-DS-091209	2-Chlorophenol	10	70	14	ug/kg
PCM-09	PCM-09-DS-091209	2-Chlorophenol	10	64	13	ug/kg
PCM-14	PCM-14-DS-091210	2-Chlorophenol	10	12	2.3	ug/kg
PCM-15	PCM-15-DS-091210	2-Chlorophenol	10	12	2.4	ug/kg
PCM-22	PCM-22-DS-091210	2-Chlorophenol	10	13	2.6	ug/kg
PCM-02	PCM-02-DS-091209	2-Methylphenol (o-Cresol)	10	300	44	ug/kg
PCM-04	PCM-04-DS-091209	2-Methylphenol (o-Cresol)	10	540	80	ug/kg
PCM-06	PCM-06-DS-091209	2-Methylphenol (o-Cresol)	10	70	11	ug/kg
PCM-09	PCM-09-DS-091209	2-Methylphenol (o-Cresol)	10	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	2-Methylphenol (o-Cresol)	10	12	1.7	ug/kg
PCM-15	PCM-15-DS-091210	2-Methylphenol (o-Cresol)	10	12	1.8	ug/kg
PCM-22	PCM-22-DS-091210	2-Methylphenol (o-Cresol)	10	13	2	ug/kg
PCM-02	PCM-02-DS-091209	2-Nitroaniline	20	590	94	ug/kg
PCM-04	PCM-04-DS-091209	2-Nitroaniline	20	1100	170	ug/kg
PCM-06	PCM-06-DS-091209	2-Nitroaniline	20	140	23	ug/kg
PCM-09	PCM-09-DS-091209	2-Nitroaniline	20	130	21	ug/kg
PCM-14	PCM-14-DS-091210	2-Nitroaniline	20	23	3.6	ug/kg
PCM-15	PCM-15-DS-091210	2-Nitroaniline	20	24	3.8	ug/kg
PCM-22	PCM-22-DS-091210	2-Nitroaniline	20	26	4.1	ug/kg
PCM-02	PCM-02-DS-091209	2-Nitrophenol	10	300	44	ug/kg
PCM-04	PCM-04-DS-091209	2-Nitrophenol	10	540	80	ug/kg
PCM-06	PCM-06-DS-091209	2-Nitrophenol	10	70	11	ug/kg
PCM-09	PCM-09-DS-091209	2-Nitrophenol	10	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	2-Nitrophenol	10	12	1.7	ug/kg
PCM-15	PCM-15-DS-091210	2-Nitrophenol	10	12	1.8	ug/kg
PCM-22	PCM-22-DS-091210	2-Nitrophenol	10	13	2	ug/kg
PCM-02	PCM-02-DS-091209	3,3'-Dichlorobenzidine	100	3000	110	ug/kg
PCM-04	PCM-04-DS-091209	3,3'-Dichlorobenzidine	100	5400	200	ug/kg
PCM-06	PCM-06-DS-091209	3,3'-Dichlorobenzidine	100	700	26	ug/kg
PCM-09	PCM-09-DS-091209	3,3'-Dichlorobenzidine	100	640	24	ug/kg
PCM-14	PCM-14-DS-091210	3,3'-Dichlorobenzidine	100	120	4.2	ug/kg
PCM-15	PCM-15-DS-091210	3,3'-Dichlorobenzidine	100	120	4.4	ug/kg
PCM-22	PCM-22-DS-091210	3,3'-Dichlorobenzidine	100	130	4.8	ug/kg
PCM-02	PCM-02-DS-091209	3-Nitroaniline	20	590	73	ug/kg
PCM-04	PCM-04-DS-091209	3-Nitroaniline	20	1100	140	ug/kg
PCM-06	PCM-06-DS-091209	3-Nitroaniline	20	140	18	ug/kg
PCM-09	PCM-09-DS-091209	3-Nitroaniline	20	130	16	ug/kg
PCM-14	PCM-14-DS-091210	3-Nitroaniline	20	23	2.8	ug/kg
PCM-15	PCM-15-DS-091210	3-Nitroaniline	20	24	3	ug/kg
PCM-22	PCM-22-DS-091210	3-Nitroaniline	20	26	3.2	ug/kg
PCM-02	PCM-02-DS-091209	4-Bromophenyl-phenyl ether	10	300	47	ug/kg
PCM-04	PCM-04-DS-091209	4-Bromophenyl-phenyl ether	10	540	85	ug/kg
PCM-06	PCM-06-DS-091209	4-Bromophenyl-phenyl ether	10	70	12	ug/kg
PCM-09	PCM-09-DS-091209	4-Bromophenyl-phenyl ether	10	64	11	ug/kg
PCM-14	PCM-14-DS-091210	4-Bromophenyl-phenyl ether	10	12	1.8	ug/kg
PCM-15	PCM-15-DS-091210	4-Bromophenyl-phenyl ether	10	12	1.9	ug/kg
PCM-22	PCM-22-DS-091210	4-Bromophenyl-phenyl ether	10	13	2.1	ug/kg
PCM-02	PCM-02-DS-091209	4-Chloro-3-methylphenol	10	300	41	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-04	PCM-04-DS-091209	4-Chloro-3-methylphenol	10	540	75	ug/kg
PCM-06	PCM-06-DS-091209	4-Chloro-3-methylphenol	10	70	9.8	ug/kg
PCM-09	PCM-09-DS-091209	4-Chloro-3-methylphenol	10	64	9	ug/kg
PCM-14	PCM-14-DS-091210	4-Chloro-3-methylphenol	10	12	1.6	ug/kg
PCM-15	PCM-15-DS-091210	4-Chloro-3-methylphenol	10	12	1.7	ug/kg
PCM-22	PCM-22-DS-091210	4-Chloro-3-methylphenol	10	13	1.8	ug/kg
PCM-02	PCM-02-DS-091209	4-Chloroaniline	10	300	56	ug/kg
PCM-04	PCM-04-DS-091209	4-Chloroaniline	10	540	110	ug/kg
PCM-06	PCM-06-DS-091209	4-Chloroaniline	10	70	14	ug/kg
PCM-09	PCM-09-DS-091209	4-Chloroaniline	10	64	13	ug/kg
PCM-14	PCM-14-DS-091210	4-Chloroaniline	10	12	2.2	ug/kg
PCM-15	PCM-15-DS-091210	4-Chloroaniline	10	12	2.3	ug/kg
PCM-22	PCM-22-DS-091210	4-Chloroaniline	10	13	2.5	ug/kg
PCM-02	PCM-02-DS-091209	4-Chlorophenyl phenyl ether	10	300	41	ug/kg
PCM-04	PCM-04-DS-091209	4-Chlorophenyl phenyl ether	10	540	75	ug/kg
PCM-06	PCM-06-DS-091209	4-Chlorophenyl phenyl ether	10	70	9.8	ug/kg
PCM-09	PCM-09-DS-091209	4-Chlorophenyl phenyl ether	10	64	9	ug/kg
PCM-14	PCM-14-DS-091210	4-Chlorophenyl phenyl ether	10	12	1.6	ug/kg
PCM-15	PCM-15-DS-091210	4-Chlorophenyl phenyl ether	10	12	1.7	ug/kg
PCM-22	PCM-22-DS-091210	4-Chlorophenyl phenyl ether	10	13	1.8	ug/kg
PCM-02	PCM-02-DS-091209	4-Methylphenol (p-Cresol)	10	300	44	ug/kg
PCM-04	PCM-04-DS-091209	4-Methylphenol (p-Cresol)	10	540	80	ug/kg
PCM-06	PCM-06-DS-091209	4-Methylphenol (p-Cresol)	10	70	11	ug/kg
PCM-09	PCM-09-DS-091209	4-Methylphenol (p-Cresol)	10	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	4-Methylphenol (p-Cresol)	10	12	1.7	ug/kg
PCM-02	PCM-02-DS-091209	4-Nitroaniline	20	590	53	ug/kg
PCM-04	PCM-04-DS-091209	4-Nitroaniline	20	1100	96	ug/kg
PCM-06	PCM-06-DS-091209	4-Nitroaniline	20	140	13	ug/kg
PCM-09	PCM-09-DS-091209	4-Nitroaniline	20	130	12	ug/kg
PCM-14	PCM-14-DS-091210	4-Nitroaniline	20	23	2.1	ug/kg
PCM-15	PCM-15-DS-091210	4-Nitroaniline	20	24	2.2	ug/kg
PCM-22	PCM-22-DS-091210	4-Nitroaniline	20	26	2.3	ug/kg
PCM-02	PCM-02-DS-091209	4-Nitrophenol	100	3000	530	ug/kg
PCM-04	PCM-04-DS-091209	4-Nitrophenol	100	5400	960	ug/kg
PCM-06	PCM-06-DS-091209	4-Nitrophenol	100	700	130	ug/kg
PCM-09	PCM-09-DS-091209	4-Nitrophenol	100	640	120	ug/kg
PCM-14	PCM-14-DS-091210	4-Nitrophenol	100	120	21	ug/kg
PCM-15	PCM-15-DS-091210	4-Nitrophenol	100	120	22	ug/kg
PCM-22	PCM-22-DS-091210	4-Nitrophenol	100	130	23	ug/kg
PCM-02	PCM-02-DS-091209	Aniline	20	590	44	ug/kg
PCM-04	PCM-04-DS-091209	Aniline	20	1100	80	ug/kg
PCM-06	PCM-06-DS-091209	Aniline	20	140	11	ug/kg
PCM-09	PCM-09-DS-091209	Aniline	20	130	9.6	ug/kg
PCM-14	PCM-14-DS-091210	Aniline	20	23	1.7	ug/kg
PCM-15	PCM-15-DS-091210	Aniline	20	24	1.8	ug/kg
PCM-22	PCM-22-DS-091210	Aniline	20	26	2	ug/kg
PCM-02	PCM-02-DS-091209	Benzoic acid	200	5900	2800	ug/kg
PCM-04	PCM-04-DS-091209	Benzoic acid	200	11000	5100	ug/kg
PCM-06	PCM-06-DS-091209	Benzoic acid	200	1400	670	ug/kg
PCM-09	PCM-09-DS-091209	Benzoic acid	200	1300	620	ug/kg
PCM-02	PCM-02-DS-091209	Benzyl alcohol	10	590	62	ug/kg
PCM-04	PCM-04-DS-091209	Benzyl alcohol	10	1100	120	ug/kg
PCM-06	PCM-06-DS-091209	Benzyl alcohol	10	140	15	ug/kg
PCM-09	PCM-09-DS-091209	Benzyl alcohol	10	130	14	ug/kg
PCM-14	PCM-14-DS-091210	Benzyl alcohol	10	23	2.4	ug/kg
PCM-15	PCM-15-DS-091210	Benzyl alcohol	10	24	2.5	ug/kg
PCM-22	PCM-22-DS-091210	Benzyl alcohol	10	26	2.7	ug/kg
PCM-02	PCM-02-DS-091209	bis(2-Chloroethoxy)methane	10	300	44	ug/kg
PCM-04	PCM-04-DS-091209	bis(2-Chloroethoxy)methane	10	540	80	ug/kg
PCM-06	PCM-06-DS-091209	bis(2-Chloroethoxy)methane	10	70	11	ug/kg
PCM-09	PCM-09-DS-091209	bis(2-Chloroethoxy)methane	10	64	9.6	ug/kg
PCM-14	PCM-14-DS-091210	bis(2-Chloroethoxy)methane	10	12	1.7	ug/kg
PCM-15	PCM-15-DS-091210	bis(2-Chloroethoxy)methane	10	12	1.8	ug/kg
PCM-22	PCM-22-DS-091210	bis(2-Chloroethoxy)methane	10	13	2	ug/kg
PCM-02	PCM-02-DS-091209	bis(2-Chloroethyl)ether	10	300	56	ug/kg
PCM-04	PCM-04-DS-091209	bis(2-Chloroethyl)ether	10	540	110	ug/kg
PCM-06	PCM-06-DS-091209	bis(2-Chloroethyl)ether	10	70	14	ug/kg
PCM-09	PCM-09-DS-091209	bis(2-Chloroethyl)ether	10	64	13	ug/kg
PCM-14	PCM-14-DS-091210	bis(2-Chloroethyl)ether	10	12	2.2	ug/kg
PCM-15	PCM-15-DS-091210	bis(2-Chloroethyl)ether	10	12	2.3	ug/kg
PCM-22	PCM-22-DS-091210	bis(2-Chloroethyl)ether	10	13	2.5	ug/kg
PCM-02	PCM-02-DS-091209	Butylbenzyl phthalate	10	300	94	ug/kg
PCM-04	PCM-04-DS-091209	Butylbenzyl phthalate	10	540	170	ug/kg
PCM-06	PCM-06-DS-091209	Butylbenzyl phthalate	10	70	23	ug/kg
PCM-09	PCM-09-DS-091209	Butylbenzyl phthalate	10	64	21	ug/kg

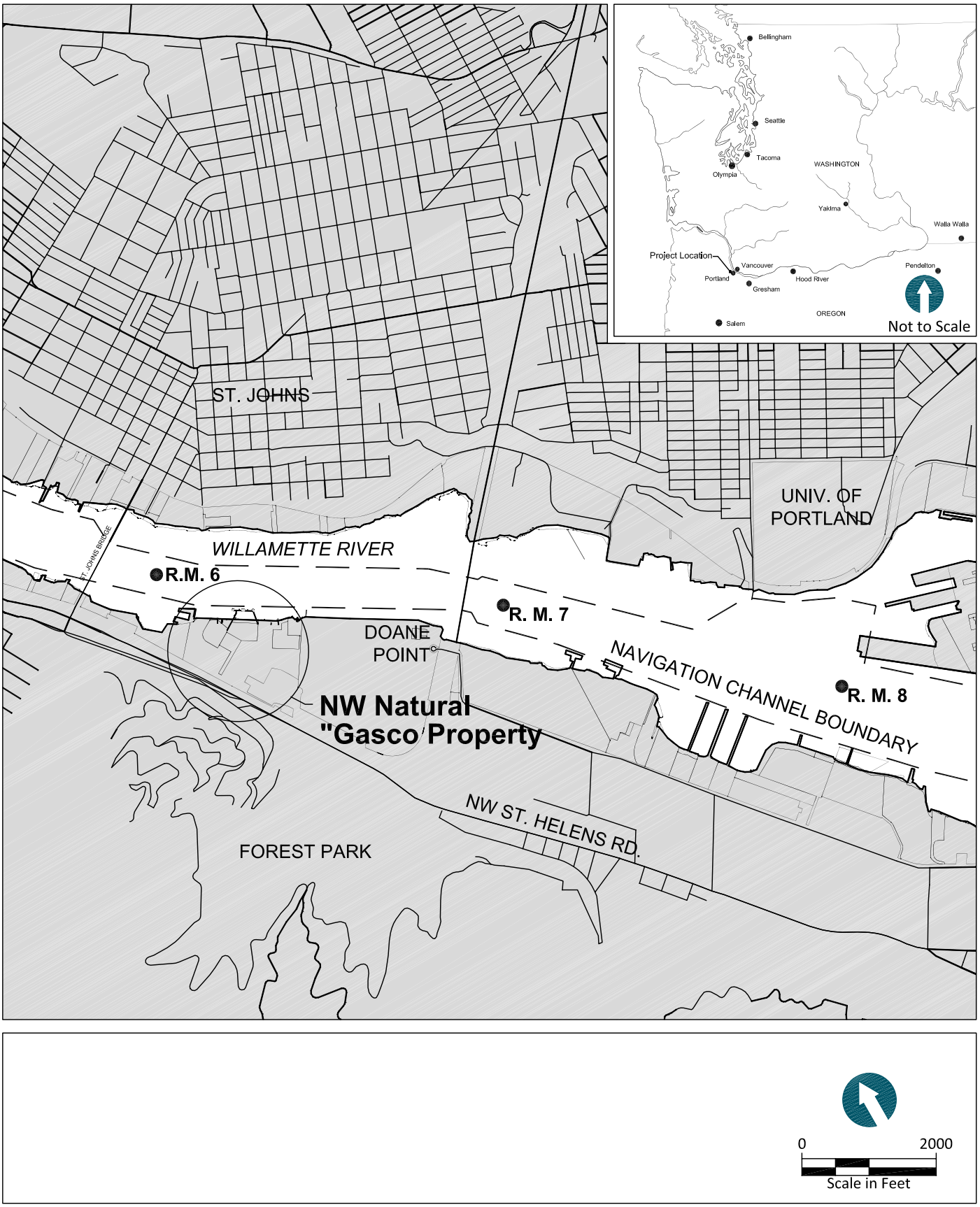
Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-14	PCM-14-DS-091210	Butylbenzyl phthalate	10	12	3.6	ug/kg
PCM-15	PCM-15-DS-091210	Butylbenzyl phthalate	10	12	3.8	ug/kg
PCM-02	PCM-02-DS-091209	Diethyl phthalate	10	300	38	ug/kg
PCM-04	PCM-04-DS-091209	Diethyl phthalate	10	540	70	ug/kg
PCM-06	PCM-06-DS-091209	Diethyl phthalate	10	70	9.1	ug/kg
PCM-09	PCM-09-DS-091209	Diethyl phthalate	10	64	8.3	ug/kg
PCM-14	PCM-14-DS-091210	Diethyl phthalate	10	12	1.5	ug/kg
PCM-15	PCM-15-DS-091210	Diethyl phthalate	10	12	1.6	ug/kg
PCM-22	PCM-22-DS-091210	Diethyl phthalate	10	13	1.7	ug/kg
PCM-02	PCM-02-DS-091209	Dimethyl phthalate	10	300	30	ug/kg
PCM-04	PCM-04-DS-091209	Dimethyl phthalate	10	540	54	ug/kg
PCM-06	PCM-06-DS-091209	Dimethyl phthalate	10	70	7	ug/kg
PCM-09	PCM-09-DS-091209	Dimethyl phthalate	10	64	6.4	ug/kg
PCM-14	PCM-14-DS-091210	Dimethyl phthalate	10	12	1.2	ug/kg
PCM-15	PCM-15-DS-091210	Dimethyl phthalate	10	12	1.2	ug/kg
PCM-22	PCM-22-DS-091210	Dimethyl phthalate	10	13	1.3	ug/kg
PCM-02	PCM-02-DS-091209	Di-n-butyl phthalate	10	590	230	ug/kg
PCM-04	PCM-04-DS-091209	Di-n-butyl phthalate	10	1100	420	ug/kg
PCM-06	PCM-06-DS-091209	Di-n-butyl phthalate	10	140	55	ug/kg
PCM-09	PCM-09-DS-091209	Di-n-butyl phthalate	10	130	51	ug/kg
PCM-14	PCM-14-DS-091210	Di-n-butyl phthalate	10	23	8.9	ug/kg
PCM-15	PCM-15-DS-091210	Di-n-butyl phthalate	10	24	9.4	ug/kg
PCM-22	PCM-22-DS-091210	Di-n-butyl phthalate	10	26	11	ug/kg
PCM-02	PCM-02-DS-091209	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	3000	41	ug/kg
PCM-04	PCM-04-DS-091209	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	5400	75	ug/kg
PCM-06	PCM-06-DS-091209	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	700	9.8	ug/kg
PCM-09	PCM-09-DS-091209	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	640	9	ug/kg
PCM-14	PCM-14-DS-091210	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	120	1.6	ug/kg
PCM-15	PCM-15-DS-091210	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	120	1.7	ug/kg
PCM-22	PCM-22-DS-091210	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	100	130	1.8	ug/kg
PCM-02	PCM-02-DS-091209	Di-n-octyl phthalate	10	300	50	ug/kg
PCM-04	PCM-04-DS-091209	Di-n-octyl phthalate	10	540	91	ug/kg
PCM-06	PCM-06-DS-091209	Di-n-octyl phthalate	10	70	12	ug/kg
PCM-09	PCM-09-DS-091209	Di-n-octyl phthalate	10	64	11	ug/kg
PCM-14	PCM-14-DS-091210	Di-n-octyl phthalate	10	12	1.9	ug/kg
PCM-15	PCM-15-DS-091210	Di-n-octyl phthalate	10	12	2.1	ug/kg
PCM-22	PCM-22-DS-091210	Di-n-octyl phthalate	10	13	2.2	ug/kg
PCM-02	PCM-02-DS-091209	Hexachlorobenzene	10	300	35	ug/kg
PCM-04	PCM-04-DS-091209	Hexachlorobenzene	10	540	64	ug/kg
PCM-06	PCM-06-DS-091209	Hexachlorobenzene	10	70	8.4	ug/kg
PCM-09	PCM-09-DS-091209	Hexachlorobenzene	10	64	7.7	ug/kg
PCM-14	PCM-14-DS-091210	Hexachlorobenzene	10	12	1.4	ug/kg
PCM-15	PCM-15-DS-091210	Hexachlorobenzene	10	12	1.5	ug/kg
PCM-22	PCM-22-DS-091210	Hexachlorobenzene	10	13	1.6	ug/kg
PCM-02	PCM-02-DS-091209	Hexachlorobutadiene	10	300	73	ug/kg
PCM-04	PCM-04-DS-091209	Hexachlorobutadiene	10	540	140	ug/kg
PCM-06	PCM-06-DS-091209	Hexachlorobutadiene	10	70	18	ug/kg
PCM-09	PCM-09-DS-091209	Hexachlorobutadiene	10	64	16	ug/kg
PCM-14	PCM-14-DS-091210	Hexachlorobutadiene	10	12	2.8	ug/kg
PCM-15	PCM-15-DS-091210	Hexachlorobutadiene	10	12	3	ug/kg
PCM-22	PCM-22-DS-091210	Hexachlorobutadiene	10	13	3.2	ug/kg
PCM-02	PCM-02-DS-091209	Hexachlorocyclopentadiene	50	1500	850	ug/kg
PCM-04	PCM-04-DS-091209	Hexachlorocyclopentadiene	50	2700	1600	ug/kg
PCM-06	PCM-06-DS-091209	Hexachlorocyclopentadiene	50	350	210	ug/kg
PCM-09	PCM-09-DS-091209	Hexachlorocyclopentadiene	50	320	190	ug/kg
PCM-14	PCM-14-DS-091210	Hexachlorocyclopentadiene	50	56	33	ug/kg
PCM-15	PCM-15-DS-091210	Hexachlorocyclopentadiene	50	59	35	ug/kg
PCM-22	PCM-22-DS-091210	Hexachlorocyclopentadiene	50	64	37	ug/kg
PCM-02	PCM-02-DS-091209	Hexachloroethane	10	300	91	ug/kg
PCM-04	PCM-04-DS-091209	Hexachloroethane	10	540	170	ug/kg
PCM-06	PCM-06-DS-091209	Hexachloroethane	10	70	22	ug/kg
PCM-09	PCM-09-DS-091209	Hexachloroethane	10	64	20	ug/kg
PCM-14	PCM-14-DS-091210	Hexachloroethane	10	12	3.5	ug/kg
PCM-15	PCM-15-DS-091210	Hexachloroethane	10	12	3.7	ug/kg
PCM-22	PCM-22-DS-091210	Hexachloroethane	10	13	4	ug/kg
PCM-02	PCM-02-DS-091209	Isophorone	10	300	30	ug/kg
PCM-04	PCM-04-DS-091209	Isophorone	10	540	54	ug/kg
PCM-06	PCM-06-DS-091209	Isophorone	10	70	7	ug/kg
PCM-09	PCM-09-DS-091209	Isophorone	10	64	6.4	ug/kg
PCM-14	PCM-14-DS-091210	Isophorone	10	12	1.2	ug/kg
PCM-15	PCM-15-DS-091210	Isophorone	10	12	1.2	ug/kg
PCM-22	PCM-22-DS-091210	Isophorone	10	13	1.3	ug/kg
PCM-02	PCM-02-DS-091209	Nitrobenzene	10	300	65	ug/kg
PCM-04	PCM-04-DS-091209	Nitrobenzene	10	540	120	ug/kg
PCM-06	PCM-06-DS-091209	Nitrobenzene	10	70	16	ug/kg

Table 5
Target Analytes with Laboratory Reporting Limits Above the Target Reporting Limits

Location ID	Sample ID	Chemical Name	Target Method Reporting Limit	Reported Method Reporting Limit	Reported Method Detection Limit	Units
PCM-09	PCM-09-DS-091209	Nitrobenzene	10	64	14	ug/kg
PCM-14	PCM-14-DS-091210	Nitrobenzene	10	12	2.5	ug/kg
PCM-15	PCM-15-DS-091210	Nitrobenzene	10	12	2.6	ug/kg
PCM-22	PCM-22-DS-091210	Nitrobenzene	10	13	2.8	ug/kg
PCM-02	PCM-02-DS-091209	N-Nitrosodi-N-propylamine	10	300	70	ug/kg
PCM-04	PCM-04-DS-091209	N-Nitrosodi-N-propylamine	10	540	130	ug/kg
PCM-06	PCM-06-DS-091209	N-Nitrosodi-N-propylamine	10	70	17	ug/kg
PCM-09	PCM-09-DS-091209	N-Nitrosodi-N-propylamine	10	64	16	ug/kg
PCM-14	PCM-14-DS-091210	N-Nitrosodi-N-propylamine	10	12	2.7	ug/kg
PCM-15	PCM-15-DS-091210	N-Nitrosodi-N-propylamine	10	12	2.9	ug/kg
PCM-22	PCM-22-DS-091210	N-Nitrosodi-N-propylamine	10	13	3.1	ug/kg
PCM-02	PCM-02-DS-091209	N-Nitrosodiphenylamine	10	300	47	ug/kg
PCM-14	PCM-14-DS-091210	N-Nitrosodiphenylamine	10	12	1.8	ug/kg
PCM-15	PCM-15-DS-091210	N-Nitrosodiphenylamine	10	12	1.9	ug/kg
PCM-22	PCM-22-DS-091210	N-Nitrosodiphenylamine	10	13	2.1	ug/kg
PCM-02	PCM-02-DS-091209	Pentachlorophenol	5	3000	590	ug/kg
PCM-04	PCM-04-DS-091209	Pentachlorophenol	5	5400	1100	ug/kg
PCM-06	PCM-06-DS-091209	Pentachlorophenol	5	700	140	ug/kg
PCM-09	PCM-09-DS-091209	Pentachlorophenol	5	640	130	ug/kg
PCM-14	PCM-14-DS-091210	Pentachlorophenol	5	120	23	ug/kg
PCM-15	PCM-15-DS-091210	Pentachlorophenol	5	120	24	ug/kg
PCM-22	PCM-22-DS-091210	Pentachlorophenol	5	130	26	ug/kg
PCM-02	PCM-02-DS-091209	Phenol	30	880	59	ug/kg
PCM-04	PCM-04-DS-091209	Phenol	30	1600	110	ug/kg
PCM-06	PCM-06-DS-091209	Phenol	30	210	14	ug/kg
PCM-09	PCM-09-DS-091209	Phenol	30	200	13	ug/kg
PCM-01	PCM-01-DSW-091209	Acenaphthylene	0.02	0.021	0.0035	ug/l
PCM-10	PCM-10-DSW-091209	Acenaphthylene	0.02	0.021	0.0035	ug/l
PCM-20	PCM-20-DSW-091209	Acenaphthylene	0.02	0.021	0.0035	ug/l
PCM-01	PCM-01-DSW-091209	Anthracene	0.02	0.021	0.0037	ug/l
PCM-01	PCM-01-DSW-091209	Benzo(a)anthracene	0.02	0.021	0.0027	ug/l
PCM-10	PCM-10-DSW-091209	Benzo(a)anthracene	0.02	0.021	0.0027	ug/l
PCM-20	PCM-20-DSW-091209	Benzo(a)anthracene	0.02	0.021	0.0027	ug/l
PCM-01	PCM-01-DSW-091209	Benzo(a)pyrene	0.02	0.021	0.0045	ug/l
PCM-01	PCM-01-DSW-091209	Benzo(b)fluoranthene	0.02	0.021	0.0024	ug/l
PCM-01	PCM-01-DSW-091209	Benzo(g,h,i)perylene	0.02	0.021	0.003	ug/l
PCM-10	PCM-10-DSW-091209	Benzo(g,h,i)perylene	0.02	0.021	0.003	ug/l
PCM-20	PCM-20-DSW-091209	Benzo(g,h,i)perylene	0.02	0.021	0.003	ug/l
PCM-01	PCM-01-DSW-091209	Benzo(k)fluoranthene	0.02	0.021	0.0026	ug/l
PCM-20	PCM-20-DSW-091209	Benzo(k)fluoranthene	0.02	0.021	0.0026	ug/l
PCM-01	PCM-01-DSW-091209	Chrysene	0.02	0.021	0.0035	ug/l
PCM-01	PCM-01-DSW-091209	Dibenzo(a,h)anthracene	0.02	0.021	0.0026	ug/l
PCM-10	PCM-10-DSW-091209	Dibenzo(a,h)anthracene	0.02	0.021	0.0026	ug/l
PCM-20	PCM-20-DSW-091209	Dibenzo(a,h)anthracene	0.02	0.021	0.0026	ug/l
PCM-01	PCM-01-DSW-091209	Fluorene	0.02	0.021	0.0039	ug/l
PCM-01	PCM-01-DSW-091209	Indeno(1,2,3-c,d)pyrene	0.02	0.021	0.0027	ug/l

FIGURES



K:\Jobs\000029-GASCO\00002902\00002902-RP-001.dwg FIG 1

Apr 01, 2010 8:49am cdavidson

Figure 1
Vicinity Map
NW Natural Gasco Site

ANCHOR QEA

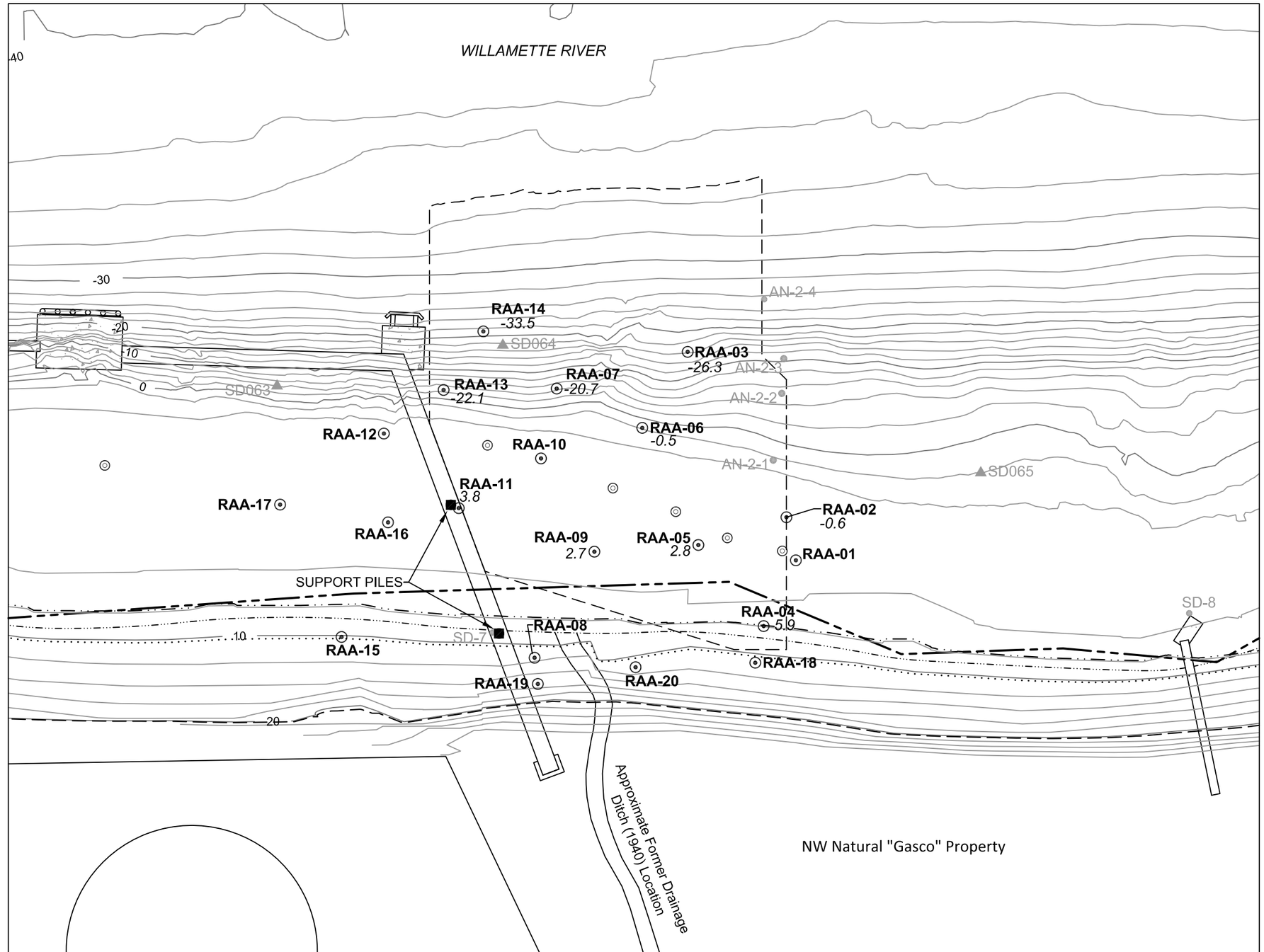
Legend:

- Lateral Extents of Suface Tar Body in Removal Action Area
- RAA-01 — Design Characterization Sediment Core Location (Anchor 2004)
- -33.5 — Bottom Elevation of Surface Tar Body in Removal Action Area (ft NAVD 88)
- Pile Location (surveyed August 2004)
- AN-2-1 — Previous Sediment Core Location (Anchor 2002)
- SD063 — Previous Sediment Core Location (Weston 1998)
- SD-7 — Previous Sediment Core Location (HAI 1996)
- Support Pile Locations (to be protected during dredging)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- Topographic and Bathymetric Contours (2 ft. Interval)

0 50
Scale in Feet

HORIZONTAL DATUM: Oregon State Plane North NAD 83 (Int. Feet).
VERTICAL DATUM: NAVD 88 (ft).

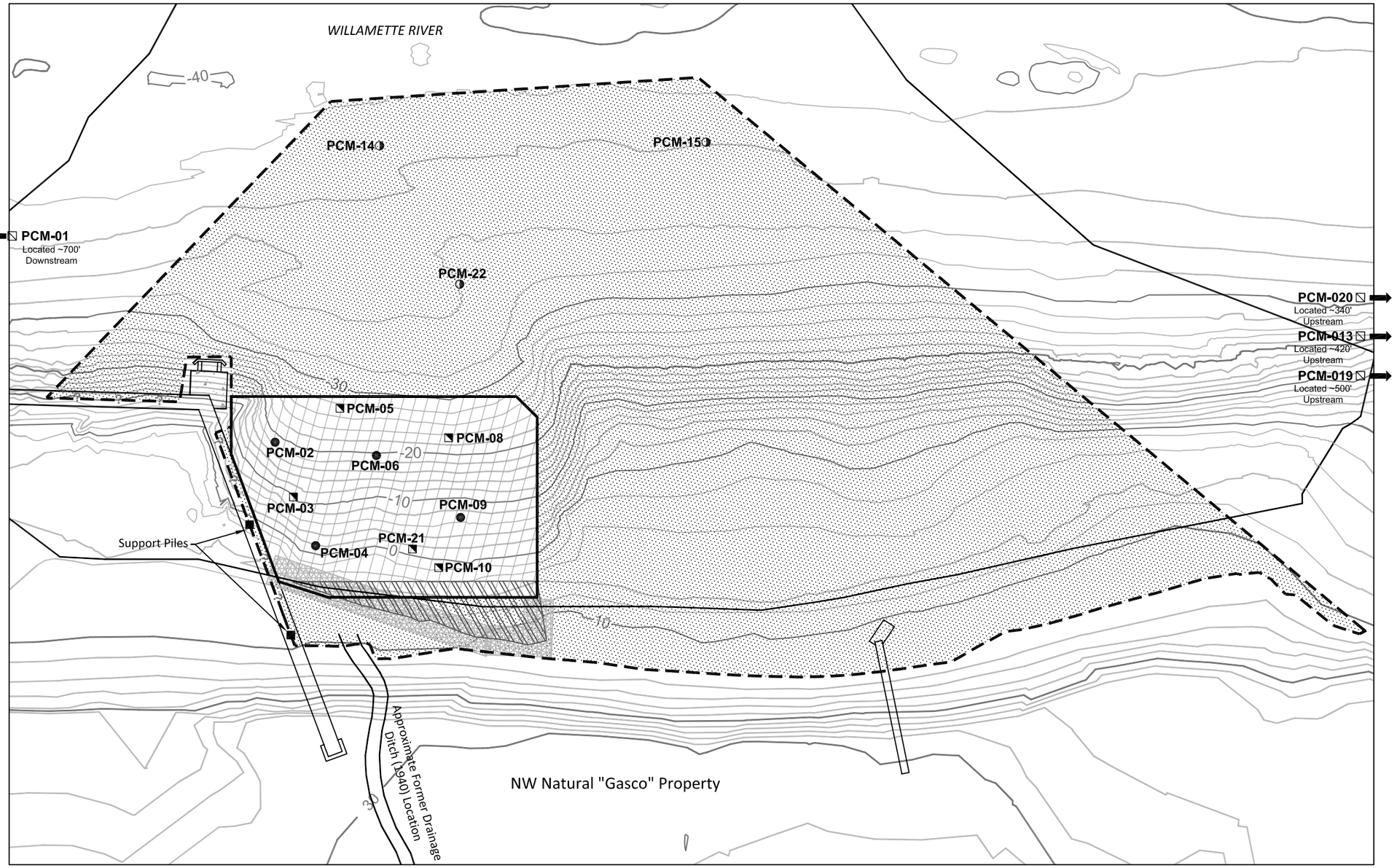
NOTES:
1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).



K:\Jobs\000029-GASCO\00002902\00002902-RP-002.dwg FIG 2
Mar 31, 2010 3:27pm cdavidson

ANCHOR QEA

Figure 2
Former Pre-Removal Lateral and Vertical Extents of Surface Tar Body
NW Natural "Gasco" Site



SOURCE: Post-cap bathymetric contours produced from survey provide by Blue Water Engineering dated December 2009. Former Drainage Ditch location from Phase Remedial Investigation Summary Report (HAI 1998).
HORIZONTAL DATUM: Oregon State Plane North NAD 83 (International Feet).
VERTICAL DATUM: NAVD 88 (ft).

LEGEND:

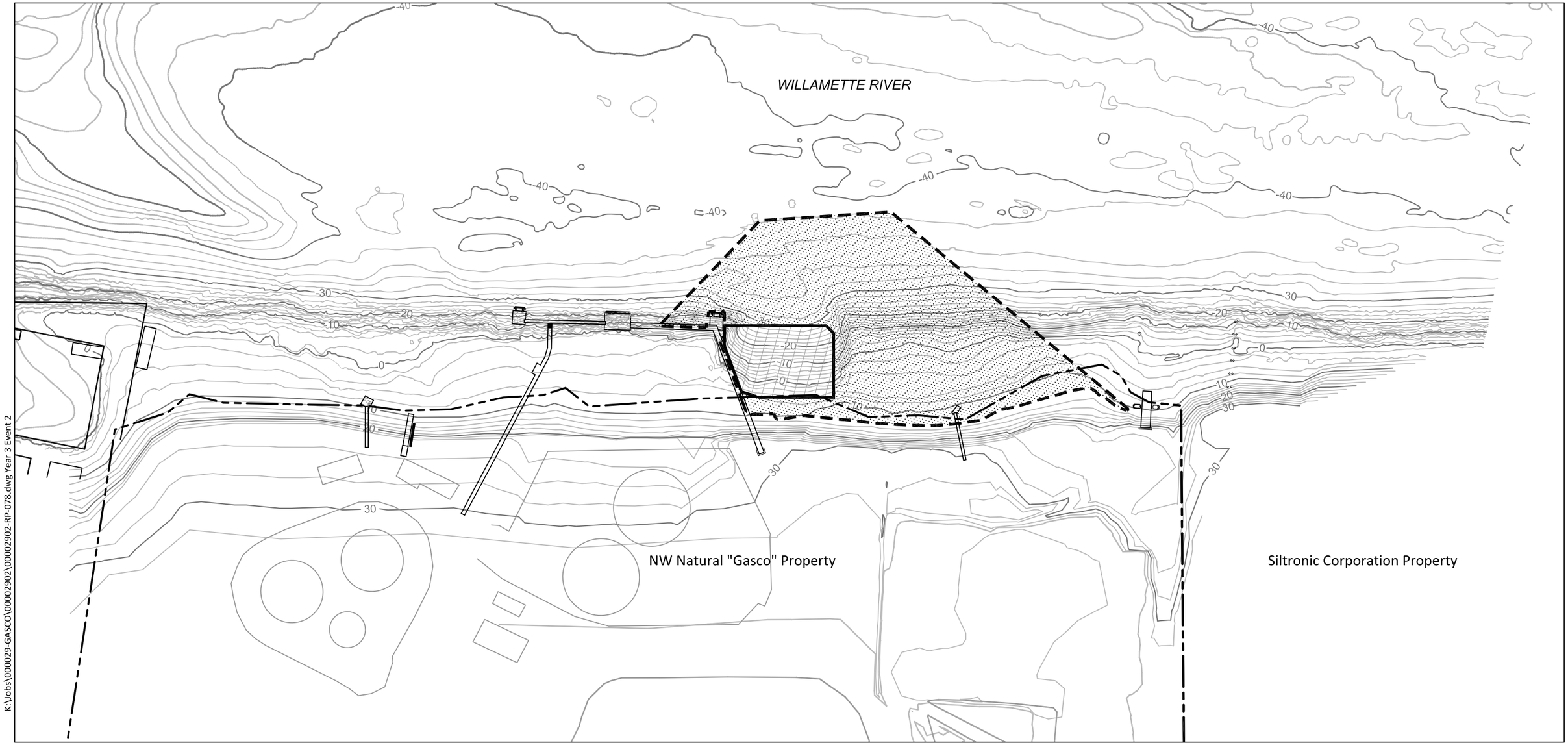
- Support Pile Location
- Extent and Elevation of 18 in Thick Cap
- Extent and Elevation of 6 in Thick Cover
- Reactive Organo-Clay Mat (RCM) Location
- Lateral Extents of Surf Zone Armoring d50 = 3 inches
- **PCM-01** Background Near-Bottom Surface Water Sample
- **PCM-14** Fringe Cover Depositional Surface Sediment Sample
- **PCM-03** Near-Bottom Surface Water Sample
- **PCM-02** Co-Located Depositional Surface Sediment & Near-Bottom Surface Water Sample
- Topographic and Bathymetric Contours (2 ft. Interval)

0 60
Scale in Feet

Mar 31, 2010 3:25pm cdavidson K:\Jobs\000029-GASCO\00002902\00002902-RP-077.dwg FIG 3 Year 3 Event 2

ANCHOR QEA

Figure 3
Actual Year 3 Event 2 Long-Term Monitoring Stations
NW Natural "Gasco" Site



K:\Jobs\000029-GASCO\00002902\00002902-RP-078.dwg Year 3 Event 2

Mar 31, 2010 3:30pm cdavidson

SOURCE: Post-cap bathymetric contours produced from survey provide by Blue Water Engineering dated December 2009.
HORIZONTAL DATUM: Oregon State Plane North NAD 83 (International Feet).
VERTICAL DATUM: NAVD 88 (ft).

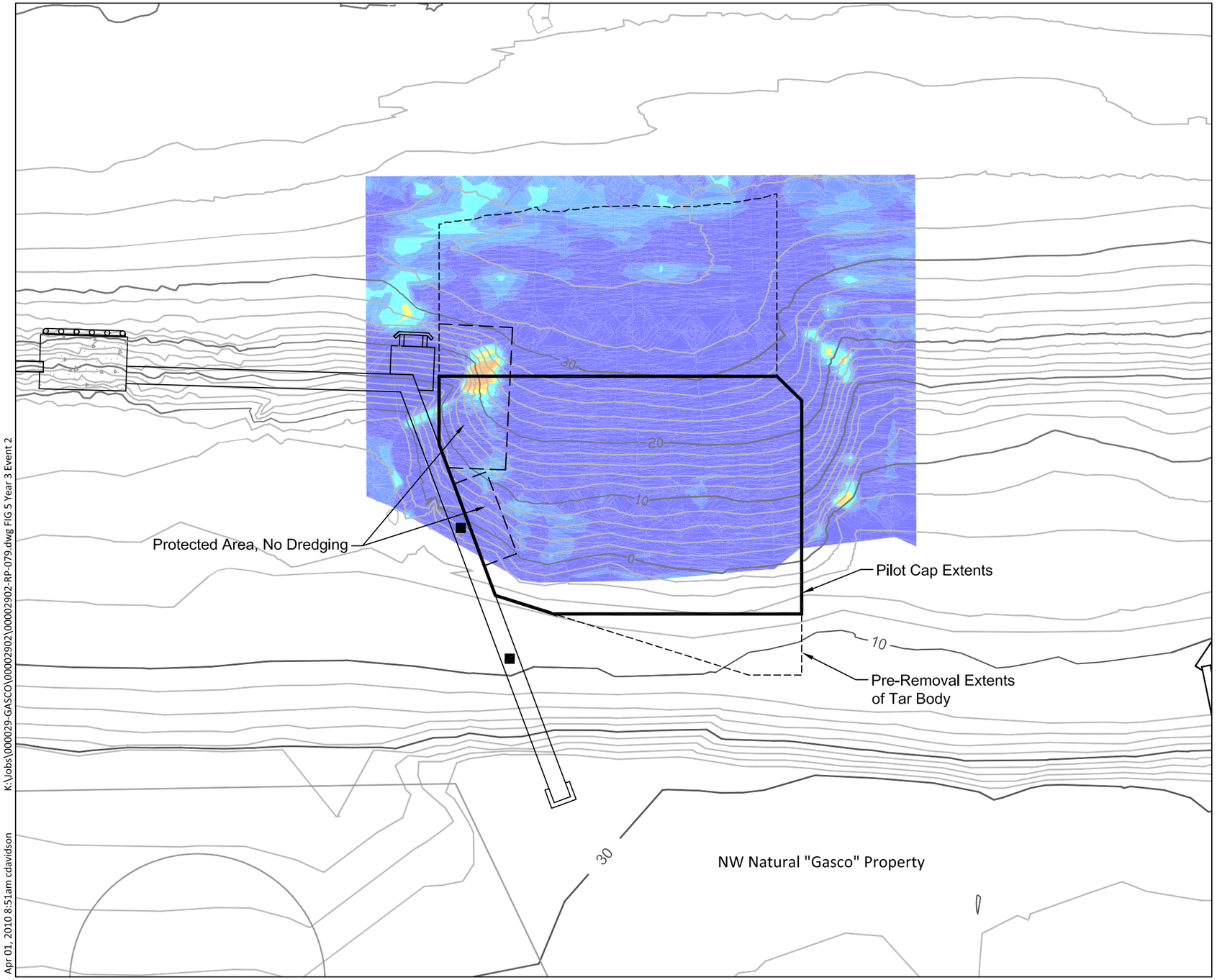
Legend:

- Extent and Elevation of 18 in Thick Cap
- Extent and Elevation of 6 in Thick Cover
- Topographic and Bathymetric Contours (2 ft. Interval)
- Property Line

0 150
Scale in Feet

ANCHOR QEA

Figure 4
Year 3 Event 2 Bathymetry
NW Natural "Gasco" Site



LEGEND:

Topographic and Bathymetric Contours
(2 ft. Interval)

Bathymetry Elevation Difference:

Color	Range Beg.	Range End
	<-2.00	-1.50
	-1.50	-1.00
	-1.00	-0.50
	-0.50	0.50
	0.50	1.00
	1.00	1.50
	1.50	>2.00

0 50
Scale in Feet

SOURCE: Post-cap bathymetric contours produced from survey provide by Blue Water Engineering dated October 2005 and December 2009.
HORIZONTAL DATUM: Oregon State Plane North NAD 83 (International Feet).
VERTICAL DATUM: NAVD 88 (ft).

Apr 01, 2010 8:51am cdavidson K:\Jobs\000029-GASCO\00002902\00002902-RP-079.dwg FIG 5 Year 3 Event 2

ANCHOR QEA

Figure 5
Isopach Comparing Post-Cap October 2005 and December 2009 Bathymetry Surveys
NW Natural "Gasco" Site

APPENDIX A
CHAIN-OF-CUSTODY FORMS

Chain of Custody Record & Laboratory Analysis Request

COC#

ANCHOR QEA

Date: 12/9/09
Laboratory : Columbia Analytical Services
Project Name: Gasco Long-Term Monitoring Year 3 Event 1
Project Number: 000029-02
Project Manager: Ryan Barth
Phone Number: 206-719-3605
Shipment Method: Courier

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Surface Waters: BTEX	PAHs	Iron total/ dissolved	Cyanide (total, free & amenable)	TOC/DOC	Sulfide	TSS	Full Portland Harbor List: Pesticides[1]	PCB Aroclors	Herbicides[1]	SVOCs with PCPs[1]	VOCs	Butyltins	TPH-Gx and TPH-DX	Metals[1] w/ hexavalent chromium	Ammonia, Sulfide, TOC, Cyanide	Grainsize, TS	Archive	Comments
1	PCM-01-DSW-091209	12/9/09 0857	wat.	12	X	X	X	X	X	X	X	X											
2	PCM-02 DSW-091209	0850		12																			
3	PCM-03 DSW-091209	1000		12																			
4	PCM-04DSW-091209	1025		12																			
5	PCM-05DSW-091209	1050		12																			
6	PCM-06DSW-091209	1105		12																			
7	PCM-08DSW-091209	1145		12																			
8	PCM-09DSW-091209	1135		12																			
9	PCM-10DSW-091209	1125		12																			
10	PCM-13DSW-091209	0925		12																			
11	PCM-19 DSW-091209	0940		12																			
12	PCM-20DSW-091209	0915		12																			

1 See WO# JD-073109 for analyte lists and test methods

2 email sample confirmation report to labdata@anchorqea.com

Additional notes/comments:

Relinquished By:	Company:	Received By:	Company:
David Gillingham	Anchor QEA LLC.	[illegible]	
Signature/Printed Name	Date/Time 12/9/09 1700	Signature/Printed Name	Date/Time 12-9-09 5:00

Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

COC#

ANCHOR QEA

Date: 12/9/09
Laboratory : Columbia Analytical Services
Project Name: Gasco Long-Term Monitoring Year 3 Event 1
Project Number: 000029-02
Project Manager: Ryan Barth
Phone Number: 206-719-3605
Shipment Method: Courier

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Surface Waters: BTEX	PAHs	Iron total/ dissolved	Cyanide (total, free & amenable)	TOC/DOC	Sulfide	TSS	Full Portland Harbor List: Pesticides[1]	PCB Aroclors	Herbicides[1]	SVOCs with PCPs[1]	VOCs	Butyltins	TPH-Gx and TPH-DX	Metals[1] w/ hexavalent chromium	Ammonia, Sulfide, TOC, Cyanide	Grainsize, TS	Archive	Comments
1	PCM-21DSW-091209	12/9/09 1115	wat	12	X	X	X	X	X	X	X												
2	PCM-TB-091209	12/7/09 —	wat	2												X							VOCs (not BTEX)
3	PCM-02-DS-091209	12/9/09 1300	Sed	7								X	X	X	X	X	X	X	X	X	X	X	
4	PCM-04DS-091209	1400	Sed	7								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
5	PCM-06DS-091209	1445	Sed	7								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
6	PCM-09DS-091209	1500	Sed	7								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
7																							
8																							
9																							
10																							
11																							
12																							

1 See WO# JD-073109 for analyte lists and test methods

2 email sample confirmation report to labdata@anchorqea.com

Additional notes/comments:

Relinquished By:	Company:	Received By:	Company:
David Gillingham	Anchor QEA LLC.	MAS	GCC
Signature/Printed Name	Date/Time 12/9/09 1700	Signature/Printed Name	Date/Time

Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page _____ of _____

Chain of Custody Record & Laboratory Analysis Request

COC#

ANCHOR QEA

Date: ~~12/10/09~~ DG 12/11/09
Laboratory : Columbia Analytical Services
Project Name: Gasco Long-Term Monitoring Year 3 Event 1
Project Number: 000029-02
Project Manager: Ryan Barth
Phone Number: 206-719-3605
Shipment Method: Fed ex

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Surface Waters: BTEX	PAHs	Iron total/ dissolved	Cyanide (total, free & amenable)	TOC/DOC	Sulfide	TSS	Full Portland Harbor List: Pesticides[1]	PCB Aroclors	Herbicides[1]	SVOCs with PCPs[1]	VOCs	Butyltins	TPH-Gx and TPH-DX	Metals[1] w/ hexavalent chromium	Ammonia, Sulfide, TOC, Cyanide	Grainsize, TS	Archive	Comments
1	PCM-DS14-091210	12/10/09 1000	Sed	7								X	X	X	X	X	X	X	X	X	X	X	
2	PCM-DS15-091210	↓ 0930	Sed	7								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
3	PCM-DS22-091210	↓ 1100	Sed	7								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

1 See WO# JD-073109 for analyte lists and test methods

2 email sample confirmation report to labdata@anchorqea.com

Additional notes/comments:

Relinquished By:	Company: Anchor QEA LLC.	Received By:	Company:
David Gillingham David Gillingham	12/10/09 1800		
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page _____ of _____

Chain of Custody Record & Laboratory Analysis Request

COC#

ANCHOR QEA

Date: ~~12/10/09~~ DG 12/11/09 DG
Laboratory : Analytical Perspectives
Project Name: Gasco Long-Term Monitoring Year 3 Event 1
Project Number: 000029-02
Project Manager: Ryan Barth
Phone Number: 206-719-3605
Shipment Method: Fed-Ex

Sediment and Field QC

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	PCB 209-Congeners	Dioxin/Furans	Comments
1	PCM-22DS-091210	12/10/09 1100	Sed	1	X	X	
2	PCM-15DS-091210	930		1	X	X	
3	PCM-14DS-091210	1000		1	X	X	
4	PCM-09DS-091209	12/9/09 1500		1	X	X	
5	PCM-06DS-091209	1445		1	X	X	
6	PCM-04DS-091209	1400		1	X	X	
7	PCM-02DS-091209	1300		1	X	X	
8	PCM-DSRB-091010	12/10/09 1400	Wat	2	X	X	
9							
10							
11							
12							

1 See WO# JD120308 for analyte lists and test methods

2 email sample confirmation report to labdata@anchorqea.com

Additional notes/comments:

Relinquished By:	Company:	Received By:	Company:
David Billingham	Anchor QEA LLC.		
Signature/Printed Name	Date/Time 12/10/09 1800	Signature/Printed Name	Date/Time

Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Chain of Custody Record & Laboratory Analysis Request

COC#

Date: 12/10/09
Laboratory : Columbia Analytical Services
Project Name: Gasco Long-Term Monitoring Year 3 Event 1
Project Number: 000029-02
Project Manager: Ryan Barth
Phone Number: 206-719-3605
Shipment Method: HAND DELIVERY

ANCHOR QEA

Line	Field Sample ID	Collection Date/Time	Matrix	No. of Containers	Surface Waters: BTEX	PAHs	Iron total/dissolved	Cyanide (total, free & amenable)	TOC/DOC	Sulfide	TSS	Full Portland Harbor List: Pesticides[1]	PCB Arocolors	Herbicides[1]	SVOCs with PCPs[1]	VOCs	Butyltins	TPH-Gx and TPH-DX	Metals[1] w/ hexavalent chromium	Ammonia, Sulfide, TOC, Cyanide	Grainsize, TS	Archive	Comments
1	PCM-14DS-091210	1000	SED	7								X	X	X	X	X	X	X	X	X	X	X	
2	PCM-15DS-091210	0920	SED	7																			
3	PCM-22DS-091210	1100	SED	7																			
4	PCM-DSRB-091210	1300	H2O	10								X	X	X	X	X	X	X	X				
5	PCM-DRB-091210	1530		6	X	X	X	X															No [illegible]
6	PCM-FB-091210	1515		10								X	X	X	X	X	X	X	X				[illegible]
7	PCM-TB-091209		H2O	2												X							[illegible]
8																							
9																							
10																							
11																							
12																							

1 See WO# JD-073109 for analyte lists and test methods

2 email sample confirmation report to labdata@anchorqea.com

Additional notes/comments:

Relinquished By:	Company:	Received By:	Company:
Ross Pickering	Anchor QEA LLC.	[illegible] CAS	
Signature/Printed Name	Date/Time 12/10/09 1410	Signature/Printed Name	Date/Time 12/10/09 1415

Relinquished By:	Company:	Received By:	Company:
Signature/Printed Name	Date/Time	Signature/Printed Name	Date/Time

Distribution: A copy will be made for the laboratory and client. The Project file will retain the original.

Page _____ of _____

APPENDIX B
VISUAL MONITORING COLLECTION FORMS

Visual Observations Log Form

Date	August 21, 2009		
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco	**Project Number:**	000029-02 BG21 T4
Monitoring Period:	Monthly(Year 4)—August 2009		
Time Observations Started:	August 21, 2009 @ 0800	**Time Observation Concluded:**	August 21, 2009 @1500
Weather Conditions:	Partly cloudy, 70s to mid-80s degrees Fahrenheit, very light wind from the east		
Wave Action Observations:	Light wind generating small waves (0.1 to 0.4 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	River level elevation on 8/21/09 ranged from 2.24 to 6.24 feet; and approximately 3.33 feet during observations (Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A strip of organo-clay mat material was visible at the upriver, shoreward extent of the cap area (Photo 1). Segments of the organo-clay mat material were also visible along the shoreward extent of the cap area at the water's edge (Photo 2).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom and warning buoys are shown in Photo 3.

Other Comments:
No sheen is evident in the vicinity of the cap area. Photo 4 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at upriver extent of sediment cap area (08/21/09)*

Photo 2 — *Shoreward edge of organo-clay mat material along water's edge (08/21/09)*

Photo 3 — *FAMM oil boom and mariner warning buoys in place across extent of pilot cap area (08/21/09)*

Photo 4 — *Conditions immediately downriver of cap area (8/21/09)*

Visual Observations Log Form

Date	September 14, 2009		
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco	**Project Number:**	000029-02 BG-21 T-4
Monitoring Period:	Monthly(Year 4)—September 2009		
Time Observations Started:	September 14, 2009 @ 0730	**Time Observation Concluded:**	September 14, 2009 @1500
Weather Conditions:	Partly cloudy, 60s to 70s degrees Fahrenheit, light wind from the north		
Wave Action Observations:	Very light wave action (0.0 to 0.2 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	River level elevation on 9/14/09 ranged from 0.33 to 4.16 feet; and approximately 0.41 feet during observations (Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A strip of organo-clay mat material was visible at the upriver, shoreward extent of the cap area (Photo 1). Segments of the organo-clay mat material were also visible along the shoreward extent of the cap area at the water's edge (Photo 2).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 3.

Other Comments:
A small area of spotty sheen (2 feet by 2 feet) was observed at the shoreline, just upriver of the cap area, adjacent to a group of pilings. No sheen was observed in the cap area or downriver of the cap. Photo 4 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at upriver extent of sediment cap (09/14/09)*

Photo 2 —*Condition of organo-clay mat material along shoreward extent of sediment cap (09/14/09)*

Photo 3 — *FAMM oil boom and mariner warning buoys in place across pilot cap area (09/14/09)*

Photo 4 — *Conditions immediately downriver of cap area (9/14/09)*

Visual Observations Log Form

Date	October 15, 2009		
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco	**Project Number:**	000029-02 BG-21 T-4
Monitoring Period:	Monthly(Year 4)—October 2009		
Time Observations Started:	October 15, 2009 @ 0730	**Time Observation Concluded:**	October 15, 2009 @ 1230
Weather Conditions:	Cloudy, high 50 degrees Fahrenheit, no wind		
Wave Action Observations:	Very light wave action (0.0 to 0.2 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	River level elevation on 10/15/09 ranged from 1.50 to 5.12 feet; and approximately 1.72 feet during observations (Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A strip of organo-clay mat material was visible at the upriver, shoreward extent of the cap area (Photo 1). Segments of the organo-clay mat material were also visible along the shoreward extent of the cap area at the water's edge (Photo 2).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 3.

Other Comments:
No sheen was observed in or around the cap area. Photo 4 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at upriver extent of sediment cap (10/15/09)*

Photo 2— *Condition of organo-clay mat material along shoreward extent of sediment cap (10/15/09)*

Photo 3 — *FAMM oil boom and mariner warning buoys in place across pilot cap area (10/15/09)*

Photo 4 — *Conditions immediately downriver of cap area (10/15/09)*

Visual Observations Log Form

Date	November 25, 2009		
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco	**Project Number:**	000029-02 BG-21 Task 4
Monitoring Period:	Monthly(Year 4)—November 2009		
Time Observations Started:	November 25, 2009 @ 06:30	**Time Observation Concluded:**	November 25, 2009 @ 17:00
Weather Conditions:	Cloudy, high 52 degrees Fahrenheit, light to moderate south Wind		
Wave Action Observations:	Light wave action (0.1 to 0.2 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	River level elevation on 11/25/09 ranged from 2.43 to 4.34 feet; and approximately 4.12 feet at 11:30 when photos were taken (Datum: Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A strip of organo-clay mat material was visible at the upriver, shoreward extent of the cap area (Photo 1). Two additional segments of the organo-clay mat material were submerged but visible along the shoreward extent of the cap area at the water's edge (Photo 2).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 3.

Other Comments:
No sheen was observed in or around the cap area. Photo 4 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at upriver extent of sediment cap (11/25/09)*

Photo 2 — *Condition of organo-clay mat material along shoreward extent of sediment cap (11/25/09)*

Photo 3 — *FAMM oil boom and mariner warning buoys in place across pilot cap area (11/25/09)*

Photo 4 — *Conditions immediately downriver of cap area (11/25/09)*

Visual Observations Log Form

Date	December 22, 2009		
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco	**Project Number:**	000029-02 BG-21 Task 4
Monitoring Period:	Monthly(Year 4)—December 2009		
Time Observations Started:	December 22, 2009 @ 08:00	**Time Observation Concluded:**	December 22, 2009 @ 16:30
Weather Conditions:	Sunny, 38 degrees Fahrenheit, 0 to 3 knot winds from southwest during pictures		
Wave Action Observations:	Light wave action (0.0 to 0.2 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	River level elevation on 12/22/09 ranged from 4.03 to 5.72 feet; and approximately 5.57 feet at 10:30 when photos were taken (Datum: Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A strip of organo-clay mat material was visible at the shoreline near the upriver extent of the cap area (Photo 1).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 2.

Other Comments:
No sheen was observed in or around the cap area. Photo 3 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1—*exposed organo-clay mat at near upriver extent of sediment cap (12/22/09)*

Photo 2— *FAMM oil boom and mariner warning buoys in place across pilot cap area (12/22/09)*

Photo 3— *Conditions immediately downriver of cap area (12/22/09)*

Visual Observations Log Form

Date	January 21, 2010	**Project Number:**	000029-02 BG-21 Task 4
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco		
Monitoring Period:	Monthly(Year 5)—January 2010		
Time Observations Started:	January 21, 2010 @ 08:00	**Time Observation Concluded:**	January 21, 2010 @ 16:00
Weather Conditions:	Partly cloudy, 54 degrees Fahrenheit, 0-7 knot winds from southeast during pictures		
Wave Action Observations:	Light wave action (0.0 to 0.1 feet in height)		
Photographs Taken:	Yes	No	

Tidal Conditions:	River level elevation on 01/21/10 ranged from 5.03 to 7.03 feet; and approximately 5.63 feet at 14:30 when photos were taken (Datum: Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. A 2-foot strip of organo-clay mat material was visible beneath the water surface near the shoreline at the upriver extent of the cap area (Photo 1).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	During the Monitoring event, the Fuel and Marine Marketing (FAMM) oil boom was positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners were in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 2.

Other Comments:
No sheen was observed in or around the cap area. Photo 3 shows the water surface and shoreline immediately downriver of the sediment cap. A ship (the Osprey Arrow) was docked along side of the pier.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at near-upriver extent of sediment cap (01/21/10):*

Photo 2 — *FAMM oil boom and mariner warning buoys in place across pilot cap area (01/21/10):*

Photo 3— *Conditions immediately downriver of cap area (01/21/10):*

Visual Observations Log Form

Date	February 25, 2010	**Project Number:**	000029-02 BG-21 Task 4
Location:	NW Natural "Gasco" Site		
Project Name:	NW Natural – Gasco		
Monitoring Period:	Monthly(Year 5)—February 2010		
Time Observations Started:	February 25, 2010 @ 14:00	**Time Observation Concluded:**	February 25, 2010 @ 15:30
Weather Conditions:	Cloudy, 52 to 57 degrees Fahrenheit, 0 to 3 knot winds from northwest		
Wave Action Observations:	Light wave action (0.0 to 0.3 feet in height)		
Photographs Taken:	Yes	No	

Tidal Conditions:	Willamette River level on 02/25/10 ranged from 2.56 to 5.99 feet. The Willamette River level during photos is approximately 5.88 feet at 14:45 (River Level Datum: Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. Three segments of organo-clay mat material are visible beneath the water surface, one near the shoreline at the upriver extent of the cap area and the other two approximately 20 feet off the shoreline. (Photo 1).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	The Fuel and Marine Marketing (FAMM) containment boom is positioned across the cap area, between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners are in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 2.

Other Comments:
No sheen is evident in or around the cap area. Photo 3 shows the water surface and shoreline immediately downriver of the sediment cap. A barge is docked at the riverward face of the ship dock.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay mat at near upriver extent of sediment cap (02/25/10):*

Photo 2 — *FAMM oil boom and mariner warning buoys in place across pilot cap area (02/25/10):*

Photo 3 — *Conditions immediately downriver of cap area (02/25/10):*

Visual Observations Log Form

Date	March 18, 2010	**Project Number:**	000029-02 BG-21 Task 4
Location:	NW Natural Gasco Site, 7900 NW St. Helens Road, Portland, Oregon		
Project Name:	NW Natural – Gasco		
Monitoring Period:	Monthly(Year 5)—March 2010		
Time Observations Started:	March 18, 2010 @ 15:00	**Time Observation Concluded:**	March 18, 2010 @ 16:30
Weather Conditions:	Clear, 60 to 64 degrees Fahrenheit, 5 to 10 knot winds from northwest		
Wave Action Observations:	Moderate wave action (0.5 to 1.0 feet in height)		
Photographs Taken:	(Yes) No		

Tidal Conditions:	Willamette River level on 3/18/10 ranged from 2.05 to 5.17 feet. The Willamette River level during photos is approximately 2.72 feet at 16:00 (River Level Datum: Morrison Gage Height)
Observations of Erosion/Deposition:	No erosion/deposition is evident along the shoreline. Three segments of organo-clay mat material are visible beneath the water surface. (Photo 1).
Observations of Long-term Controls (i.e., oil booms, organo-clay mat, etc.)	The Fuel and Marine Marketing (FAMM) containment boom is positioned across the cap area between the upriver corner of the ship dock and the wooden dolphin (near the upriver extent of the site and near the Siltronic Corporation outfall). Buoys that identify the cap area to mariners are in place as installed. The position of the FAMM oil boom, warning buoys and a general overview of the site shoreline are shown in Photo 2.

Other Comments:
No sheen is evident in or around the cap vicinity. Photo 3 shows the water surface and shoreline immediately downriver of the sediment cap.

Recorded by: Douglas Laffoon

Photo 1 — *Exposed organo-clay at shoreward extent of sediment cap (03/18/10):*

Photo 2 — *FAMM oil boom and warning buoys in place across pilot cap area (3/18/10):*

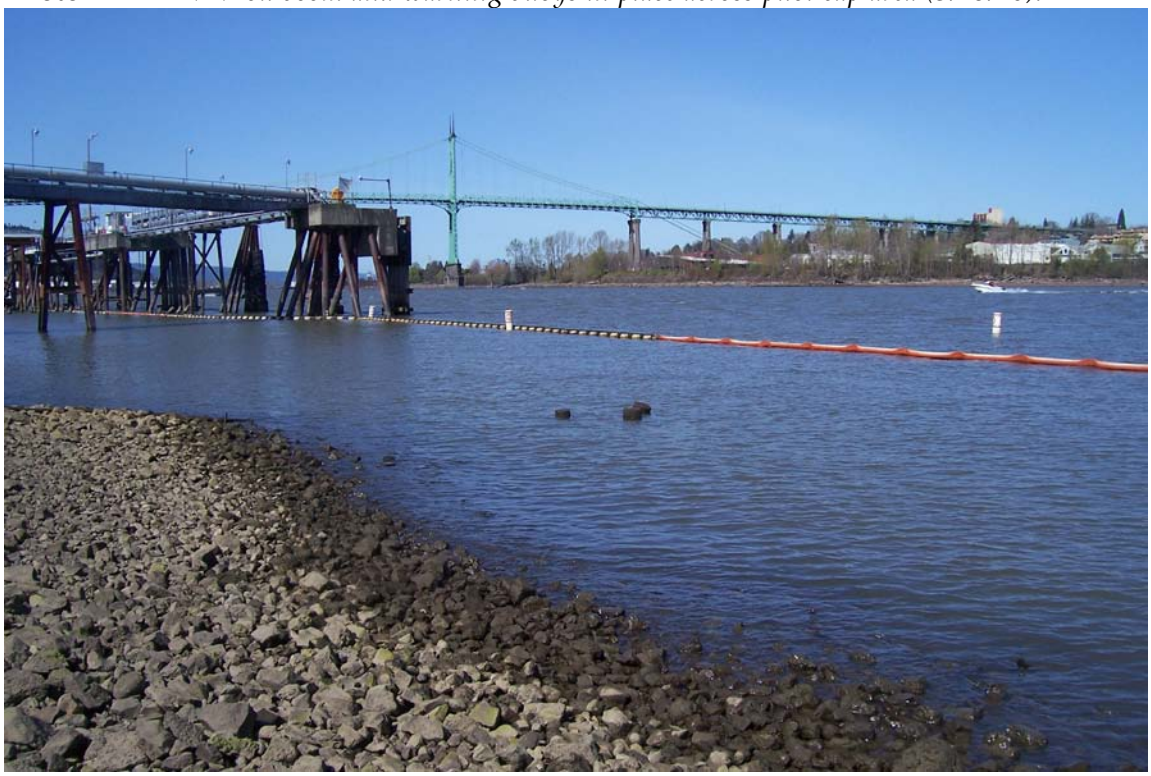


Photo 3 — *Conditions immediately downriver of cap area (03/18/10):*

APPENDIX C
DEPOSITIONAL SURFACE SEDIMENT COLLECTION FORMS

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No:** 000029-02 BG17 **Station ID:** PCM-02

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: 9-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Sunny light Breeze very cold.
Station Coordinates: N / Lat. ON STN
E / Long. ON STN
Datum: NAD 83 / WGS 84 zone: oregon N

Sample ID: PCM-02-DS-091209
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 26.5 ft. Grab Recovery: 8 cm Time: 1345
Tide Level: — ft. Sample Interval: 0-7 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other: naphtha	slight BUBBS	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 1 cm sand on Bottom of Grab

Grab Number: 2 Water Depth: 26.5 ft. Grab Recovery: 8 cm Time: 1345
Tide Level: — ft. Sample Interval: 0-7 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace Blubs	Damp
sand C M F	black	mod dense/stiff	moderate	other: naphth	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 1 cm sand on Bottom of Grab

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Date/Time Lab Drop Off:

Recorded by: DG

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No: 000029-02 BG17** **Station ID:** PCM-04

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: 9-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Sunny, Cold light breeze
Station Coordinates: N / Lat. ON STN
E / Long. on STN
Datum: (NAD 83) / WGS 84 zone: oregon N

Sample ID: PCM-04-DS-091209
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 13.5 ft. Grab Recovery: 10 cm Time: 1400
Tide Level: — ft. Sample Interval: 0-2 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 2 cm silt over Sand

Grab Number: 2 Water Depth: 13.5 ft. Grab Recovery: 5 cm Time: 1400
Tide Level: — ft. Sample Interval: 0-4 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 4 cm silt over sand

Grab Number: 3 Water Depth: 13.5 ft. Grab Recovery: 4 cm Time: 1400
Tide Level: — ft. Sample Interval: 0-3 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 3 cm silt over sand

Date/Time Lab Drop Off:

Recorded by: DG

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No: 000029-02 BG17** **Station ID:** PCM-06

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: 9-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Cold
Station Coordinates: N / Lat. ON STN
E / Long. ON STN
Datum: (NAD 83) WGS 84 zone: Oregon N

Sample ID: PCM-06-DS-091209
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 27.2 ft. Grab Recovery: 6 cm Time: 1445
Tide Level: — ft. Sample Interval: 0-6 cm
Bioassay / (Chemistry) Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	(soft/loose)	(slight)	(Petroleum)	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	(slight)	(Moist)
silt clay	(brown olive)	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: Soft sediment

Grab Number: 2 Water Depth: 27.2 ft. Grab Recovery: 10 cm Time: 1450
Tide Level: — ft. Sample Interval: 0-5 cm
Bioassay / (Chemistry) Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	(soft/loose)	slight	(Petroleum)	trace	Damp
sand C M F	black	mod dense/stiff	(moderate)	other:	(slight)	(Moist)
silt clay	(brown olive)	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 5 cm of soft dep. sediment overlying mod dense dark sediment w/ few organics

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Date/Time Lab Drop Off:

Recorded by: _____

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No:** 000029-02 BG17 **Station ID:** PCM-09

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: 9-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Cold
Station Coordinates: N / Lat. ON STN
E / Long. ON STN
Datum: NAD 83 / WGS 84 zone: Oregon N

Sample ID: PCM-09-DS-091209
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor List

Grab Number: 1 Water Depth: 16.5 ft. Grab Recovery: 8 cm Time: 1500
Tide Level: — ft. Sample Interval: 0 – 8 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: silt to bottom of Grab

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Date/Time Lab Drop Off:

Recorded by: DG

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No: 000029-02 BG17** **Station ID:** PCM-14

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: ~~9-Dec-09~~ 10-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Cold, light Breeze
Station Coordinates: N / Lat. On STN
E / Long. On STN
Datum: (NAD 83) / WGS 84 zone: oregon N

Sample ID: PCM-14DS-091210
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 46.4 ft. Grab Recovery: 10 cm Time: 1000
Tide Level: — ft. Sample Interval: 0-3 cm
Bioassay / (Chemistry) Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	(Very soft/Loose)	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
(silt) clay	(brown)	dense/stiff	strong		moderate	(Wet)
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 3 cm brown wet silt over cap sand

Grab Number: 2 Water Depth: 46.4 ft. Grab Recovery: 10 cm Time: ____
Tide Level: ____ ft. Sample Interval: 0-4 cm
Bioassay / (Chemistry) Depth MLLW: ____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 5 grabs all same
0-4 cm = silt over sand

Grab Number: 3 Water Depth: 46.4 ft. Grab Recovery: 10 cm Time: ____
Tide Level: ____ ft. Sample Interval: 0-4 cm
Bioassay / (Chemistry) Depth MLLW: ____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: 4 cm silt over sand, same as grab #1

Date/Time Lab Drop Off:

Recorded by: DG

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No:** 000029-02 BG17 **Station ID:** PCM-15

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: ~~9-Dec-09~~ 10-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: cold sunny light Breeze
Station Coordinates: N / Lat. ON STN
E / Long. ON STN
Datum: NAD 83 / WGS 84 zone: Oregon N

Sample ID: PCM-15DS-091210
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin/Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 45.6 ft. Grab Recovery: 10 cm Time: 0930
Tide Level: — ft. Sample Interval: 0-2 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: Brown silt over sand

Grab Number: 2 Water Depth: 45.6 ft. Grab Recovery: 8 cm Time: 0930
Tide Level: ____ ft. Sample Interval: 0-3 cm
Bioassay / Chemistry Depth MLLW: ____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: Same as above
3 cm silt over sand

Grab Number: 3 Water Depth: 45.6 ft. Grab Recovery: 10 cm Time: 0930
Tide Level: ____ ft. Sample Interval: 0-3 cm
Bioassay / Chemistry Depth MLLW: ____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: Same as above
3 cm silt over sand

Date/Time Lab Drop Off:

Recorded by: DG

ANCHOR QEA

Surface Sediment Field Sample Record

Project Name: Gasco Y3E2 Cap Monitoring **Project No: 000029-02 BG17** **Station ID:** PCM-22

Sampling Crew: R. Pickering and D. Gillingham
Sample Date: ~~9-Dec-09~~ 10-Dec-09 Sampling Method: Diver slide sampler
Sampling Vessel: RSS 36 Aluminum boat
Subcontractor(s): Research Support Services Weather: Sunny, Calm, Cold
Station Coordinates: N / Lat. ON STN
E / Long. ON STN
Datum: NAD 83 / WGS 84 zone:

Sample ID: PCM-22DS-091210
Analysis: Metals / TBT / SVOCs / VOCs / PCBs / Pest Other: Dioxin / Furan
TS / TVS / Grain Size / TOC / Ammonia / Sulfides Other: PCB congeners
(Circle Appropriate Analyses) Full Portland Harbor list

Grab Number: 1 Water Depth: 46.4 ft. Grab Recovery: 10 cm Time: 1100
Tide Level: — ft. Sample Interval: 0-10 cm
Bioassay / Chemistry Depth MLLW: — ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments: Thin Brown surface, slightly firmer on Bottom wet surface (top 3 cm) moist. below.

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Grab Number: _____ Water Depth: _____ ft. Grab Recovery: _____ cm Time: _____
Tide Level: _____ ft. Sample Interval: _____ cm
Bioassay / Chemistry Depth MLLW: _____ ft.

Sediment Type:	Sediment Color:	Density:	Sediment Odor:		Sheen:	Moisture:
cobble	D.O.	Very soft/Loose	none	H2S	none	Dry
gravel	gray	soft/loose	slight	Petroleum	trace	Damp
sand C M F	black	mod dense/stiff	moderate	other:	slight	Moist
silt clay	brown	dense/stiff	strong		moderate	Wet
organic matter	brown surface	very dense/stiff	overwhelming		heavy	

Comments:

Date/Time Lab Drop Off:

Recorded by: DG

APPENDIX D
DATA VALIDATION REPORTS

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Anchor Environmental, LLC
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
ATTN: Ms. Joy Dunay

March 2, 2010

SUBJECT: NW Natural Gasco Site, Data Validation

Dear Ms. Dunay,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 22, 2010. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 22475:

SDG #	Fraction
P1904	Polychlorinated Biphenyls as Congeners,
P1905	Dioxins/Dibenzofurans

The data validation was performed under EPA Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Diobenzofurans Data Review, September 2005
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco
Data Validation Operations Manager/Senior Chemist

V:\LOGIN\Anchor\Gasco\22475COV.wpd

Attachment 1

1,572 Pages-EX EDD **LDC #22475 (Anchor Environmental-Seattle WA / NW Natural - Gasco Long Term Monitoring Year 3)**

LDC	SDG#	DATE REC'D	(3) DATE DUE	PCB Cong. (1668A)		Dioxins (1613)																																	
Matrix:	Water/Solids			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	P1904	01/22/10	02/12/10	1	0	1	0																																
B	P1905	01/22/10	02/12/10	0	7	0	7																																
Total	A/SC			1	7	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS, MSD, or DUP's.

22475ST.wpd

NW Natural Gasco Site
Data Validation Reports
LDC #22475

P1904

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural Gasco Site
Collection Date:	December 10, 2009
LDC Report Date:	February 26, 2010
Matrix:	Water
Parameters:	Polychlorinated Biphenyl
Validation Level:	EPA Level III
Laboratory:	Analytical Perspectives
Sample Delivery Group (SDG):	P1904

Sample Identification

PCM-DSRB-091010

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1668A for Polychlorinated Biphenyl as Congeners.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

EMPC Estimated Maximum Possible Concentration

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all homologues.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled and labeled compounds.

The ion abundance ratios for all PCB congeners were within method criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 30.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The ion abundance ratios for all PCB congeners were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyls as congeners contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
7428_MB001	12/15/09	Total Di-CBs Total Tri-CBs	6.43 pg/L 3.63 pg/L	All samples in SDG P1904

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
PCM-DSRB-091010	Total Di-CBs Total Tri-CBs	11 pg/L 11.5 pg/L	11U pg/L 11.5U pg/L

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG P1904	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to compound quantitation problems, EMPC results were qualified as estimated in one sample.

Due to method blank contamination problems, data were qualified as not detected in one sample.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

Sample PCM-DSRB-091010 was identified as a rinsate blank. No polychlorinated biphenyls as congeners contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (pg/L)
PCM-DSRB-091010	PCB-105	0.816
	PCB-118	1.97
	Total Di-CBs	11
	Total Tri-CBs	5.68
	Total Tetra-CBs	5.76
	Total Penta-CBs	6.14
	Total Hexa-CBs	2.5
	Total Hepta-CBs	0.819
	Total Octa-CBs	0.902

NW Natural Gasco Site
Polychlorinated Biphenyl - Data Qualification Summary - SDG P1904

SDG	Sample	Compound	Flag	A or P	Reason
P1904	PCM-DSRB-091010	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A	Compound quantitation and CRQLs

NW Natural Gasco Site
Polychlorinated Biphenyl - Laboratory Blank Data Qualification Summary - SDG P1904

SDG	Sample	Compound	Modified Final Concentration	A or P
P1904	PCM-DSRB-091010	Total Di-CBs Total Tri-CBs	11U pg/L 11.5U pg/L	A

LDC #: 22475A3c

SDG #: P1904

Laboratory: Analytical Perspectives

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/4/10

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Routine calibration/ICV	A	
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitation and CRQLs	SN	ENPC - qual J
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	SW	FB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091010 W	11	7428_MB001	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 22475A3c
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: 9
2nd Reviewer: K

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/15/09 **Blank analysis date:** 12/31/09
Conc. units: pg/L **Associated samples:** All

Compound	Blank ID	Sample Identification								
	28_MB001		1							
Total Di-CBs	6.43		11/U							
↓ Tri-CBs	3.63	11.5	~~5.68~~/U							

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ **Associated samples:** _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22475A3c
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: 7
2nd reviewer: A

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA 1668)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Sample: 1 Field Blank / Trip Blank / Rinsate (circle one) RB

Compound	Concentration Units (pg/L)
PCB 105	0.816 *
118	1.97
Total Di-CBs	11
Tri-CBs	5.68
Tetra-CBs	5.76
Penta-CBs	6.14

Sample: _____ Field Blank / Trip Blank / Rinsate (circle one)

Compound	Concentration Units ( )
Hexa-CBs	2.5
Hepta-CBs	0.819
Octa-CBs	0.902

* 2MPC

Sample: _____ Field Blank / Trip Blank / Rinsate (circle one)

Compound	Concentration Units ( )

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural Gasco Site
Collection Date:	December 10, 2009
LDC Report Date:	February 26, 2010
Matrix:	Water
Parameters:	Dioxins/Dibenzofurans
Validation Level:	EPA Level III
Laboratory:	Analytical Perspectives
Sample Delivery Group (SDG):	P1904

Sample Identification

PCM-DSRB-091010

Introduction

This data review covers one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all homologues. The chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomer was less than or equal to 25%.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 30.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 20.0% for unlabeled compounds and less than or equal to 30.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
7428_MB001	12/15/09	OCDD	3 pg/L	All samples in SDG P1904

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
PCM-DSRB-091010	OCDD	2.74 pg/L	2.74U pg/L

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG P1904	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to method blank contamination problems, OCDD was qualified as not detected in one sample.

No data were qualified due to compound quantitation problems, the associated result was qualified as non-detected due to method blank contamination.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

Sample PCM-DSRB-091010 was identified as a rinsate blank. No polychlorinated dioxin/dibenzofuran contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (pg/L)
PCM-DSRB-091010	OCDD	2.74

NW Natural Gasco Site
Dioxins/Dibenzofurans - Data Qualification Summary - SDG P1904

SDG	Sample	Compound	Flag	A or P	Reason
P1904	PCM-DSRB-091010	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A	Compound quantitation and CRQLs

NW Natural Gasco Site
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG P1904

SDG	Sample	Compound	Modified Final Concentration	A or P
P1904	PCM-DSRB-091010	OCDD	2.74U pg/L	A

LDC #: 22475A21

SDG #: P1904

Laboratory: Analytical Perspectives

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/4/10

Page: 1 of 1

Reviewer: 9

2nd Reviewer: N

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Routine calibration/~~ICV~~	A	
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitation and CRQLs	N	
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	SW	FB=1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091010 W	11	07428_MB001	21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 Method 8290)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

Notes:

LDC #: 22475A1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method ~~8290~~ 1613)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/15/09 **Blank analysis date:** 12/20/09
Conc. units: pg/L Associated Samples: ML

Compound	Blank ID	Sample Identification								
7438	MB001	1 *								
9	3 *	2.74/U								

* 2MPC

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22475A21
SDG #: Silicone

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: 9
2nd reviewer: M

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA_____)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Sample: 1 Field Blank / Trip Blank / Rinsate (circle one) FB

Compound	Concentration Units (pg/L)
4	2.74 *

* 2MPC

Sample: _____ Field Blank / Trip Blank / Rinsate (circle one)

Compound	Concentration Units ( )

Sample: _____ Field Blank / Trip Blank / Rinsate (circle one)

Compound	Concentration Units ( )

NW Natural Gasco Site - LDC 22475

SDG: P1904

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_001	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/20/2009	0.5976	Yes	N	U			23.1482	0.5976	pg/l
PCM-DSRB-091010	P1904_7428_001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/20/2009	0.5854	Yes	N	U			4.6296	0.5854	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/20/2009	0.7433	Yes	N	U			23.1482	0.7433	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/20/2009	0.7339	Yes	N	U			23.1482	0.7339	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/20/2009	1.4376	Yes	N	U			23.1482	1.4376	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/20/2009	0.5007	Yes	N	U			23.1482	0.5007	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/20/2009	0.4738	Yes	N	U			23.1482	0.4738	pg/l
PCM-DSRB-091010	P1904_7428_001	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/20/2009	0.4736	Yes	N	U			23.1482	0.4736	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Hexachlorodibenzofuran (HxCDF)	12/20/2009	0.5678	Yes	N	U			23.1482	0.5678	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/20/2009	1.1461	Yes	N	U			23.1482	1.1461	pg/l
PCM-DSRB-091010	P1904_7428_001	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/20/2009	0.3202	Yes	N	U			4.6296	0.3202	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/20/2009	0.5854	Yes	N	U			4.6296	0.5854	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Pentachlorodibenzofuran (PeCDF)	12/20/2009	0.4738	Yes	N	U			23.1482	0.4738	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/20/2009	1.6099	Yes	N	U			23.1482	1.6099	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/20/2009	0.4887	Yes	N	U			23.1482	0.4887	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/20/2009	0.7597	Yes	N	U			23.1482	0.7597	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Tetrachlorodibenzofuran (TCDF)	12/20/2009	0.3202	Yes	N	U			4.6296	0.3202	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/20/2009	2.74	Yes	Y	EMPCJB	U	7	46.2963	1.3755	pg/l

SDG: P1904

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_001	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/20/2009	1.4871		Yes	N	U			23.1482	1.4871	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/20/2009	1.2864		Yes	N	U			23.1482	1.2864	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/20/2009	0.7597		Yes	N	U			23.1482	0.7597	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/20/2009	1.2864		Yes	N	U			23.1482	1.2864	pg/l
PCM-DSRB-091010	P1904_7428_001	Total Heptachlorodibenzofuran (HpCDF)	12/20/2009	0.8972		Yes	N	U			23.1482	0.8972	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/20/2009	1.3993		Yes	N	U			46.2963	1.3993	pg/l
PCM-DSRB-091010	P1904_7428_001	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/20/2009	1.4294		Yes	N	U			23.1482	1.4294	pg/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-055	12/31/2009	9.26		Yes	N	U			9.26	0.779	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-039	12/31/2009	0.716		Yes	Y	J B			9.26	0.497	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-046	12/31/2009	9.26		Yes	N	U			9.26	0.772	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-052	12/31/2009	1.92		Yes	Y	J			9.26	0.614	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-051	12/31/2009	9.26		Yes	N	U			9.26	0.696	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-050/053	12/31/2009	18.5		Yes	N	C U			18.5	0.72	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-049/069	12/31/2009	0.716		Yes	Y	JEMPC C	J	23	18.5	0.571	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-048	12/31/2009	9.26		Yes	N	U			9.26	0.649	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-054	12/31/2009	9.26		Yes	N	U			9.26	0.466	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-045	12/31/2009	9.26		Yes	N	U			9.26	0.727	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-044/047/065	12/31/2009	2.68		Yes	Y	J C			27.8	0.666	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-043	12/31/2009	9.26		Yes	N	U			9.26	0.804	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-042	12/31/2009	9.26		Yes	N	U			9.26	0.792	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-040/071	12/31/2009	0.616		Yes	Y	EMPC C	J	23	18.5	0.641	pg/l

SDG: P1904

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-038	12/31/2009	9.26	Yes	N	U			9.26	0.694	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-037	12/31/2009	9.26	Yes	N	U			9.26	0.641	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-056	12/31/2009	9.26	Yes	N	U			9.26	0.687	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-078	12/31/2009	9.26	Yes	N	U			9.26	0.776	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-041	12/31/2009	9.26	Yes	N	U			9.26	0.771	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-072	12/31/2009	9.26	Yes	N	U			9.26	0.736	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-084	12/31/2009	9.26	Yes	N	U			9.26	0.885	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-083	12/31/2009	9.26	Yes	N	U			9.26	0.93	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-082	12/31/2009	9.26	Yes	N	U			9.26	0.871	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-081	12/31/2009	9.26	Yes	N	U			9.26	0.77	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-080	12/31/2009	9.26	Yes	N	U			9.26	0.58	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-079	12/31/2009	9.26	Yes	N	U			9.26	0.679	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-018/030	12/31/2009	2.29	Yes	Y	JEMPC C J		23	18.5	0.779	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-073	12/31/2009	9.26	Yes	N	U			9.26	0.559	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-036	12/31/2009	9.26	Yes	N	U			9.26	0.591	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-057	12/31/2009	9.26	Yes	N	U			9.26	0.837	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-068	12/31/2009	9.26	Yes	N	U			9.26	0.607	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-067	12/31/2009	9.26	Yes	N	U			9.26	0.644	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-066	12/31/2009	0.573	Yes	Y				9.26	0.669	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-064	12/31/2009	0.591	Yes	Y	J			9.26	0.442	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-063	12/31/2009	9.26	Yes	N	U			9.26	0.622	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-060	12/31/2009	9.26	Yes	N	U			9.26	0.711	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-059/062/075	12/31/2009	27.8	Yes	N	C U			27.8	0.481	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-058	12/31/2009	9.26	Yes	N	U			9.26	0.766	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-077	12/31/2009	9.26	Yes	N	U			9.26	0.787	pg/l

SDG: P1904

Analytical Method	E1668A												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	Nonachlorobiphenyls (total)	12/31/2009	0		Yes	N	U			0	1.39	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-008	12/31/2009	2.39		Yes	Y	J SI			9.26	1.07	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-007	12/31/2009	9.26		Yes	N	U			9.26	1.1	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-006	12/31/2009	9.26		Yes	N	U			9.26	1.08	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-005	12/31/2009	9.26		Yes	N	U			9.26	1.19	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-004	12/31/2009	1.36		Yes	Y	J SI			9.26	1.35	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-003	12/31/2009	9.26		Yes	N	U			9.26	0.638	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-002	12/31/2009	9.26		Yes	N	U			9.26	0.574	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-020/028	12/31/2009	3.53		Yes	Y	JBEMPC	J	23	18.5	0.591	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Octachlorobiphenyls (total)	12/31/2009	0.902		Yes	Y				0	0.538	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-011	12/31/2009	7.22		Yes	Y	J B SI			9.26	1.32	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Heptachlorobiphenyls (total)	12/31/2009	0.819		Yes	Y				0	0.514	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Monochlorobiphenyls (total)	12/31/2009	0.931		Yes	Y	EMPC	J	23	0	0.669	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Tetrachlorobiphenyls (total)	12/31/2009	8.59		Yes	Y	EMPC	J	23	0	0.671	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Hexachlorobiphenyls (total)	12/31/2009	3.46		Yes	Y	EMPC	J	23	0	0.762	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Pentachlorobiphenyls (total)	12/31/2009	8.21		Yes	Y	EMPC	J	23	0	0.509	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Trichlorobiphenyls (total)	12/31/2009	11.5		Yes	Y	EMPC	U	7	0	0.795	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	Dichlorobiphenyls (total)	12/31/2009	11		Yes	Y		U	7	0	1.27	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-001	12/31/2009	0.931		Yes	Y	J EMPC	J	23	9.26	0.7	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-021/033	12/31/2009	1.13		Yes	Y	J C			18.5	0.593	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-034	12/31/2009	9.26		Yes	N	U			9.26	0.668	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-032	12/31/2009	1.83		Yes	Y	J B			9.26	0.615	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-031	12/31/2009	1.43		Yes	Y	J B			9.26	0.554	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-027	12/31/2009	9.26		Yes	N	U			9.26	0.741	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-026/029	12/31/2009	18.5		Yes	N	C U			18.5	0.61	pg/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-025	12/31/2009	9.26	Yes	N	U			9.26	0.52	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-024	12/31/2009	9.26	Yes	N	U			9.26	0.669	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-009	12/31/2009	9.26	Yes	N	U			9.26	1.07	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-022	12/31/2009	0.566	Yes	Y				9.26	0.568	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-010	12/31/2009	9.26	Yes	N	U			9.26	0.958	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-019	12/31/2009	9.26	Yes	N	U			9.26	0.95	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-089	12/31/2009	9.26	Yes	N	U			9.26	0.888	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-017	12/31/2009	9.26	Yes	N	U			9.26	0.856	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-016	12/31/2009	9.26	Yes	N	U			9.26	1.01	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-015	12/31/2009	9.26	Yes	N	U			9.26	1.19	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-014	12/31/2009	9.26	Yes	N	U			9.26	1.06	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-012/013	12/31/2009	18.5	Yes	N	C U			18.5	1.17	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-035	12/31/2009	9.26	Yes	N	U			9.26	0.656	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-023	12/31/2009	9.26	Yes	N	U			9.26	0.539	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-169	12/31/2009	9.26	Yes	N	U			9.26	0.914	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-153/168	12/31/2009	0.962	Yes	Y	JEMPC C J		23	18.5	0.361	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-181	12/31/2009	9.26	Yes	N	U			9.26	0.602	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-180/193	12/31/2009	0.819	Yes	Y	J C			18.5	0.478	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-179	12/31/2009	9.26	Yes	N	U			9.26	0.338	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-178	12/31/2009	9.26	Yes	N	U			9.26	0.446	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-177	12/31/2009	9.26	Yes	N	U			9.26	0.554	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-176	12/31/2009	9.26	Yes	N	U			9.26	0.303	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-175	12/31/2009	9.26	Yes	N	U			9.26	0.605	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-174	12/31/2009	9.26	Yes	N	U			9.26	0.512	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-172	12/31/2009	9.26	Yes	N	U			9.26	0.598	pg/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-183	12/31/2009	9.26	Yes	N	U			9.26	0.497	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-170	12/31/2009	9.26	Yes	N	U			9.26	0.602	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-184	12/31/2009	9.26	Yes	N	U			9.26	0.381	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-167	12/31/2009	9.26	Yes	N	U			9.26	0.776	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-165	12/31/2009	9.26	Yes	N	U			9.26	0.456	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-164	12/31/2009	9.26	Yes	N	U			9.26	0.384	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-162	12/31/2009	9.26	Yes	N	U			9.26	0.646	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-161	12/31/2009	9.26	Yes	N	U			9.26	0.442	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-160	12/31/2009	9.26	Yes	N	U			9.26	0.351	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-159	12/31/2009	9.26	Yes	N	U			9.26	0.761	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-158	12/31/2009	9.26	Yes	N	U			9.26	0.396	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-156/157	12/31/2009	18.5	Yes	N	C U			18.5	0.954	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-155	12/31/2009	9.26	Yes	N	U			9.26	0.404	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-085/116	12/31/2009	18.5	Yes	N	C U			18.5	0.608	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-171/173	12/31/2009	18.5	Yes	N	C U			18.5	0.574	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-197	12/31/2009	9.26	Yes	N	U			9.26	0.358	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-061/070/074/076	12/31/2009	1.49	Yes	Y	JEMPC C	J	23	37	0.719	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-209	12/31/2009	9.26	Yes	N	U			9.26	1.47	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-208	12/31/2009	9.26	Yes	N	U			9.26	1.17	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-207	12/31/2009	9.26	Yes	N	U			9.26	1.13	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-206	12/31/2009	9.26	Yes	N	U			9.26	1.6	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-205	12/31/2009	9.26	Yes	N	U			9.26	0.641	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-204	12/31/2009	9.26	Yes	N	U			9.26	0.428	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-203	12/31/2009	9.26	Yes	N	U			9.26	0.486	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-202	12/31/2009	9.26	Yes	N	U			9.26	0.435	pg/l

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Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-107/124	12/31/2009	18.5	Yes	N	C U			18.5	0.621	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-106	12/31/2009	9.26	Yes	N	U			9.26	0.617	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-120	12/31/2009	9.26	Yes	N	U			9.26	0.576	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-104	12/31/2009	9.26	Yes	N	U			9.26	0.32	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-121	12/31/2009	9.26	Yes	N	U			9.26	0.517	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-102	12/31/2009	9.26	Yes	N	U			9.26	0.832	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-099	12/31/2009	9.26	Yes	N	U			9.26	0.672	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-098	12/31/2009	9.26	Yes	N	U			9.26	0.903	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-096	12/31/2009	9.26	Yes	N	U			9.26	0.36	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-095	12/31/2009	1.25	Yes	Y	J EMPC	J	23	9.26	0.766	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-094	12/31/2009	9.26	Yes	N	U			9.26	0.773	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-093/100	12/31/2009	18.5	Yes	N	C U			18.5	0.826	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-092	12/31/2009	9.26	Yes	N	U			9.26	0.896	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-091	12/31/2009	9.26	Yes	N	U			9.26	0.658	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-090/101/113	12/31/2009	2.01	Yes	Y	J C			27.8	0.778	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-086/087/097/108/119/125	12/31/2009	55.6	Yes	N	C U			55.6	0.68	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-105	12/31/2009	0.816	Yes	Y	J EMPC	J	23	9.26	0.55	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-135/151	12/31/2009	18.5	Yes	N	C U			18.5	0.538	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-150	12/31/2009	9.26	Yes	N	U			9.26	0.336	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-148	12/31/2009	9.26	Yes	N	U			9.26	0.459	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-147/149	12/31/2009	18.5	Yes	N	C U			18.5	0.469	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-146	12/31/2009	9.26	Yes	N	U			9.26	0.452	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-145	12/31/2009	9.26	Yes	N	U			9.26	0.444	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-144	12/31/2009	9.26	Yes	N	U			9.26	0.555	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-143	12/31/2009	9.26	Yes	N	U			9.26	0.43	pg/l

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-201	12/31/2009	9.26		Yes	N	U			9.26	0.411	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-182	12/31/2009	9.26		Yes	N	U			9.26	0.555	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-198/199	12/31/2009	18.5		Yes	N	C U			18.5	0.552	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-152	12/31/2009	9.26		Yes	N	U			9.26	0.391	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-196	12/31/2009	9.26		Yes	N	U			9.26	0.522	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-195	12/31/2009	9.26		Yes	N	U			9.26	0.647	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-194	12/31/2009	0.902		Yes	Y	J			9.26	0.638	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-192	12/31/2009	9.26		Yes	N	U			9.26	0.518	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-191	12/31/2009	9.26		Yes	N	U			9.26	0.52	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-190	12/31/2009	9.26		Yes	N	U			9.26	0.514	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-189	12/31/2009	9.26		Yes	N	U			9.26	0.508	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-188	12/31/2009	9.26		Yes	N	U			9.26	0.345	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-187	12/31/2009	9.26		Yes	N	U			9.26	0.516	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-186	12/31/2009	9.26		Yes	N	U			9.26	0.363	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-185	12/31/2009	9.26		Yes	N	U			9.26	0.527	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-200	12/31/2009	9.26		Yes	N	U			9.26	0.457	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-103	12/31/2009	9.26		Yes	N	U			9.26	0.728	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-154	12/31/2009	9.26		Yes	N	U			9.26	0.48	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-117	12/31/2009	9.26		Yes	N	U			9.26	0.711	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-115	12/31/2009	9.26		Yes	N	U			9.26	0.573	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-114	12/31/2009	9.26		Yes	N	U			9.26	0.539	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-112	12/31/2009	9.26		Yes	N	U			9.26	0.619	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-111	12/31/2009	9.26		Yes	N	U			9.26	0.5	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-110	12/31/2009	2.16		Yes	Y	J			9.26	0.547	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-109	12/31/2009	9.26		Yes	N	U			9.26	0.543	pg/l

SDG: P1904

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-142	12/31/2009	9.26	Yes	N	U			9.26	0.504	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-141	12/31/2009	9.26	Yes	N	U			9.26	0.495	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-139/140	12/31/2009	18.5	Yes	N	C U			18.5	0.5	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-118	12/31/2009	1.97	Yes	Y	J			9.26	0.52	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-136	12/31/2009	9.26	Yes	N	U			9.26	0.44	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-088	12/31/2009	9.26	Yes	N	U			9.26	0.799	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-134	12/31/2009	9.26	Yes	N	U			9.26	0.792	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-133	12/31/2009	9.26	Yes	N	U			9.26	0.6	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-132	12/31/2009	9.26	Yes	N	U			9.26	0.542	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-131	12/31/2009	9.26	Yes	N	U			9.26	0.549	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-130	12/31/2009	9.26	Yes	N	U			9.26	0.602	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-129/138/163	12/31/2009	2.5	Yes	Y	J C			27.8	0.463	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-128/166	12/31/2009	18.5	Yes	N	C U			18.5	0.941	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-127	12/31/2009	9.26	Yes	N	U			9.26	0.603	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-126	12/31/2009	9.26	Yes	N	U			9.26	0.541	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-123	12/31/2009	9.26	Yes	N	U			9.26	0.582	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-122	12/31/2009	9.26	Yes	N	U			9.26	0.627	pg/l
PCM-DSRB-091010	P1904_7428_PCB_001	PCB-137	12/31/2009	9.26	Yes	N	U			9.26	0.431	pg/l

NW Natural Gasco Site
Data Validation Reports
LDC #22475

P1905

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural Gasco Site
Collection Date:	December 10, 2009
LDC Report Date:	February 26, 2010
Matrix:	Sediment
Parameters:	Polychlorinated Biphenyl
Validation Level:	EPA Level III
Laboratory:	Analytical Perspectives
Sample Delivery Group (SDG):	P1905

Sample Identification

PCM-22DS-091210
PCM-15DS-091210
PCM-14DS-091210
PCM-09DS-091209
PCM-06DS-091209
PCM-04DS-091209
PCM-02DS-091209

Introduction

This data review covers 7 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1668A for Polychlorinated Biphenyl as Congeners.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

EMPC Estimated Maximum Possible Concentration

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all homologues.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled and labeled compounds.

The ion abundance ratios for all PCB congeners were within method criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 30.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The ion abundance ratios for all PCB congeners were within method criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyls as congeners contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
7437_MB001	12/17/09	PCB-105 PCB-118 Total Di-CBs Total Tri-CBs Total Tetra-CBs Total Penta-CBs Total Hexa-CBs	0.155 pg/g 0.281 pg/g 5.14 pg/g 1.25 pg/g 0.498 pg/g 1.58 pg/g 0.56 pg/g	All samples in SDG P1905

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG P1905	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to compound quantitation problems, EMPC results were qualified as estimated in seven samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural Gasco Site
Polychlorinated Biphenyl - Data Qualification Summary - SDG P1905

SDG	Sample	Compound	Flag	A or P	Reason
P1905	PCM-22DS-091210 PCM-15DS-091210 PCM-14DS-091210 PCM-09DS-091209 PCM-06DS-091209 PCM-04DS-091209 PCM-02DS-091209	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A	Compound quantitation and CRQLs

NW Natural Gasco Site
Polychlorinated Biphenyl - Laboratory Blank Data Qualification Summary - SDG P1905

No Sample Data Qualified in this SDG

LDC #: 22475B3c

SDG #: P1905

Laboratory: Analytical Perspectives

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/4/10

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Polychlorinated Biphenyl Congeners (EPA Method 1668A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Routine calibration/~~ICV~~	A	
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitation and CRQLs	SW	EMPC - J
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	PCM-22DS-091210	11	TA37MB01	21		31	
2	PCM-15DS-091210	12		22		32	
3	PCM-14DS-091210	13		23		33	
4	PCM-09DS-091209	14		24		34	
5	PCM-06DS-091209	15		25		35	
6	PCM-04DS-091209	16		26		36	
7	PCM-02DS-091209	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 22475B3c
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS PCB Congeners (EPA Method 1668)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/17/09 **Blank analysis date:** 12/30/09
Conc. units: pg/g **Associated samples:** All (>5x)

Compound	Blank ID	Sample Identification								
	7_MB001									
PCB 105	0.155									
118	0.281									
Total Di-CBs	5.14									
Tri-CBs	1.25									
Tetra-CBs	0.498									
Penta-CBs	1.58									
Hexa-CBs	0.56									

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ **Associated samples:** _____

Compound	Blank ID	Sample Identification								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural Gasco Site
Collection Date:	December 10, 2009
LDC Report Date:	February 26, 2010
Matrix:	Sediment
Parameters:	Dioxins/Dibenzofurans
Validation Level:	EPA Level III
Laboratory:	Analytical Perspectives
Sample Delivery Group (SDG):	P1905

Sample Identification

PCM-22DS-091210
PCM-15DS-091210
PCM-14DS-091210
PCM-09DS-091209
PCM-06DS-091209
PCM-04DS-091209
PCM-02DS-091209

Introduction

This data review covers 7 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

Retention time windows were established for all homologues. The chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomer was less than or equal to 25%.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 30.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were less than or equal to 20.0% for unlabeled compounds and less than or equal to 30.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks.

VI. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VII. Ongoing Precision & Recovery Samples (OPR)

Ongoing precision and recovery (OPR) control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

Raw data were not reviewed for this SDG.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Flag	A or P
All samples in SDG P1905	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A

Raw data were not reviewed for this SDG.

XII. System Performance

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to compound quantitation problems, EMPC results were qualified as estimated in seven samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural Gasco Site
Dioxins/Dibenzofurans - Data Qualification Summary - SDG P1905

SDG	Sample	Compound	Flag	A or P	Reason
P1905	PCM-22DS-091210 PCM-15DS-091210 PCM-14DS-091210 PCM-09DS-091209 PCM-06DS-091209 PCM-04DS-091209 PCM-02DS-091209	All compounds reported by the lab as estimated maximum possible concentration (EMPC)	J (all detects)	A	Compound quantitation and CRQLs

NW Natural Gasco Site
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG P1905

No Sample Data Qualified in this SDG

LDC #: 22475B21

SDG #: P1905

Laboratory: Analytical Perspectives

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 7/4/10

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Routine calibration/~~ICV~~	A	
V.	Blanks	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specified
VII.	Laboratory control samples	A	OPR
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	N	
XI.	Compound quantitation and CRQLs	~~S~~N	EMPC - J
XII.	System performance	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	PCM-22DS-091210 Soil	11	7437-MB001	21		31	
2	PCM-15DS-091210	12	7437-MB001CU	22		32	
3	PCM-14DS-091210	13		23		33	
4	PCM-09DS-091209	14		24		34	
5	PCM-06DS-091209	15		25		35	
6	PCM-04DS-091209	16		26		36	
7	PCM-02DS-091209	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

NW Natural Gasco Site - LDC 22475

SDG: P1905

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	3.83	Yes	Y				2.4486	0.5357	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	1/6/2010	2700	Yes	Y				4.8972	0.3457	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Tetrachlorodibenzofuran (TCDF)	1/6/2010	83.1	Yes	Y	EMPC	J	23	0.4897	0.1203	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1/6/2010	0.608	Yes	Y	EMPC	J	23	0.4897	0.1411	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	1/6/2010	6.97	Yes	Y				2.4486	0.2644	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	58.6	Yes	Y				2.4486	0.4308	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	1/6/2010	52.5	Yes	Y				2.4486	0.194	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	0.7105	Yes	N	U			2.4486	0.7105	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	8.96	Yes	Y				2.4486	1.1781	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	10.6	Yes	Y				2.4486	0.4154	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	1/6/2010	25.8	Yes	Y				2.4486	0.2702	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	1/6/2010	16.7	Yes	Y				2.4486	0.3038	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Pentachlorodibenzo-p-dioxin (PeCDD)	1/6/2010	9.18	Yes	Y	EMPC	J	23	2.4486	0.2196	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Pentachlorodibenzofuran (PeCDF)	1/6/2010	82.8	Yes	Y	EMPC	J	23	2.4486	0.2863	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Hexachlorodibenzofuran (HxCDF)	1/6/2010	127	Yes	Y	EMPC	J	23	2.4486	0.4693	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	1/6/2010	303	Yes	Y				2.4486	0.3764	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	73.7	Yes	Y	EMPC	J	23	2.4486	0.9408	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Heptachlorodibenzo-p-dioxin (HpCDD)	1/6/2010	710	Yes	Y				2.4486	0.3764	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Heptachlorodibenzofuran (HpCDF)	1/6/2010	156	Yes	Y				2.4486	0.2352	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	2.12	Yes	Y	J			2.4486	1.0967	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1/6/2010	1.13	Yes	Y	J			2.4486	0.2196	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	Total Tetrachlorodibenzo-p-dioxin (TCDD)	1/6/2010	10.8	Yes	Y	EMPC	J	23	0.4897	0.1411	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	1/6/2010	9.49	Yes	Y				2.4486	0.2875	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	1/6/2010	156	Yes	Y				4.8972	0.3941	pg/g
PCM-02DS-091209 10.21G	P1905_7437_007CU	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	1/6/2010	24	Yes	Y				0.4897	0.1203	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	2.58	Yes	Y	EMPC	J	23	2.3719	0.6347	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	1/6/2010	15.2	Yes	Y				0.4744	0.1392	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	1/6/2010	5.58	Yes	Y				2.3719	0.2834	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Hexachlorodibenzofuran (HxCDF)	1/6/2010	70.4	Yes	Y	EMPC	J	23	2.3719	0.4325	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	1/6/2010	8.37	Yes	Y				2.3719	0.2573	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	1/6/2010	13	Yes	Y				2.3719	0.2307	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	1/6/2010	37.9	Yes	Y				2.3719	0.2061	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	11.8	Yes	Y				2.3719	0.7069	pg/g

SDG: P1905

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Tetrachlorodibenzo-p-dioxin (TCDD)	1/6/2010	9.05		Yes	Y	EMPC	J	23	0.4744	0.1451	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	1/6/2010	458		Yes	Y				2.3719	0.3501	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	19.7		Yes	Y				2.3719	0.4243	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	1/6/2010	2.92		Yes	Y				2.3719	0.2816	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	1/6/2010	4.08		Yes	Y	EMPC	J	23	2.3719	0.3856	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1/6/2010	1.08		Yes	Y	J			2.3719	0.2606	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	1.46		Yes	Y	J			2.3719	0.5888	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	1/6/2010	162		Yes	Y				4.7438	0.3131	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Heptachlorodibenzofuran (HpCDF)	1/6/2010	148		Yes	Y				2.3719	0.2403	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Pentachlorodibenzo-p-dioxin (PeCDD)	1/6/2010	9.48		Yes	Y	EMPC	J	23	2.3719	0.2606	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	103		Yes	Y				2.3719	0.6161	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	1/6/2010	3630		Yes	Y				4.7438	0.3002	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Pentachlorodibenzofuran (PeCDF)	1/6/2010	43.3		Yes	Y	EMPC	J	23	2.3719	0.2436	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Tetrachlorodibenzofuran (TCDF)	1/6/2010	55.2		Yes	Y	EMPC	J	23	0.4744	0.1392	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	1/6/2010	4.54		Yes	Y				2.3719	0.5372	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1/6/2010	0.377		Yes	Y	J			0.4744	0.1451	pg/g
PCM-04DS_091209 10.54G	P1905_7437_006CU	Total Heptachlorodibenzo-p-dioxin (HpCDD)	1/6/2010	1080		Yes	Y				2.3719	0.3501	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_005	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	0.671	Yes	Y				0.4995	0.0461	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/23/2009	1450	Yes	Y				4.995	0.2814	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	14.2	Yes	Y				2.4975	0.1964	pg/g
PCM-06DS-091209	P1905_7437_005	Total Tetrachlorodibenzofuran (TCDF)	12/23/2009	55.4	Yes	Y	EMPC	J	23	0.4995	0.0692	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	3.05	Yes	Y				2.4975	0.3808	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	26.1	Yes	Y				2.4975	0.3556	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2009	34.9	Yes	Y				2.4975	0.1236	pg/g
PCM-06DS-091209	P1905_7437_005	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	3.1	Yes	Y				2.4975	0.3925	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	7.96	Yes	Y				2.4975	0.3605	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/23/2009	0.3198	Yes	N	U			2.4975	0.3198	pg/g
PCM-06DS-091209	P1905_7437_005	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	9.38	Yes	Y				2.4975	0.1966	pg/g
PCM-06DS-091209	P1905_7437_005	Total Hexachlorodibenzofuran (HxCDF)	12/23/2009	76.7	Yes	Y				2.4975	0.3574	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/23/2009	6.98	Yes	Y				2.4975	0.1697	pg/g
PCM-06DS-091209	P1905_7437_005	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2009	14.8	Yes	Y				0.4995	0.0692	pg/g
PCM-06DS-091209	P1905_7437_005	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	10.8	Yes	Y	EMPC	J	23	2.4975	0.217	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	6.34	Yes	Y				2.4975	0.3325	pg/g
PCM-06DS-091209	P1905_7437_005	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	12.4	Yes	Y	EMPC	J	23	0.4995	0.0461	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	162	Yes	Y				2.4975	0.2003	pg/g
PCM-06DS-091209	P1905_7437_005	Total Pentachlorodibenzofuran (PeCDF)	12/23/2009	52.8	Yes	Y				2.4975	0.1965	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_005	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	387	Yes	Y				2.4975	0.2003	pg/g
PCM-06DS-091209	P1905_7437_005	Total Heptachlorodibenzofuran (HpCDF)	12/23/2009	96.7	Yes	Y				2.4975	0.1438	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/23/2009	97.7	Yes	Y				4.995	0.1877	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	1.58	Yes	Y	J			2.4975	0.3126	pg/g
PCM-06DS-091209	P1905_7437_005	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	1.26	Yes	Y	J			2.4975	0.217	pg/g
PCM-06DS-091209	P1905_7437_005	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	52.7	Yes	Y				2.4975	0.3418	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	1.97	Yes	Y	J			2.3923	0.4971	pg/g
PCM-09DS-091209	P1905_7437_004	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	10.6	Yes	Y	EMPC	J	23	2.3923	0.0942	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/23/2009	142	Yes	Y				4.7847	0.1544	pg/g
PCM-09DS-091209	P1905_7437_004	Total Heptachlorodibenzofuran (HpCDF)	12/23/2009	113	Yes	Y				2.3923	0.1284	pg/g
PCM-09DS-091209	P1905_7437_004	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	425	Yes	Y				2.3923	0.1737	pg/g
PCM-09DS-091209	P1905_7437_004	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	54.3	Yes	Y	EMPC	J	23	2.3923	0.568	pg/g
PCM-09DS-091209	P1905_7437_004	Total Pentachlorodibenzofuran (PeCDF)	12/23/2009	48.3	Yes	Y	EMPC	J	23	2.3923	0.1658	pg/g
PCM-09DS-091209	P1905_7437_004	Total Tetrachlorodibenzofuran (TCDF)	12/23/2009	66.4	Yes	Y	EMPC	J	23	0.4785	0.03	pg/g
PCM-09DS-091209	P1905_7437_004	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	0.599	Yes	Y				0.4785	0.0613	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	1.37	Yes	Y	J			2.3923	0.0942	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	4.2	Yes	Y				2.3923	0.6727	pg/g
PCM-09DS-091209	P1905_7437_004	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	11.6	Yes	Y	EMPC	J	23	0.4785	0.0613	pg/g
PCM-09DS-091209	P1905_7437_004	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2009	20.3	Yes	Y				0.4785	0.03	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_004	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/23/2009	5.44		Yes	Y				2.3923	0.1528	pg/g
PCM-09DS-091209	P1905_7437_004	Total Hexachlorodibenzofuran (HxCDF)	12/23/2009	65.9		Yes	Y	EMPC	J	23	2.3923	0.198	pg/g
PCM-09DS-091209	P1905_7437_004	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	8.89		Yes	Y				2.3923	0.1709	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	12.4		Yes	Y				2.3923	0.161	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	5.55		Yes	Y				2.3923	0.2043	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	5.6		Yes	Y	EMPC	J	23	2.3923	0.5371	pg/g
PCM-09DS-091209	P1905_7437_004	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	2.67		Yes	Y				2.3923	0.2318	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2009	33.6		Yes	Y				2.3923	0.1081	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/23/2009	0.1607		Yes	N	U			2.3923	0.1607	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	185		Yes	Y				2.3923	0.1737	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	20.5		Yes	Y				2.3923	0.1948	pg/g
PCM-09DS-091209	P1905_7437_004	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/23/2009	2400		Yes	Y				4.7847	0.2188	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	1.06		Yes	Y	J			2.4343	0.2987	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	18		Yes	Y				2.4343	0.234	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2009	21.2		Yes	Y				2.4343	0.1229	pg/g
PCM-14DS-091210	P1905_7437_003	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	1.58		Yes	Y	J			2.4343	0.2482	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	3.82		Yes	Y				2.4343	0.2965	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	4.52		Yes	Y				2.4343	0.2447	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_003	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	6.64	Yes	Y				2.4343	0.24	pg/g
PCM-14DS-091210	P1905_7437_003	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	4.21	Yes	Y				2.4343	0.255	pg/g
PCM-14DS-091210	P1905_7437_003	Total Hexachlorodibenzofuran (HxCDF)	12/23/2009	47.2	Yes	Y	EMPC	J	23	2.4343	0.2533	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/23/2009	4.31	Yes	Y				2.4343	0.1641	pg/g
PCM-14DS-091210	P1905_7437_003	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2009	6.13	Yes	Y				0.4869	0.0841	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/23/2009	0.2908	Yes	N	U			2.4343	0.2908	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	0.55	Yes	Y	EMPC J	J	23	2.4343	0.1825	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/23/2009	828	Yes	Y				4.8685	0.348	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/23/2009	62.8	Yes	Y				4.8685	0.1171	pg/g
PCM-14DS-091210	P1905_7437_003	Total Heptachlorodibenzofuran (HpCDF)	12/23/2009	61.2	Yes	Y				2.4343	0.1415	pg/g
PCM-14DS-091210	P1905_7437_003	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	197	Yes	Y				2.4343	0.1918	pg/g
PCM-14DS-091210	P1905_7437_003	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	5	Yes	Y	EMPC	J	23	2.4343	0.1825	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	86.2	Yes	Y				2.4343	0.1918	pg/g
PCM-14DS-091210	P1905_7437_003	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	29.1	Yes	Y	EMPC	J	23	2.4343	0.3057	pg/g
PCM-14DS-091210	P1905_7437_003	Total Pentachlorodibenzofuran (PeCDF)	12/23/2009	24.5	Yes	Y				2.4343	0.2473	pg/g
PCM-14DS-091210	P1905_7437_003	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	1.79	Yes	Y	J			2.4343	0.3235	pg/g
PCM-14DS-091210	P1905_7437_003	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	0.241	Yes	Y	EMPC J	J	23	0.4869	0.1017	pg/g
PCM-14DS-091210	P1905_7437_003	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	8.85	Yes	Y	EMPC	J	23	0.4869	0.1017	pg/g
PCM-14DS-091210	P1905_7437_003	Total Tetrachlorodibenzofuran (TCDF)	12/23/2009	22.9	Yes	Y	EMPC	J	23	0.4869	0.0841	pg/g
PCM-15DS-091210	P1905_7437_002	Total Heptachlorodibenzofuran (HpCDF)	12/23/2009	81.2	Yes	Y				2.381	0.0971	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_002	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	34.2	Yes	Y				2.381	0.1909	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2009	29.7	Yes	Y				2.381	0.0846	pg/g
PCM-15DS-091210	P1905_7437_002	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	0.308	Yes	Y	EMPC J	J	23	0.4762	0.0214	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	2.24	Yes	Y	J			2.381	0.19	pg/g
PCM-15DS-091210	P1905_7437_002	Total Tetrachlorodibenzofuran (TCDF)	12/23/2009	37.6	Yes	Y	EMPC	J	23	0.4762	0.0395	pg/g
PCM-15DS-091210	P1905_7437_002	Total Pentachlorodibenzofuran (PeCDF)	12/23/2009	50.2	Yes	Y				2.381	0.1492	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/23/2009	1020	Yes	Y				4.7619	0.1501	pg/g
PCM-15DS-091210	P1905_7437_002	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	36.2	Yes	Y				2.381	0.1673	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	110	Yes	Y				2.381	0.1133	pg/g
PCM-15DS-091210	P1905_7437_002	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	251	Yes	Y				2.381	0.1133	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/23/2009	73.9	Yes	Y				4.7619	0.1195	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	0.983	Yes	Y	J			2.381	0.1483	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	4.53	Yes	Y				2.381	0.1646	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/23/2009	0.2164	Yes	N	U			2.381	0.2164	pg/g
PCM-15DS-091210	P1905_7437_002	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	6.81	Yes	Y	EMPC	J	23	2.381	0.1128	pg/g
PCM-15DS-091210	P1905_7437_002	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	2.8	Yes	Y				2.381	0.202	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	0.925	Yes	Y	J			2.381	0.1128	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	8.03	Yes	Y				2.381	0.1811	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_002	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	18.8	Yes	Y				2.381	0.1457	pg/g
PCM-15DS-091210	P1905_7437_002	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	10.2	Yes	Y	EMPC	J	23	0.4762	0.0214	pg/g
PCM-15DS-091210	P1905_7437_002	Total Hexachlorodibenzofuran (HxCDF)	12/23/2009	75.6	Yes	Y	EMPC	J	23	2.381	0.1967	pg/g
PCM-15DS-091210	P1905_7437_002	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/23/2009	5.82	Yes	Y				2.381	0.1128	pg/g
PCM-15DS-091210	P1905_7437_002	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2009	13.3	Yes	Y				0.4762	0.0395	pg/g
PCM-15DS-091210	P1905_7437_002	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	9.42	Yes	Y				2.381	0.1527	pg/g
PCM-22DS-091210	P1905_7437_001	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	12/23/2009	12.7	Yes	Y				0.4864	0.0514	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	12/23/2009	5.53	Yes	Y				2.4319	0.1676	pg/g
PCM-22DS-091210	P1905_7437_001	Total Hexachlorodibenzofuran (HxCDF)	12/23/2009	73.5	Yes	Y				2.4319	0.3079	pg/g
PCM-22DS-091210	P1905_7437_001	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	7.89	Yes	Y				2.4319	0.1661	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	6.54	Yes	Y				2.4319	0.2952	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	28.5	Yes	Y				2.4319	0.3125	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	12/23/2009	31.5	Yes	Y				2.4319	0.1027	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	12/23/2009	2.82	Yes	Y				2.4319	0.2181	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	12/23/2009	12.2	Yes	Y				2.4319	0.1495	pg/g
PCM-22DS-091210	P1905_7437_001	Total Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	12	Yes	Y	EMPC	J	23	0.4864	0.0524	pg/g
PCM-22DS-091210	P1905_7437_001	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	12/23/2009	2.78	Yes	Y				2.4319	0.405	pg/g
PCM-22DS-091210	P1905_7437_001	Total Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	49.5	Yes	Y	EMPC	J	23	2.4319	0.4811	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	0.94	Yes	Y	J			2.4319	0.2058	pg/g

Analytical Method E1613

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_001	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	6.11		Yes	Y				2.4319	0.5072	pg/g
PCM-22DS-091210	P1905_7437_001	Total Pentachlorodibenzofuran (PeCDF)	12/23/2009	44.5		Yes	Y	EMPC	J	23	2.4319	0.1575	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	3.83		Yes	Y				2.4319	0.479	pg/g
PCM-22DS-091210	P1905_7437_001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	12/23/2009	0.435		Yes	Y	EMPC J	J	23	0.4864	0.0524	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	12/23/2009	1290		Yes	Y				4.8638	0.1363	pg/g
PCM-22DS-091210	P1905_7437_001	Total Tetrachlorodibenzofuran (TCDF)	12/23/2009	46.4		Yes	Y	EMPC	J	23	0.4864	0.0514	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	143		Yes	Y				2.4319	0.1968	pg/g
PCM-22DS-091210	P1905_7437_001	Total Pentachlorodibenzo-p-dioxin (PeCDD)	12/23/2009	9.09		Yes	Y	EMPC	J	23	2.4319	0.2058	pg/g
PCM-22DS-091210	P1905_7437_001	Total Heptachlorodibenzo-p-dioxin (HpCDD)	12/23/2009	322		Yes	Y				2.4319	0.1968	pg/g
PCM-22DS-091210	P1905_7437_001	Total Heptachlorodibenzofuran (HpCDF)	12/23/2009	88.8		Yes	Y				2.4319	0.1309	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	12/23/2009	96.2		Yes	Y				4.8638	0.0983	pg/g
PCM-22DS-091210	P1905_7437_001	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	12/23/2009	1.19		Yes	Y	J			2.4319	0.4589	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-050/053	12/30/2009	99.2		Yes	Y	C			1.96	0.315	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-044/047/065	12/30/2009	2.94		Yes	N	C U			2.94	0.293	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-051	12/30/2009	38.4		Yes	Y				0.979	0.295	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-048	12/30/2009	99.3		Yes	Y				0.979	0.282	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-046	12/30/2009	28		Yes	Y				0.979	0.315	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-045	12/30/2009	64		Yes	Y				0.979	0.285	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-049/069	12/30/2009	1.96		Yes	N	C U			1.96	0.244	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-043	12/30/2009	0.979		Yes	N	U			0.979	0.35	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-042	12/30/2009	0.979		Yes	N	U			0.979	0.335	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-041	12/30/2009	0.979		Yes	N	U			0.979	0.353	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-040/071	12/30/2009	258		Yes	Y	C			1.96	0.271	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-052	12/30/2009	0.979		Yes	N	U			0.979	0.265	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-038	12/30/2009	0.979		Yes	N	U			0.979	1.46	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-037	12/30/2009	120		Yes	Y				0.979	1.31	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-036	12/30/2009	0.979		Yes	N	U			0.979	1.22	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-035	12/30/2009	0.979		Yes	N	U			0.979	1.35	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-039	12/30/2009	0.979		Yes	N	U			0.979	1.03	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-066	12/30/2009	0.979		Yes	N	U			0.979	0.606	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Octachlorobiphenyls (total)	12/30/2009	783		Yes	Y				0	0.751	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-034	12/30/2009	3.63		Yes	Y				0.979	1.39	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-078	12/30/2009	0.979		Yes	N	U			0.979	0.755	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-077	12/30/2009	64.5		Yes	Y				0.979	0.625	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-073	12/30/2009	0.979		Yes	N	U			0.979	0.24	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-072	12/30/2009	3.84		Yes	Y				0.979	0.718	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-059/062/075	12/30/2009	2.94		Yes	N	C U			2.94	0.21	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-067	12/30/2009	0.979		Yes	N	U			0.979	0.617	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-054	12/30/2009	0.979		Yes	N	U			0.979	1.99	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-064	12/30/2009	189		Yes	Y				0.979	0.193	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-063	12/30/2009	0.979		Yes	N	U			0.979	0.597	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-060	12/30/2009	232		Yes	Y				0.979	0.69	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-058	12/30/2009	0.979		Yes	N	U			0.979	0.701	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-057	12/30/2009	0.979		Yes	N	U			0.979	0.736	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-056	12/30/2009	0.979		Yes	N	U			0.979	0.663	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-055	12/30/2009	0.979	Yes	N	U			0.979	0.679	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-068	12/30/2009	1.03	Yes	Y	EMPC	J	23	0.979	0.576	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Heptachlorobiphenyls (total)	12/30/2009	2920	Yes	Y				0	0.618	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-002	12/30/2009	14.4	Yes	Y				0.979	1.69	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-006	12/30/2009	27.3	Yes	Y	SI			0.979	5.5	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-005	12/30/2009	135	Yes	Y	SI			0.979	6.72	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-004	12/30/2009	50	Yes	Y	SI			0.979	1.53	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-003	12/30/2009	21	Yes	Y	EMPC	J	23	0.979	1.84	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-001	12/30/2009	24.3	Yes	Y				0.979	3.7	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-008	12/30/2009	26.8	Yes	Y	SI			0.979	6.14	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Nonachlorobiphenyls (total)	12/30/2009	340	Yes	Y				0	0.803	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-009	12/30/2009	8.08	Yes	Y	SI			0.979	6.09	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Monochlorobiphenyls (total)	12/30/2009	59.7	Yes	Y	EMPC	J	23	0	2.77	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Tetrachlorobiphenyls (total)	12/30/2009	1410	Yes	Y				0	0.787	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Hexachlorobiphenyls (total)	12/30/2009	5040	Yes	Y				0	1.12	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Pentachlorobiphenyls (total)	12/30/2009	4300	Yes	Y				0	0.431	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Trichlorobiphenyls (total)	12/30/2009	1660	Yes	Y				0	0.889	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	Dichlorobiphenyls (total)	12/30/2009	253	Yes	Y				0	4.02	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-016	12/30/2009	0.979	Yes	N	U			0.979	0.471	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-079	12/30/2009	4.76	Yes	Y				0.979	0.674	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-020/028	12/30/2009	559	Yes	Y	C			1.96	1.13	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-031	12/30/2009	450	Yes	Y				0.979	1.15	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-027	12/30/2009	0.979	Yes	N	U			0.979	0.351	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-026/029	12/30/2009	95.6	Yes	Y	C			1.96	1.22	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-025	12/30/2009	39	Yes	Y				0.979	1.11	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-024	12/30/2009	0.979	Yes	N	U			0.979	0.316	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-023	12/30/2009	0.344	Yes	Y				0.979	1.07	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-007	12/30/2009	5.06	Yes	Y	SI			0.979	5.81	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-021/033	12/30/2009	191	Yes	Y	C			1.96	1.13	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-032	12/30/2009	0.979	Yes	N	U			0.979	0.294	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-019	12/30/2009	50.7	Yes	Y				0.979	0.473	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-018/030	12/30/2009	1.96	Yes	N	C U			1.96	0.373	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-017	12/30/2009	0.979	Yes	N	U			0.979	0.373	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-015	12/30/2009	0.979	Yes	N	U			0.979	6.5	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-012/013	12/30/2009	1.96	Yes	N	C U			1.96	6.19	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-011	12/30/2009	0.979	Yes	N	U			0.979	6.37	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-010	12/30/2009	0.979	Yes	N	U			0.979	1.11	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-022	12/30/2009	146	Yes	Y				0.979	1.16	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-154	12/30/2009	23.7	Yes	Y				0.979	0.309	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-136	12/30/2009	200	Yes	Y				0.979	0.264	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-137	12/30/2009	28.6	Yes	Y				0.979	0.302	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-139/140	12/30/2009	16	Yes	Y	C			1.96	0.306	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-141	12/30/2009	210	Yes	Y				0.979	0.326	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-142	12/30/2009	1.23	Yes	Y				0.979	0.316	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-143	12/30/2009	1.43	Yes	Y				0.979	0.286	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-144	12/30/2009	58.5	Yes	Y				0.979	0.347	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-145	12/30/2009	0.979	Yes	N	U			0.979	0.269	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-146	12/30/2009	181	Yes	Y				0.979	0.288	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-147/149	12/30/2009	865	Yes	Y	C			1.96	0.292	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-148	12/30/2009	3.84	Yes	Y				0.979	0.289	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-150	12/30/2009	3.31	Yes	Y				0.979	0.199	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-131	12/30/2009	10.8	Yes	Y				0.979	0.345	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-153/168	12/30/2009	892	Yes	Y	C			1.96	0.235	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-133	12/30/2009	26.4	Yes	Y				0.979	0.389	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-155	12/30/2009	0.528	Yes	Y	J			0.979	0.234	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-156/157	12/30/2009	116	Yes	Y	C			1.96	0.917	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-158	12/30/2009	99	Yes	Y				0.979	0.261	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-159	12/30/2009	0.979	Yes	N	U			0.979	1.26	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-160	12/30/2009	0.979	Yes	N	U			0.979	0.234	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-161	12/30/2009	0.979	Yes	N	U			0.979	0.285	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-162	12/30/2009	7.81	Yes	Y				0.979	1.03	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-184	12/30/2009	0.74	Yes	Y	J			0.979	0.142	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-183	12/30/2009	212	Yes	Y				0.979	0.602	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-182	12/30/2009	2.57	Yes	Y				0.979	0.648	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-181	12/30/2009	11.9	Yes	Y				0.979	0.718	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-180/193	12/30/2009	713	Yes	Y	C			1.96	0.542	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-179	12/30/2009	162	Yes	Y				0.979	0.124	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-152	12/30/2009	1.54	Yes	Y				0.979	0.235	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-200	12/30/2009	30	Yes	Y				0.979	0.431	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-130	12/30/2009	64.5	Yes	Y				0.979	0.391	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-129/138/163	12/30/2009	1110	Yes	Y	C			2.94	0.305	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-185	12/30/2009	33.2	Yes	Y				0.979	0.561	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-186	12/30/2009	0.477	Yes	Y	J			0.979	0.137	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-187	12/30/2009	492	Yes	Y				0.979	0.592	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-188	12/30/2009	0.93	Yes	Y	J EMPC	J	23	0.979	0.129	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-189	12/30/2009	13	Yes	Y				0.979	0.956	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-190	12/30/2009	68.9	Yes	Y				0.979	0.722	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-191	12/30/2009	14.1	Yes	Y				0.979	0.591	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-192	12/30/2009	0.979	Yes	N	U			0.979	0.568	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-194	12/30/2009	211	Yes	Y				0.979	1.32	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-195	12/30/2009	91.8	Yes	Y				0.979	1.34	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-196	12/30/2009	74.6	Yes	Y				0.979	0.511	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-135/151	12/30/2009	450	Yes	Y	C			1.96	0.339	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-206	12/30/2009	269	Yes	Y				0.979	1.03	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-176	12/30/2009	43.5	Yes	Y				0.979	0.115	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-132	12/30/2009	326	Yes	Y				0.979	0.333	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-086/087/097/108/119/125	12/30/2009	559	Yes	Y	C			5.88	0.458	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-061/070/074/076	12/30/2009	3.92	Yes	N	C U			3.92	0.673	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-209	12/30/2009	722	Yes	Y				0.979	1.22	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-197	12/30/2009	6.74	Yes	Y				0.979	0.36	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-207	12/30/2009	16.9	Yes	Y				0.979	0.552	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-198/199	12/30/2009	185	Yes	Y	C			1.96	0.483	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-205	12/30/2009	10.4	Yes	Y				0.979	1.07	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-204	12/30/2009	0.979	Yes	N	U			0.979	0.39	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-203	12/30/2009	96.9	Yes	Y				0.979	0.468	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-202	12/30/2009	50.3	Yes	Y				0.979	0.427	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-201	12/30/2009	26.6	Yes	Y				0.979	0.403	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-134	12/30/2009	59.9	Yes	Y				0.979	0.429	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-208	12/30/2009	53.9	Yes	Y				0.979	0.58	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-096	12/30/2009	9.87	Yes	Y				0.979	0.162	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-178	12/30/2009	81.7		Yes	Y				0.979	0.17	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-115	12/30/2009	16.9		Yes	Y				0.979	0.379	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-114	12/30/2009	15.4		Yes	Y				0.979	0.347	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-112	12/30/2009	0.979		Yes	N	U			0.979	0.422	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-111	12/30/2009	0.817		Yes	Y	J EMPC	J	23	0.979	0.347	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-110	12/30/2009	928		Yes	Y				0.979	0.396	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-109	12/30/2009	51		Yes	Y				0.979	0.359	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-107/124	12/30/2009	27.3		Yes	Y	C			1.96	0.415	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-106	12/30/2009	0.979		Yes	N	U			0.979	0.422	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-105	12/30/2009	286		Yes	Y				0.979	0.422	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-104	12/30/2009	0.999		Yes	Y				0.979	0.144	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-103	12/30/2009	0.979		Yes	N	U			0.979	0.477	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-102	12/30/2009	0.979		Yes	N	U			0.979	0.607	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-118	12/30/2009	668		Yes	Y				0.979	0.366	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-090/101/113	12/30/2009	1040		Yes	Y	C			2.94	0.518	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-081	12/30/2009	2.1		Yes	Y				0.979	0.738	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-082	12/30/2009	110		Yes	Y				0.979	0.596	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-083	12/30/2009	53.7		Yes	Y				0.979	0.622	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-084	12/30/2009	0.979		Yes	N	U			0.979	0.561	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-085/116	12/30/2009	114		Yes	Y	C			1.96	0.394	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-099	12/30/2009	372		Yes	Y				0.979	0.442	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-089	12/30/2009	0.979		Yes	N	U			0.979	0.574	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-098	12/30/2009	0.979		Yes	N	U			0.979	0.512	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-091	12/30/2009	0.979		Yes	N	U			0.979	0.415	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-092	12/30/2009	0.979		Yes	N	U			0.979	0.594	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02DS-091209	P1905_7437_PCB_007	PCB-093/100	12/30/2009	1.96	Yes	N	C U			1.96	0.529	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-094	12/30/2009	0.979	Yes	N	U			0.979	0.499	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-095	12/30/2009	0.979	Yes	N	U			0.979	0.485	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-120	12/30/2009	4.42	Yes	Y				0.979	0.404	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-088	12/30/2009	0.979	Yes	N	U			0.979	0.521	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-174	12/30/2009	371	Yes	Y				0.979	0.623	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-165	12/30/2009	1	Yes	Y				0.979	0.283	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-167	12/30/2009	40.2	Yes	Y				0.979	1.27	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-117	12/30/2009	22.3	Yes	Y				0.979	0.52	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-169	12/30/2009	0.979	Yes	N	U			0.979	2.06	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-177	12/30/2009	212	Yes	Y				0.979	0.653	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-170	12/30/2009	313	Yes	Y				0.979	0.885	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-014	12/30/2009	0.979	Yes	N	U			0.979	5.49	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-164	12/30/2009	72.1	Yes	Y				0.979	0.238	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-172	12/30/2009	55.4	Yes	Y				0.979	0.691	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-080	12/30/2009	326	Yes	Y				0.979	0.563	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-175	12/30/2009	17.1	Yes	Y				0.979	0.695	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-128/166	12/30/2009	162	Yes	Y	C			1.96	1.46	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-127	12/30/2009	0.979	Yes	N	U			0.979	0.474	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-126	12/30/2009	3.44	Yes	Y				0.979	0.909	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-123	12/30/2009	12.8	Yes	Y				0.979	0.396	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-122	12/30/2009	9.5	Yes	Y				0.979	0.403	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-121	12/30/2009	0.979	Yes	N	U			0.979	0.343	pg/g
PCM-02DS-091209	P1905_7437_PCB_007	PCB-171/173	12/30/2009	106	Yes	Y	C			1.96	0.683	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-048	12/30/2009	72.5	Yes	Y				0.949	0.271	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	Trichlorobiphenyls (total)	12/30/2009	1230		Yes	Y	EMPC	J	23	0	0.659	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Pentachlorobiphenyls (total)	12/30/2009	3360		Yes	Y				0	0.37	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Hexachlorobiphenyls (total)	12/30/2009	3530		Yes	Y				0	0.877	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Monochlorobiphenyls (total)	12/30/2009	25.1		Yes	Y				0	1.25	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Heptachlorobiphenyls (total)	12/30/2009	1930		Yes	Y				0	0.553	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Nonachlorobiphenyls (total)	12/30/2009	132		Yes	Y				0	0.944	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Octachlorobiphenyls (total)	12/30/2009	524		Yes	Y				0	0.771	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-001	12/30/2009	6.05		Yes	Y				0.949	1.96	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-002	12/30/2009	7.95		Yes	Y				0.949	0.492	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-003	12/30/2009	11.1		Yes	Y				0.949	0.535	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Tetrachlorobiphenyls (total)	12/30/2009	2500		Yes	Y				0	0.619	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-197	12/30/2009	5.33		Yes	Y				0.949	0.343	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-045	12/30/2009	47.7		Yes	Y				0.949	0.273	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-086/087/097/108/119/125	12/30/2009	417		Yes	Y	C			5.69	0.44	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-084	12/30/2009	0.949		Yes	N	U			0.949	0.54	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-085/116	12/30/2009	90.4		Yes	Y	C			1.9	0.379	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-088	12/30/2009	0.949		Yes	N	U			0.949	0.5	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-089	12/30/2009	0.949		Yes	N	U			0.949	0.552	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-090/101/113	12/30/2009	760		Yes	Y	C			2.85	0.498	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-091	12/30/2009	0.949		Yes	N	U			0.949	0.399	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-092	12/30/2009	153		Yes	Y				0.949	0.57	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-093/100	12/30/2009	1.9		Yes	N	C U			1.9	0.508	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-094	12/30/2009	5.26		Yes	Y				0.949	0.48	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-095	12/30/2009	0.949		Yes	N	U			0.949	0.467	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-082	12/30/2009	80.3		Yes	Y				0.949	0.573	pg/g

Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-098	12/30/2009	0.949	Yes	N	U			0.949	0.492	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-081	12/30/2009	1.44	Yes	Y				0.949	0.604	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-198/199	12/30/2009	107	Yes	Y	C			1.9	0.461	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-200	12/30/2009	18.7	Yes	Y				0.949	0.411	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-201	12/30/2009	18.6	Yes	Y				0.949	0.384	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-202	12/30/2009	32.7	Yes	Y				0.949	0.408	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-203	12/30/2009	75.4	Yes	Y				0.949	0.446	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-204	12/30/2009	0.949	Yes	N	U			0.949	0.372	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-205	12/30/2009	6.9	Yes	Y				0.949	1.13	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-206	12/30/2009	93	Yes	Y				0.949	1.16	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-207	12/30/2009	11.1	Yes	Y				0.949	0.694	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-208	12/30/2009	27.4	Yes	Y				0.949	0.729	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-209	12/30/2009	103	Yes	Y				0.949	1.3	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-061/070/074/076	12/30/2009	3.8	Yes	N	C U			3.8	0.549	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-096	12/30/2009	7.1	Yes	Y				0.949	0.115	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-059/062/075	12/30/2009	26.5	Yes	Y	C			2.85	0.202	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-043	12/30/2009	12.1	Yes	Y				0.949	0.336	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-044/047/065	12/30/2009	470	Yes	Y	C			2.85	0.282	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-004	12/30/2009	30	Yes	Y	SI			0.949	0.841	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-046	12/30/2009	24.8	Yes	Y				0.949	0.302	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-015	12/30/2009	68.7	Yes	Y	SI			0.949	1.99	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-049/069	12/30/2009	270	Yes	Y	C			1.9	0.235	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-050/053	12/30/2009	83.2	Yes	Y	C			1.9	0.303	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-051	12/30/2009	37.1	Yes	Y				0.949	0.283	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-052	12/30/2009	462	Yes	Y				0.949	0.254	pg/g

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Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-054	12/30/2009	7.63	Yes	Y				0.949	1.31	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-055	12/30/2009	0.949	Yes	N	U			0.949	0.554	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-056	12/30/2009	0.949	Yes	N	U			0.949	0.541	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-083	12/30/2009	43.9	Yes	Y				0.949	0.598	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-058	12/30/2009	0.949	Yes	N	U			0.949	0.572	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	Dichlorobiphenyls (total)	12/30/2009	340	Yes	Y				0	1.42	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-060	12/30/2009	295	Yes	Y				0.949	0.564	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-063	12/30/2009	0.949	Yes	N	U			0.949	0.488	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-064	12/30/2009	161	Yes	Y				0.949	0.186	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-066	12/30/2009	0.949	Yes	N	U			0.949	0.494	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-067	12/30/2009	0.949	Yes	N	U			0.949	0.504	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-068	12/30/2009	0.949	Yes	N	U			0.949	0.471	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-072	12/30/2009	0.949	Yes	N	U			0.949	0.586	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-073	12/30/2009	0.949	Yes	N	U			0.949	0.231	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-077	12/30/2009	46.7	Yes	Y				0.949	0.623	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-078	12/30/2009	0.949	Yes	N	U			0.949	0.617	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-079	12/30/2009	3.51	Yes	Y				0.949	0.55	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-080	12/30/2009	267	Yes	Y				0.949	0.46	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-057	12/30/2009	0.949	Yes	N	U			0.949	0.601	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-152	12/30/2009	1.12	Yes	Y				0.949	0.216	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-169	12/30/2009	0.949	Yes	N	U			0.949	1.25	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-136	12/30/2009	135	Yes	Y				0.949	0.243	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-137	12/30/2009	21	Yes	Y				0.949	0.236	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-139/140	12/30/2009	12.2	Yes	Y	C			1.9	0.238	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-141	12/30/2009	142	Yes	Y				0.949	0.254	pg/g

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Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-142	12/30/2009	0.779	Yes	Y	J			0.949	0.247	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-143	12/30/2009	0.633	Yes	Y	J			0.949	0.223	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-144	12/30/2009	41.7	Yes	Y				0.949	0.271	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-145	12/30/2009	0.949	Yes	N	U			0.949	0.247	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-146	12/30/2009	128	Yes	Y				0.949	0.224	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-147/149	12/30/2009	614	Yes	Y	C			1.9	0.228	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-134	12/30/2009	45.9	Yes	Y				0.949	0.334	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-150	12/30/2009	2.46	Yes	Y				0.949	0.182	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-012/013	12/30/2009	4.98	Yes	Y	C SI			1.9	1.9	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-153/168	12/30/2009	612	Yes	Y	C			1.9	0.183	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-154	12/30/2009	17.1	Yes	Y				0.949	0.241	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-155	12/30/2009	0.398	Yes	Y	J			0.949	0.215	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-156/157	12/30/2009	78.4	Yes	Y	C			1.9	0.878	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-158	12/30/2009	70.7	Yes	Y				0.949	0.204	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-159	12/30/2009	0.949	Yes	N	U			0.949	1.16	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-160	12/30/2009	0.949	Yes	N	U			0.949	0.183	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-161	12/30/2009	0.949	Yes	N	U			0.949	0.222	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-162	12/30/2009	0.949	Yes	N	U			0.949	0.946	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-164	12/30/2009	50.5	Yes	Y				0.949	0.186	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-165	12/30/2009	0.725	Yes	Y	J			0.949	0.221	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-167	12/30/2009	27.2	Yes	Y				0.949	1.17	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-148	12/30/2009	2.98	Yes	Y				0.949	0.226	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-117	12/30/2009	17.8	Yes	Y				0.949	0.499	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-099	12/30/2009	277	Yes	Y				0.949	0.425	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-102	12/30/2009	0.949	Yes	N	U			0.949	0.583	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-103	12/30/2009	11		Yes	Y				0.949	0.459	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-104	12/30/2009	0.825		Yes	Y	J EMPC	J	23	0.949	0.102	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-105	12/30/2009	203		Yes	Y				0.949	0.384	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-106	12/30/2009	0.949		Yes	N	U			0.949	0.406	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-107/124	12/30/2009	19.7		Yes	Y	C			1.9	0.399	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-109	12/30/2009	36.6		Yes	Y				0.949	0.345	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-110	12/30/2009	718		Yes	Y				0.949	0.381	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-111	12/30/2009	0.672		Yes	Y	J			0.949	0.333	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-112	12/30/2009	0.949		Yes	N	U			0.949	0.406	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-005	12/30/2009	0.949		Yes	N	U			0.949	2.06	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-115	12/30/2009	11.9		Yes	Y				0.949	0.364	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-135/151	12/30/2009	322		Yes	Y	C			1.9	0.264	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-118	12/30/2009	471		Yes	Y				0.949	0.357	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-120	12/30/2009	3.43		Yes	Y				0.949	0.388	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-121	12/30/2009	0.949		Yes	N	U			0.949	0.33	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-122	12/30/2009	6.41		Yes	Y				0.949	0.428	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-123	12/30/2009	8.4		Yes	Y				0.949	0.38	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-126	12/30/2009	3.59		Yes	Y				0.949	0.627	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-127	12/30/2009	0.949		Yes	N	U			0.949	0.432	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-128/166	12/30/2009	125		Yes	Y	C			1.9	1.34	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-129/138/163	12/30/2009	768		Yes	Y	C			2.85	0.238	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-130	12/30/2009	46.6		Yes	Y				0.949	0.305	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-131	12/30/2009	7.73		Yes	Y				0.949	0.269	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-132	12/30/2009	236		Yes	Y				0.949	0.26	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-114	12/30/2009	10.2		Yes	Y				0.949	0.368	pg/g

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Analytical Method	E1668A												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-021/033	12/30/2009	104		Yes	Y	C			1.9	0.764	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-038	12/30/2009	0.949		Yes	N	U			0.949	0.985	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-037	12/30/2009	105		Yes	Y				0.949	0.884	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-036	12/30/2009	0.949		Yes	N	U			0.949	0.827	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-035	12/30/2009	0.949		Yes	N	U			0.949	0.915	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-034	12/30/2009	1.86		Yes	Y				0.949	0.939	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-032	12/30/2009	0.949		Yes	N	U			0.949	0.27	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-031	12/30/2009	250		Yes	Y				0.949	0.78	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-027	12/30/2009	0.949		Yes	N	U			0.949	0.322	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-026/029	12/30/2009	51.2		Yes	Y	C			1.9	0.823	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-025	12/30/2009	20.5		Yes	Y				0.949	0.749	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-024	12/30/2009	0.949		Yes	N	U			0.949	0.29	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-039	12/30/2009	1.32		Yes	Y	EMPC	J	23	0.949	0.7	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-022	12/30/2009	78.1		Yes	Y				0.949	0.783	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-009	12/30/2009	3.26		Yes	Y	SI			0.949	1.87	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-020/028	12/30/2009	298		Yes	Y	C			1.9	0.763	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-019	12/30/2009	41.4		Yes	Y				0.949	0.434	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-018/030	12/30/2009	197		Yes	Y	C			1.9	0.343	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-017	12/30/2009	77.6		Yes	Y				0.949	0.342	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-016	12/30/2009	0.949		Yes	N	U			0.949	0.433	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-014	12/30/2009	0.949		Yes	N	U			0.949	1.68	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-011	12/30/2009	167		Yes	Y	SI			0.949	1.95	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-010	12/30/2009	0.949		Yes	N	U			0.949	0.608	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-170	12/30/2009	198		Yes	Y				0.949	0.615	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-008	12/30/2009	53.2		Yes	Y	SI			0.949	1.88	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04DS-091209	P1905_7437_PCB_006	PCB-133	12/30/2009	18.1		Yes	Y				0.949	0.303	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-006	12/30/2009	11.5		Yes	Y	SI			0.949	1.69	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-023	12/30/2009	0.949		Yes	N	U			0.949	0.726	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-175	12/30/2009	11.7		Yes	Y				0.949	0.632	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-007	12/30/2009	1.86		Yes	Y	SI			0.949	1.78	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-040/071	12/30/2009	175		Yes	Y	C			1.9	0.26	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-171/173	12/30/2009	71.3		Yes	Y	C			1.9	0.62	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-174	12/30/2009	257		Yes	Y				0.949	0.566	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-176	12/30/2009	28.2		Yes	Y				0.949	0.118	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-177	12/30/2009	139		Yes	Y				0.949	0.593	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-178	12/30/2009	53.2		Yes	Y				0.949	0.175	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-179	12/30/2009	107		Yes	Y				0.949	0.127	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-180/193	12/30/2009	459		Yes	Y	C			1.9	0.492	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-181	12/30/2009	9.39		Yes	Y				0.949	0.653	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-182	12/30/2009	1.69		Yes	Y				0.949	0.589	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-183	12/30/2009	140		Yes	Y				0.949	0.547	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-184	12/30/2009	0.522		Yes	Y	J			0.949	0.146	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-191	12/30/2009	9.09		Yes	Y				0.949	0.537	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-172	12/30/2009	37.4		Yes	Y				0.949	0.628	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-042	12/30/2009	0.949		Yes	N	U			0.949	0.321	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-195	12/30/2009	61.7		Yes	Y				0.949	1.41	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-185	12/30/2009	26.8		Yes	Y				0.949	0.51	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-192	12/30/2009	0.949		Yes	N	U			0.949	0.516	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-196	12/30/2009	55.1		Yes	Y				0.949	0.488	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-190	12/30/2009	42.4		Yes	Y				0.949	0.502	pg/g

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PCM-04DS-091209	P1905_7437_PCB_006	PCB-189	12/30/2009	8.49		Yes	Y				0.949	0.821	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-188	12/30/2009	0.706		Yes	Y	J			0.949	0.132	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-041	12/30/2009	38.2		Yes	Y				0.949	0.339	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-187	12/30/2009	331		Yes	Y				0.949	0.538	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-186	12/30/2009	0.949		Yes	N	U			0.949	0.14	pg/g
PCM-04DS-091209	P1905_7437_PCB_006	PCB-194	12/30/2009	142		Yes	Y				0.949	1.4	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-111	12/30/2009	1.18		Yes	Y				0.999	0.165	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-112	12/30/2009	0.999		Yes	N	U			0.999	0.201	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-110	12/30/2009	928		Yes	Y				0.999	0.188	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-114	12/30/2009	14.3		Yes	Y				0.999	0.174	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-115	12/30/2009	13.2		Yes	Y				0.999	0.18	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-117	12/30/2009	22.5		Yes	Y				0.999	0.247	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-118	12/30/2009	763		Yes	Y				0.999	0.164	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-120	12/30/2009	8.29		Yes	Y				0.999	0.192	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-122	12/30/2009	9.37		Yes	Y				0.999	0.203	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-102	12/30/2009	28.4		Yes	Y				0.999	0.288	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-123	12/30/2009	11.8		Yes	Y				0.999	0.188	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-126	12/30/2009	3.44		Yes	Y				0.999	1.18	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-121	12/30/2009	0.719		Yes	Y	J			0.999	0.163	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-109	12/30/2009	67.4		Yes	Y				0.999	0.171	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-107/124	12/30/2009	26.9		Yes	Y	C			2	0.197	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-106	12/30/2009	0.999		Yes	N	U			0.999	0.201	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-105	12/30/2009	269		Yes	Y				0.999	0.193	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-103	12/30/2009	17.7		Yes	Y				0.999	0.227	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-099	12/30/2009	426		Yes	Y				0.999	0.21	pg/g

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PCM-06DS-091209	P1905_7437_PCB_005	PCB-098	12/30/2009	2.21	Yes	Y				0.999	0.243	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-096	12/30/2009	10.2	Yes	Y				0.999	0.164	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-093/100	12/30/2009	20.7	Yes	Y	C			2	0.251	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-127	12/30/2009	0.999	Yes	N	U			0.999	0.217	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-144	12/30/2009	83.3	Yes	Y				0.999	0.285	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-095	12/30/2009	603	Yes	Y				0.999	0.231	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-094	12/30/2009	5.78	Yes	Y				0.999	0.237	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-104	12/30/2009	1.15	Yes	Y				0.999	0.147	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-143	12/30/2009	2.25	Yes	Y				0.999	0.235	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-158	12/30/2009	146	Yes	Y				0.999	0.214	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-092	12/30/2009	204	Yes	Y				0.999	0.282	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-023	12/30/2009	0.999	Yes	N	U			0.999	0.429	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-156/157	12/30/2009	153	Yes	Y	C			2	1.98	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-155	12/30/2009	0.683	Yes	Y	J			0.999	0.21	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-154	12/30/2009	27.4	Yes	Y				0.999	0.254	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-153/168	12/30/2009	1420	Yes	Y	C			2	0.193	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-152	12/30/2009	1.76	Yes	Y	EMPC	J	23	0.999	0.21	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-150	12/30/2009	4.24	Yes	Y				0.999	0.178	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-148	12/30/2009	4.08	Yes	Y				0.999	0.238	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-147/149	12/30/2009	1220	Yes	Y	C			2	0.24	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-142	12/30/2009	0.764	Yes	Y	J			0.999	0.26	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-145	12/30/2009	0.999	Yes	N	U			0.999	0.241	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-128/166	12/30/2009	203	Yes	Y	C			2	1.63	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-141	12/30/2009	334	Yes	Y				0.999	0.268	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-139/140	12/30/2009	18.3	Yes	Y	C			2	0.251	pg/g

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PCM-06DS-091209	P1905_7437_PCB_005	PCB-137	12/30/2009	32.9		Yes	Y				0.999	0.248	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-136	12/30/2009	246		Yes	Y				0.999	0.237	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-135/151	12/30/2009	620		Yes	Y	C			2	0.279	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-134	12/30/2009	77.8		Yes	Y				0.999	0.352	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-133	12/30/2009	32		Yes	Y				0.999	0.319	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-132	12/30/2009	432		Yes	Y				0.999	0.274	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-131	12/30/2009	12.3		Yes	Y				0.999	0.283	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-130	12/30/2009	81		Yes	Y				0.999	0.321	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-129/138/163	12/30/2009	1590		Yes	Y	C			3	0.25	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-146	12/30/2009	254		Yes	Y				0.999	0.236	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Monochlorobiphenyls (total)	12/30/2009	32.8		Yes	Y				0	0.512	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-164	12/30/2009	103		Yes	Y				0.999	0.196	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-003	12/30/2009	11.1		Yes	Y				0.999	0.297	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-091	12/30/2009	98.7		Yes	Y				0.999	0.197	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-001	12/30/2009	10.6		Yes	Y				0.999	0.727	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Octachlorobiphenyls (total)	12/30/2009	1670		Yes	Y				0	0.905	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-006	12/30/2009	16.5		Yes	Y	SI			0.999	0.431	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Heptachlorobiphenyls (total)	12/30/2009	5530		Yes	Y				0	0.892	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-007	12/30/2009	2.62		Yes	Y	SI			0.999	0.455	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Tetrachlorobiphenyls (total)	12/30/2009	3690		Yes	Y				0	0.498	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-171/173	12/30/2009	200		Yes	Y	C			2	1.25	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-170	12/30/2009	614		Yes	Y				0.999	1.27	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-169	12/30/2009	0.999		Yes	N	U			0.999	1.79	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-167	12/30/2009	56.3		Yes	Y				0.999	1.42	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-174	12/30/2009	686		Yes	Y				0.999	1.14	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_PCB_005	Nonachlorobiphenyls (total)	12/30/2009	342		Yes	Y				0	1.16	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-015	12/30/2009	89		Yes	Y	SI			0.999	0.51	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-172	12/30/2009	108		Yes	Y				0.999	1.27	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-021/033	12/30/2009	120		Yes	Y	C			2	0.451	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-020/028	12/30/2009	318		Yes	Y	C			2	0.451	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-019	12/30/2009	43.6		Yes	Y				0.999	0.235	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-018/030	12/30/2009	172		Yes	Y	C			2	0.186	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-005	12/30/2009	1.7		Yes	Y	SI			0.999	0.527	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-016	12/30/2009	65.3		Yes	Y				0.999	0.235	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-162	12/30/2009	3.4		Yes	Y				0.999	1.15	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-014	12/30/2009	0.999		Yes	N	U			0.999	0.43	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-012/013	12/30/2009	10.8		Yes	Y	C SI			2	0.485	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-011	12/30/2009	221		Yes	Y	SI			0.999	0.499	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-010	12/30/2009	2.02		Yes	Y	SI			0.999	0.366	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-009	12/30/2009	4.77		Yes	Y	SI			0.999	0.478	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-008	12/30/2009	81.1		Yes	Y	SI			0.999	0.482	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-017	12/30/2009	79		Yes	Y				0.999	0.185	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-195	12/30/2009	194		Yes	Y				0.999	1.71	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-165	12/30/2009	0.953		Yes	Y	J			0.999	0.233	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-202	12/30/2009	83.6		Yes	Y				0.999	0.44	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-201	12/30/2009	56.1		Yes	Y				0.999	0.415	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-200	12/30/2009	74.1		Yes	Y				0.999	0.443	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-198/199	12/30/2009	358		Yes	Y	C			2	0.497	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-204	12/30/2009	0.999		Yes	N	U			0.999	0.401	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-196	12/30/2009	187		Yes	Y				0.999	0.526	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_PCB_005	PCB-205	12/30/2009	21.8	Yes	Y				0.999	1.37	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-194	12/30/2009	447	Yes	Y				0.999	1.69	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-192	12/30/2009	0.999	Yes	N	U			0.999	1.04	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-191	12/30/2009	26.7	Yes	Y				0.999	1.08	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-190	12/30/2009	136	Yes	Y				0.999	1.04	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-189	12/30/2009	24.8	Yes	Y				0.999	0.845	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-025	12/30/2009	25.7	Yes	Y				0.999	0.442	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-197	12/30/2009	0.999	Yes	N	U			0.999	0.371	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Dichlorobiphenyls (total)	12/30/2009	474	Yes	Y				0	0.508	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-161	12/30/2009	0.999	Yes	N	U			0.999	0.234	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-160	12/30/2009	0.999	Yes	N	U			0.999	0.193	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-159	12/30/2009	0.999	Yes	N	U			0.999	1.41	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-188	12/30/2009	1.26	Yes	Y				0.999	0.181	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Hexachlorobiphenyls (total)	12/30/2009	7160	Yes	Y				0	1.35	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-203	12/30/2009	246	Yes	Y				0.999	0.482	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Trichlorobiphenyls (total)	12/30/2009	1450	Yes	Y				0	0.378	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-004	12/30/2009	44.7	Yes	Y	SI			0.999	0.506	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-086/087/097/108/119/125	12/30/2009	529	Yes	Y	C			5.99	0.218	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-061/070/074/076	12/30/2009	758	Yes	Y	C			4	0.806	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-209	12/30/2009	505	Yes	Y				0.999	1.29	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-208	12/30/2009	55.5	Yes	Y				0.999	0.908	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-207	12/30/2009	23.7	Yes	Y				0.999	0.864	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-206	12/30/2009	263	Yes	Y				0.999	1.42	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	Pentachlorobiphenyls (total)	12/30/2009	5590	Yes	Y				0	0.341	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-085/116	12/30/2009	109	Yes	Y	C			2	0.187	pg/g

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Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_PCB_005	PCB-048	12/30/2009	73.1	Yes	Y				0.999	0.2	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-081	12/30/2009	1.89	Yes	Y				0.999	0.884	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-002	12/30/2009	11.2	Yes	Y				0.999	0.274	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-082	12/30/2009	89.1	Yes	Y				0.999	0.283	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-175	12/30/2009	31.6	Yes	Y				0.999	1.27	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-079	12/30/2009	5.24	Yes	Y				0.999	0.807	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-084	12/30/2009	175	Yes	Y				0.999	0.267	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-078	12/30/2009	0.999	Yes	N	U			0.999	0.905	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-088	12/30/2009	0.999	Yes	N	U			0.999	0.247	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-089	12/30/2009	10	Yes	Y				0.999	0.273	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-052	12/30/2009	513	Yes	Y				0.999	0.188	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-057	12/30/2009	2.04	Yes	Y				0.999	0.882	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-051	12/30/2009	38.2	Yes	Y				0.999	0.209	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-049/069	12/30/2009	303	Yes	Y	C			2	0.173	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-083	12/30/2009	57.1	Yes	Y				0.999	0.296	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-064	12/30/2009	165	Yes	Y				0.999	0.137	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-056	12/30/2009	179	Yes	Y				0.999	0.794	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-058	12/30/2009	1.6	Yes	Y	EMPC	J	23	0.999	0.84	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-055	12/30/2009	4.19	Yes	Y				0.999	0.814	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-059/062/075	12/30/2009	32.9	Yes	Y	C			3	0.149	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-054	12/30/2009	8.7	Yes	Y				0.999	0.261	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-080	12/30/2009	0.999	Yes	N	U			0.999	0.675	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-063	12/30/2009	14.9	Yes	Y				0.999	0.716	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-050/053	12/30/2009	85.4	Yes	Y	C			2	0.223	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-066	12/30/2009	397	Yes	Y				0.999	0.726	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_PCB_005	PCB-067	12/30/2009	11.1	Yes	Y				0.999	0.739	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-068	12/30/2009	4.74	Yes	Y				0.999	0.691	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-072	12/30/2009	7.56	Yes	Y				0.999	0.86	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-073	12/30/2009	1.92	Yes	Y	EMPC	J	23	0.999	0.17	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-077	12/30/2009	51.9	Yes	Y				0.999	0.933	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-060	12/30/2009	82	Yes	Y				0.999	0.827	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-184	12/30/2009	1.04	Yes	Y				0.999	0.199	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-090/101/113	12/30/2009	1060	Yes	Y	C			3	0.246	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-031	12/30/2009	271	Yes	Y				0.999	0.461	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-027	12/30/2009	17.1	Yes	Y				0.999	0.174	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-026/029	12/30/2009	54.8	Yes	Y	C			2	0.486	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-187	12/30/2009	858	Yes	Y				0.999	1.09	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-024	12/30/2009	1.41	Yes	Y				0.999	0.157	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-186	12/30/2009	0.999	Yes	N	U			0.999	0.192	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-032	12/30/2009	62	Yes	Y				0.999	0.146	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-185	12/30/2009	52.1	Yes	Y				0.999	1.03	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-034	12/30/2009	2.07	Yes	Y				0.999	0.554	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-183	12/30/2009	429	Yes	Y				0.999	1.1	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-182	12/30/2009	2.62	Yes	Y				0.999	1.19	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-181	12/30/2009	13.8	Yes	Y				0.999	1.32	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-180/193	12/30/2009	1440	Yes	Y	C			2	0.993	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-179	12/30/2009	293	Yes	Y				0.999	0.174	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-178	12/30/2009	140	Yes	Y				0.999	0.239	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-177	12/30/2009	383	Yes	Y				0.999	1.2	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-176	12/30/2009	82.3	Yes	Y				0.999	0.162	pg/g

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Analytical Method	E1668A												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06DS-091209	P1905_7437_PCB_005	PCB-022	12/30/2009	89.7	Yes	Y				0.999	0.462	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-035	12/30/2009	7.89	Yes	Y				0.999	0.54	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-036	12/30/2009	1.66	Yes	Y				0.999	0.488	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-037	12/30/2009	118	Yes	Y				0.999	0.522	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-038	12/30/2009	0.999	Yes	N	U			0.999	0.582	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-039	12/30/2009	1.6	Yes	Y				0.999	0.413	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-040/071	12/30/2009	185	Yes	Y	C			2	0.192	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-045	12/30/2009	46.4	Yes	Y				0.999	0.202	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-044/047/065	12/30/2009	532	Yes	Y	C			3	0.208	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-046	12/30/2009	21.9	Yes	Y				0.999	0.223	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-043	12/30/2009	14.7	Yes	Y				0.999	0.248	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-042	12/30/2009	121	Yes	Y				0.999	0.237	pg/g
PCM-06DS-091209	P1905_7437_PCB_005	PCB-041	12/30/2009	30.1	Yes	Y				0.999	0.25	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-162	12/30/2009	3.13	Yes	Y				0.957	0.827	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-136	12/30/2009	150	Yes	Y				0.957	0.178	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-167	12/30/2009	44.3	Yes	Y				0.957	1.02	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-169	12/30/2009	0.957	Yes	N	U			0.957	1.21	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-164	12/30/2009	63.8	Yes	Y				0.957	0.164	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-161	12/30/2009	0.957	Yes	N	U			0.957	0.196	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-160	12/30/2009	0.957	Yes	N	U			0.957	0.161	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-165	12/30/2009	0.817	Yes	Y	J EMPC	J	23	0.957	0.195	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-142	12/30/2009	0.793	Yes	Y	J EMPC	J	23	0.957	0.217	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-061/070/074/076	12/30/2009	631	Yes	Y	C			3.83	0.652	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-122	12/30/2009	7.82	Yes	Y				0.957	0.225	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-123	12/30/2009	10.6	Yes	Y				0.957	0.21	pg/g

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Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-126	12/30/2009	2.99	Yes	Y				0.957	0.689	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-127	12/30/2009	0.957	Yes	N	U			0.957	0.223	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-128/166	12/30/2009	176	Yes	Y	C			1.91	1.17	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-129/138/163	12/30/2009	1070	Yes	Y	C			2.87	0.21	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-130	12/30/2009	66.8	Yes	Y				0.957	0.269	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-131	12/30/2009	9.68	Yes	Y				0.957	0.237	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-132	12/30/2009	290	Yes	Y				0.957	0.229	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-133	12/30/2009	22.6	Yes	Y				0.957	0.267	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-134	12/30/2009	54.9	Yes	Y				0.957	0.295	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-135/151	12/30/2009	374	Yes	Y	C			1.91	0.233	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-139/140	12/30/2009	15.7	Yes	Y	C			1.91	0.21	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-148	12/30/2009	3.39	Yes	Y				0.957	0.199	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-158	12/30/2009	101	Yes	Y				0.957	0.179	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-156/157	12/30/2009	128	Yes	Y	C			1.91	1.35	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-155	12/30/2009	0.505	Yes	Y	J			0.957	0.157	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-154	12/30/2009	20.2	Yes	Y				0.957	0.213	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-153/168	12/30/2009	810	Yes	Y	C			1.91	0.161	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-137	12/30/2009	38.9	Yes	Y				0.957	0.208	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-150	12/30/2009	3.08	Yes	Y				0.957	0.134	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-141	12/30/2009	182	Yes	Y				0.957	0.224	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-147/149	12/30/2009	742	Yes	Y	C			1.91	0.201	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-146	12/30/2009	168	Yes	Y				0.957	0.198	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-145	12/30/2009	0.374	Yes	Y	J			0.957	0.181	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-144	12/30/2009	47.6	Yes	Y				0.957	0.238	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-143	12/30/2009	0.957	Yes	N	U			0.957	0.196	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-159	12/30/2009	0.957	Yes	N	U			0.957	1.02	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-152	12/30/2009	1.3	Yes	Y	EMPC	J	23	0.957	0.158	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-203	12/30/2009	110	Yes	Y				0.957	0.376	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-192	12/30/2009	0.957	Yes	N	U			0.957	0.735	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-194	12/30/2009	187	Yes	Y				0.957	1	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-195	12/30/2009	75.9	Yes	Y				0.957	1.02	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-196	12/30/2009	79.1	Yes	Y				0.957	0.41	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-197	12/30/2009	5.56	Yes	Y				0.957	0.289	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-198/199	12/30/2009	166	Yes	Y	C			1.91	0.388	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-200	12/30/2009	23.2	Yes	Y				0.957	0.346	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-208	12/30/2009	38	Yes	Y				0.957	0.624	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-202	12/30/2009	42.5	Yes	Y				0.957	0.343	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-189	12/30/2009	12	Yes	Y				0.957	0.66	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-204	12/30/2009	0.957	Yes	N	U			0.957	0.313	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-205	12/30/2009	8.99	Yes	Y				0.957	0.815	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-206	12/30/2009	127	Yes	Y				0.957	0.915	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-207	12/30/2009	14.9	Yes	Y				0.957	0.594	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-121	12/30/2009	0.65	Yes	Y	J			0.957	0.183	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-209	12/30/2009	150	Yes	Y				0.957	0.758	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-086/087/097/108/119/125	12/30/2009	418	Yes	Y	C			5.74	0.244	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-201	12/30/2009	24.8	Yes	Y				0.957	0.323	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-181	12/30/2009	9.17	Yes	Y				0.957	0.931	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-171/173	12/30/2009	88.8	Yes	Y	C			1.91	0.885	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-172	12/30/2009	49.5	Yes	Y				0.957	0.896	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-174	12/30/2009	298	Yes	Y				0.957	0.807	pg/g

Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-175	12/30/2009	14.5	Yes	Y				0.957	0.901	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-176	12/30/2009	34.5	Yes	Y				0.957	0.0945	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-177	12/30/2009	176	Yes	Y				0.957	0.846	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-178	12/30/2009	66.3	Yes	Y				0.957	0.139	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-191	12/30/2009	11.9	Yes	Y				0.957	0.767	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-180/193	12/30/2009	605	Yes	Y	C			1.91	0.702	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-190	12/30/2009	61.7	Yes	Y				0.957	0.785	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-182	12/30/2009	2.15	Yes	Y				0.957	0.84	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-183	12/30/2009	179	Yes	Y				0.957	0.78	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-184	12/30/2009	0.737	Yes	Y	J			0.957	0.116	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-185	12/30/2009	21	Yes	Y				0.957	0.727	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-186	12/30/2009	0.957	Yes	N	U			0.957	0.112	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-187	12/30/2009	402	Yes	Y				0.957	0.767	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-188	12/30/2009	1.13	Yes	Y				0.957	0.105	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-170	12/30/2009	274	Yes	Y				0.957	0.963	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-179	12/30/2009	132	Yes	Y				0.957	0.101	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-018/030	12/30/2009	153	Yes	Y	C			1.91	0.135	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-005	12/30/2009	1.55	Yes	Y	SI			0.957	0.384	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-006	12/30/2009	22.9	Yes	Y	SI			0.957	0.315	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-007	12/30/2009	3.87	Yes	Y	SI			0.957	0.332	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-008	12/30/2009	110	Yes	Y	SI			0.957	0.351	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-009	12/30/2009	5.36	Yes	Y	SI			0.957	0.348	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-010	12/30/2009	1.88	Yes	Y	SI			0.957	0.261	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-011	12/30/2009	193	Yes	Y	SI			0.957	0.364	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-012/013	12/30/2009	11.9	Yes	Y	C SI			1.91	0.354	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-014	12/30/2009	0.957		Yes	N	U			0.957	0.314	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-015	12/30/2009	99.2		Yes	Y	SI			0.957	0.372	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-034	12/30/2009	1.86		Yes	Y				0.957	0.376	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-017	12/30/2009	68		Yes	Y				0.957	0.135	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-002	12/30/2009	10.1		Yes	Y				0.957	0.176	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-019	12/30/2009	35.6		Yes	Y				0.957	0.171	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-020/028	12/30/2009	283		Yes	Y	C			1.91	0.305	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-021/033	12/30/2009	110		Yes	Y	C			1.91	0.306	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-022	12/30/2009	82.5		Yes	Y				0.957	0.313	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-023	12/30/2009	0.181		Yes	Y				0.957	0.291	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-024	12/30/2009	1.42		Yes	Y				0.957	0.115	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-025	12/30/2009	24.1		Yes	Y				0.957	0.3	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-057	12/30/2009	1.66		Yes	Y				0.957	0.713	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-027	12/30/2009	15		Yes	Y				0.957	0.127	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-120	12/30/2009	3.88		Yes	Y				0.957	0.215	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-032	12/30/2009	55.8		Yes	Y				0.957	0.107	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-016	12/30/2009	61.6		Yes	Y				0.957	0.171	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-054	12/30/2009	6.53		Yes	Y				0.957	0.163	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-039	12/30/2009	1.62		Yes	Y				0.957	0.28	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-040/071	12/30/2009	152		Yes	Y	C			1.91	0.142	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-041	12/30/2009	27.6		Yes	Y				0.957	0.185	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-042	12/30/2009	99.7		Yes	Y				0.957	0.175	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-043	12/30/2009	11.5		Yes	Y				0.957	0.183	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-044/047/065	12/30/2009	431		Yes	Y	C			2.87	0.154	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-045	12/30/2009	38.8		Yes	Y				0.957	0.149	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-046	12/30/2009	17.7	Yes	Y				0.957	0.165	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-048	12/30/2009	59.8	Yes	Y				0.957	0.148	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-049/069	12/30/2009	242	Yes	Y	C			1.91	0.128	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-050/053	12/30/2009	65.7	Yes	Y	C			1.91	0.165	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-004	12/30/2009	46.8	Yes	Y	SI			0.957	0.362	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-052	12/30/2009	415	Yes	Y				0.957	0.139	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-003	12/30/2009	18.6	Yes	Y				0.957	0.192	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-055	12/30/2009	4.31	Yes	Y				0.957	0.658	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Trichlorobiphenyls (total)	12/30/2009	1310	Yes	Y				0	0.262	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Pentachlorobiphenyls (total)	12/30/2009	4270	Yes	Y				0	0.266	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Hexachlorobiphenyls (total)	12/30/2009	4590	Yes	Y				0	0.934	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Tetrachlorobiphenyls (total)	12/30/2009	3050	Yes	Y				0	0.38	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Monochlorobiphenyls (total)	12/30/2009	47.9	Yes	Y				0	0.56	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Heptachlorobiphenyls (total)	12/30/2009	2440	Yes	Y				0	0.641	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Nonachlorobiphenyls (total)	12/30/2009	180	Yes	Y				0	0.77	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Octachlorobiphenyls (total)	12/30/2009	722	Yes	Y				0	0.579	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-001	12/30/2009	19.2	Yes	Y				0.957	0.927	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-031	12/30/2009	243	Yes	Y				0.957	0.312	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-051	12/30/2009	30.3	Yes	Y				0.957	0.154	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-104	12/30/2009	0.936	Yes	Y	J			0.957	0.117	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-089	12/30/2009	7.78	Yes	Y				0.957	0.305	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-035	12/30/2009	6.92	Yes	Y				0.957	0.366	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-091	12/30/2009	77.5	Yes	Y				0.957	0.221	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-026/029	12/30/2009	51.1	Yes	Y	C			1.91	0.33	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-093/100	12/30/2009	15.2	Yes	Y	C			1.91	0.281	pg/g

SDG: P1905

Analytical Method	E1668A												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-094	12/30/2009	4.57		Yes	Y				0.957	0.266	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-095	12/30/2009	469		Yes	Y				0.957	0.258	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-096	12/30/2009	7.67		Yes	Y				0.957	0.131	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-098	12/30/2009	0.623		Yes	Y	J			0.957	0.272	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-099	12/30/2009	294		Yes	Y				0.957	0.235	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-088	12/30/2009	0.957		Yes	N	U			0.957	0.277	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-103	12/30/2009	12.3		Yes	Y				0.957	0.254	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-090/101/113	12/30/2009	765		Yes	Y	C			2.87	0.276	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-105	12/30/2009	244		Yes	Y				0.957	0.199	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-106	12/30/2009	0.957		Yes	N	U			0.957	0.224	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-107/124	12/30/2009	24.1		Yes	Y	C			1.91	0.221	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-109	12/30/2009	45.8		Yes	Y				0.957	0.191	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-110	12/30/2009	727		Yes	Y				0.957	0.211	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-111	12/30/2009	0.723		Yes	Y	J EMPC	J	23	0.957	0.184	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-112	12/30/2009	0.957		Yes	N	U			0.957	0.225	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-114	12/30/2009	12.5		Yes	Y				0.957	0.194	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-115	12/30/2009	8.2		Yes	Y				0.957	0.202	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-117	12/30/2009	15.4		Yes	Y				0.957	0.276	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-118	12/30/2009	582		Yes	Y				0.957	0.188	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-102	12/30/2009	23.9		Yes	Y				0.957	0.323	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-060	12/30/2009	73.4		Yes	Y				0.957	0.669	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-036	12/30/2009	1.5		Yes	Y				0.957	0.331	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-037	12/30/2009	110		Yes	Y				0.957	0.354	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-038	12/30/2009	0.604		Yes	Y	J			0.957	0.394	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	Dichlorobiphenyls (total)	12/30/2009	497		Yes	Y				0	0.367	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09DS-091209	P1905_7437_PCB_004	PCB-056	12/30/2009	156		Yes	Y				0.957	0.642	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-092	12/30/2009	147		Yes	Y				0.957	0.316	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-059/062/075	12/30/2009	27.7		Yes	Y	C			2.87	0.11	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-085/116	12/30/2009	91.4		Yes	Y	C			1.91	0.21	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-063	12/30/2009	12.4		Yes	Y				0.957	0.578	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-064	12/30/2009	137		Yes	Y				0.957	0.101	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-066	12/30/2009	329		Yes	Y				0.957	0.587	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-081	12/30/2009	1.61		Yes	Y				0.957	0.714	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-084	12/30/2009	140		Yes	Y				0.957	0.299	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-058	12/30/2009	1.75		Yes	Y				0.957	0.679	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-082	12/30/2009	73.9		Yes	Y				0.957	0.317	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-067	12/30/2009	9.72		Yes	Y				0.957	0.598	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-080	12/30/2009	0.957		Yes	N	U			0.957	0.546	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-068	12/30/2009	3.75		Yes	Y				0.957	0.558	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-078	12/30/2009	0.957		Yes	N	U			0.957	0.731	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-077	12/30/2009	47.3		Yes	Y				0.957	0.717	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-073	12/30/2009	1.68		Yes	Y				0.957	0.126	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-072	12/30/2009	6.74		Yes	Y				0.957	0.695	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-079	12/30/2009	4.16		Yes	Y				0.957	0.653	pg/g
PCM-09DS-091209	P1905_7437_PCB_004	PCB-083	12/30/2009	38.1		Yes	Y				0.957	0.331	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Heptachlorobiphenyls (total)	12/30/2009	2690		Yes	Y				0	0.641	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Monochlorobiphenyls (total)	12/30/2009	22.6		Yes	Y				0	0.511	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Tetrachlorobiphenyls (total)	12/30/2009	1860		Yes	Y				0	0.349	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Hexachlorobiphenyls (total)	12/30/2009	4720		Yes	Y	EMPC	J	23	0	0.906	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Pentachlorobiphenyls (total)	12/30/2009	3000		Yes	Y				0	0.289	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	Dichlorobiphenyls (total)	12/30/2009	280	Yes	Y				0	0.343	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-092	12/30/2009	110	Yes	Y				0.974	0.38	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Nonachlorobiphenyls (total)	12/30/2009	144	Yes	Y				0	0.723	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Trichlorobiphenyls (total)	12/30/2009	777	Yes	Y	EMPC	J	23	0	0.303	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-170	12/30/2009	302	Yes	Y				0.974	0.967	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-156/157	12/30/2009	87.4	Yes	Y	C			1.95	1.3	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-158	12/30/2009	86.2	Yes	Y				0.974	0.138	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-159	12/30/2009	0.974	Yes	N	U			0.974	1.04	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-160	12/30/2009	0.974	Yes	N	U			0.974	0.124	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-161	12/30/2009	0.974	Yes	N	U			0.974	0.15	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-162	12/30/2009	1.95	Yes	Y				0.974	0.847	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-164	12/30/2009	64	Yes	Y				0.974	0.126	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-165	12/30/2009	1.44	Yes	Y	EMPC	J	23	0.974	0.15	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-180/193	12/30/2009	657	Yes	Y	C			1.95	0.694	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-169	12/30/2009	0.974	Yes	N	U			0.974	1.11	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-153/168	12/30/2009	917	Yes	Y	C			1.95	0.124	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-171/173	12/30/2009	92.8	Yes	Y	C			1.95	0.874	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-172	12/30/2009	48.9	Yes	Y				0.974	0.885	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-174	12/30/2009	307	Yes	Y				0.974	0.798	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-175	12/30/2009	13.4	Yes	Y				0.974	0.89	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-176	12/30/2009	46.1	Yes	Y				0.974	0.114	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-177	12/30/2009	210	Yes	Y				0.974	0.836	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-178	12/30/2009	85.2	Yes	Y				0.974	0.169	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-129/138/163	12/30/2009	982	Yes	Y	C			2.92	0.161	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-167	12/30/2009	32.3	Yes	Y				0.974	1.05	pg/g

Analytical Method	E1668A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-142	12/30/2009	0.974	Yes	N	U			0.974	0.167	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-090/101/113	12/30/2009	604	Yes	Y	C			2.92	0.332	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-131	12/30/2009	6.77	Yes	Y				0.974	0.182	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-132	12/30/2009	275	Yes	Y				0.974	0.176	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-133	12/30/2009	44.7	Yes	Y				0.974	0.205	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-134	12/30/2009	48	Yes	Y				0.974	0.226	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-135/151	12/30/2009	417	Yes	Y	C			1.95	0.179	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-136	12/30/2009	170	Yes	Y				0.974	0.193	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-137	12/30/2009	19.1	Yes	Y				0.974	0.16	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-155	12/30/2009	0.512	Yes	Y	J			0.974	0.171	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-141	12/30/2009	180	Yes	Y				0.974	0.172	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-154	12/30/2009	50.9	Yes	Y				0.974	0.163	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-143	12/30/2009	0.932	Yes	Y	J			0.974	0.151	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-144	12/30/2009	46.1	Yes	Y				0.974	0.183	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-145	12/30/2009	0.974	Yes	N	U			0.974	0.197	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-146	12/30/2009	290	Yes	Y				0.974	0.152	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-147/149	12/30/2009	782	Yes	Y	C			1.95	0.154	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-148	12/30/2009	10.4	Yes	Y				0.974	0.153	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-150	12/30/2009	4.39	Yes	Y				0.974	0.145	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-152	12/30/2009	1.2	Yes	Y				0.974	0.172	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-181	12/30/2009	5.82	Yes	Y				0.974	0.92	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-139/140	12/30/2009	26.6	Yes	Y	C			1.95	0.161	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-106	12/30/2009	0.974	Yes	N	U			0.974	0.27	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-206	12/30/2009	100	Yes	Y				0.974	0.854	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-207	12/30/2009	12.7	Yes	Y				0.974	0.564	pg/g

Analytical Method	E1668A												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-208	12/30/2009	30.9		Yes	Y				0.974	0.592	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-209	12/30/2009	101		Yes	Y				0.974	0.769	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-061/070/074/076	12/30/2009	395		Yes	Y	C			3.89	0.518	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-086/087/097/108/119/125	12/30/2009	274		Yes	Y	C			5.84	0.293	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-111	12/30/2009	1.7		Yes	Y				0.974	0.222	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-110	12/30/2009	512		Yes	Y				0.974	0.254	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-179	12/30/2009	165		Yes	Y				0.974	0.122	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-107/124	12/30/2009	15		Yes	Y	C			1.95	0.266	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-203	12/30/2009	118		Yes	Y				0.974	0.51	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-105	12/30/2009	156		Yes	Y				0.974	0.256	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-104	12/30/2009	1.11		Yes	Y				0.974	0.143	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-103	12/30/2009	11.7		Yes	Y				0.974	0.305	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-102	12/30/2009	15.2		Yes	Y				0.974	0.388	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-099	12/30/2009	214		Yes	Y				0.974	0.283	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-098	12/30/2009	0.624		Yes	Y	J EMPC	J	23	0.974	0.328	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-096	12/30/2009	6.32		Yes	Y				0.974	0.16	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-095	12/30/2009	318		Yes	Y				0.974	0.311	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-109	12/30/2009	33.3		Yes	Y				0.974	0.23	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-192	12/30/2009	0.974		Yes	N	U			0.974	0.727	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-182	12/30/2009	2.7		Yes	Y				0.974	0.83	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-183	12/30/2009	181		Yes	Y				0.974	0.77	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-184	12/30/2009	0.562		Yes	Y	J			0.974	0.141	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-185	12/30/2009	31.7		Yes	Y				0.974	0.718	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-186	12/30/2009	0.974		Yes	N	U			0.974	0.135	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-187	12/30/2009	449		Yes	Y				0.974	0.758	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-188	12/30/2009	0.869		Yes	Y	J			0.974	0.128	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-189	12/30/2009	12.5		Yes	Y				0.974	0.663	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-205	12/30/2009	8.93		Yes	Y				0.974	0.824	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-191	12/30/2009	12.9		Yes	Y				0.974	0.757	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-204	12/30/2009	0.974		Yes	N	U			0.974	0.425	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-194	12/30/2009	192		Yes	Y				0.974	1.01	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-195	12/30/2009	77		Yes	Y				0.974	1.03	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-196	12/30/2009	90.9		Yes	Y				0.974	0.557	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-197	12/30/2009	7.62		Yes	Y				0.974	0.393	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-198/199	12/30/2009	186		Yes	Y	C			1.95	0.527	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-200	12/30/2009	25.9		Yes	Y				0.974	0.47	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-201	12/30/2009	27.1		Yes	Y				0.974	0.439	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-202	12/30/2009	42.5		Yes	Y				0.974	0.466	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-128/166	12/30/2009	118		Yes	Y	C			1.95	1.2	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-190	12/30/2009	67.9		Yes	Y				0.974	0.788	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-038	12/30/2009	0.974		Yes	N	U			0.974	0.354	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-024	12/30/2009	0.898		Yes	Y	J EMPC	J	23	0.974	0.193	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-025	12/30/2009	14.2		Yes	Y				0.974	0.269	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-026/029	12/30/2009	28.4		Yes	Y	C			1.95	0.296	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-027	12/30/2009	10.1		Yes	Y				0.974	0.213	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-031	12/30/2009	141		Yes	Y				0.974	0.28	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-032	12/30/2009	33		Yes	Y				0.974	0.179	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-034	12/30/2009	1.12		Yes	Y				0.974	0.337	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-035	12/30/2009	4.45		Yes	Y				0.974	0.329	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-048	12/30/2009	33.3		Yes	Y				0.974	0.21	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-037	12/30/2009	65.9		Yes	Y				0.974	0.318	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-021/033	12/30/2009	62.7		Yes	Y	C			1.95	0.274	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-039	12/30/2009	1.19		Yes	Y				0.974	0.252	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-040/071	12/30/2009	83.7		Yes	Y	C			1.95	0.202	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-041	12/30/2009	16.1		Yes	Y				0.974	0.262	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-042	12/30/2009	57		Yes	Y				0.974	0.249	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-043	12/30/2009	6.51		Yes	Y				0.974	0.26	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-044/047/065	12/30/2009	260		Yes	Y	C			2.92	0.218	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-045	12/30/2009	19		Yes	Y				0.974	0.212	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-130	12/30/2009	52.2		Yes	Y				0.974	0.206	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-036	12/30/2009	0.715		Yes	Y	J			0.974	0.297	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-011	12/30/2009	146		Yes	Y	SI			0.974	0.256	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-001	12/30/2009	8.46		Yes	Y				0.974	0.787	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-002	12/30/2009	6.57		Yes	Y				0.974	0.216	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-003	12/30/2009	7.52		Yes	Y				0.974	0.235	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-004	12/30/2009	26.1		Yes	Y	SI			0.974	0.425	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-005	12/30/2009	0.752		Yes	Y	J SI			0.974	0.27	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-006	12/30/2009	7.63		Yes	Y	SI			0.974	0.221	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-007	12/30/2009	1.31		Yes	Y	SI			0.974	0.234	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-008	12/30/2009	40.2		Yes	Y	SI			0.974	0.247	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-023	12/30/2009	0.974		Yes	N	U			0.974	0.261	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-010	12/30/2009	1.32		Yes	Y	SI			0.974	0.307	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-022	12/30/2009	45.1		Yes	Y				0.974	0.281	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-012/013	12/30/2009	5.56		Yes	Y	C SI			1.95	0.249	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-014	12/30/2009	0.974		Yes	N	U			0.974	0.221	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-015	12/30/2009	48.7	Yes	Y	SI			0.974	0.262	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-016	12/30/2009	33.2	Yes	Y				0.974	0.287	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-017	12/30/2009	43.8	Yes	Y				0.974	0.227	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-018/030	12/30/2009	94.4	Yes	Y	C			1.95	0.227	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-019	12/30/2009	25.4	Yes	Y				0.974	0.288	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-020/028	12/30/2009	172	Yes	Y	C			1.95	0.274	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-049/069	12/30/2009	153	Yes	Y	C			1.95	0.182	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-009	12/30/2009	2.34	Yes	Y	B SI			0.974	0.245	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-114	12/30/2009	8.67	Yes	Y				0.974	0.237	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-046	12/30/2009	9.91	Yes	Y				0.974	0.234	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-083	12/30/2009	27.4	Yes	Y				0.974	0.398	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-084	12/30/2009	86.5	Yes	Y				0.974	0.359	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-085/116	12/30/2009	52.2	Yes	Y	C			1.95	0.252	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-088	12/30/2009	0.974	Yes	N	U			0.974	0.333	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-089	12/30/2009	4.42	Yes	Y				0.974	0.367	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-091	12/30/2009	54.3	Yes	Y				0.974	0.266	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-093/100	12/30/2009	13.9	Yes	Y	C			1.95	0.338	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-081	12/30/2009	1.01	Yes	Y				0.974	0.568	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-112	12/30/2009	0.974	Yes	N	U			0.974	0.27	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-080	12/30/2009	0.974	Yes	N	U			0.974	0.434	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-115	12/30/2009	5.29	Yes	Y				0.974	0.243	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-117	12/30/2009	16.5	Yes	Y				0.974	0.332	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-118	12/30/2009	387	Yes	Y				0.974	0.235	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-120	12/30/2009	5.17	Yes	Y				0.974	0.258	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-121	12/30/2009	0.752	Yes	Y	J			0.974	0.22	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-122	12/30/2009	4.92		Yes	Y				0.974	0.275	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-123	12/30/2009	6.72		Yes	Y				0.974	0.253	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-126	12/30/2009	2.29		Yes	Y				0.974	0.61	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-127	12/30/2009	0.974		Yes	N	U			0.974	0.287	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-094	12/30/2009	3.36		Yes	Y				0.974	0.319	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-063	12/30/2009	7.39		Yes	Y				0.974	0.46	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-050/053	12/30/2009	45.1		Yes	Y	C			1.95	0.234	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-051	12/30/2009	23.9		Yes	Y				0.974	0.219	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-052	12/30/2009	249		Yes	Y				0.974	0.197	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-054	12/30/2009	5.94		Yes	Y				0.974	0.176	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-055	12/30/2009	2.38		Yes	Y				0.974	0.522	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-056	12/30/2009	93.7		Yes	Y				0.974	0.51	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-057	12/30/2009	0.991		Yes	Y				0.974	0.567	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-058	12/30/2009	1.42		Yes	Y				0.974	0.539	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-082	12/30/2009	46.6		Yes	Y				0.974	0.381	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-060	12/30/2009	40.2		Yes	Y				0.974	0.531	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	Octachlorobiphenyls (total)	12/30/2009	777		Yes	Y				0	0.645	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-064	12/30/2009	76.1		Yes	Y				0.974	0.144	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-066	12/30/2009	210		Yes	Y				0.974	0.466	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-067	12/30/2009	5.9		Yes	Y				0.974	0.475	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-068	12/30/2009	2.52		Yes	Y				0.974	0.443	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-072	12/30/2009	4.1		Yes	Y				0.974	0.553	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-073	12/30/2009	1.59		Yes	Y	EMPC	J	23	0.974	0.179	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-077	12/30/2009	30.6		Yes	Y				0.974	0.569	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-078	12/30/2009	0.974		Yes	N	U			0.974	0.581	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14DS-091210	P1905_7437_PCB_003	PCB-079	12/30/2009	5.53		Yes	Y				0.974	0.518	pg/g
PCM-14DS-091210	P1905_7437_PCB_003	PCB-059/062/075	12/30/2009	15.7		Yes	Y	C			2.92	0.156	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Hexachlorobiphenyls (total)	12/30/2009	3220		Yes	Y				0	0.239	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-147/149	12/30/2009	548		Yes	Y	C			1.9	0.0393	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-135/151	12/30/2009	284		Yes	Y	C			1.9	0.0457	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-136	12/30/2009	122		Yes	Y				0.952	0.0387	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-137	12/30/2009	20.1		Yes	Y				0.952	0.0407	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-139/140	12/30/2009	10.3		Yes	Y	C			1.9	0.0412	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-141	12/30/2009	128		Yes	Y				0.952	0.044	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-142	12/30/2009	0.456		Yes	Y	J			0.952	0.0426	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-143	12/30/2009	0.952		Yes	N	U			0.952	0.0385	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-144	12/30/2009	33.5		Yes	Y				0.952	0.0468	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-105	12/30/2009	155		Yes	Y				0.952	0.0441	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-146	12/30/2009	125		Yes	Y				0.952	0.0388	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-132	12/30/2009	201		Yes	Y				0.952	0.0449	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-148	12/30/2009	3.15		Yes	Y				0.952	0.039	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-150	12/30/2009	3.32		Yes	Y				0.952	0.0291	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-152	12/30/2009	1.28		Yes	Y				0.952	0.0344	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-153/168	12/30/2009	584		Yes	Y	C			1.9	0.0317	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-154	12/30/2009	18		Yes	Y				0.952	0.0417	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-155	12/30/2009	0.522		Yes	Y	J			0.952	0.0343	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-156/157	12/30/2009	73.3		Yes	Y	C			1.9	0.336	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-158	12/30/2009	62.2		Yes	Y				0.952	0.0352	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-086/087/097/108/119/125	12/30/2009	282		Yes	Y	C			5.71	0.0492	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-145	12/30/2009	0.952		Yes	N	U			0.952	0.0394	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-121	12/30/2009	0.716	Yes	Y	J			0.952	0.0368	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-106	12/30/2009	0.952	Yes	N	U			0.952	0.0453	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-107/124	12/30/2009	14.7	Yes	Y	C			1.9	0.0445	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-109	12/30/2009	30.6	Yes	Y				0.952	0.0385	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-110	12/30/2009	508	Yes	Y				0.952	0.0425	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-111	12/30/2009	0.614	Yes	Y	J			0.952	0.0372	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-112	12/30/2009	0.952	Yes	N	U			0.952	0.0453	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-114	12/30/2009	7.76	Yes	Y				0.952	0.039	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-115	12/30/2009	2.85	Yes	Y				0.952	0.0407	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-117	12/30/2009	9.6	Yes	Y				0.952	0.0557	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-134	12/30/2009	38.4	Yes	Y				0.952	0.0578	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-120	12/30/2009	3.18	Yes	Y				0.952	0.0434	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-133	12/30/2009	17.5	Yes	Y				0.952	0.0524	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-122	12/30/2009	5.44	Yes	Y				0.952	0.0454	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-123	12/30/2009	6.77	Yes	Y				0.952	0.0423	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-126	12/30/2009	2.21	Yes	Y				0.952	0.22	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-127	12/30/2009	0.952	Yes	N	U			0.952	0.0497	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-128/166	12/30/2009	115	Yes	Y	C			1.9	0.313	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-129/138/163	12/30/2009	709	Yes	Y	C			2.86	0.0411	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-130	12/30/2009	42.4	Yes	Y				0.952	0.0527	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-131	12/30/2009	6.17	Yes	Y				0.952	0.0465	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-164	12/30/2009	43.9	Yes	Y				0.952	0.0321	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-118	12/30/2009	385	Yes	Y				0.952	0.0396	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-203	12/30/2009	95.5	Yes	Y				0.952	0.108	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-160	12/30/2009	0.952	Yes	N	U			0.952	0.0316	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-191	12/30/2009	9.56	Yes	Y				0.952	0.17	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-192	12/30/2009	0.952	Yes	N	U			0.952	0.163	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-194	12/30/2009	175	Yes	Y				0.952	0.308	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-195	12/30/2009	72.3	Yes	Y				0.952	0.312	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-196	12/30/2009	70.2	Yes	Y				0.952	0.117	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-197	12/30/2009	4.59	Yes	Y				0.952	0.0827	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-198/199	12/30/2009	147	Yes	Y	C			1.9	0.111	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-200	12/30/2009	22.4	Yes	Y				0.952	0.0989	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-189	12/30/2009	9.01	Yes	Y				0.952	0.21	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-202	12/30/2009	37.2	Yes	Y				0.952	0.0982	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-188	12/30/2009	0.986	Yes	Y				0.952	0.0269	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-204	12/30/2009	0.952	Yes	N	U			0.952	0.0896	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-205	12/30/2009	8.04	Yes	Y				0.952	0.25	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-206	12/30/2009	101	Yes	Y				0.952	0.204	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-207	12/30/2009	12.3	Yes	Y				0.952	0.122	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-208	12/30/2009	28.7	Yes	Y				0.952	0.128	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-209	12/30/2009	120	Yes	Y				0.952	0.157	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-061/070/074/076	12/30/2009	409	Yes	Y	C			3.81	0.135	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Dichlorobiphenyls (total)	12/30/2009	291	Yes	Y				0	0.147	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Trichlorobiphenyls (total)	12/30/2009	717	Yes	Y				0	0.0708	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-201	12/30/2009	21.5	Yes	Y				0.952	0.0925	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-178	12/30/2009	56.5	Yes	Y				0.952	0.0355	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-159	12/30/2009	0.952	Yes	N	U			0.952	0.271	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-165	12/30/2009	0.941	Yes	Y	J			0.952	0.0382	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-167	12/30/2009	26.6	Yes	Y				0.952	0.273	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-169	12/30/2009	0.952		Yes	N	U			0.952	0.312	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-170	12/30/2009	217		Yes	Y				0.952	0.213	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-171/173	12/30/2009	68.8		Yes	Y	C			1.9	0.197	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-172	12/30/2009	40.1		Yes	Y				0.952	0.199	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-174	12/30/2009	241		Yes	Y				0.952	0.179	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-175	12/30/2009	11.4		Yes	Y				0.952	0.2	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-190	12/30/2009	49.1		Yes	Y				0.952	0.174	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-177	12/30/2009	140		Yes	Y				0.952	0.188	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-162	12/30/2009	1.47		Yes	Y				0.952	0.221	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-179	12/30/2009	111		Yes	Y				0.952	0.0258	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-180/193	12/30/2009	508		Yes	Y	C			1.9	0.156	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-181	12/30/2009	4.77		Yes	Y				0.952	0.207	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-182	12/30/2009	1.92		Yes	Y				0.952	0.187	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-183	12/30/2009	139		Yes	Y				0.952	0.173	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-184	12/30/2009	0.612		Yes	Y	J			0.952	0.0296	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-185	12/30/2009	19.2		Yes	Y				0.952	0.161	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-186	12/30/2009	0.952		Yes	N	U			0.952	0.0285	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-187	12/30/2009	335		Yes	Y				0.952	0.17	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-176	12/30/2009	28.1		Yes	Y				0.952	0.0241	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-032	12/30/2009	26.4		Yes	Y				0.952	0.0331	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-043	12/30/2009	6.89		Yes	Y				0.952	0.0532	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-019	12/30/2009	25.7		Yes	Y				0.952	0.0532	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-020/028	12/30/2009	168		Yes	Y	C			1.9	0.0764	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-021/033	12/30/2009	58.3		Yes	Y	C			1.9	0.0764	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-022	12/30/2009	42.4		Yes	Y				0.952	0.0783	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-023	12/30/2009	0.952	Yes	N	U			0.952	0.0727	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-024	12/30/2009	0.717	Yes	Y	J			0.952	0.0356	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-025	12/30/2009	15.1	Yes	Y				0.952	0.0749	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-026/029	12/30/2009	28.7	Yes	Y	C			1.9	0.0824	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-017	12/30/2009	36.3	Yes	Y				0.952	0.0419	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-031	12/30/2009	136	Yes	Y				0.952	0.0781	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-016	12/30/2009	24.4	Yes	Y				0.952	0.053	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-034	12/30/2009	1.27	Yes	Y				0.952	0.094	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-035	12/30/2009	4.82	Yes	Y				0.952	0.0916	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-036	12/30/2009	0.815	Yes	Y	J			0.952	0.0828	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-037	12/30/2009	67.7	Yes	Y				0.952	0.0884	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-038	12/30/2009	0.406	Yes	Y	J			0.952	0.0986	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-039	12/30/2009	0.9	Yes	Y	J			0.952	0.0701	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-040/071	12/30/2009	93.4	Yes	Y	C			1.9	0.0413	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-041	12/30/2009	13.8	Yes	Y				0.952	0.0537	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-042	12/30/2009	61.8	Yes	Y				0.952	0.0509	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-027	12/30/2009	8.79	Yes	Y				0.952	0.0394	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-005	12/30/2009	0.718	Yes	Y	J SI			0.952	0.0638	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-161	12/30/2009	0.952	Yes	N	U			0.952	0.0384	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Pentachlorobiphenyls (total)	12/30/2009	2990	Yes	Y				0	0.0683	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-104	12/30/2009	1.26	Yes	Y				0.952	0.0241	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Monochlorobiphenyls (total)	12/30/2009	20	Yes	Y	EMPC	J	23	0	0.164	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Heptachlorobiphenyls (total)	12/30/2009	1990	Yes	Y				0	0.159	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Nonachlorobiphenyls (total)	12/30/2009	142	Yes	Y				0	0.166	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Octachlorobiphenyls (total)	12/30/2009	653	Yes	Y				0	0.174	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-001	12/30/2009	7.47		Yes	Y				0.952	0.235	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-002	12/30/2009	6.76		Yes	Y				0.952	0.0852	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-018/030	12/30/2009	69.4		Yes	Y	C			1.9	0.042	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-004	12/30/2009	24.4		Yes	Y	SI			0.952	0.233	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	Tetrachlorobiphenyls (total)	12/30/2009	2000		Yes	Y				0	0.0885	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-006	12/30/2009	7.62		Yes	Y	SI			0.952	0.0523	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-007	12/30/2009	1.29		Yes	Y	SI			0.952	0.0552	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-008	12/30/2009	36.4		Yes	Y	SI			0.952	0.0583	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-009	12/30/2009	2.16		Yes	Y	SI			0.952	0.0579	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-010	12/30/2009	1.11		Yes	Y	SI			0.952	0.168	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-011	12/30/2009	161		Yes	Y	SI			0.952	0.0605	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-012/013	12/30/2009	6.11		Yes	Y	C SI			1.9	0.0588	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-014	12/30/2009	0.952		Yes	N	U			0.952	0.0521	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-015	12/30/2009	49.5		Yes	Y	SI			0.952	0.0618	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-003	12/30/2009	5.77		Yes	Y	EMPC	J	23	0.952	0.0926	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-089	12/30/2009	4.82		Yes	Y				0.952	0.0616	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-077	12/30/2009	31.7		Yes	Y				0.952	0.166	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-078	12/30/2009	0.952		Yes	N	U			0.952	0.151	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-079	12/30/2009	3.24		Yes	Y				0.952	0.135	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-080	12/30/2009	0.952		Yes	N	U			0.952	0.113	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-081	12/30/2009	1.05		Yes	Y				0.952	0.148	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-082	12/30/2009	47.5		Yes	Y				0.952	0.0639	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-083	12/30/2009	30.6		Yes	Y				0.952	0.0667	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-084	12/30/2009	95.9		Yes	Y				0.952	0.0602	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-073	12/30/2009	1.71		Yes	Y				0.952	0.0366	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-088	12/30/2009	0.952		Yes	N	U			0.952	0.0559	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-099	12/30/2009	206		Yes	Y				0.952	0.0475	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-090/101/113	12/30/2009	556		Yes	Y	C			2.86	0.0556	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-091	12/30/2009	61.3		Yes	Y				0.952	0.0446	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-092	12/30/2009	110		Yes	Y				0.952	0.0637	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-093/100	12/30/2009	17.4		Yes	Y	C			1.9	0.0568	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-094	12/30/2009	4.06		Yes	Y				0.952	0.0536	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-095	12/30/2009	343		Yes	Y				0.952	0.0521	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-096	12/30/2009	6.87		Yes	Y				0.952	0.027	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-098	12/30/2009	0.815		Yes	Y	J			0.952	0.0549	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-102	12/30/2009	16.9		Yes	Y				0.952	0.0651	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-085/116	12/30/2009	59		Yes	Y	C			1.9	0.0423	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-051	12/30/2009	30		Yes	Y				0.952	0.0449	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-103	12/30/2009	13.8		Yes	Y				0.952	0.0512	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-045	12/30/2009	19.9		Yes	Y				0.952	0.0433	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-046	12/30/2009	10.3		Yes	Y				0.952	0.0479	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-048	12/30/2009	34.1		Yes	Y				0.952	0.043	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-072	12/30/2009	4.24		Yes	Y				0.952	0.144	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-050/053	12/30/2009	54		Yes	Y	C			1.9	0.048	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-044/047/065	12/30/2009	298		Yes	Y	C			2.86	0.0446	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-052	12/30/2009	275		Yes	Y				0.952	0.0403	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-054	12/30/2009	7.05		Yes	Y				0.952	0.0404	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-055	12/30/2009	2.07		Yes	Y				0.952	0.136	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-067	12/30/2009	5.83		Yes	Y				0.952	0.124	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-057	12/30/2009	1.19		Yes	Y				0.952	0.147	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15DS-091210	P1905_7437_PCB_002	PCB-058	12/30/2009	1.02		Yes	Y				0.952	0.14	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-059/062/075	12/30/2009	16.7		Yes	Y	C			2.86	0.0319	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-060	12/30/2009	39.9		Yes	Y				0.952	0.138	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-063	12/30/2009	8.33		Yes	Y				0.952	0.12	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-064	12/30/2009	82.5		Yes	Y				0.952	0.0294	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-066	12/30/2009	217		Yes	Y				0.952	0.121	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-056	12/30/2009	96.7		Yes	Y				0.952	0.133	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-068	12/30/2009	2.89		Yes	Y				0.952	0.115	pg/g
PCM-15DS-091210	P1905_7437_PCB_002	PCB-049/069	12/30/2009	175		Yes	Y	C			1.9	0.0372	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-145	12/30/2009	0.32		Yes	Y	J EMPC	J	23	0.973	0.15	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-144	12/30/2009	43.7		Yes	Y				0.973	0.178	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-143	12/30/2009	1.9		Yes	Y				0.973	0.147	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-142	12/30/2009	0.52		Yes	Y	J EMPC	J	23	0.973	0.163	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-141	12/30/2009	171		Yes	Y				0.973	0.168	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-139/140	12/30/2009	13.6		Yes	Y	C			1.95	0.157	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-136	12/30/2009	157		Yes	Y				0.973	0.148	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-135/151	12/30/2009	356		Yes	Y	C			1.95	0.174	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-137	12/30/2009	28.2		Yes	Y				0.973	0.155	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-146	12/30/2009	158		Yes	Y				0.973	0.148	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-147/149	12/30/2009	700		Yes	Y	C			1.95	0.15	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-148	12/30/2009	3.52		Yes	Y				0.973	0.149	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-150	12/30/2009	3.45		Yes	Y				0.973	0.111	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-152	12/30/2009	1.68		Yes	Y				0.973	0.131	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-153/168	12/30/2009	746		Yes	Y	C			1.95	0.121	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-154	12/30/2009	21.4		Yes	Y				0.973	0.159	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-155	12/30/2009	0.559	Yes	Y	J EMPC	J	23	0.973	0.131	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-134	12/30/2009	47.6	Yes	Y				0.973	0.22	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-158	12/30/2009	86.7	Yes	Y				0.973	0.134	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-118	12/30/2009	558	Yes	Y				0.973	0.171	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-159	12/30/2009	0.973	Yes	N	U			0.973	0.836	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-156/157	12/30/2009	96.3	Yes	Y	C			1.95	1.03	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-120	12/30/2009	4.09	Yes	Y				0.973	0.182	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-106	12/30/2009	0.973	Yes	N	U			0.973	0.19	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-187	12/30/2009	375	Yes	Y				0.973	0.57	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-160	12/30/2009	0.973	Yes	N	U			0.973	0.121	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-107/124	12/30/2009	22.3	Yes	Y	C			1.95	0.187	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-109	12/30/2009	42.8	Yes	Y				0.973	0.162	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-110	12/30/2009	745	Yes	Y				0.973	0.179	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-111	12/30/2009	0.707	Yes	Y	J EMPC	J	23	0.973	0.156	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-112	12/30/2009	0.719	Yes	Y	J			0.973	0.191	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-114	12/30/2009	11.8	Yes	Y				0.973	0.172	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-121	12/30/2009	0.627	Yes	Y	J EMPC	J	23	0.973	0.155	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-117	12/30/2009	18.2	Yes	Y				0.973	0.235	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-133	12/30/2009	21.5	Yes	Y				0.973	0.2	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-122	12/30/2009	7.88	Yes	Y				0.973	0.199	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-123	12/30/2009	10.2	Yes	Y				0.973	0.179	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-126	12/30/2009	2.69	Yes	Y				0.973	0.894	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-127	12/30/2009	0.973	Yes	N	U			0.973	0.195	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-128/166	12/30/2009	146	Yes	Y	C			1.95	0.966	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-129/138/163	12/30/2009	945	Yes	Y	C			2.92	0.157	pg/g

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-130	12/30/2009	55.8	Yes	Y				0.973	0.201	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-131	12/30/2009	8.4	Yes	Y				0.973	0.177	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-132	12/30/2009	265	Yes	Y				0.973	0.171	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-115	12/30/2009	6.66	Yes	Y				0.973	0.171	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-201	12/30/2009	24.4	Yes	Y				0.973	0.241	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-189	12/30/2009	11	Yes	Y				0.973	0.702	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-190	12/30/2009	57.6	Yes	Y				0.973	0.59	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-191	12/30/2009	11.8	Yes	Y				0.973	0.57	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-192	12/30/2009	0.973	Yes	N	U			0.973	0.547	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-194	12/30/2009	187	Yes	Y				0.973	0.907	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-195	12/30/2009	77.2	Yes	Y				0.973	0.919	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-196	12/30/2009	82.4	Yes	Y				0.973	0.306	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-197	12/30/2009	6.31	Yes	Y				0.973	0.215	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-185	12/30/2009	15.8	Yes	Y				0.973	0.54	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-200	12/30/2009	25	Yes	Y				0.973	0.258	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-186	12/30/2009	0.973	Yes	N	U			0.973	0.0905	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-202	12/30/2009	42.7	Yes	Y				0.973	0.256	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-203	12/30/2009	117	Yes	Y				0.973	0.28	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-204	12/30/2009	0.973	Yes	N	U			0.973	0.233	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-205	12/30/2009	9.42	Yes	Y				0.973	0.737	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-206	12/30/2009	152	Yes	Y				0.973	0.595	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-207	12/30/2009	16.9	Yes	Y				0.973	0.4	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-208	12/30/2009	49.9	Yes	Y				0.973	0.42	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-209	12/30/2009	241	Yes	Y				0.973	0.472	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-086/087/097/108/119/125	12/30/2009	433	Yes	Y	C			5.84	0.207	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-198/199	12/30/2009	182	Yes	Y	C			1.95	0.289	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-177	12/30/2009	168	Yes	Y				0.973	0.629	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-162	12/30/2009	2.53	Yes	Y				0.973	0.681	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-164	12/30/2009	57.5	Yes	Y				0.973	0.123	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-165	12/30/2009	0.974	Yes	Y				0.973	0.146	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-167	12/30/2009	34.5	Yes	Y				0.973	0.842	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-169	12/30/2009	0.973	Yes	N	U			0.973	0.896	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-170	12/30/2009	261	Yes	Y				0.973	0.723	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-171/173	12/30/2009	85.8	Yes	Y	C			1.95	0.658	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-172	12/30/2009	47.3	Yes	Y				0.973	0.666	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-174	12/30/2009	275	Yes	Y				0.973	0.6	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-188	12/30/2009	1.03	Yes	Y				0.973	0.0854	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-176	12/30/2009	34.6	Yes	Y				0.973	0.0765	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-105	12/30/2009	225	Yes	Y				0.973	0.174	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-178	12/30/2009	67.5	Yes	Y				0.973	0.113	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-179	12/30/2009	136	Yes	Y				0.973	0.082	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-180/193	12/30/2009	592	Yes	Y	C			1.95	0.522	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-181	12/30/2009	7.29	Yes	Y				0.973	0.692	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-182	12/30/2009	1.96	Yes	Y				0.973	0.624	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-183	12/30/2009	173	Yes	Y				0.973	0.579	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-184	12/30/2009	0.816	Yes	Y	J			0.973	0.0942	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-061/070/074/076	12/30/2009	661	Yes	Y	C			3.89	0.553	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-161	12/30/2009	0.973	Yes	N	U			0.973	0.146	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-175	12/30/2009	12.8	Yes	Y				0.973	0.669	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-031	12/30/2009	212	Yes	Y				0.973	0.263	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-042	12/30/2009	101		Yes	Y				0.973	0.22	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-018/030	12/30/2009	120		Yes	Y	C			1.95	0.175	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-019	12/30/2009	31.2		Yes	Y				0.973	0.221	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-020/028	12/30/2009	245		Yes	Y	C			1.95	0.257	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-021/033	12/30/2009	90.4		Yes	Y	C			1.95	0.257	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-022	12/30/2009	65.8		Yes	Y				0.973	0.263	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-023	12/30/2009	0.973		Yes	N	U			0.973	0.244	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-024	12/30/2009	0.916		Yes	Y	J			0.973	0.148	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-025	12/30/2009	19.8		Yes	Y				0.973	0.252	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-016	12/30/2009	42.5		Yes	Y				0.973	0.22	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-027	12/30/2009	11.5		Yes	Y				0.973	0.164	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-015	12/30/2009	66.2		Yes	Y	SI			0.973	0.275	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-032	12/30/2009	41.7		Yes	Y				0.973	0.138	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-034	12/30/2009	1.72		Yes	Y				0.973	0.316	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-035	12/30/2009	6.37		Yes	Y				0.973	0.308	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-036	12/30/2009	0.948		Yes	Y	J			0.973	0.278	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-037	12/30/2009	95.3		Yes	Y				0.973	0.297	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-038	12/30/2009	0.403		Yes	Y	J			0.973	0.332	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-039	12/30/2009	1.45		Yes	Y				0.973	0.236	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-040/071	12/30/2009	147		Yes	Y	C			1.95	0.178	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Pentachlorobiphenyls (total)	12/30/2009	4360		Yes	Y				0	0.283	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-026/029	12/30/2009	40.4		Yes	Y	C			1.95	0.277	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-004	12/30/2009	28.9		Yes	Y	SI			0.973	0.448	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Dichlorobiphenyls (total)	12/30/2009	362		Yes	Y				0	0.362	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Trichlorobiphenyls (total)	12/30/2009	1080		Yes	Y				0	0.259	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	Hexachlorobiphenyls (total)	12/30/2009	4180		Yes	Y	EMPC	J	23	0	0.723	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Tetrachlorobiphenyls (total)	12/30/2009	3130		Yes	Y				0	0.367	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Monochlorobiphenyls (total)	12/30/2009	28.8		Yes	Y				0	0.623	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Heptachlorobiphenyls (total)	12/30/2009	2340		Yes	Y				0	0.531	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Nonachlorobiphenyls (total)	12/30/2009	218		Yes	Y				0	0.507	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	Octachlorobiphenyls (total)	12/30/2009	753		Yes	Y				0	0.496	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-001	12/30/2009	9.78		Yes	Y				0.973	1.03	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-017	12/30/2009	54		Yes	Y				0.973	0.174	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-003	12/30/2009	9.41		Yes	Y				0.973	0.219	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-043	12/30/2009	11.4		Yes	Y				0.973	0.229	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-005	12/30/2009	0.861		Yes	Y	J SI			0.973	0.284	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-006	12/30/2009	10.4		Yes	Y	SI			0.973	0.232	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-007	12/30/2009	1.85		Yes	Y	SI			0.973	0.245	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-008	12/30/2009	52.1		Yes	Y	SI			0.973	0.259	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-009	12/30/2009	3.01		Yes	Y	SI			0.973	0.257	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-010	12/30/2009	1.4		Yes	Y	SI			0.973	0.324	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-011	12/30/2009	190		Yes	Y	SI			0.973	0.269	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-012/013	12/30/2009	8		Yes	Y	C SI			1.95	0.261	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-014	12/30/2009	0.973		Yes	N	U			0.973	0.232	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-002	12/30/2009	9.57		Yes	Y				0.973	0.202	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-091	12/30/2009	82.5		Yes	Y				0.973	0.187	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-041	12/30/2009	26.9		Yes	Y				0.973	0.231	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-079	12/30/2009	4.08		Yes	Y				0.973	0.554	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-080	12/30/2009	1.7		Yes	Y				0.973	0.463	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-081	12/30/2009	1.12		Yes	Y				0.973	0.607	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-082	12/30/2009	75.9	Yes	Y				0.973	0.269	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-083	12/30/2009	39.9	Yes	Y				0.973	0.281	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-084	12/30/2009	149	Yes	Y				0.973	0.253	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-085/116	12/30/2009	84.5	Yes	Y	C			1.95	0.178	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-088	12/30/2009	0.973	Yes	N	U			0.973	0.235	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-077	12/30/2009	44.3	Yes	Y				0.973	0.652	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-090/101/113	12/30/2009	811	Yes	Y	C			2.92	0.234	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-073	12/30/2009	1.65	Yes	Y				0.973	0.158	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-092	12/30/2009	154	Yes	Y				0.973	0.268	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-093/100	12/30/2009	18.2	Yes	Y	C			1.95	0.239	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-094	12/30/2009	5.57	Yes	Y				0.973	0.225	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-095	12/30/2009	495	Yes	Y				0.973	0.219	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-096	12/30/2009	8.63	Yes	Y				0.973	0.122	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-098	12/30/2009	1.91	Yes	Y				0.973	0.231	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-099	12/30/2009	299	Yes	Y				0.973	0.2	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-102	12/30/2009	24.1	Yes	Y				0.973	0.274	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-103	12/30/2009	14.7	Yes	Y				0.973	0.216	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-089	12/30/2009	7.8	Yes	Y				0.973	0.259	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-057	12/30/2009	1.68	Yes	Y				0.973	0.606	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-044/047/065	12/30/2009	452	Yes	Y	C			2.92	0.192	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-045	12/30/2009	35.6	Yes	Y				0.973	0.187	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-046	12/30/2009	16.9	Yes	Y				0.973	0.206	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-048	12/30/2009	59	Yes	Y				0.973	0.185	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-049/069	12/30/2009	251	Yes	Y	C			1.95	0.16	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-050/053	12/30/2009	68.4	Yes	Y	C			1.95	0.207	pg/g

Analytical Method E1668A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22DS-091210	P1905_7437_PCB_001	PCB-051	12/30/2009	32.1		Yes	Y				0.973	0.193	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-052	12/30/2009	441		Yes	Y				0.973	0.174	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-054	12/30/2009	7.03		Yes	Y				0.973	0.196	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-078	12/30/2009	0.973		Yes	N	U			0.973	0.621	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-056	12/30/2009	157		Yes	Y				0.973	0.545	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-104	12/30/2009	1.28		Yes	Y				0.973	0.108	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-058	12/30/2009	1.61		Yes	Y				0.973	0.576	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-059/062/075	12/30/2009	26.3		Yes	Y	C			2.92	0.138	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-060	12/30/2009	65		Yes	Y				0.973	0.568	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-063	12/30/2009	12.6		Yes	Y				0.973	0.491	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-064	12/30/2009	136		Yes	Y				0.973	0.127	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-066	12/30/2009	340		Yes	Y				0.973	0.498	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-067	12/30/2009	9.33		Yes	Y				0.973	0.507	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-068	12/30/2009	3.77		Yes	Y				0.973	0.474	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-072	12/30/2009	6.37		Yes	Y				0.973	0.591	pg/g
PCM-22DS-091210	P1905_7437_PCB_001	PCB-055	12/30/2009	3.47		Yes	Y				0.973	0.558	pg/g

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Anchor Environmental, LLC
1423 3rd Avenue, Suite 300
Seattle, WA 98101-2226
ATTN: Ms. Joy Dunay

March 1, 2010

SUBJECT: NW Natural Gasco Pilot Cap Monitoring Year 3, Data Validation

Dear Ms. Dunay,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on January 27, 2010. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 22482:

SDG #	Fraction
K0911918 K0911919 K0911973	Volatiles, Semivolatiles, Polynuclear Aromatic Hydrocarbons, Chlorinated Pesticides, Polychlorinated Biphenyls, Metals, Herbicides, Wet Chemistry, Gasoline Range Organics, Diesel Range Organics & Residual Range Organics, Butyltins, Phenols

The data validation was performed under EPA Level III guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; Update IV, February 2007

Please feel free to contact us if you have any questions.

Sincerely,

Stella Cuenco

Stella S. Cuenco
Data Validation Operations Manager/Senior Chemist

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EDD

Attachment 1

11,036 Pages-EX

LDC #22482 (Anchor Environmental-Seattle WA / NW Natural - Gasco Pilot Cap Monitoring Year 3)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260B)		BTEX (8260B)		SVOA (8270C)		PAHs (8270C -SIM)		Pest. (8081A)		PCBs (8082)		Metals (SW846)		Fe (6010B)		Diss. Fe (6010B)		Herbs. (8151A)		Chlor. Phenols (8151M)		GRO (NWTPH -Gx)		DRO RRO (Dx)		Butyl -tins (Krone)							
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K0911918	01/27/10	02/18/10	-	-	14	0	-	-	13	0	-	-	-	-	-	-	13	0	13	0	-	-	-	-	-	-	-	-	-	-						
B	K0911919	01/27/10	02/18/10	0	4	-	-	0	4	0	4	0	4	0	4	0	4	-	-	-	-	0	4	0	4	0	4	0	4	0	4						
C	K0911973	01/27/10	02/18/10	3	3	1	0	2	3	1	3	2	3	2	3	2	3	1	0	-	-	2	3	2	3	2	3	2	3	2	3						
Total	T/SC			3	7	15	0	2	7	14	7	2	7	2	7	2	7	14	0	13	0	2	7	2	7	2	7	2	7	2	7	0	0	0	0	0	154

LDC #22482 (Anchor Environmental-Seattle WA / NW Natural - Gasco Pilot Cap Monitoring Year 3)

LDC	SDG#	DATE REC'D	(3) DATE DUE	NH_3-N (350.1 Plumb)		T.CN- (335.4 /4500)		Total CN- (9012A)		F.CN- (ASTM D4282)		Amen. CN- (4500)		Cr(VI) (7196A)		Part. Size (PSEP)		S= (9030M /4500)		DOC (5310C)		TOC (PSEP 5310C)		Total Solids (160.3)		TSS (2540D)											
Matrix:	Water/Sediment			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K0911918	01/27/10	02/18/10	-	-	13	0	-	-	13	0	13	0	-	-	-	-	13	0	13	0	13	0	-	-	13	0										
B	K0911919	01/27/10	02/18/10	0	4	-	-	0	4	-	-	-	-	0	4	0	4	0	4	-	-	0	4	0	4	-	-										
C	K0911973	01/27/10	02/18/10	0	3	1	0	0	3	1	0	1	0	0	3	0	3	0	3	-	-	0	3	0	3	-	-										
Total	T/SC			0	7	14	0	0	7	14	0	14	0	0	7	0	7	13	7	13	0	13	7	0	7	13	0	0	0	0	0	0	0	0	0	0	143

Shaded cells indicate Level IV validation (all other cells are Level III validation). These sample counts do not include MS, MSD, or DUP's.

22482ST.wpd

NW Natural Gasco Pilot Cap Monitoring Year 3
Data Validation Reports
LDC #22482

K0911918

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water
Parameters:	Volatiles
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911918

Sample Identification

PCM-01-DEW-091209
PCM-02-DEW-091209
PCM-03-DEW-091209
PCM-04-DEW-091209
PCM-05-DEW-091209
PCM-06-DEW-091209
PCM-08-DEW-091209
PCM-09-DEW-091209
PCM-10-DEW-091209
PCM-13-DEW-091209
PCM-19-DEW-091209
PCM-20-DEW-091209
PCM-21-DEW-091209
PCM-TB-091209

Introduction

This data review covers 14 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles which are Benzene, Toluene, Ethylbenzene, Xylenes, total.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample PCM-TB-091209 was identified as a trip blank. No volatile contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Data Qualification Summary - SDG K0911918

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Laboratory Blank Data Qualification Summary - SDG K0911918

No Sample Data Qualified in this SDG

LDC #: 22482A1
SDG #: K0911918
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2/8/10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (BTEX)(EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	RRF no spec
IV.	Continuing calibration/ICV	A	ICV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 14

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: water

1	PCM-01-DSW-091209	11	PCM-19-DSW-091209	21	KWG0911910	31	
2	PCM-02-DSW-091209	12	PCM-20-DSW-091209	22		32	
3	PCM-03-DSW-091209	13	PCM-21-DSW-091209	23		33	
4	PCM-04-DSW-091209	14	PCM-TB-091209	24		34	
5	PCM-05-DSW-091209	15		25		35	
6	PCM-06-DSW-091209	16		26		36	
7	PCM-08-DSW-091209	17		27		37	
8	PCM-09-DSW-091209	18		28		38	
9	PCM-10-DSW-091209	19		29		39	
10	PCM-13-DSW-091209	20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911918

Sample Identification

PCM-01-DSW-091209
PCM-02-DSW-091209
PCM-03-DSW-091209
PCM-04-DSW-091209
PCM-05-DSW-091209
PCM-06-DSW-091209
PCM-08-DSW-091209
PCM-09-DSW-091209
PCM-10-DSW-091209
PCM-13-DSW-091209
PCM-19-DSW-091209
PCM-20-DSW-091209
PCM-21-DSW-091209

Introduction

This data review covers 13 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all target compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0911677-MB	12/11/09	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0031 ug/L 0.0030 ug/L	All samples in SDG K0911918

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
PCM-01-DSW-091209	Benzo(a)anthracene	0.0035 ug/L	0.021U ug/L
PCM-02-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0074 ug/L 0.0067 ug/L	0.020U ug/L 0.020U ug/L
PCM-03-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0055 ug/L 0.0041 ug/L	0.020U ug/L 0.020U ug/L
PCM-04-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0072 ug/L 0.0053 ug/L	0.020U ug/L 0.020U ug/L
PCM-05-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0066 ug/L 0.0052 ug/L	0.020U ug/L 0.020U ug/L
PCM-06-DSW-091209	Benzo(a)anthracene	0.0051 ug/L	0.020U ug/L
PCM-08-DSW-091209	Benzo(a)anthracene	0.0037 ug/L	0.020U ug/L
PCM-09-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0085 ug/L 0.0073 ug/L	0.020U ug/L 0.020U ug/L
PCM-10-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.011 ug/L 0.012 ug/L	0.021U ug/L 0.021U ug/L
PCM-13-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0062 ug/L 0.0047 ug/L	0.020U ug/L 0.020U ug/L
PCM-19-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0065 ug/L 0.0042 ug/L	0.020U ug/L 0.020U ug/L
PCM-20-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0064 ug/L 0.0059 ug/L	0.021U ug/L 0.021U ug/L
PCM-21-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0039 ug/L 0.0036 ug/L	0.020U ug/L 0.020U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to method blank contamination problems, benzo(a)anthracene and benzo(g,h,i)perylene results were qualified as not detected in thirteen and ten samples, respectively.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K0911918

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K0911918

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K0911918	PCM-01-DSW-091209	Benzo(a)anthracene	0.021U ug/L	A
K0911918	PCM-02-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-03-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-04-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-05-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-06-DSW-091209	Benzo(a)anthracene	0.020U ug/L	A
K0911918	PCM-08-DSW-091209	Benzo(a)anthracene	0.020U ug/L	A
K0911918	PCM-09-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-10-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.021U ug/L 0.021U ug/L	A
K0911918	PCM-13-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-19-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A
K0911918	PCM-20-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.021U ug/L 0.021U ug/L	A
K0911918	PCM-21-DSW-091209	Benzo(a)anthracene Benzo(g,h,i)perylene	0.020U ug/L 0.020U ug/L	A

LDC #: 22482A2b
SDG #: K0911918
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2/8/10
Page: 1 of 7
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Continuing calibration/ICV	A	ICV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
water

1	PCM-01-DSW-091209	11	PCM-19-DSW-091209	21	KWG0911677	31	
2	PCM-02-DSW-091209	12	PCM-20-DSW-091209	22		32	
3	PCM-03-DSW-091209	13	PCM-21-DSW-091209	23		33	
4	PCM-04-DSW-091209	14		24		34	
5	PCM-05-DSW-091209	15		25		35	
6	PCM-06-DSW-091209	16		26		36	
7	PCM-08-DSW-091209	17		27		37	
8	PCM-09-DSW-091209	18		28		38	
9	PCM-10-DSW-091209	19		29		39	
10	PCM-13-DSW-091209	20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

COMPNDL.2S

LDC #: 22482A2b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/11/09 **Blank analysis date:** 12/18/09
Conc. units: ug/L Associated Samples: All

Compound	Blank ID	Sample Identification									
	KWG0911	677-MB	1	2	3	4	5	6	7	8
CCC	0.0031		0.0035/0.021U	0.0074/0.020U	0.0055/0.020U	0.0072/0.020U	0.0066/0.020U	0.0051/0.020U	0.0037/0.020U	0.0085/0.020U
LLL	0.0030		-	0.0067/0.020U	0.0041/0.020U	0.0053/0.020U	0.0052/0.020U	-	-	0.0073/0.020U

Blank extraction date: 12/11/09 **Blank analysis date:** 12/18/09
Conc. units: ug/L Associated Samples:

Compound	Blank ID	Sample Identification								
	↓		9	10	11	12	13			
CCC	0.0031		0.011/0.021U	0.0062/0.020U	0.0065/0.020U	0.0064/0.021U	0.0039/0.020U			
LLL	0.0030		0.012/0.021U	0.0047/0.020U	0.0042/0.020U	0.0059/0.021U	0.0036/0.020U			

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: NW Natural - Gasco Pilot Cap Monitoring Year 3

Collection Date: December 9, 2009

LDC Report Date: February 10, 2010

Matrix: Water

Parameters: Iron

Validation Level: EPA Level III

Laboratory: Columbia Analytical Services

Sample Delivery Group (SDG): K0911918

Sample Identification

PCM-01-DSW-091209
PCM-02-DSW-091209
PCM-03-DSW-091209
PCM-04-DSW-091209
PCM-05-DSW-091209
PCM-06-DSW-091209
PCM-08-DSW-091209
PCM-09-DSW-091209
PCM-10-DSW-091209
PCM-13-DSW-091209
PCM-19-DSW-091209
PCM-20-DSW-091209
PCM-21-DSW-091209
PCM-01-DSW-091209F
PCM-02-DSW-091209F
PCM-03-DSW-091209F
PCM-04-DSW-091209F
PCM-05-DSW-091209F
PCM-06-DSW-091209F
PCM-08-DSW-091209F
PCM-09-DSW-091209F
PCM-10-DSW-091209F
PCM-13-DSW-091209F
PCM-19-DSW-091209F
PCM-20-DSW-091209F
PCM-21-DSW-091209F
PCM-01-DSW-091209MS
PCM-01-DSW-091209DUP
PCM-01-DSW-091209FMS
PCM-01-DSW-091209FDUP

Samples appended with "F" were analyzed for dissolved iron

Introduction

This data review covers 30 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6010B for Iron.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section IV.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

ICP-MS was not utilized in this SDG.

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No iron was found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Iron	5.8 ug/L	PCM-01-DSW-091209 PCM-02-DSW-091209 PCM-03-DSW-091209 PCM-04-DSW-091209 PCM-05-DSW-091209 PCM-06-DSW-091209 PCM-08-DSW-091209 PCM-09-DSW-091209 PCM-10-DSW-091209 PCM-13-DSW-091209 PCM-19-DSW-091209 PCM-20-DSW-091209 PCM-21-DSW-091209
ICB/CCB	Iron	5.9 ug/L	PCM-01-DSW-091209F PCM-02-DSW-091209F PCM-03-DSW-091209F PCM-04-DSW-091209F PCM-05-DSW-091209F PCM-06-DSW-091209F PCM-08-DSW-091209F PCM-09-DSW-091209F PCM-10-DSW-091209F PCM-13-DSW-091209F PCM-19-DSW-091209F PCM-20-DSW-091209F PCM-21-DSW-091209F

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
PCM-01-DSW-091209F	Iron	29.2 ug/L	29.2U ug/L

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards (ICP-MS)

ICP-MS was not utilized in this SDG.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met.

XII. Sample Result Verification

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration blank contamination problems, iron result was qualified as not detected in one sample.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Iron - Data Qualification Summary - SDG K0911918

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Iron - Laboratory Blank Data Qualification Summary - SDG K0911918

SDG	Sample	Analyte	Modified Final Concentration	A or P
K0911918	PCM-01-DSW-091209F	Iron	29.2U ug/L	A

LDC #: 22482A4

SDG #: K0911918

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2-1-10

Page: 1 of 1

Reviewer: CR

2nd Reviewer: V

METHOD: Iron (EPA SW 846 Method 6010B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	Calibration	A	
III.	Blanks	SW	
IV.	ICP Interference Check Sample (ICS) Analysis	A	
V.	Matrix Spike Analysis	A	MS
VI.	Duplicate Sample Analysis	A	Dup
VII.	Laboratory Control Samples (LCS)	A	LCS
VIII.	Internal Standard (ICP-MS)	N	Not utilized
IX.	Furnace Atomic Absorption QC	N	↓
X.	ICP Serial Dilution	A	
XI.	Sample Result Verification	N	
XII.	Overall Assessment of Data	A	
XIII.	Field Duplicates	N	
XIV.	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: water

1	PCM-01-DSW-091209	11	PCM-19-DSW-091209	21	PCM-09-DSW-091209F	31	PBW
2	PCM-02-DSW-091209	12	PCM-20-DSW-091209	22	PCM-10-DSW-091209F	32	PBWF
3	PCM-03-DSW-091209	13	PCM-21-DSW-091209	23	PCM-13-DSW-091209F	33	
4	PCM-04-DSW-091209	14	PCM-01-DSW-091209F	24	PCM-19-DSW-091209F	34	
5	PCM-05-DSW-091209	15	PCM-02-DSW-091209F	25	PCM-20-DSW-091209F	35	
6	PCM-06-DSW-091209	16	PCM-03-DSW-091209F	26	PCM-21-DSW-091209F	36	
7	PCM-08-DSW-091209	17	PCM-04-DSW-091209F	27	PCM-01-DSW-091209MS	37	
8	PCM-09-DSW-091209	18	PCM-05-DSW-091209F	28	PCM-01-DSW-091209DUP	38	
9	PCM-10-DSW-091209	19	PCM-06-DSW-091209F	29	PCM-01-DSW-091209FMS	39	
10	PCM-13-DSW-091209	20	PCM-08-DSW-091209F	30	PCM-01-DSW-091209FDUP	40	

Notes: Samples appended with "F" were analyzed for dissolved iron

LDC #: 22482A4
SDG #: See Cover
METHOD: Trace metals (EPA SW 864 Method 6010B)

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Soil preparation factor applied: NA

Reviewer: CR
2nd Reviewer: [illegible]

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1-13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Fe			5.8	29										

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 14-26

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	14									
Fe			5.9	29.5	29.2									

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water
Parameters:	Wet Chemistry
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911918

Sample Identification

PCM-01-DSW-091209
PCM-02-DSW-091209
PCM-03-DSW-091209
PCM-04-DSW-091209
PCM-05-DSW-091209
PCM-06-DSW-091209
PCM-08-DSW-091209
PCM-09-DSW-091209
PCM-10-DSW-091209
PCM-13-DSW-091209
PCM-19-DSW-091209
PCM-20-DSW-091209
PCM-21-DSW-091209
PCM-01-DSW-091209MS
PCM-01-DSW-091209MSD
PCM-01-DSW-091209DUP

Introduction

This data review covers 16 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Standard Method 4500-CN-E for Total Cyanide and Amenable to Chlorine Cyanide, ASTM D4282-02 for Free Cyanide, Standard Method 5310C for Total Organic Carbon and Dissolved Organic Carbon, Standard Method 4500-S2-D for Sulfide, and Standard Method 2540D for Total Suspended Solids.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

V. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Data Qualification Summary -SDG K0911918

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Laboratory Blank Data Qualification Summary -SDG K0911918

No Sample Data Qualified in this SDG

LDC #: 22482A6 **VALIDATION COMPLETENESS WORKSHEET** Date: 2-1-10

SDG #: K0911918 Level III Page: 1 of 1

Laboratory: Columbia Analytical Services Reviewer: CR

2nd Reviewer: [illegible]

METHOD: Total Cyanide (SM4500-CN-B/E), Free Cyanide (ASTM D4282-02), Amenable to Chlorine Cyanide (SM 4500-CN-B/E), DOC (SM5310C), Sulfide (SM4500-S2-D), TOC (SM5310C), TSS (SM2540D)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	MS/D
V	Duplicates	A	Dup
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Water

1	PCM-01-DSW-091209	11	PCM-19-DSW-091209	21	PBW	31	
2	PCM-02-DSW-091209	12	PCM-20-DSW-091209	22		32	
3	PCM-03-DSW-091209	13	PCM-21-DSW-091209	23		33	
4	PCM-04-DSW-091209	14	PCM-01-DSW-091209MS	24		34	
5	PCM-05-DSW-091209	15	PCM-01-DSW-091209MSD	25		35	
6	PCM-06-DSW-091209	16	PCM-01-DSW-091209DUP	26		36	
7	PCM-08-DSW-091209	17		27		37	
8	PCM-09-DSW-091209	18		28		38	
9	PCM-10-DSW-091209	19		29		39	
10	PCM-13-DSW-091209	20		30		40	

Notes:

LDC #: 22482A6
SDG #: K0911918

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: 1 of
Reviewer: CR
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-13		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size TSS DOC
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
QC:14		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size DOC
15		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
16		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size DOC
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size

Comments:

Gasco Pilot Cap Monitoring Year 3 - LDC 22482

SDG: K0911918

Analytical Method A2540D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-02-DSW-091209	K0911918-002	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-03-DSW-091209	K0911918-003	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-04-DSW-091209	K0911918-004	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-05-DSW-091209	K0911918-005	Total Suspended Solids	12/16/2009	5	Yes	Y				5.0	5.0	mg/l
PCM-06-DSW-091209	K0911918-006	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-08-DSW-091209	K0911918-007	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-09-DSW-091209	K0911918-008	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-10-DSW-091209	K0911918-009	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-13-DSW-091209	K0911918-010	Total Suspended Solids	12/16/2009	5	Yes	Y				5.0	5.0	mg/l
PCM-19-DSW-091209	K0911918-011	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l
PCM-20-DSW-091209	K0911918-012	Total Suspended Solids	12/16/2009	6.5	Yes	Y				5.0	5.0	mg/l
PCM-21-DSW-091209	K0911918-013	Total Suspended Solids	12/16/2009	5	Yes	N	U			5.0	5.0	mg/l

Analytical Method A4500CN-E

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-01-DSW-091209	K0911918-001	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-02-DSW-091209	K0911918-002	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-02-DSW-091209	K0911918-002	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-03-DSW-091209	K0911918-003	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-03-DSW-091209	K0911918-003	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-04-DSW-091209	K0911918-004	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-04-DSW-091209	K0911918-004	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-05-DSW-091209	K0911918-005	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l

Analytical Method A4500CN-E

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-05-DSW-091209	K0911918-005	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-06-DSW-091209	K0911918-006	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-06-DSW-091209	K0911918-006	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-08-DSW-091209	K0911918-007	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-08-DSW-091209	K0911918-007	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-09-DSW-091209	K0911918-008	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-09-DSW-091209	K0911918-008	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-10-DSW-091209	K0911918-009	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-10-DSW-091209	K0911918-009	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-13-DSW-091209	K0911918-010	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-13-DSW-091209	K0911918-010	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-19-DSW-091209	K0911918-011	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-19-DSW-091209	K0911918-011	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-20-DSW-091209	K0911918-012	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-20-DSW-091209	K0911918-012	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-21-DSW-091209	K0911918-013	Cyanide, amenable	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l
PCM-21-DSW-091209	K0911918-013	Cyanide	12/18/2009	0.01	Yes	N	U			0.010	0.003	mg/l

Analytical Method A5310C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Dissolved organic carbon	12/21/2009	2.16	Yes	Y				0.50	0.07	mg/l
PCM-01-DSW-091209	K0911918-001	Total organic carbon	12/21/2009	6.08	Yes	Y				0.50	0.07	mg/l
PCM-02-DSW-091209	K0911918-002	Dissolved organic carbon	12/21/2009	2.04	Yes	Y				0.50	0.07	mg/l
PCM-02-DSW-091209	K0911918-002	Total organic carbon	12/21/2009	5.81	Yes	Y				0.50	0.07	mg/l
PCM-03-DSW-091209	K0911918-003	Dissolved organic carbon	12/21/2009	2.12	Yes	Y				0.50	0.07	mg/l
PCM-03-DSW-091209	K0911918-003	Total organic carbon	12/21/2009	4.99	Yes	Y				0.50	0.07	mg/l

Analytical Method A5310C

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DSW-091209	K0911918-004	Dissolved organic carbon	12/21/2009	2.28		Yes	Y				0.50	0.07	mg/l
PCM-04-DSW-091209	K0911918-004	Total organic carbon	12/21/2009	5.61		Yes	Y				0.50	0.07	mg/l
PCM-05-DSW-091209	K0911918-005	Dissolved organic carbon	12/21/2009	2.11		Yes	Y				0.50	0.07	mg/l
PCM-05-DSW-091209	K0911918-005	Total organic carbon	12/21/2009	5.75		Yes	Y				0.50	0.07	mg/l
PCM-06-DSW-091209	K0911918-006	Dissolved organic carbon	12/21/2009	2		Yes	Y				0.50	0.07	mg/l
PCM-06-DSW-091209	K0911918-006	Total organic carbon	12/21/2009	4.21		Yes	Y				0.50	0.07	mg/l
PCM-08-DSW-091209	K0911918-007	Dissolved organic carbon	12/21/2009	2.17		Yes	Y				0.50	0.07	mg/l
PCM-08-DSW-091209	K0911918-007	Total organic carbon	12/21/2009	6.16		Yes	Y				0.50	0.07	mg/l
PCM-09-DSW-091209	K0911918-008	Dissolved organic carbon	12/21/2009	2.16		Yes	Y				0.50	0.07	mg/l
PCM-09-DSW-091209	K0911918-008	Total organic carbon	12/21/2009	5.44		Yes	Y				0.50	0.07	mg/l
PCM-10-DSW-091209	K0911918-009	Dissolved organic carbon	12/21/2009	2		Yes	Y				0.50	0.07	mg/l
PCM-10-DSW-091209	K0911918-009	Total organic carbon	12/21/2009	6.67		Yes	Y				0.50	0.07	mg/l
PCM-13-DSW-091209	K0911918-010	Dissolved organic carbon	12/21/2009	1.99		Yes	Y				0.50	0.07	mg/l
PCM-13-DSW-091209	K0911918-010	Total organic carbon	12/21/2009	6.03		Yes	Y				0.50	0.07	mg/l
PCM-19-DSW-091209	K0911918-011	Dissolved organic carbon	12/21/2009	1.96		Yes	Y				0.50	0.07	mg/l
PCM-19-DSW-091209	K0911918-011	Total organic carbon	12/21/2009	6.25		Yes	Y				0.50	0.07	mg/l
PCM-20-DSW-091209	K0911918-012	Dissolved organic carbon	12/21/2009	2.19		Yes	Y				0.50	0.07	mg/l
PCM-20-DSW-091209	K0911918-012	Total organic carbon	12/21/2009	6.15		Yes	Y				0.50	0.07	mg/l
PCM-21-DSW-091209	K0911918-013	Dissolved organic carbon	12/21/2009	2.47		Yes	Y				0.50	0.07	mg/l
PCM-21-DSW-091209	K0911918-013	Total organic carbon	12/21/2009	6.22		Yes	Y				0.50	0.07	mg/l

Analytical Method D4282-02

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Cyanide, Free	12/10/2009	10		Yes	N	XU			10	5	ug/l
PCM-02-DSW-091209	K0911918-002	Cyanide, Free	12/10/2009	10		Yes	N	XU			10	5	ug/l
PCM-03-DSW-091209	K0911918-003	Cyanide, Free	12/10/2009	10		Yes	N	XU			10	5	ug/l

Analytical Method D4282-02

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DSW-091209	K0911918-004	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-05-DSW-091209	K0911918-005	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-06-DSW-091209	K0911918-006	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-08-DSW-091209	K0911918-007	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-09-DSW-091209	K0911918-008	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-10-DSW-091209	K0911918-009	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-13-DSW-091209	K0911918-010	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-19-DSW-091209	K0911918-011	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-20-DSW-091209	K0911918-012	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l
PCM-21-DSW-091209	K0911918-013	Cyanide, Free	12/10/2009	10	Yes	N	XU			10	5	ug/l

Analytical Method SM4500S2D

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-02-DSW-091209	K0911918-002	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-03-DSW-091209	K0911918-003	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-04-DSW-091209	K0911918-004	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-05-DSW-091209	K0911918-005	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-06-DSW-091209	K0911918-006	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-08-DSW-091209	K0911918-007	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-09-DSW-091209	K0911918-008	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-10-DSW-091209	K0911918-009	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-13-DSW-091209	K0911918-010	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-19-DSW-091209	K0911918-011	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-20-DSW-091209	K0911918-012	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l
PCM-21-DSW-091209	K0911918-013	Sulfide	12/16/2009	0.05	Yes	N	U			0.050	0.020	mg/l

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Iron	12/16/2009	376		Yes	Y				20.0	0.8	ug/l
PCM-01-DSW-091209	K0911918-001DIS	Iron	12/22/2009	29.2		Yes	N		U	7	20.0	0.8	ug/l
PCM-02-DSW-091209	K0911918-002	Iron	12/16/2009	379		Yes	Y				20.0	0.8	ug/l
PCM-02-DSW-091209	K0911918-002DIS	Iron	12/22/2009	42.5		Yes	Y				20.0	0.8	ug/l
PCM-03-DSW-091209	K0911918-003	Iron	12/16/2009	393		Yes	Y				20.0	0.8	ug/l
PCM-03-DSW-091209	K0911918-003DIS	Iron	12/22/2009	30.5		Yes	Y				20.0	0.8	ug/l
PCM-04-DSW-091209	K0911918-004	Iron	12/16/2009	369		Yes	Y				20.0	0.8	ug/l
PCM-04-DSW-091209	K0911918-004DIS	Iron	12/22/2009	41.2		Yes	Y				20.0	0.8	ug/l
PCM-05-DSW-091209	K0911918-005	Iron	12/16/2009	365		Yes	Y				20.0	0.8	ug/l
PCM-05-DSW-091209	K0911918-005DIS	Iron	12/22/2009	40.3		Yes	Y				20.0	0.8	ug/l
PCM-06-DSW-091209	K0911918-006	Iron	12/16/2009	365		Yes	Y				20.0	0.8	ug/l
PCM-06-DSW-091209	K0911918-006DIS	Iron	12/22/2009	40.3		Yes	Y				20.0	0.8	ug/l
PCM-08-DSW-091209	K0911918-007	Iron	12/16/2009	332		Yes	Y				20.0	0.8	ug/l
PCM-08-DSW-091209	K0911918-007DIS	Iron	12/22/2009	40.2		Yes	Y				20.0	0.8	ug/l
PCM-09-DSW-091209	K0911918-008	Iron	12/16/2009	375		Yes	Y				20.0	0.8	ug/l
PCM-09-DSW-091209	K0911918-008DIS	Iron	12/22/2009	39.1		Yes	Y				20.0	0.8	ug/l
PCM-10-DSW-091209	K0911918-009	Iron	12/16/2009	383		Yes	Y				20.0	0.8	ug/l
PCM-10-DSW-091209	K0911918-009DIS	Iron	12/22/2009	39		Yes	Y				20.0	0.8	ug/l
PCM-13-DSW-091209	K0911918-010	Iron	12/16/2009	379		Yes	Y				20.0	0.8	ug/l
PCM-13-DSW-091209	K0911918-010DIS	Iron	12/22/2009	39.6		Yes	Y				20.0	0.8	ug/l
PCM-19-DSW-091209	K0911918-011	Iron	12/16/2009	382		Yes	Y				20.0	0.8	ug/l
PCM-19-DSW-091209	K0911918-011DIS	Iron	12/22/2009	38.5		Yes	Y				20.0	0.8	ug/l
PCM-20-DSW-091209	K0911918-012	Iron	12/16/2009	369		Yes	Y				20.0	0.8	ug/l
PCM-20-DSW-091209	K0911918-012DIS	Iron	12/22/2009	30.9		Yes	Y				20.0	0.8	ug/l
PCM-21-DSW-091209	K0911918-013	Iron	12/16/2009	345		Yes	Y				20.0	0.8	ug/l

Analytical Method	SW6010												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-21-DSW-091209	K0911918-013DIS	Iron	12/22/2009	39.3		Yes	Y				20.0	0.8	ug/l

Analytical Method	SW8260												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Ethylbenzene	12/17/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-01-DSW-091209	K0911918-001	m,p-Xylene	12/17/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-01-DSW-091209	K0911918-001	Toluene	12/17/2009	0.08		Yes	Y	J			0.50	0.052	ug/l
PCM-01-DSW-091209	K0911918-001	o-Xylene	12/17/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-01-DSW-091209	K0911918-001	Benzene	12/17/2009	0.04		Yes	Y	J			0.50	0.038	ug/l
PCM-02-DSW-091209	K0911918-002	Benzene	12/17/2009	0.05		Yes	Y	J			0.50	0.038	ug/l
PCM-02-DSW-091209	K0911918-002	m,p-Xylene	12/17/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-02-DSW-091209	K0911918-002	Toluene	12/17/2009	0.11		Yes	Y	J			0.50	0.052	ug/l
PCM-02-DSW-091209	K0911918-002	Ethylbenzene	12/17/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-02-DSW-091209	K0911918-002	o-Xylene	12/17/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-03-DSW-091209	K0911918-003	Benzene	12/18/2009	0.05		Yes	Y	J			0.50	0.038	ug/l
PCM-03-DSW-091209	K0911918-003	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-03-DSW-091209	K0911918-003	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-03-DSW-091209	K0911918-003	Toluene	12/18/2009	0.08		Yes	Y	J			0.50	0.052	ug/l
PCM-03-DSW-091209	K0911918-003	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-04-DSW-091209	K0911918-004	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-04-DSW-091209	K0911918-004	Toluene	12/18/2009	0.08		Yes	Y	J			0.50	0.052	ug/l
PCM-04-DSW-091209	K0911918-004	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-04-DSW-091209	K0911918-004	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-04-DSW-091209	K0911918-004	Benzene	12/18/2009	0.05		Yes	Y	J			0.50	0.038	ug/l
PCM-05-DSW-091209	K0911918-005	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-05-DSW-091209	K0911918-005	Benzene	12/18/2009	0.5		Yes	N	U			0.50	0.038	ug/l

Analytical Method SW8260

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-05-DSW-091209	K0911918-005	Toluene	12/18/2009	0.08		Yes	Y	J			0.50	0.052	ug/l
PCM-05-DSW-091209	K0911918-005	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-05-DSW-091209	K0911918-005	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-06-DSW-091209	K0911918-006	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-06-DSW-091209	K0911918-006	Benzene	12/18/2009	0.5		Yes	N	U			0.50	0.038	ug/l
PCM-06-DSW-091209	K0911918-006	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-06-DSW-091209	K0911918-006	Toluene	12/18/2009	0.06		Yes	Y	J			0.50	0.052	ug/l
PCM-06-DSW-091209	K0911918-006	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-08-DSW-091209	K0911918-007	Toluene	12/18/2009	0.07		Yes	Y	J			0.50	0.052	ug/l
PCM-08-DSW-091209	K0911918-007	Benzene	12/18/2009	0.5		Yes	N	U			0.50	0.038	ug/l
PCM-08-DSW-091209	K0911918-007	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-08-DSW-091209	K0911918-007	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-08-DSW-091209	K0911918-007	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-09-DSW-091209	K0911918-008	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-09-DSW-091209	K0911918-008	Benzene	12/18/2009	0.05		Yes	Y	J			0.50	0.038	ug/l
PCM-09-DSW-091209	K0911918-008	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-09-DSW-091209	K0911918-008	Toluene	12/18/2009	0.08		Yes	Y	J			0.50	0.052	ug/l
PCM-09-DSW-091209	K0911918-008	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-10-DSW-091209	K0911918-009	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-10-DSW-091209	K0911918-009	Ethylbenzene	12/18/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-10-DSW-091209	K0911918-009	Toluene	12/18/2009	0.07		Yes	Y	J			0.50	0.052	ug/l
PCM-10-DSW-091209	K0911918-009	Benzene	12/18/2009	0.5		Yes	N	U			0.50	0.038	ug/l
PCM-10-DSW-091209	K0911918-009	m,p-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-13-DSW-091209	K0911918-010	o-Xylene	12/18/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-13-DSW-091209	K0911918-010	Toluene	12/18/2009	0.13		Yes	Y	J			0.50	0.052	ug/l

Analytical Method	SW8260												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-13-DSW-091209	K0911918-010	Ethylbenzene	12/18/2009	0.5	Yes	N	U			0.50	0.050	ug/l
PCM-13-DSW-091209	K0911918-010	Benzene	12/18/2009	0.05	Yes	Y	J			0.50	0.038	ug/l
PCM-13-DSW-091209	K0911918-010	m,p-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-19-DSW-091209	K0911918-011	o-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.074	ug/l
PCM-19-DSW-091209	K0911918-011	Benzene	12/18/2009	0.06	Yes	Y	J			0.50	0.038	ug/l
PCM-19-DSW-091209	K0911918-011	m,p-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-19-DSW-091209	K0911918-011	Toluene	12/18/2009	0.12	Yes	Y	J			0.50	0.052	ug/l
PCM-19-DSW-091209	K0911918-011	Ethylbenzene	12/18/2009	0.5	Yes	N	U			0.50	0.050	ug/l
PCM-20-DSW-091209	K0911918-012	o-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.074	ug/l
PCM-20-DSW-091209	K0911918-012	Ethylbenzene	12/18/2009	0.5	Yes	N	U			0.50	0.050	ug/l
PCM-20-DSW-091209	K0911918-012	Toluene	12/18/2009	0.1	Yes	Y	J			0.50	0.052	ug/l
PCM-20-DSW-091209	K0911918-012	m,p-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-20-DSW-091209	K0911918-012	Benzene	12/18/2009	0.04	Yes	Y	J			0.50	0.038	ug/l
PCM-21-DSW-091209	K0911918-013	o-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.074	ug/l
PCM-21-DSW-091209	K0911918-013	Ethylbenzene	12/18/2009	0.5	Yes	N	U			0.50	0.050	ug/l
PCM-21-DSW-091209	K0911918-013	Toluene	12/18/2009	0.08	Yes	Y	J			0.50	0.052	ug/l
PCM-21-DSW-091209	K0911918-013	m,p-Xylene	12/18/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-21-DSW-091209	K0911918-013	Benzene	12/18/2009	0.5	Yes	N	U			0.50	0.038	ug/l
PCM-TB-091209	K0911918-014	Ethylbenzene	12/17/2009	0.5	Yes	N	U			0.50	0.050	ug/l
PCM-TB-091209	K0911918-014	Toluene	12/17/2009	0.5	Yes	N	U			0.50	0.052	ug/l
PCM-TB-091209	K0911918-014	m,p-Xylene	12/17/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-TB-091209	K0911918-014	Benzene	12/17/2009	0.5	Yes	N	U			0.50	0.038	ug/l
PCM-TB-091209	K0911918-014	o-Xylene	12/17/2009	0.5	Yes	N	U			0.50	0.074	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-01-DSW-091209	K0911918-001	Anthracene	12/18/2009	0.021		Yes	N	U			0.021	0.0037	ug/l
PCM-01-DSW-091209	K0911918-001	Benzo(g,h,i)perylene	12/18/2009	0.021		Yes	N	U			0.021	0.0030	ug/l
PCM-01-DSW-091209	K0911918-001	Benzo(b)fluoranthene	12/18/2009	0.021		Yes	N	U			0.021	0.0024	ug/l
PCM-01-DSW-091209	K0911918-001	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.021		Yes	N	U			0.021	0.0027	ug/l
PCM-01-DSW-091209	K0911918-001	Pyrene	12/18/2009	0.0053		Yes	Y	J			0.021	0.0036	ug/l
PCM-01-DSW-091209	K0911918-001	Acenaphthene	12/18/2009	0.0047		Yes	Y	J			0.021	0.0046	ug/l
PCM-01-DSW-091209	K0911918-001	Chrysene	12/18/2009	0.021		Yes	N	U			0.021	0.0035	ug/l
PCM-01-DSW-091209	K0911918-001	Naphthalene	12/18/2009	0.031		Yes	Y				0.021	0.0031	ug/l
PCM-01-DSW-091209	K0911918-001	Fluoranthene	12/18/2009	0.0066		Yes	Y	J			0.021	0.0046	ug/l
PCM-01-DSW-091209	K0911918-001	Fluorene	12/18/2009	0.021		Yes	N	U			0.021	0.0039	ug/l
PCM-01-DSW-091209	K0911918-001	2-Methylnaphthalene	12/18/2009	0.0032		Yes	Y	J			0.021	0.0024	ug/l
PCM-01-DSW-091209	K0911918-001	Phenanthrene	12/18/2009	0.0083		Yes	Y	J			0.021	0.0052	ug/l
PCM-01-DSW-091209	K0911918-001	Dibenzo(a,h)anthracene	12/18/2009	0.021		Yes	N	U			0.021	0.0026	ug/l
PCM-01-DSW-091209	K0911918-001	Benzo(a)anthracene	12/18/2009	0.0035	0.021	Yes	N	J	U	7	0.021	0.0027	ug/l
PCM-01-DSW-091209	K0911918-001	Benzo(a)pyrene	12/18/2009	0.021		Yes	N	U			0.021	0.0045	ug/l
PCM-01-DSW-091209	K0911918-001	Acenaphthylene	12/18/2009	0.021		Yes	N	U			0.021	0.0035	ug/l
PCM-01-DSW-091209	K0911918-001	Benzo(k)fluoranthene	12/18/2009	0.021		Yes	N	U			0.021	0.0026	ug/l
PCM-02-DSW-091209	K0911918-002	Chrysene	12/18/2009	0.0061		Yes	Y	J			0.020	0.0034	ug/l
PCM-02-DSW-091209	K0911918-002	Phenanthrene	12/18/2009	0.029		Yes	Y				0.020	0.0050	ug/l
PCM-02-DSW-091209	K0911918-002	Benzo(a)pyrene	12/18/2009	0.0067		Yes	Y	J			0.020	0.0043	ug/l
PCM-02-DSW-091209	K0911918-002	Benzo(a)anthracene	12/18/2009	0.0074	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-02-DSW-091209	K0911918-002	Anthracene	12/18/2009	0.0075		Yes	Y	J			0.020	0.0036	ug/l
PCM-02-DSW-091209	K0911918-002	Benzo(g,h,i)perylene	12/18/2009	0.0067	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-02-DSW-091209	K0911918-002	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0047		Yes	Y	J			0.020	0.0026	ug/l
PCM-02-DSW-091209	K0911918-002	Benzo(b)fluoranthene	12/18/2009	0.0064		Yes	Y	J			0.020	0.0023	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DSW-091209	K0911918-002	Fluoranthene	12/18/2009	0.025		Yes	Y				0.020	0.0044	ug/l
PCM-02-DSW-091209	K0911918-002	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-02-DSW-091209	K0911918-002	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-02-DSW-091209	K0911918-002	Acenaphthene	12/18/2009	0.019		Yes	Y	J			0.020	0.0044	ug/l
PCM-02-DSW-091209	K0911918-002	Pyrene	12/18/2009	0.024		Yes	Y				0.020	0.0035	ug/l
PCM-02-DSW-091209	K0911918-002	2-Methylnaphthalene	12/18/2009	0.0073		Yes	Y	J			0.020	0.0023	ug/l
PCM-02-DSW-091209	K0911918-002	Naphthalene	12/18/2009	0.067		Yes	Y				0.020	0.0030	ug/l
PCM-02-DSW-091209	K0911918-002	Fluorene	12/18/2009	0.012		Yes	Y	J			0.020	0.0038	ug/l
PCM-02-DSW-091209	K0911918-002	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-03-DSW-091209	K0911918-003	Acenaphthene	12/18/2009	0.014		Yes	Y	J			0.020	0.0044	ug/l
PCM-03-DSW-091209	K0911918-003	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-03-DSW-091209	K0911918-003	Benzo(b)fluoranthene	12/18/2009	0.0042		Yes	Y	J			0.020	0.0023	ug/l
PCM-03-DSW-091209	K0911918-003	Fluoranthene	12/18/2009	0.015		Yes	Y	J			0.020	0.0044	ug/l
PCM-03-DSW-091209	K0911918-003	Benzo(a)pyrene	12/18/2009	0.0048		Yes	Y	J			0.020	0.0043	ug/l
PCM-03-DSW-091209	K0911918-003	Benzo(a)anthracene	12/18/2009	0.0055	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-03-DSW-091209	K0911918-003	Chrysene	12/18/2009	0.0052		Yes	Y	J			0.020	0.0034	ug/l
PCM-03-DSW-091209	K0911918-003	Phenanthrene	12/18/2009	0.02		Yes	Y				0.020	0.0050	ug/l
PCM-03-DSW-091209	K0911918-003	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-03-DSW-091209	K0911918-003	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0035		Yes	Y	J			0.020	0.0026	ug/l
PCM-03-DSW-091209	K0911918-003	Fluorene	12/18/2009	0.0066		Yes	Y	J			0.020	0.0038	ug/l
PCM-03-DSW-091209	K0911918-003	Naphthalene	12/18/2009	0.077		Yes	Y				0.020	0.0030	ug/l
PCM-03-DSW-091209	K0911918-003	2-Methylnaphthalene	12/18/2009	0.0055		Yes	Y	J			0.020	0.0023	ug/l
PCM-03-DSW-091209	K0911918-003	Anthracene	12/18/2009	0.0051		Yes	Y	J			0.020	0.0036	ug/l
PCM-03-DSW-091209	K0911918-003	Pyrene	12/18/2009	0.017		Yes	Y	J			0.020	0.0035	ug/l
PCM-03-DSW-091209	K0911918-003	Benzo(g,h,i)perylene	12/18/2009	0.0041	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-03-DSW-091209	K0911918-003	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-04-DSW-091209	K0911918-004	Benzo(g,h,i)perylene	12/18/2009	0.0053	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-04-DSW-091209	K0911918-004	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-04-DSW-091209	K0911918-004	Benzo(a)pyrene	12/18/2009	0.02		Yes	N	U			0.020	0.0043	ug/l
PCM-04-DSW-091209	K0911918-004	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0039		Yes	Y	J			0.020	0.0026	ug/l
PCM-04-DSW-091209	K0911918-004	Benzo(b)fluoranthene	12/18/2009	0.0053		Yes	Y	J			0.020	0.0023	ug/l
PCM-04-DSW-091209	K0911918-004	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-04-DSW-091209	K0911918-004	Anthracene	12/18/2009	0.0047		Yes	Y	J			0.020	0.0036	ug/l
PCM-04-DSW-091209	K0911918-004	Acenaphthylene	12/18/2009	0.0041		Yes	Y	J			0.020	0.0034	ug/l
PCM-04-DSW-091209	K0911918-004	Chrysene	12/18/2009	0.0048		Yes	Y	J			0.020	0.0034	ug/l
PCM-04-DSW-091209	K0911918-004	Fluoranthene	12/18/2009	0.019		Yes	Y	J			0.020	0.0044	ug/l
PCM-04-DSW-091209	K0911918-004	Phenanthrene	12/18/2009	0.02		Yes	Y	J			0.020	0.0050	ug/l
PCM-04-DSW-091209	K0911918-004	Pyrene	12/18/2009	0.021		Yes	Y				0.020	0.0035	ug/l
PCM-04-DSW-091209	K0911918-004	Naphthalene	12/18/2009	0.075		Yes	Y				0.020	0.0030	ug/l
PCM-04-DSW-091209	K0911918-004	2-Methylnaphthalene	12/18/2009	0.0078		Yes	Y	J			0.020	0.0023	ug/l
PCM-04-DSW-091209	K0911918-004	Benzo(a)anthracene	12/18/2009	0.0072	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-04-DSW-091209	K0911918-004	Acenaphthene	12/18/2009	0.013		Yes	Y	J			0.020	0.0044	ug/l
PCM-04-DSW-091209	K0911918-004	Fluorene	12/18/2009	0.0058		Yes	Y	J			0.020	0.0038	ug/l
PCM-05-DSW-091209	K0911918-005	Acenaphthene	12/18/2009	0.02		Yes	Y	J			0.020	0.0044	ug/l
PCM-05-DSW-091209	K0911918-005	Phenanthrene	12/18/2009	0.027		Yes	Y				0.020	0.0050	ug/l
PCM-05-DSW-091209	K0911918-005	Benzo(a)anthracene	12/18/2009	0.0066	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-05-DSW-091209	K0911918-005	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-05-DSW-091209	K0911918-005	Benzo(a)pyrene	12/18/2009	0.0065		Yes	Y	J			0.020	0.0043	ug/l
PCM-05-DSW-091209	K0911918-005	Chrysene	12/18/2009	0.008		Yes	Y	J			0.020	0.0034	ug/l
PCM-05-DSW-091209	K0911918-005	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-05-DSW-091209	K0911918-005	Naphthalene	12/18/2009	0.096		Yes	Y				0.020	0.0030	ug/l
PCM-05-DSW-091209	K0911918-005	Anthracene	12/18/2009	0.007		Yes	Y	J			0.020	0.0036	ug/l
PCM-05-DSW-091209	K0911918-005	2-Methylnaphthalene	12/18/2009	0.0082		Yes	Y	J			0.020	0.0023	ug/l
PCM-05-DSW-091209	K0911918-005	Pyrene	12/18/2009	0.027		Yes	Y				0.020	0.0035	ug/l
PCM-05-DSW-091209	K0911918-005	Benzo(g,h,i)perylene	12/18/2009	0.0052	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-05-DSW-091209	K0911918-005	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0038		Yes	Y	J			0.020	0.0026	ug/l
PCM-05-DSW-091209	K0911918-005	Benzo(b)fluoranthene	12/18/2009	0.0061		Yes	Y	J			0.020	0.0023	ug/l
PCM-05-DSW-091209	K0911918-005	Fluoranthene	12/18/2009	0.025		Yes	Y				0.020	0.0044	ug/l
PCM-05-DSW-091209	K0911918-005	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-05-DSW-091209	K0911918-005	Fluorene	12/18/2009	0.011		Yes	Y	J			0.020	0.0038	ug/l
PCM-06-DSW-091209	K0911918-006	Chrysene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-06-DSW-091209	K0911918-006	Benzo(a)pyrene	12/18/2009	0.02		Yes	N	U			0.020	0.0043	ug/l
PCM-06-DSW-091209	K0911918-006	2-Methylnaphthalene	12/18/2009	0.0046		Yes	Y	J			0.020	0.0023	ug/l
PCM-06-DSW-091209	K0911918-006	Naphthalene	12/18/2009	0.057		Yes	Y				0.020	0.0030	ug/l
PCM-06-DSW-091209	K0911918-006	Fluorene	12/18/2009	0.0041		Yes	Y	J			0.020	0.0038	ug/l
PCM-06-DSW-091209	K0911918-006	Phenanthrene	12/18/2009	0.011		Yes	Y	J			0.020	0.0050	ug/l
PCM-06-DSW-091209	K0911918-006	Acenaphthene	12/18/2009	0.0073		Yes	Y	J			0.020	0.0044	ug/l
PCM-06-DSW-091209	K0911918-006	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-06-DSW-091209	K0911918-006	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-06-DSW-091209	K0911918-006	Anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0036	ug/l
PCM-06-DSW-091209	K0911918-006	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-06-DSW-091209	K0911918-006	Fluoranthene	12/18/2009	0.0091		Yes	Y	J			0.020	0.0044	ug/l
PCM-06-DSW-091209	K0911918-006	Benzo(b)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0023	ug/l
PCM-06-DSW-091209	K0911918-006	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.02		Yes	N	U			0.020	0.0026	ug/l
PCM-06-DSW-091209	K0911918-006	Benzo(g,h,i)perylene	12/18/2009	0.02		Yes	N	U			0.020	0.0029	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DSW-091209	K0911918-006	Pyrene	12/18/2009	0.0094		Yes	Y	J			0.020	0.0035	ug/l
PCM-06-DSW-091209	K0911918-006	Benzo(a)anthracene	12/18/2009	0.0051	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-08-DSW-091209	K0911918-007	Acenaphthene	12/18/2009	0.0055		Yes	Y	J			0.020	0.0044	ug/l
PCM-08-DSW-091209	K0911918-007	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-08-DSW-091209	K0911918-007	Fluorene	12/18/2009	0.02		Yes	N	U			0.020	0.0038	ug/l
PCM-08-DSW-091209	K0911918-007	Phenanthrene	12/18/2009	0.0099		Yes	Y	J			0.020	0.0050	ug/l
PCM-08-DSW-091209	K0911918-007	Benzo(a)anthracene	12/18/2009	0.0037	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-08-DSW-091209	K0911918-007	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-08-DSW-091209	K0911918-007	Benzo(a)pyrene	12/18/2009	0.02		Yes	N	U			0.020	0.0043	ug/l
PCM-08-DSW-091209	K0911918-007	Naphthalene	12/18/2009	0.038		Yes	Y				0.020	0.0030	ug/l
PCM-08-DSW-091209	K0911918-007	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-08-DSW-091209	K0911918-007	2-Methylnaphthalene	12/18/2009	0.004		Yes	Y	J			0.020	0.0023	ug/l
PCM-08-DSW-091209	K0911918-007	Fluoranthene	12/18/2009	0.0095		Yes	Y	J			0.020	0.0044	ug/l
PCM-08-DSW-091209	K0911918-007	Benzo(b)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0023	ug/l
PCM-08-DSW-091209	K0911918-007	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.02		Yes	N	U			0.020	0.0026	ug/l
PCM-08-DSW-091209	K0911918-007	Benzo(g,h,i)perylene	12/18/2009	0.02		Yes	N	U			0.020	0.0029	ug/l
PCM-08-DSW-091209	K0911918-007	Pyrene	12/18/2009	0.0077		Yes	Y	J			0.020	0.0035	ug/l
PCM-08-DSW-091209	K0911918-007	Anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0036	ug/l
PCM-08-DSW-091209	K0911918-007	Chrysene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-09-DSW-091209	K0911918-008	Chrysene	12/18/2009	0.0079		Yes	Y	J			0.020	0.0034	ug/l
PCM-09-DSW-091209	K0911918-008	Naphthalene	12/18/2009	0.051		Yes	Y				0.020	0.0030	ug/l
PCM-09-DSW-091209	K0911918-008	Fluorene	12/18/2009	0.0062		Yes	Y	J			0.020	0.0038	ug/l
PCM-09-DSW-091209	K0911918-008	Phenanthrene	12/18/2009	0.019		Yes	Y	J			0.020	0.0050	ug/l
PCM-09-DSW-091209	K0911918-008	Acenaphthene	12/18/2009	0.014		Yes	Y	J			0.020	0.0044	ug/l
PCM-09-DSW-091209	K0911918-008	Benzo(a)anthracene	12/18/2009	0.0085	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DSW-091209	K0911918-008	Anthracene	12/18/2009	0.0062		Yes	Y	J			0.020	0.0036	ug/l
PCM-09-DSW-091209	K0911918-008	Benzo(a)pyrene	12/18/2009	0.0081		Yes	Y	J			0.020	0.0043	ug/l
PCM-09-DSW-091209	K0911918-008	2-Methylnaphthalene	12/18/2009	0.007		Yes	Y	J			0.020	0.0023	ug/l
PCM-09-DSW-091209	K0911918-008	Acenaphthylene	12/18/2009	0.0039		Yes	Y	J			0.020	0.0034	ug/l
PCM-09-DSW-091209	K0911918-008	Benzo(k)fluoranthene	12/18/2009	0.0042		Yes	Y	J			0.020	0.0025	ug/l
PCM-09-DSW-091209	K0911918-008	Fluoranthene	12/18/2009	0.022		Yes	Y				0.020	0.0044	ug/l
PCM-09-DSW-091209	K0911918-008	Benzo(b)fluoranthene	12/18/2009	0.01		Yes	Y	J			0.020	0.0023	ug/l
PCM-09-DSW-091209	K0911918-008	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0065		Yes	Y	J			0.020	0.0026	ug/l
PCM-09-DSW-091209	K0911918-008	Benzo(g,h,i)perylene	12/18/2009	0.0073	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-09-DSW-091209	K0911918-008	Pyrene	12/18/2009	0.021		Yes	Y				0.020	0.0035	ug/l
PCM-09-DSW-091209	K0911918-008	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-10-DSW-091209	K0911918-009	Benzo(b)fluoranthene	12/18/2009	0.013		Yes	Y	J			0.021	0.0024	ug/l
PCM-10-DSW-091209	K0911918-009	Chrysene	12/18/2009	0.015		Yes	Y	J			0.021	0.0035	ug/l
PCM-10-DSW-091209	K0911918-009	Naphthalene	12/18/2009	0.08		Yes	Y				0.021	0.0031	ug/l
PCM-10-DSW-091209	K0911918-009	Fluorene	12/18/2009	0.0052		Yes	Y	J			0.021	0.0039	ug/l
PCM-10-DSW-091209	K0911918-009	Phenanthrene	12/18/2009	0.02		Yes	Y	J			0.021	0.0052	ug/l
PCM-10-DSW-091209	K0911918-009	Acenaphthene	12/18/2009	0.01		Yes	Y	J			0.021	0.0046	ug/l
PCM-10-DSW-091209	K0911918-009	Benzo(a)anthracene	12/18/2009	0.011	0.021	Yes	N	J	U	7	0.021	0.0027	ug/l
PCM-10-DSW-091209	K0911918-009	2-Methylnaphthalene	12/18/2009	0.0053		Yes	Y	J			0.021	0.0024	ug/l
PCM-10-DSW-091209	K0911918-009	Benzo(a)pyrene	12/18/2009	0.011		Yes	Y	J			0.021	0.0045	ug/l
PCM-10-DSW-091209	K0911918-009	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.01		Yes	Y	J			0.021	0.0027	ug/l
PCM-10-DSW-091209	K0911918-009	Acenaphthylene	12/18/2009	0.021		Yes	N	U			0.021	0.0035	ug/l
PCM-10-DSW-091209	K0911918-009	Fluoranthene	12/18/2009	0.029		Yes	Y				0.021	0.0046	ug/l
PCM-10-DSW-091209	K0911918-009	Benzo(g,h,i)perylene	12/18/2009	0.012	0.021	Yes	N	J	U	7	0.021	0.0030	ug/l
PCM-10-DSW-091209	K0911918-009	Benzo(k)fluoranthene	12/18/2009	0.0055		Yes	Y	J			0.021	0.0026	ug/l

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-10-DSW-091209	K0911918-009	Pyrene	12/18/2009	0.028		Yes	Y				0.021	0.0036	ug/l
PCM-10-DSW-091209	K0911918-009	Anthracene	12/18/2009	0.007		Yes	Y	J			0.021	0.0037	ug/l
PCM-10-DSW-091209	K0911918-009	Dibenzo(a,h)anthracene	12/18/2009	0.021		Yes	N	U			0.021	0.0026	ug/l
PCM-13-DSW-091209	K0911918-010	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-13-DSW-091209	K0911918-010	Anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0036	ug/l
PCM-13-DSW-091209	K0911918-010	Benzo(b)fluoranthene	12/18/2009	0.0044		Yes	Y	J			0.020	0.0023	ug/l
PCM-13-DSW-091209	K0911918-010	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0038		Yes	Y	J			0.020	0.0026	ug/l
PCM-13-DSW-091209	K0911918-010	Benzo(g,h,i)perylene	12/18/2009	0.0047	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-13-DSW-091209	K0911918-010	Pyrene	12/18/2009	0.018		Yes	Y	J			0.020	0.0035	ug/l
PCM-13-DSW-091209	K0911918-010	Benzo(a)pyrene	12/18/2009	0.0056		Yes	Y	J			0.020	0.0043	ug/l
PCM-13-DSW-091209	K0911918-010	Benzo(a)anthracene	12/18/2009	0.0062	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-13-DSW-091209	K0911918-010	Acenaphthene	12/18/2009	0.0082		Yes	Y	J			0.020	0.0044	ug/l
PCM-13-DSW-091209	K0911918-010	Fluoranthene	12/18/2009	0.018		Yes	Y	J			0.020	0.0044	ug/l
PCM-13-DSW-091209	K0911918-010	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-13-DSW-091209	K0911918-010	2-Methylnaphthalene	12/18/2009	0.0049		Yes	Y	J			0.020	0.0023	ug/l
PCM-13-DSW-091209	K0911918-010	Chrysene	12/18/2009	0.0053		Yes	Y	J			0.020	0.0034	ug/l
PCM-13-DSW-091209	K0911918-010	Naphthalene	12/18/2009	0.042		Yes	Y				0.020	0.0030	ug/l
PCM-13-DSW-091209	K0911918-010	Fluorene	12/18/2009	0.02		Yes	N	U			0.020	0.0038	ug/l
PCM-13-DSW-091209	K0911918-010	Phenanthrene	12/18/2009	0.018		Yes	Y	J			0.020	0.0050	ug/l
PCM-13-DSW-091209	K0911918-010	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-19-DSW-091209	K0911918-011	Phenanthrene	12/18/2009	0.019		Yes	Y	J			0.020	0.0050	ug/l
PCM-19-DSW-091209	K0911918-011	Fluorene	12/18/2009	0.0053		Yes	Y	J			0.020	0.0038	ug/l
PCM-19-DSW-091209	K0911918-011	2-Methylnaphthalene	12/18/2009	0.0059		Yes	Y	J			0.020	0.0023	ug/l
PCM-19-DSW-091209	K0911918-011	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0033		Yes	Y	J			0.020	0.0026	ug/l
PCM-19-DSW-091209	K0911918-011	Anthracene	12/18/2009	0.0051		Yes	Y	J			0.020	0.0036	ug/l

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-19-DSW-091209	K0911918-011	Naphthalene	12/18/2009	0.074		Yes	Y				0.020	0.0030	ug/l
PCM-19-DSW-091209	K0911918-011	Benzo(g,h,i)perylene	12/18/2009	0.0042	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-19-DSW-091209	K0911918-011	Acenaphthene	12/18/2009	0.014		Yes	Y	J			0.020	0.0044	ug/l
PCM-19-DSW-091209	K0911918-011	Benzo(b)fluoranthene	12/18/2009	0.0034		Yes	Y	J			0.020	0.0023	ug/l
PCM-19-DSW-091209	K0911918-011	Fluoranthene	12/18/2009	0.016		Yes	Y	J			0.020	0.0044	ug/l
PCM-19-DSW-091209	K0911918-011	Benzo(k)fluoranthene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-19-DSW-091209	K0911918-011	Chrysene	12/18/2009	0.0042		Yes	Y	J			0.020	0.0034	ug/l
PCM-19-DSW-091209	K0911918-011	Benzo(a)pyrene	12/18/2009	0.0048		Yes	Y	J			0.020	0.0043	ug/l
PCM-19-DSW-091209	K0911918-011	Dibenzo(a,h)anthracene	12/18/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-19-DSW-091209	K0911918-011	Benzo(a)anthracene	12/18/2009	0.0065	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-19-DSW-091209	K0911918-011	Acenaphthylene	12/18/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-19-DSW-091209	K0911918-011	Pyrene	12/18/2009	0.016		Yes	Y	J			0.020	0.0035	ug/l
PCM-20-DSW-091209	K0911918-012	2-Methylnaphthalene	12/18/2009	0.0046		Yes	Y	J			0.021	0.0024	ug/l
PCM-20-DSW-091209	K0911918-012	Chrysene	12/18/2009	0.0049		Yes	Y	J			0.021	0.0035	ug/l
PCM-20-DSW-091209	K0911918-012	Benzo(a)pyrene	12/18/2009	0.0066		Yes	Y	J			0.021	0.0045	ug/l
PCM-20-DSW-091209	K0911918-012	Dibenzo(a,h)anthracene	12/18/2009	0.021		Yes	N	U			0.021	0.0026	ug/l
PCM-20-DSW-091209	K0911918-012	Benzo(a)anthracene	12/18/2009	0.0064	0.021	Yes	N	J	U	7	0.021	0.0027	ug/l
PCM-20-DSW-091209	K0911918-012	Acenaphthene	12/18/2009	0.0063		Yes	Y	J			0.021	0.0046	ug/l
PCM-20-DSW-091209	K0911918-012	Phenanthrene	12/18/2009	0.015		Yes	Y	J			0.021	0.0052	ug/l
PCM-20-DSW-091209	K0911918-012	Naphthalene	12/18/2009	0.066		Yes	Y				0.021	0.0031	ug/l
PCM-20-DSW-091209	K0911918-012	Anthracene	12/18/2009	0.0038		Yes	Y	J			0.021	0.0037	ug/l
PCM-20-DSW-091209	K0911918-012	Acenaphthylene	12/18/2009	0.021		Yes	N	U			0.021	0.0035	ug/l
PCM-20-DSW-091209	K0911918-012	Fluorene	12/18/2009	0.0045		Yes	Y	J			0.021	0.0039	ug/l
PCM-20-DSW-091209	K0911918-012	Benzo(k)fluoranthene	12/18/2009	0.021		Yes	N	U			0.021	0.0026	ug/l
PCM-20-DSW-091209	K0911918-012	Fluoranthene	12/18/2009	0.02		Yes	Y	J			0.021	0.0046	ug/l

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-20-DSW-091209	K0911918-012	Benzo(b)fluoranthene	12/18/2009	0.0058		Yes	Y	J			0.021	0.0024	ug/l
PCM-20-DSW-091209	K0911918-012	Indeno(1,2,3-c,d)pyrene	12/18/2009	0.0043		Yes	Y	J			0.021	0.0027	ug/l
PCM-20-DSW-091209	K0911918-012	Pyrene	12/18/2009	0.023		Yes	Y				0.021	0.0036	ug/l
PCM-20-DSW-091209	K0911918-012	Benzo(g,h,i)perylene	12/18/2009	0.0059	0.021	Yes	N	J	U	7	0.021	0.0030	ug/l
PCM-21-DSW-091209	K0911918-013	Fluoranthene	12/21/2009	0.0091		Yes	Y	J			0.020	0.0044	ug/l
PCM-21-DSW-091209	K0911918-013	Benzo(b)fluoranthene	12/21/2009	0.0029		Yes	Y	J			0.020	0.0023	ug/l
PCM-21-DSW-091209	K0911918-013	Indeno(1,2,3-c,d)pyrene	12/21/2009	0.02		Yes	N	U			0.020	0.0026	ug/l
PCM-21-DSW-091209	K0911918-013	Benzo(g,h,i)perylene	12/21/2009	0.0036	0.020	Yes	N	J	U	7	0.020	0.0029	ug/l
PCM-21-DSW-091209	K0911918-013	Pyrene	12/21/2009	0.007		Yes	Y	J			0.020	0.0035	ug/l
PCM-21-DSW-091209	K0911918-013	Anthracene	12/21/2009	0.02		Yes	N	U			0.020	0.0036	ug/l
PCM-21-DSW-091209	K0911918-013	Benzo(k)fluoranthene	12/21/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-21-DSW-091209	K0911918-013	Acenaphthylene	12/21/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-21-DSW-091209	K0911918-013	Benzo(a)pyrene	12/21/2009	0.02		Yes	N	U			0.020	0.0043	ug/l
PCM-21-DSW-091209	K0911918-013	Dibenzo(a,h)anthracene	12/21/2009	0.02		Yes	N	U			0.020	0.0025	ug/l
PCM-21-DSW-091209	K0911918-013	Benzo(a)anthracene	12/21/2009	0.0039	0.020	Yes	N	J	U	7	0.020	0.0026	ug/l
PCM-21-DSW-091209	K0911918-013	Acenaphthene	12/21/2009	0.0046		Yes	Y	J			0.020	0.0044	ug/l
PCM-21-DSW-091209	K0911918-013	Chrysene	12/21/2009	0.02		Yes	N	U			0.020	0.0034	ug/l
PCM-21-DSW-091209	K0911918-013	Phenanthrene	12/21/2009	0.011		Yes	Y	J			0.020	0.0050	ug/l
PCM-21-DSW-091209	K0911918-013	Fluorene	12/21/2009	0.02		Yes	N	U			0.020	0.0038	ug/l
PCM-21-DSW-091209	K0911918-013	Naphthalene	12/21/2009	0.074		Yes	Y				0.020	0.0030	ug/l
PCM-21-DSW-091209	K0911918-013	2-Methylnaphthalene	12/21/2009	0.0041		Yes	Y	J			0.020	0.0023	ug/l

NW Natural Gasco Pilot Cap Monitoring Year 3
Data Validation Reports
LDC #22482

K0911919

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Volatiles
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209

Introduction

This data review covers 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/25/09	Acrolein Vinyl acetate	0.0353 (≥0.05) 0.0418 (≥0.05)	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209 KWG0911937-MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/17/09	Acrolein Acrylonitrile Vinyl acetate 2-Chloroethylvinyl ether	0.0121 (≥0.05) 0.0408 (≥0.05) 0.0297 (≥0.05) 0.0305 (≥0.05)	PCM-02-DS-091209 KWG0912009-MB	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/18/09	Bromomethane Iodomethane	27 60	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209 KWG0911937-MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/21/09	Acrolein	47	PCM-02-DS-091209 KWG0912009-MB	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/17/09	Iodomethane	32	PCM-02-DS-091209 KWG0912009-MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
12/18/09	Acrolein Vinyl acetate	0.0357 (≥0.05) 0.0403 (≥0.05)	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209 KWG0911937-MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/21/09	Acrolein Acrylonitrile Vinyl acetate 2-Chloroethylvinyl ether	0.0178 (≥0.05) 0.0397 (≥0.05) 0.0284 (≥0.05) 0.0242 (≥0.05)	PCM-02-DS-091209 KWG0912009-MB	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0911937-MB	12/18/09	Acetone Methylene chloride Methyl-tert-butyl ether	6.7 ug/Kg 1.5 ug/Kg 0.47 ug/Kg	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0912009-MB	12/21/09	Acetone Methylene chloride 2-Butanone	0.33 mg/Kg 0.014 mg/Kg 0.27 mg/Kg	PCM-02-DS-091209

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
PCM-04-DS-091209	Acetone Methyl-tert-butyl ether	1.8 ug/Kg 0.29 ug/Kg	11U ug/Kg 2.1U ug/Kg
PCM-06-DS-091209	Methyl-tert-butyl ether	0.41 ug/Kg	2.8U ug/Kg
PCM-09-DS-091209	Methyl-tert-butyl ether	0.26 ug/Kg	2.6U ug/Kg
PCM-02-DS-091209	2-Butanone	0.88 mg/Kg	15U mg/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0911937-LCS/LCSD (PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209 KWG0911937-MB)	Iodomethane	154 (50-140)	155 (50-140)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration RRF and %D problems, data were qualified as estimated in four samples.

Due to method blank contamination problems, data were qualified as not detected in four samples.

No data were qualified due to high LCS/LCSD %Rs, the associated results were non-detected.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Data Qualification Summary - SDG K0911919

SDG	Sample	Compound	Flag	A or P	Reason
K0911919	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
K0911919	PCM-02-DS-091209	Acrolein Acrylonitrile Vinyl acetate 2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
K0911919	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Bromomethane Iodomethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911919	PCM-02-DS-091209	Acrolein	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911919	PCM-02-DS-091209	Iodomethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)
K0911919	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
K0911919	PCM-02-DS-091209	Acrolein Acrylonitrile Vinyl acetate 2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
K0911919	PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Iodomethane	J (all detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Laboratory Blank Data Qualification Summary - SDG K0911919

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K0911919	PCM-04-DS-091209	Acetone Methyl-tert-butyl ether	11U ug/Kg 2.1U ug/Kg	A
K0911919	PCM-06-DS-091209	Methyl-tert-butyl ether	2.8U ug/Kg	A
K0911919	PCM-09-DS-091209	Methyl-tert-butyl ether	2.6U ug/Kg	A
K0911919	PCM-02-DS-091209	2-Butanone	15U mg/Kg	A

LDC #: 22482B1
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2/8/10
Page: 1 of 1
Reviewer: FT
2nd Reviewer: ✓

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	
IV.	Continuing calibration/ICV	SW	ICV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	SW	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
sediments

1 1	PCM-02-DS-091209	11 1	KWG0912009-MB1	21		31	
2 2	PCM-04-DS-091209	12 2	KWG0911937-MB2	22		32	
3 2	PCM-06-DS-091209	13		23		33	
4 2	PCM-09-DS-091209	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

*** = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.**

LDC #: 22482B1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: ≤30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10/25/09	CAL9083	FFFF		0.0353	KWG0911937-MB,	J/UJ/A
			HH		0.0418	2 → 4	↓
	12/17/09	CAL9089	FFFF		0.0121	KWG0912009-MB,	
			GGGG		0.0408	1	
			HH		0.0297	↓	↓
			II		0.0305		

INICAL.1S

LDC #: 22482B1
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: PM
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	12/17/09	CAL9089-ICV	Iodomethane	32		KWG0912009-MB,	J/UJ/A
						1	
	12/18/09	1218F007	B	27		KWG0911937-MB,	J/UJ/A
			Iodomethane	60		2→4	
			FFFF		0.0357		
			HH		0.0403		
	12/21/09	1221F003	FFFF	47	0.0178	KWG0912009-MB,	J/UJ/A
			GGGG		0.0397	1	
			HH		0.0284		
			II		0.0242		

LDC #: 22482B1
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 12/18/09
Conc. units: ug/kg
Associated Samples: 2 → 4

Compound	Blank ID	Sample Identification								
	KWG0911937-MB	2	3	4						
F	6.7	1.8/11U	–	–						
E	1.5	–	–	–						
LL	0.47	0.29/2.1U	0.41/2.8U	0.26/2.6U						
~~NNN KKK~~	~~1.3~~	–	–	–						
CRQL										

Blank analysis date: 12/21/09
Conc. units: ug/kg
Associated Samples: 1 ~~(ND + 75x)~~

Compound	Blank ID	Sample Identification								
	KWG0912009-MB		1							
~~Methylene chloride~~ F	0.33		–							
~~Acetone~~ E	0.014		–							
M	0.27		0.88/~~3.4~~ 15U							
~~MMM~~	~~0.030~~		–							
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 22482B1
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		KWG0911937-	Iodomethane	154 (50-140)	155 (50-140)	( )	KWG0911937-MB,	J/Pdet
		lcs/D		( )	( )	( )	2 → 4	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Semivolatiles
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209MS
PCM-02-DS-091209MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/23/09	4-Nitroaniline	28	All samples in SDG K0911919	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for sample PCM-04-DS-091209. Since the sample was diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within the QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0911917-LCS/LCSD (All samples in SDG K0911919)	2-Methylphenol 2,4-Dimethylphenol Benzoic acid	- 47 (50-140) 18 (50-140)	48 (50-140) 49 (50-140) 20 (50-140)	- - -	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D and LCS/LCSD %R problems, data were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Semivolatiles - Data Qualification Summary - SDG K0911919

SDG	Sample	Compound	Flag	A or P	Reason
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	4-Nitroaniline	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	2-Methylphenol 2,4-Dimethylphenol Benzoic acid	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B2a

SDG #: K0911919

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/8/10

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD, r²
IV.	Continuing calibration	SW	ICV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Sediments

1+	PCM-02-DS-091209	11	KWG0911917-MB			31	
2+	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209MS	15		25		35	
6	PCM-02-DS-091209MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

COMPNDL2S

LDC #: 22482B2a

SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: Ft

2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	12/23/09	CAL9096-ICV	88	28		all + BLK	J/UJ/A

CONCAL.2S

LDC #: 22482B29
SDG #: all cases

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FZ
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		2	surrogates	outside limit ( )	no qual 50x DL
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP) = 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

SUR.2S

LDC #: 22482B2a
SDG #: SEE COVER

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		5+6	several compound	%R (+ %R)	RPD ( )		1	no qual as PL
			outside	(limit)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG.	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 22482B2a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		KWG0911917-	G	( )	48 (50-140)	( )	All + BLK	J/UJ/P
		LCS1D	D	47 (50-140)	49 (50-140)	( )	↓	↓
			PPP	18 (↓)	20 (↓)	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209MS
PCM-02-DS-091209MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all target compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within the QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B2b
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2/8/10
Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Continuing calibration/ICV	A	ICV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS ID
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
Sediments

1	PCM-02-DS-091209	11	KWG0911915-MB	21		31	
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209MS	15		25		35	
6	PCM-02-DS-091209MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 22482B2b
SDG #: all cases

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were percent recoveries (%R) for surrogates within QC limits?
Y N N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N N/A If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		1	TPH	182 (35-109)	no qual
				( )	
		2	↓	201 (↓)	↓
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	

* QC limits are advisory

	QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116
S3 (TPH) = Terphenyl-d14	18-137	33-141
S4 (PHL) = Phenol-d5	24-113	10-94
S5 (2FP) = 2-Fluorophenol	25-121	21-100
S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

SUR.2S

LDC #: 22482B2b
SDG #: SEE COVER

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		5 + 6	several	compounds were	)	outside	1	no qual 50X DL
			limit	( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG.	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Chlorinated Pesticides
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209MS
PCM-02-DS-091209MSD
PCM-06-DS-091209MS
PCM-06-DS-091209MSD

Introduction

This data review covers 8 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/24/09	1224F004D	D6-XLB	Mirex	21	PCM-02-DS-091209 PCM-04-DS-091209 PCM-09-DS-091209 PCM-02-DS-091209MS PCM-02-DS-091209MSD PCM-06-DS-091209MS PCM-06-DS-091209MSD	J (all detects) UJ (all non-detects)	A
12/24/09	1224F004D	D6-35MS	Mirex	21	PCM-02-DS-091209 PCM-04-DS-091209 PCM-09-DS-091209 PCM-02-DS-091209MS PCM-02-DS-091209MSD PCM-06-DS-091209MS PCM-06-DS-091209MSD	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/24/09	1224F004.D	DB-XLB	Mirex	21	PCM-02-DS-091209 PCM-04-DS-091209 PCM-09-DS-091209 PCM-02-DS-091209MS PCM-02-DS-091209MSD PCM-06-DS-091209MS PCM-06-DS-091209MSD	J (all detects) UJ (all non-detects)	A
12/24/09	1224F004.D	DB-35MS	Mirex	21	PCM-02-DS-091209 PCM-04-DS-091209 PCM-09-DS-091209 PCM-02-DS-091209MS PCM-02-DS-091209MSD PCM-06-DS-091209MS PCM-06-DS-091209MSD	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-02-DS-091209MS/MSD (PCM-02-DS-091209)	Hexachlorobenzene	27 (50-140)	42 (50-140)	44 (≤40)	J (all detects) UJ (all non-detects)	A
	alpha-BHC	40 (50-140)	-	73 (≤40)		
	beta-BHC	31 (50-140)	-	71 (≤40)		
	gamma-BHC	6 (50-140)	-	125 (≤40)		
	delta-BHC	35 (50-140)	-	73 (≤40)		
	Heptachlor epoxide	41 (50-140)	-	59 (≤40)		
	gamma-Chlordane	45 (50-140)	-	62 (≤40)		
	Endosulfan I	37 (50-140)	-	63 (≤40)		
	alpha-Chlordane	47 (50-140)	-	61 (≤40)		
	Dieldrin	30 (50-140)	-	63 (≤40)		
	4,4'-DDE	33 (50-140)	-	51 (≤40)		
	Endrin	49 (50-140)	-	57 (≤40)		
	Endosulfan II	44 (50-140)	-	62 (≤40)		
	Endrin aldehyde	30 (50-140)	-	63 (≤40)		
	Endrin ketone	38 (50-140)	-	79 (≤40)		
	Methoxychlor	38 (50-140)	-	67 (≤40)		
PCM-02-DS-091209MS/MSD (PCM-02-DS-091209)	Heptachlor	-	-	61 (≤40)	J (all detects)	A
	Aldrin	-	-	53 (≤40)	J (all detects)	
	Endosulfan sulfate	-	-	53 (≤40)	J (all detects)	
	4,4'-DDT	-	-	42 (≤40)	J (all detects)	
PCM-02-DS-091209MS/MSD (PCM-02-DS-091209)	4,4'-DDD	0 (50-140)	-	62 (≤40)	J (all detects) R (all non-detects)	A
PCM-06-DS-091209MS/MSD (PCM-06-DS-091209)	Toxaphene	48 (50-140)	-	-	J (all detects) UJ (all non-detects)	A
	Oxychlordane	-	47 (50-140)	-		
	trans-Nonachlor	-	45 (50-140)	43 (≤40)		
	Mirex	-	46 (50-140)	-		
	Hexachloroethane	-	25 (50-140)	82 (≤40)		
	Hexachlorobutadiene	-	36 (50-140)	60 (≤40)		
	2,4'-DDE	49 (50-140)	45 (50-140)	-		
	2,4'-DDD	26 (50-140)	20 (50-140)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
KWG0911913-LCS	Hexachlorobenzene	49 (50-140)	All samples in SDG K0911919	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D, MS/MSD %R and RPD, and LCS %R problems, data were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Data Qualification Summary - SDG K0911919

SDG	Sample	Compound	Flag	A or P	Reason
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209	Mirex	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911919	PCM-02-DS-091209	Hexachlorobenzene alpha-BHC beta-BHC gamma-BHC delta-BHC Heptachlor epoxide gamma-Chlordane Endosulfan I alpha-Chlordane Dieldrin 4,4'-DDE Endrin Endosulfan II Endrin aldehyde Endrin ketone Methoxychlor	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
K0911919	PCM-02-DS-091209	Heptachlor Aldrin Endosulfan sulfate 4,4'-DDT	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicates (RPD)
K0911919	PCM-02-DS-091209	4,4'-DDD	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
K0911919	PCM-06-DS-091209	Toxaphene Oxychlordane Mirex 2,4'-DDE 2,4'-DDD	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K0911919	PCM-06-DS-091209	trans-Nonachlor Hexachloroethane Hexachlorobutadiene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Hexachlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B3a

SDG #: K0911919

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2-5-10

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Chlorinated Pesticides (EPA SW 846 Method 8081A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	A	0/8 RSD
IV.	Continuing calibration/ICV	S.W.	ICV/CCV ≤ 200%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	S.W.	
VIII.	Laboratory control samples	S.W.	LCS
IX.	Regional quality assurance and quality control	N	
Xa.	Florisil cartridge check	N	
Xb.	GPC Calibration	N	
XI.	Target compound identification	N	
XII.	Compound quantitation and reported CRQLs	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All sediment

1	PCM-02-DS-091209	11		21		31	KWG0911913-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209MS	15		25		35	
6	PCM-02-DS-091209MSD	16		26		36	
7	PCM-06-DS-091209MS	17		27		37	
8	PCM-06-DS-091209MSD	18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. trans-Nonachlor
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Mirex
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Hexachloroethane
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Hexachlorobutadiene
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK. 2,4'-DDE
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL. 2,4'-DDD
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. Hexachlorobenzene	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. oxychlordane	NN.

Notes:

C:\docs\Work\Pesticides\COMPLST-3S.wpd

LDC #: 12482B39
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?
Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
Y N N/A Was at least one standard run daily to verify the working curve?
Y N N/A Did the continuing calibration standards meet the percent difference (%D) of ≤20.0%?

Level IV/D Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	12/4/09	1224F004.D	DB-XLB	HH	21	( )	1-2, 4-8	J/UJ/A
			DB-35MS	HH	21	( )		✓
						( )		
						( )		
						( )		
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						( )		
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A. alpha-BHC	E. Heptachlor	I. Dieldrin	M. 4,4'-DDD	Q. Endrin ketone	U. Toxaphene	Y. Aroclor-1242	CC. DB 608	GG._____
B. beta-BHC	F. Aldrin	J. 4,4'-DDE	N. Endosulfan sulfate	R. Endrin aldehyde	V. Aroclor-1016	Z. Aroclor-1248	DD. DB 1701	HH._____
C. delta-BHC	G. Heptachlor epoxide	K. Endrin	O. 4,4'-DDT	S. alpha-Chlordane	W. Aroclor-1221	AA. Aroclor-1254	EE._____	II._____
D. gamma-BHC	H. Endosulfan I	L. Endosulfan II	P. Methoxychlor	T. gamma-Chlordane	X. Aroclor-1232	BB. Aroclor-1260	FF._____	JJ._____

CONCAL.3S.wpd

LDC #: 22482B39
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5+6	EE	27 (50-140)	42 (50-140)	44 (≤40)		J/UJ/A ~~J det's/A~~
		A	40 ( )	( )	73 ( )		
		B	31 ( )	( )	71 ( )		
		D	6 ( )	( )	125 ( )		
		C	35 ( )	( )	73 ( )		
		E	( )	( )	61 ( )		J+/A
		F	( )	( )	53 ( )		
		G	41 ( )	( )	59 ( )		UJ/A
		T	45 ( )	( )	62 ( )		
		H	37 ( )	( )	63 ( )		
		S	47 ( )	( )	61 ( )		
		I	30 ( )	( )	63 ( )		
		J	33 ( )	( )	51 ( )		
		K	49 ( )	( )	57 ( )		
		L	44 ( )	( )	62 ( )		
		M	0 ( )	( )	62 ( )		J/R/A
		R	30 ( )	( )	63 ( )		UJ/A
		N	( )	( )	53 ( )		J+/A
		O	( )	( )	42 ( )		
		Q	38 ( )	( )	79 ( )		UJ/A
		P	38 ( )	( )	67 ( )		
			( )	( )	( )		
	7+8	U	48 ( )	( )	( )	3	J/UJ/A
		FF	( )	47 ( )	( )		J/UJ/A
		GG	( )	45 ( )	43 ( )		~~J/UJ/A~~

MSDNew.wpd

LDC #: 22482B39
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: VA
2nd Reviewer:

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	7+8	HH	(50-140)	46 (50-140)	(<40)	3	J/UJ/A
		II	( )	25 ( )	82 ( )		~~J/UJ/A~~ J/UJ/A
		JJ	( )	36 ( )	60 ( )		
		KK	49 ( )	45 ( )	( )		
		LL	26 ( )	20 ( )	( )		J/UJ/A
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 22482B39
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer:

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	KWG0911913-LCS	EE	49 (50-140)	( )	( )	All + Blk	J/UJ/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Polychlorinated Biphenyls
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209

Introduction

This data review covers 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polychlorinated Biphenyls - Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B3b
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-4-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	0/0028D
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 200/0
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS
IX.	Regional quality assurance and quality control	N	
Xa.	Florisil cartridge check	N	
Xb.	GPC Calibration	N	
XI.	Target compound identification	N	
XII.	Compound quantitation and reported CRQLs	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All sediment

1	PCM-02-DS-091209	11		21		31	KWG0911914-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Metals
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209MS
PCM-02-DS-091209DUP
PCM-06-DS-091209MS
PCM-06-DS-091209DUP

Introduction

This data review covers 8 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020 and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section IV.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Chromium Lead Mercury Zinc	0.22 mg/Kg 0.048 mg/Kg 0.002 mg/Kg 0.4 mg/Kg	All samples in SDG K0911919
ICB/CCB	Antimony Chromium Selenium	0.098 ug/L 0.17 ug/L 0.45 ug/L	All samples in SDG K0911919

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
PCM-04-DS-091209	Selenium	0.16 mg/Kg	0.16U mg/Kg
PCM-06-DS-091209	Selenium	0.20 mg/Kg	0.20U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
PCM-09-DS-091209	Selenium	0.22 mg/Kg	0.22U mg/Kg

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
PCM-06-DS-091209MS (All samples in SDG K0911919)	Antimony	49.4 (65-135)	J (all detects) UJ (all non-detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards (ICP-MS)

Raw data was not reviewed for this SDG.

X. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
PCM-06-DS-091209L	Copper Lead	13 (≤10) 11 (≤10)	All samples in SDG K0911919	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R and serial dilution %D problems, data were qualified as estimated in four samples.

Due to calibration blank contamination problems, selenium results were qualified as not detected in three samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
PCM-06-DS-091209L	Copper Lead	13 (≤10) 11 (≤10)	All samples in SDG K0911919	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Metals - Data Qualification Summary - SDG K0911919

SDG	Sample	Analyte	Flag	A or P	Reason
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R)
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Copper Lead	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Metals - Laboratory Blank Data Qualification Summary - SDG K0911919

SDG	Sample	Analyte	Modified Final Concentration	A or P
K0911919	PCM-04-DS-091209	Selenium	0.16U mg/Kg	A
K0911919	PCM-06-DS-091209	Selenium	0.20U mg/Kg	A
K0911919	PCM-09-DS-091209	Selenium	0.22U mg/Kg	A

LDC #: 22482B4
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-1-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	SW	MS
VII.	Duplicate Sample Analysis	A	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	Not reviewed
X.	Furnace Atomic Absorption QC	A	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: sediment

1	PCM-02-DS-091209	11	QBS	21		31	
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209MS	15		25		35	
6	PCM-02-DS-091209DUP	16		26		36	
7	PCM-06-DS-091209MS	17		27		37	
8	PCM-06-DS-091209DUP	18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482B4
SDG #: 160911919

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1 - 4	Sed.	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
QC: 5,6		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
L 7,8		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
Analysis Method		
ICP	S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
ICP Trace		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
ICP-MS	S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
GFAA	S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___

Comments: Mercury by CVAA if performed

LDC #: 22482B4
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: ~

METHOD: Trace metals (EPA SW 864 Method 6010B) Soil preparation factor applied: 50x; Se at 2x; Sb, Cr @ 5x
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2	3	4							
Sb			0.098	0.1225										
Cr	0.22		0.17	1.1										
Pb	0.048			0.24										
Hg	0.002			0.01										
Se			0.45	0.225	0.16	0.20	0.22							
Zn	0.4			2										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 22482B4
SDG #: K0911919

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125?~~ 65-135 If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Was a post digestion spike analyzed for ICP elements that did not meet the required criteria for matrix spike recovery?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
	7	Sed.	Sb	49.4	All	J/UJ/A

Comments:

LDC #: 22482B4
SDG #: 180911919

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the IDL, was an ICP serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Diluted Sample ID	Matrix	Analyte	%D	Associated Samples	Qualifications
	3	sed	Cu	13	All	J/UJ/A
			Pb	11	↓	↓

Comments:

SDIL.4S2

LDC Report# 22482B5

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Herbicides
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209

Introduction

This data review covers 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/25/09	1224F016.D	1	Dalapon	22	PCM-06-DS-091209 PCM-09-DS-091209	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
KWG0911718-LCS	Dalapon	44 (50-140)	All samples in SDG K0911919	J (all detects) UJ (all non-detects)	P

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D and LCS %R problems, dalapon results were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Herbicides - Data Qualification Summary - SDG K0911919

SDG	Sample	Compound	Flag	A or P	Reason
K0911919	PCM-06-DS-091209 PCM-09-DS-091209	Dalapon	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Dalapon	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Herbicides - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B5
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 1-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	%RSD, r²
IIb.	Calibration verification/ICV	S.W.	ICV/CCV ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	S.W.	no associated samples, no qual
IVc.	Laboratory control samples	S.W.	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All sediment

1	PCM-02-DS-091209	11		21		31	KWG0911718-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482B5
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: VK
2nd Reviewer: ✓

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ✓ %D or __ RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	12/25/09	1224F016.D	#1	Dalapon	22	( )	3+4	J/UJ/A
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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LDC #: 22482B5
SDG #: See Cover

METHOD: X GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	KUG091178-LCS	Dalapon	44 (50-140)	( )	( )	ALL + BLK	J/UJ/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 11, 2010
Matrix:	Sediment
Parameters:	Wet Chemistry
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209MS
PCM-02-DS-091209MSD
PCM-02-DS-091209DUP
PCM-02-DS-091209TRP
PCM-04-DS-091209MS
PCM-04-DS-091209MSD
PCM-04-DS-091209DUP
PCM-09-DS-091209DUP
PCM-09-DS-091209TRP

Introduction

This data review covers 13 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 350.1 for Ammonia as Nitrogen, EPA SW 846 Method 9012A for Total Cyanide, EPA SW 846 Method 7196A for Hexavalent Chromium, PSEP Method for Particle Size and Total Organic Carbon, EPA SW 846 Method 9030M for Sulfide, and EPA Method 160.3 for Total Solids.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB (prep blank)	Cyanide	0.11 mg/Kg	All samples in SDG K0911919
ICB/CCB	Hexavalent chromium	0.011 mg/L	All samples in SDG K0911919

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-04-DS-091209MS/MSD (All samples in SDG K0911919)	Hexavalent chromium	45 (65-135)	46 (65-135)	-	J (all detects) UJ (all non-detects)	A

V. Duplicates/Triplicates

Duplicate (DUP) and Triplicate (TRP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Sample Result Verification

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to MS/MSD %R problems, Hexavalent chromium results were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Data Qualification Summary -SDG K0911919

SDG	Sample	Analyte	Flag	A or P	Reason
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Hexavalent chromium	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Laboratory Blank Data Qualification Summary -SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B6

SDG #: K0911919

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2-1-10

Page: 1 of 1

Reviewer: CR

2nd Reviewer:

METHOD: Ammonia-N (EPA Method 350.1), Total Cyanide (EPA SW846 Method 9012A), Hexavalent Chromium (EPA SW846 Method 7196A), Particle Size (PSEP), Sulfide (EPA SW846 Method 9030M), Total Solids (EPA Method 160.3), TOC (PSEP Method)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	SW	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS/D
V	Duplicates ~~/Triplicates~~	~~SW~~ A	Dup, Trp
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: Sediment

1	PCM-02-DS-091209	11	PCM-04-DS-091209DUP	21		31	
2	PCM-04-DS-091209	12	PCM-09-DS-091209DUP	22		32	
3	PCM-06-DS-091209	13	PCM-09-DS-091209TRP	23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209MS	15		25		35	
6	PCM-02-DS-091209MSD	16		26		36	
7	PCM-02-DS-091209DUP	17		27		37	
8	PCM-02-DS-091209TRP	18		28		38	
9	PCM-04-DS-091209MS	19		29		39	
10	PCM-04-DS-091209MSD	20		30		40	

Notes:

LDC #: 22458286
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: 1 of 1
Reviewer: CG
2nd reviewer: [illegible]

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-4		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
QC: 5		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
6		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
7		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
8		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
9		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
10		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
11		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
12		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
13		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size

Comments:

LDC #: 22482B6
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were all samples associated with a given method blank?
Y N N/A Were any inorganic contaminants detected above the reporting limit in the method blanks? If yes, please see qualifications below.

Conc. units: mg/kg (10x) **Associated Samples:** All

Analyte	Blank ID	Maximum ICB/CCB	Blank Action Limit	Sample Identification								
	PB(mg/kg)	(mg/L)	mg/kg	No Qualifiers								
Cr6+		0.004	0.2									
CN	0.11		0.55									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22482B6
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Inorganics, EPA Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125?~~ 65-135 If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	9/10	Sed	Cr6+	45	46		All	J/UJ/A

Comments:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-02-DS-091209DUP

Introduction

This data review covers 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per NWTPH-Gx Method for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Gasoline Range Organics - Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B7
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-4-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Gasoline Range Organics (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	% RSD
IIb.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates /DUP	N/A	Client Specified
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ALL sediment

1	PCM-02-DS-091209	11		21		31	KWG0911685-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-02-DS-091209DUP	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Diesel Range Organics & Residual Range Organics
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209

Introduction

This data review covers 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per NWTPH-Dx Method for Diesel Range Organics and Residual Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic or residual range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG0911738-BLK	12/14/09	Diesel range organics Residual range organics	3.0 mg/Kg 5.8 mg/Kg	All samples in SDG K0911919

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Diesel Range Organics & Residual Range Organics - Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Diesel Range Organics & Residual Range Organics - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B8
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-4-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Diesel Range Organics & Residual Range Organics (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	%RSD
IIb.	Calibration verification/ICV	A	ICV/CCVs 20%
III.	Blanks	S.W.	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	N	Client Specified
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All sediment

1	PCM-02-DS-091209	11		21		31	KWG0911738-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482B8
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only) Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 12/14/09 **Blank analysis date:** 12/15/09 **Associated samples:** ALL
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
	KWG0911738-01A							
DRO	3.0							
RRO	5.8		ALL 7 SX					

Blank extraction date: ____ **Blank analysis date:** ____ **Associated samples:** ____
Conc. units: ____

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Butyltins
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209
PCM-04-DS-091209MS
PCM-04-DS-091209MSD

Introduction

This data review covers 6 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Krone Method for Butyltins.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and the confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
12/23/09	RTX-1	Tetra-n-butyltin	21	All samples in SDG K0911919	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
11/23/09	RTX-35	Tetra-n-butyltin	32	All samples in SDG K0911919	J (all detects) UJ (all non-detects)	A

III. Blanks

Method blanks were reviewed for each matrix as applicable. No butyltin contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-04-DS-091209MS/MSD (PCM-04-DS-091209)	Di-n-butyltin	-	21 (50-140)	79 (≤40)	J (all detects) UJ (all non-detects)	A
	n-Butyltin	37 (50-140)	7 (50-140)	123 (≤40)	J (all detects) UJ (all non-detects)	

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D, and MS/MSD %R and RPD problems, data were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Butyltins - Data Qualification Summary - SDG K0911919

SDG	Sample	Compound	Flag	A or P	Reason
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Tetra-n-butyltin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911919	PCM-02-DS-091209 PCM-04-DS-091209 PCM-06-DS-091209 PCM-09-DS-091209	Tetra-n-butyltin	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)
K0911919	PCM-04-DS-091209	Di-n-butyltin n-butyltin	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Butyltins - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B19
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-4-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Butyltins (Krone Method)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	0/0 RSD
IIb.	Calibration verification/ICV	A S.W.	ICV/CCVs 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	S.W.	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: ALL sediment

1	PCM-02-DS-091209	11		21		31	KWG091724-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5	PCM-04-DS-091209MS	15		25		35	
6	PCM-04-DS-091209MSD	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482B19
SDG #: See Cover

METHOD: ___ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? X %D or ___ RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?

Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?

Level IV Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	11/23/09	1123FA21C.d (ICV)	RTX-35	A	32	( )	ALL + BLK	J/UJ/A
						( )		
						( )		
	12/23/09	1223F003.D	RTX-1	A	21	( )	ALL + BLK	J/UJ/A
						( )		
						( )		
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						( )		

A) Tetra-n-butyltin

CONCALNew.wpd

LDC #: 22482B19
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: HE
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	5,6	C	(50-140)	21 (50-140)	79 (40)	2	~~J/UJ~~ all S/A
		D	37 (50-140)	7 (50-140)	123 (40)		✓ ✓ ✓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

C) Di-n-butyltin

D) n-Butyltin

MSDNew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Phenols
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911919

Sample Identification

PCM-02-DS-091209
PCM-04-DS-091209
PCM-06-DS-091209
PCM-09-DS-091209

Introduction

This data review covers 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151M for Phenols.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No phenol contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

No field blanks were identified in this SDG.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Phenols - Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Phenols - Laboratory Blank Data Qualification Summary - SDG K0911919

No Sample Data Qualified in this SDG

LDC #: 22482B33
SDG #: K0911919
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-4-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Phenols (EPA SW 846 Method 8151M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9/09
IIa.	Initial calibration	A	%RSD, r^2
IIb.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	A	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: All sediments

1	PCM-02-DS-091209	11		21		31	KWG0911717-BLK
2	PCM-04-DS-091209	12		22		32	
3	PCM-06-DS-091209	13		23		33	
4	PCM-09-DS-091209	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Analytical Method E160.3

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Total solids	12/10/2009	42.9		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Total solids	12/10/2009	46.9		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Total solids	12/10/2009	36		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Total solids	12/10/2009	39.2		Yes	Y						pct

Analytical Method E350.1M

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Ammonia	12/17/2009	77.3		Yes	Y				5.9	0.47	mg/kg
PCM-04-DS-091209	K0911919-002	Ammonia	12/17/2009	44.6		Yes	Y				1.1	0.09	mg/kg
PCM-06-DS-091209	K0911919-003	Ammonia	12/17/2009	87		Yes	Y				7.0	0.56	mg/kg
PCM-09-DS-091209	K0911919-004	Ammonia	12/17/2009	86.7		Yes	Y				6.4	0.52	mg/kg

Analytical Method Krone

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Dibutyltin (ion)	12/23/2009	2.1		Yes	Y	J			2.4	0.44	ug/kg
PCM-02-DS-091209	K0911919-001	n-Butyltin (ion)	12/23/2009	0.89		Yes	Y	J			2.4	0.61	ug/kg
PCM-02-DS-091209	K0911919-001	Tributyltin (ion)	12/23/2009	4.3		Yes	Y	P			2.4	1.0	ug/kg
PCM-02-DS-091209	K0911919-001	Tetrabutyltin (ion)	12/23/2009	2.4		Yes	N	U	UJ	5	2.4	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Tetrabutyltin (ion)	12/23/2009	2.2		Yes	N	U	UJ	5	2.2	0.94	ug/kg
PCM-04-DS-091209	K0911919-002	n-Butyltin (ion)	12/23/2009	0.87		Yes	Y	J	J	8,9	2.2	0.56	ug/kg
PCM-04-DS-091209	K0911919-002	Dibutyltin (ion)	12/23/2009	2.1		Yes	Y	JP	J	8,9	2.2	0.41	ug/kg
PCM-04-DS-091209	K0911919-002	Tributyltin (ion)	12/23/2009	5.1		Yes	Y				2.2	0.92	ug/kg
PCM-06-DS-091209	K0911919-003	Dibutyltin (ion)	12/23/2009	1.7		Yes	Y	J			2.8	0.53	ug/kg
PCM-06-DS-091209	K0911919-003	n-Butyltin (ion)	12/23/2009	2.4		Yes	Y	JP			2.8	0.72	ug/kg
PCM-06-DS-091209	K0911919-003	Tributyltin (ion)	12/23/2009	2.8		Yes	Y	P			2.8	1.2	ug/kg
PCM-06-DS-091209	K0911919-003	Tetrabutyltin (ion)	12/23/2009	2.8		Yes	N	U	UJ	5	2.8	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	Dibutyltin (ion)	12/23/2009	1.5		Yes	Y	JP			2.6	0.49	ug/kg

Analytical Method Krone

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	n-Butyltin (ion)	12/23/2009	1.4		Yes	Y	J			2.6	0.67	ug/kg
PCM-09-DS-091209	K0911919-004	Tributyltin (ion)	12/23/2009	2.6		Yes	N	U			2.6	1.1	ug/kg
PCM-09-DS-091209	K0911919-004	Tetrabutyltin (ion)	12/23/2009	2.6		Yes	N	U	UJ	5	2.6	1.2	ug/kg

Analytical Method NWTPHDx

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Diesel Range Hydrocarbons	12/15/2009	1900		Yes	Y	DZ			290	14	mg/kg
PCM-02-DS-091209	K0911919-001	Residual Range Hydrocarbons	12/15/2009	2300		Yes	Y	DZ			1200	34	mg/kg
PCM-04-DS-091209	K0911919-002	Diesel Range Hydrocarbons	12/15/2009	1400		Yes	Y	DZ			270	13	mg/kg
PCM-04-DS-091209	K0911919-002	Residual Range Hydrocarbons	12/15/2009	2500		Yes	Y	DZ			1100	31	mg/kg
PCM-06-DS-091209	K0911919-003	Residual Range Hydrocarbons	12/15/2009	790		Yes	Y	O			280	8.1	mg/kg
PCM-06-DS-091209	K0911919-003	Diesel Range Hydrocarbons	12/15/2009	280		Yes	Y	H			70	3.4	mg/kg
PCM-09-DS-091209	K0911919-004	Residual Range Hydrocarbons	12/15/2009	440		Yes	Y	O			260	7.4	mg/kg
PCM-09-DS-091209	K0911919-004	Diesel Range Hydrocarbons	12/15/2009	120		Yes	Y	H			64	3.1	mg/kg

Analytical Method NWTPHGx

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Gasoline Range Hydrocarbons	12/10/2009	46		Yes	Y	Z			15	4.5	mg/kg
PCM-04-DS-091209	K0911919-002	Gasoline Range Hydrocarbons	12/10/2009	11		Yes	Y	J			14	4.0	mg/kg
PCM-06-DS-091209	K0911919-003	Gasoline Range Hydrocarbons	12/10/2009	14		Yes	Y	J			19	5.5	mg/kg
PCM-09-DS-091209	K0911919-004	Gasoline Range Hydrocarbons	12/10/2009	17		Yes	N	U			17	4.9	mg/kg

Analytical Method PSEP

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Sand, Fine	12/14/2009	11.2		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Silt	12/14/2009	48.4		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Sand, Very Fine	12/14/2009	32.9		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Sand, Medium	12/14/2009	3.7		Yes	Y						pct

Analytical Method PSEP

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Sand, Coarse	12/14/2009	1.12		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Gravel	12/14/2009	0		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Clay	12/14/2009	4.2		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Sand, Very Coarse	12/14/2009	0.12		Yes	Y						pct
PCM-02-DS-091209	K0911919-001	Total organic carbon	12/16/2009	3.25		Yes	Y				0.050	0.020	pct
PCM-04-DS-091209	K0911919-002	Sand, Medium	12/14/2009	18.9		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Clay	12/14/2009	2.14		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Gravel	12/14/2009	0.81		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Sand, Fine	12/14/2009	25.1		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Silt	12/14/2009	30.2		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Sand, Very Fine	12/14/2009	7.5		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Sand, Very Coarse	12/14/2009	3.67		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Sand, Coarse	12/14/2009	9.67		Yes	Y						pct
PCM-04-DS-091209	K0911919-002	Total organic carbon	12/16/2009	2.18		Yes	Y				0.050	0.020	pct
PCM-06-DS-091209	K0911919-003	Clay	12/14/2009	3.45		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Silt	12/14/2009	66.3		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Sand, Very Fine	12/14/2009	16.9		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Sand, Fine	12/14/2009	5.62		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Sand, Medium	12/14/2009	3.13		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Sand, Coarse	12/14/2009	1.64		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Sand, Very Coarse	12/14/2009	0.84		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Gravel	12/14/2009	0.04		Yes	Y						pct
PCM-06-DS-091209	K0911919-003	Total organic carbon	12/16/2009	2.9		Yes	Y				0.050	0.020	pct
PCM-09-DS-091209	K0911919-004	Sand, Very Coarse	12/14/2009	0.53		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Sand, Medium	12/14/2009	2.34		Yes	Y						pct

Analytical Method PSEP

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	Silt	12/14/2009	47.4		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Clay	12/14/2009	21.2		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Sand, Very Fine	12/14/2009	19.9		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Gravel	12/14/2009	0.04		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Sand, Coarse	12/14/2009	1.06		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Sand, Fine	12/14/2009	4.74		Yes	Y						pct
PCM-09-DS-091209	K0911919-004	Total organic carbon	12/16/2009	3.01		Yes	Y				0.050	0.020	pct

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Zinc	12/23/2009	110		Yes	Y				2.1	0.3	mg/kg
PCM-02-DS-091209	K0911919-001	Aluminum	12/23/2009	19700		Yes	Y				10.6	0.4	mg/kg
PCM-04-DS-091209	K0911919-002	Zinc	12/23/2009	92.2		Yes	Y				1.9	0.3	mg/kg
PCM-04-DS-091209	K0911919-002	Aluminum	12/23/2009	12500		Yes	Y				9.7	0.4	mg/kg
PCM-06-DS-091209	K0911919-003	Zinc	12/23/2009	111		Yes	Y				2.1	0.3	mg/kg
PCM-06-DS-091209	K0911919-003	Aluminum	12/23/2009	19600		Yes	Y				10.3	0.4	mg/kg
PCM-09-DS-091209	K0911919-004	Aluminum	12/23/2009	21100		Yes	Y				9.4	0.4	mg/kg
PCM-09-DS-091209	K0911919-004	Zinc	12/23/2009	108		Yes	Y				1.9	0.3	mg/kg

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Antimony	12/23/2009	0.171		Yes	Y		J	8	0.053	0.010	mg/kg
PCM-02-DS-091209	K0911919-001	Silver	12/23/2009	0.244		Yes	Y				0.021	0.008	mg/kg
PCM-02-DS-091209	K0911919-001	Chromium	12/24/2009	21.9		Yes	Y				0.21	0.02	mg/kg
PCM-02-DS-091209	K0911919-001	Cadmium	12/24/2009	0.189		Yes	Y				0.021	0.004	mg/kg
PCM-02-DS-091209	K0911919-001	Arsenic	12/24/2009	3.07		Yes	Y				0.53	0.05	mg/kg
PCM-02-DS-091209	K0911919-001	Nickel	12/24/2009	18.8		Yes	Y				0.21	0.02	mg/kg

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Lead	12/24/2009	12		Yes	Y		J	16	0.053	0.006	mg/kg
PCM-02-DS-091209	K0911919-001	Copper	12/24/2009	30.6		Yes	Y		J	16	0.11	0.08	mg/kg
PCM-04-DS-091209	K0911919-002	Silver	12/23/2009	0.077		Yes	Y				0.019	0.008	mg/kg
PCM-04-DS-091209	K0911919-002	Antimony	12/23/2009	0.232		Yes	Y		J	8	0.048	0.009	mg/kg
PCM-04-DS-091209	K0911919-002	Chromium	12/24/2009	27.8		Yes	Y				0.19	0.01	mg/kg
PCM-04-DS-091209	K0911919-002	Nickel	12/24/2009	15.8		Yes	Y				0.19	0.02	mg/kg
PCM-04-DS-091209	K0911919-002	Cadmium	12/24/2009	0.152		Yes	Y				0.019	0.004	mg/kg
PCM-04-DS-091209	K0911919-002	Arsenic	12/24/2009	2.7		Yes	Y				0.48	0.05	mg/kg
PCM-04-DS-091209	K0911919-002	Lead	12/24/2009	10.8		Yes	Y		J	16	0.048	0.006	mg/kg
PCM-04-DS-091209	K0911919-002	Copper	12/24/2009	24.4		Yes	Y		J	16	0.10	0.08	mg/kg
PCM-06-DS-091209	K0911919-003	Antimony	12/23/2009	0.155		Yes	Y		J	8	0.051	0.009	mg/kg
PCM-06-DS-091209	K0911919-003	Silver	12/23/2009	0.123		Yes	Y				0.021	0.008	mg/kg
PCM-06-DS-091209	K0911919-003	Chromium	12/24/2009	23.3		Yes	Y				0.21	0.02	mg/kg
PCM-06-DS-091209	K0911919-003	Cadmium	12/24/2009	0.196		Yes	Y				0.021	0.004	mg/kg
PCM-06-DS-091209	K0911919-003	Arsenic	12/24/2009	3.45		Yes	Y				0.51	0.05	mg/kg
PCM-06-DS-091209	K0911919-003	Nickel	12/24/2009	17.9		Yes	Y				0.21	0.02	mg/kg
PCM-06-DS-091209	K0911919-003	Copper	12/24/2009	31.8		Yes	Y		J	16	0.10	0.08	mg/kg
PCM-06-DS-091209	K0911919-003	Lead	12/24/2009	12.5		Yes	Y		J	16	0.051	0.006	mg/kg
PCM-09-DS-091209	K0911919-004	Silver	12/23/2009	0.115		Yes	Y				0.019	0.008	mg/kg
PCM-09-DS-091209	K0911919-004	Antimony	12/23/2009	0.169		Yes	Y		J	8	0.047	0.008	mg/kg
PCM-09-DS-091209	K0911919-004	Chromium	12/24/2009	25.6		Yes	Y				0.19	0.01	mg/kg
PCM-09-DS-091209	K0911919-004	Lead	12/24/2009	12		Yes	Y		J	16	0.047	0.006	mg/kg
PCM-09-DS-091209	K0911919-004	Nickel	12/24/2009	20.2		Yes	Y				0.19	0.02	mg/kg
PCM-09-DS-091209	K0911919-004	Arsenic	12/24/2009	3.62		Yes	Y				0.47	0.05	mg/kg
PCM-09-DS-091209	K0911919-004	Copper	12/24/2009	35.2		Yes	Y		J	16	0.09	0.08	mg/kg

Analytical Method	SW6020												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	Cadmium	12/24/2009	0.195		Yes	Y				0.019	0.004	mg/kg

Analytical Method	SW7196												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Chromium VI	12/23/2009	1.2		Yes	N	U	UJ	8	1.2	0.19	mg/kg
PCM-04-DS-091209	K0911919-002	Chromium VI	12/23/2009	1.1		Yes	N	U	UJ	8	1.1	1.18	mg/kg
PCM-06-DS-091209	K0911919-003	Chromium VI	12/23/2009	0.26		Yes	Y	J	J	8	1.4	0.23	mg/kg
PCM-09-DS-091209	K0911919-004	Chromium VI	12/23/2009	0.27		Yes	Y	J	J	8	1.3	0.20	mg/kg

Analytical Method	SW7471												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Mercury	12/17/2009	0.064		Yes	Y				0.020	0.002	mg/kg
PCM-04-DS-091209	K0911919-002	Mercury	12/17/2009	0.04		Yes	Y				0.019	0.002	mg/kg
PCM-06-DS-091209	K0911919-003	Mercury	12/17/2009	0.064		Yes	Y				0.018	0.002	mg/kg
PCM-09-DS-091209	K0911919-004	Mercury	12/17/2009	0.061		Yes	Y				0.018	0.002	mg/kg

Analytical Method	SW7742												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Selenium	1/11/2010	0.23		Yes	Y				0.11	0.03	mg/kg
PCM-04-DS-091209	K0911919-002	Selenium	1/11/2010	0.16		Yes	N		U	7	0.10	0.03	mg/kg
PCM-06-DS-091209	K0911919-003	Selenium	1/11/2010	0.2		Yes	N		U	7	0.10	0.03	mg/kg
PCM-09-DS-091209	K0911919-004	Selenium	1/11/2010	0.22		Yes	N		U	7	0.09	0.03	mg/kg

Analytical Method	SW8081												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Hexachloroethane	12/25/2009	1.2		Yes	N	U			1.2	0.39	ug/kg
PCM-02-DS-091209	K0911919-001	2,4'-DDT (o,p'-DDT)	12/25/2009	5.5		Yes	Y	P			1.2	0.068	ug/kg
PCM-02-DS-091209	K0911919-001	trans-Nonachlor	12/25/2009	1.2		Yes	N	Ui			1.2	1.1	ug/kg
PCM-02-DS-091209	K0911919-001	Toxaphene	12/25/2009	360		Yes	N	Ui			360	360	ug/kg

Analytical Method	SW8081											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	2,4'-DDD (o,p'-DDD)	12/25/2009	10	Yes	Y				1.2	0.16	ug/kg
PCM-02-DS-091209	K0911919-001	Heptachlor	12/25/2009	1.2	Yes	N	Ui			1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Endrin aldehyde	12/25/2009	2.4	Yes	N	Ui	UJ	8,9	2.4	2.4	ug/kg
PCM-02-DS-091209	K0911919-001	Mirex	12/25/2009	3.2	Yes	Y	P	J	5	1.2	0.12	ug/kg
PCM-02-DS-091209	K0911919-001	Endrin	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	0.59	ug/kg
PCM-02-DS-091209	K0911919-001	Dieldrin	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	4,4'-DDT (p,p'-DDT)	12/25/2009	7.3	Yes	Y		J	9	1.2	0.20	ug/kg
PCM-02-DS-091209	K0911919-001	Endrin ketone	12/25/2009	3.1	Yes	N	Ui	UJ	8,9	3.1	3.1	ug/kg
PCM-02-DS-091209	K0911919-001	4,4'-DDE (p,p'-DDE)	12/25/2009	6.4	Yes	Y		J	8,9	1.2	0.13	ug/kg
PCM-02-DS-091209	K0911919-001	beta-Chlordane (trans-Chlordane)	12/25/2009	2	Yes	N	Ui	UJ	8,9	2.0	2.0	ug/kg
PCM-02-DS-091209	K0911919-001	cis-Nonachlor	12/25/2009	3.4	Yes	N	Ui			3.4	3.4	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachlorobutadiene	12/25/2009	1.2	Yes	N	U			1.2	0.25	ug/kg
PCM-02-DS-091209	K0911919-001	4,4'-DDD (p,p'-DDD)	12/25/2009	29	Yes	Y		J	8,9	1.2	0.13	ug/kg
PCM-02-DS-091209	K0911919-001	Endosulfan-alpha (I)	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	2,4'-DDE (o,p'-DDE)	12/25/2009	1.2	Yes	N	Ui			1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Endosulfan-beta (II)	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	delta-BHC	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Methoxychlor	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Heptachlor epoxide	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Endosulfan sulfate	12/25/2009	3.4	Yes	N	Ui			3.4	3.4	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachlorobenzene	12/25/2009	1.2	Yes	N	Ui	UJ	8,9,10	1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	gamma-BHC (Lindane)	12/25/2009	3.9	Yes	Y	P	J	8,9	1.2	0.094	ug/kg
PCM-02-DS-091209	K0911919-001	Oxychlordane	12/25/2009	1.2	Yes	N	Ui			1.2	1.2	ug/kg
PCM-02-DS-091209	K0911919-001	Aldrin	12/25/2009	3.4	Yes	N	Ui			3.4	3.4	ug/kg
PCM-02-DS-091209	K0911919-001	alpha-BHC	12/25/2009	1.2	Yes	N	Ui	UJ	8,9	1.2	0.41	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	beta-BHC	12/25/2009	1.3		Yes	N	Ui	UJ	8,9	1.3	1.3	ug/kg
PCM-02-DS-091209	K0911919-001	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.2		Yes	N	Ui	UJ	8,9	1.2	1.2	ug/kg
PCM-04-DS-091209	K0911919-002	Endrin	12/25/2009	1.9		Yes	Y	P			1.1	0.10	ug/kg
PCM-04-DS-091209	K0911919-002	Oxychlordane	12/25/2009	1.1		Yes	N	Ui			1.1	0.85	ug/kg
PCM-04-DS-091209	K0911919-002	Aldrin	12/25/2009	1.2		Yes	N	Ui			1.2	1.2	ug/kg
PCM-04-DS-091209	K0911919-002	alpha-BHC	12/25/2009	1.1		Yes	N	U			1.1	0.12	ug/kg
PCM-04-DS-091209	K0911919-002	beta-BHC	12/25/2009	2.9		Yes	N	Ui			2.9	2.9	ug/kg
PCM-04-DS-091209	K0911919-002	delta-BHC	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Endosulfan-beta (II)	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	2,4'-DDE (o,p'-DDE)	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	trans-Nonachlor	12/25/2009	1.1		Yes	N	Ui			1.1	0.62	ug/kg
PCM-04-DS-091209	K0911919-002	2,4'-DDT (o,p'-DDT)	12/25/2009	3.1		Yes	Y	P			1.1	0.062	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachlorobenzene	12/25/2009	1.1		Yes	N	Ui	UJ	10	1.1	0.40	ug/kg
PCM-04-DS-091209	K0911919-002	Heptachlor epoxide	12/25/2009	1.1		Yes	N	Ui			1.1	0.52	ug/kg
PCM-04-DS-091209	K0911919-002	Mirex	12/25/2009	3.3		Yes	N	Ui	UJ	5	3.3	3.3	ug/kg
PCM-04-DS-091209	K0911919-002	4,4'-DDD (p,p'-DDD)	12/25/2009	15		Yes	Y				1.1	0.12	ug/kg
PCM-04-DS-091209	K0911919-002	Endrin aldehyde	12/25/2009	1.5		Yes	N	Ui			1.5	1.5	ug/kg
PCM-04-DS-091209	K0911919-002	Endrin ketone	12/25/2009	5.5		Yes	Y				1.1	0.099	ug/kg
PCM-04-DS-091209	K0911919-002	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	beta-Chlordane (trans-Chlordane)	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Endosulfan sulfate	12/25/2009	2.4		Yes	N	Ui			2.4	2.4	ug/kg
PCM-04-DS-091209	K0911919-002	4,4'-DDT (p,p'-DDT)	12/25/2009	8		Yes	Y				1.1	0.19	ug/kg
PCM-04-DS-091209	K0911919-002	4,4'-DDE (p,p'-DDE)	12/25/2009	2.9		Yes	Y				1.1	0.12	ug/kg
PCM-04-DS-091209	K0911919-002	2,4'-DDD (o,p'-DDD)	12/25/2009	5.6		Yes	Y	P			1.1	0.14	ug/kg
PCM-04-DS-091209	K0911919-002	cis-Nonachlor	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	Dieldrin	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Methoxychlor	12/25/2009	4.2		Yes	N	Ui			4.2	4.2	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachloroethane	12/25/2009	1.1		Yes	N	U			1.1	0.36	ug/kg
PCM-04-DS-091209	K0911919-002	Endosulfan-alpha (I)	12/25/2009	1.1		Yes	N	Ui			1.1	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachlorobutadiene	12/25/2009	1.1		Yes	N	U			1.1	0.23	ug/kg
PCM-04-DS-091209	K0911919-002	Toxaphene	12/25/2009	270		Yes	N	Ui			270	270	ug/kg
PCM-04-DS-091209	K0911919-002	Heptachlor	12/25/2009	0.76		Yes	Y	JP			1.1	0.13	ug/kg
PCM-04-DS-091209	K0911919-002	gamma-BHC (Lindane)	12/25/2009	2.1		Yes	N	Ui			2.1	2.1	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachloroethane	12/28/2009	1.4		Yes	N	U	UJ	8,9	1.4	0.46	ug/kg
PCM-06-DS-091209	K0911919-003	Dieldrin	12/28/2009	1.4		Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	Endrin ketone	12/28/2009	1.4		Yes	N	Ui			1.4	0.30	ug/kg
PCM-06-DS-091209	K0911919-003	4,4'-DDT (p,p'-DDT)	12/28/2009	5.9		Yes	Y				1.4	0.24	ug/kg
PCM-06-DS-091209	K0911919-003	beta-Chlordane (trans-Chlordane)	12/28/2009	1.4		Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	cis-Nonachlor	12/28/2009	1.7		Yes	N	Ui			1.7	1.7	ug/kg
PCM-06-DS-091209	K0911919-003	Endrin	12/28/2009	1.4		Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	2,4'-DDD (o,p'-DDD)	12/28/2009	6.1		Yes	Y		J	8	1.4	0.18	ug/kg
PCM-06-DS-091209	K0911919-003	gamma-BHC (Lindane)	12/28/2009	1.2		Yes	Y	J			1.4	0.12	ug/kg
PCM-06-DS-091209	K0911919-003	Heptachlor epoxide	12/28/2009	1.4		Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	Endosulfan-alpha (I)	12/28/2009	1.4		Yes	N	U			1.4	0.088	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachlorobutadiene	12/28/2009	1.4		Yes	N	U	UJ	8,9	1.4	0.30	ug/kg
PCM-06-DS-091209	K0911919-003	Toxaphene	12/28/2009	70		Yes	N	Ui	UJ	8	70	26	ug/kg
PCM-06-DS-091209	K0911919-003	Methoxychlor	12/28/2009	1.4		Yes	N	U			1.4	0.27	ug/kg
PCM-06-DS-091209	K0911919-003	Heptachlor	12/28/2009	1.4		Yes	N	U			1.4	0.17	ug/kg
PCM-06-DS-091209	K0911919-003	4,4'-DDD (p,p'-DDD)	12/28/2009	12		Yes	Y				1.4	0.16	ug/kg
PCM-06-DS-091209	K0911919-003	Endosulfan sulfate	12/28/2009	1.4		Yes	N	Ui			1.4	1.4	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DS-091209	K0911919-003	Hexachlorobenzene	12/28/2009	1.4	Yes	N	U	UJ	10	1.4	0.28	ug/kg
PCM-06-DS-091209	K0911919-003	Mirex	12/28/2009	1.4	Yes	N	Ui	UJ	5,8	1.4	0.22	ug/kg
PCM-06-DS-091209	K0911919-003	Oxychlordane	12/28/2009	1.4	Yes	N	U	UJ	8	1.4	0.12	ug/kg
PCM-06-DS-091209	K0911919-003	Aldrin	12/28/2009	1.4	Yes	N	U			1.4	0.23	ug/kg
PCM-06-DS-091209	K0911919-003	alpha-Chlordane (cis-Chlordane)	12/28/2009	1.4	Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	2,4'-DDT (o,p'-DDT)	12/28/2009	1.4	Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	alpha-BHC	12/28/2009	1.4	Yes	N	U			1.4	0.16	ug/kg
PCM-06-DS-091209	K0911919-003	Endrin aldehyde	12/28/2009	1.4	Yes	N	Ui			1.4	0.62	ug/kg
PCM-06-DS-091209	K0911919-003	trans-Nonachlor	12/28/2009	1.4	Yes	N	U	UJ	8,9	1.4	0.13	ug/kg
PCM-06-DS-091209	K0911919-003	2,4'-DDE (o,p'-DDE)	12/28/2009	1.4	Yes	N	U	UJ	8	1.4	0.23	ug/kg
PCM-06-DS-091209	K0911919-003	Endosulfan-beta (II)	12/28/2009	1.4	Yes	N	Ui			1.4	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	delta-BHC	12/28/2009	1.4	Yes	N	U			1.4	0.11	ug/kg
PCM-06-DS-091209	K0911919-003	beta-BHC	12/28/2009	1.4	Yes	N	U			1.4	0.25	ug/kg
PCM-06-DS-091209	K0911919-003	4,4'-DDE (p,p'-DDE)	12/28/2009	3.5	Yes	Y				1.4	0.16	ug/kg
PCM-09-DS-091209	K0911919-004	Endrin	12/25/2009	1.3	Yes	N	Ui			1.3	0.19	ug/kg
PCM-09-DS-091209	K0911919-004	Endosulfan sulfate	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	Methoxychlor	12/25/2009	1.3	Yes	N	U			1.3	0.25	ug/kg
PCM-09-DS-091209	K0911919-004	2,4'-DDD (o,p'-DDD)	12/25/2009	4.5	Yes	Y				1.3	0.17	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachloroethane	12/25/2009	1.3	Yes	N	U			1.3	0.43	ug/kg
PCM-09-DS-091209	K0911919-004	4,4'-DDD (p,p'-DDD)	12/25/2009	8.7	Yes	Y				1.3	0.15	ug/kg
PCM-09-DS-091209	K0911919-004	Dieldrin	12/25/2009	1.3	Yes	N	U			1.3	0.18	ug/kg
PCM-09-DS-091209	K0911919-004	gamma-BHC (Lindane)	12/25/2009	1.5	Yes	Y				1.3	0.11	ug/kg
PCM-09-DS-091209	K0911919-004	Endrin ketone	12/25/2009	1.3	Yes	N	U			1.3	0.12	ug/kg
PCM-09-DS-091209	K0911919-004	beta-Chlordane (trans-Chlordane)	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	cis-Nonachlor	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg

Analytical Method	SW8081											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.3		Yes	N	U			1.3	0.13	ug/kg
PCM-09-DS-091209	K0911919-004	trans-Nonachlor	12/25/2009	1.3		Yes	N	Ui			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	Heptachlor epoxide	12/25/2009	1.3		Yes	N	Ui			1.3	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorobenzene	12/25/2009	1.3		Yes	N	U	UJ	10	1.3	0.26	ug/kg
PCM-09-DS-091209	K0911919-004	Endosulfan-alpha (I)	12/25/2009	1.3		Yes	N	U			1.3	0.081	ug/kg
PCM-09-DS-091209	K0911919-004	2,4'-DDE (o,p'-DDE)	12/25/2009	1.3		Yes	N	Ui			1.3	0.81	ug/kg
PCM-09-DS-091209	K0911919-004	Endosulfan-beta (II)	12/25/2009	1.3		Yes	N	U			1.3	0.18	ug/kg
PCM-09-DS-091209	K0911919-004	Mirex	12/25/2009	1.3		Yes	N	Ui			1.3	0.23	ug/kg
PCM-09-DS-091209	K0911919-004	alpha-BHC	12/25/2009	1.3		Yes	N	U			1.3	0.15	ug/kg
PCM-09-DS-091209	K0911919-004	4,4'-DDE (p,p'-DDE)	12/25/2009	2.4		Yes	Y				1.3	0.15	ug/kg
PCM-09-DS-091209	K0911919-004	Oxychlordane	12/25/2009	1.3		Yes	N	U			1.3	0.11	ug/kg
PCM-09-DS-091209	K0911919-004	beta-BHC	12/25/2009	1.3		Yes	N	U			1.3	0.23	ug/kg
PCM-09-DS-091209	K0911919-004	Aldrin	12/25/2009	1.3		Yes	N	U			1.3	0.21	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorobutadiene	12/25/2009	1.3		Yes	N	U			1.3	0.27	ug/kg
PCM-09-DS-091209	K0911919-004	Toxaphene	12/25/2009	150		Yes	N	Ui			150	150	ug/kg
PCM-09-DS-091209	K0911919-004	2,4'-DDT (o,p'-DDT)	12/25/2009	1.6		Yes	Y				1.3	0.074	ug/kg
PCM-09-DS-091209	K0911919-004	Heptachlor	12/25/2009	1.3		Yes	N	Ui			1.3	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	Endrin aldehyde	12/25/2009	1.3		Yes	N	Ui			1.3	0.82	ug/kg
PCM-09-DS-091209	K0911919-004	delta-BHC	12/25/2009	1.3		Yes	N	Ui			1.3	0.14	ug/kg
PCM-09-DS-091209	K0911919-004	4,4'-DDT (p,p'-DDT)	12/25/2009	72		Yes	Y	D			13	2.2	ug/kg

Analytical Method	SW8082											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Aroclor 1232	12/23/2009	18		Yes	N	Ui			18	18	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1254	12/23/2009	60		Yes	N	Ui			60	60	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1262	12/23/2009	12		Yes	N	Ui			12	4.8	ug/kg

Analytical Method SW8082

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Aroclor 1268	12/23/2009	12		Yes	N	U			12	2.5	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1221	12/23/2009	24		Yes	N	Ui			24	24	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1248	12/23/2009	12		Yes	N	Ui			12	8.3	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1016	12/23/2009	12		Yes	N	Ui			12	7.6	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1242	12/23/2009	12		Yes	N	Ui			12	4.6	ug/kg
PCM-02-DS-091209	K0911919-001	Aroclor 1260	12/23/2009	12		Yes	N	Ui			12	8.1	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1242	12/23/2009	11		Yes	N	Ui			11	3.2	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1232	12/23/2009	41		Yes	N	Ui			41	41	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1248	12/23/2009	11		Yes	N	Ui			11	3.5	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1016	12/23/2009	11		Yes	N	Ui			11	4.0	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1260	12/23/2009	11		Yes	N	Ui			11	8.4	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1268	12/23/2009	11		Yes	N	U			11	2.3	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1262	12/23/2009	11		Yes	N	Ui			11	6.0	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1254	12/23/2009	29		Yes	N	Ui			29	29	ug/kg
PCM-04-DS-091209	K0911919-002	Aroclor 1221	12/23/2009	22		Yes	N	Ui			22	13	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1268	12/23/2009	14		Yes	N	Ui			14	3.7	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1260	12/23/2009	14		Yes	N	Ui			14	8.4	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1242	12/23/2009	14		Yes	N	U			14	3.0	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1262	12/23/2009	14		Yes	N	Ui			14	6.1	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1254	12/23/2009	29		Yes	N	Ui			29	29	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1232	12/23/2009	14		Yes	N	Ui			14	14	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1221	12/23/2009	28		Yes	N	Ui			28	28	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1016	12/23/2009	14		Yes	N	Ui			14	3.3	ug/kg
PCM-06-DS-091209	K0911919-003	Aroclor 1248	12/23/2009	14		Yes	N	Ui			14	3.5	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1232	12/23/2009	13		Yes	N	Ui			13	7.8	ug/kg

Analytical Method SW8082

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	Aroclor 1221	12/23/2009	26		Yes	N	Ui			26	26	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1268	12/23/2009	13		Yes	N	U			13	2.7	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1260	12/23/2009	14		Yes	N	Ui			14	14	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1248	12/23/2009	13		Yes	N	Ui			13	3.1	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1016	12/23/2009	13		Yes	N	Ui			13	3.6	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1262	12/23/2009	13		Yes	N	Ui			13	6.2	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1242	12/23/2009	13		Yes	N	Ui			13	4.1	ug/kg
PCM-09-DS-091209	K0911919-004	Aroclor 1254	12/23/2009	24		Yes	N	Ui			24	24	ug/kg

Analytical Method SW8151A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Dichlorprop	12/25/2009	350		Yes	N	U			350	64	ug/kg
PCM-02-DS-091209	K0911919-001	Dicamba	12/25/2009	350		Yes	N	U			350	31	ug/kg
PCM-02-DS-091209	K0911919-001	2,2-Dichloropropionic acid (Dalapon)	12/25/2009	350		Yes	N	U	UJ	10	350	43	ug/kg
PCM-02-DS-091209	K0911919-001	Mecoprop (MCPP)	12/25/2009	70000		Yes	N	U			70000	19000	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,5-TP (Silvex)	12/25/2009	350		Yes	N	U			350	32	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/25/2009	350		Yes	N	U			350	28	ug/kg
PCM-02-DS-091209	K0911919-001	MCPA	12/25/2009	70000		Yes	N	U			70000	19000	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/25/2009	350		Yes	N	U			350	28	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-DB (2,4-D derivative)	12/25/2009	350		Yes	N	U			350	26	ug/kg
PCM-02-DS-091209	K0911919-001	Dinoseb	12/25/2009	350		Yes	N	U			350	19	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-DB (2,4-D derivative)	12/25/2009	320		Yes	N	U			320	24	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/25/2009	320		Yes	N	U			320	26	ug/kg
PCM-04-DS-091209	K0911919-002	MCPA	12/25/2009	64000		Yes	N	U			64000	17000	ug/kg
PCM-04-DS-091209	K0911919-002	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/25/2009	320		Yes	N	U			320	26	ug/kg

Analytical Method SW8151A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	2,4,5-TP (Silvex)	12/25/2009	320		Yes	N	U			320	29	ug/kg
PCM-04-DS-091209	K0911919-002	Mecoprop (MCPP)	12/25/2009	64000		Yes	N	U			64000	17000	ug/kg
PCM-04-DS-091209	K0911919-002	Dinoseb	12/25/2009	320		Yes	N	U			320	18	ug/kg
PCM-04-DS-091209	K0911919-002	Dicamba	12/25/2009	320		Yes	N	U			320	29	ug/kg
PCM-04-DS-091209	K0911919-002	Dichlorprop	12/25/2009	320		Yes	N	U			320	59	ug/kg
PCM-04-DS-091209	K0911919-002	2,2-Dichloropropionic acid (Dalapon)	12/25/2009	320		Yes	N	U	UJ	10	320	40	ug/kg
PCM-06-DS-091209	K0911919-003	2,2-Dichloropropionic acid (Dalapon)	12/25/2009	420		Yes	N	U	UJ	5,10	420	51	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,5-TP (Silvex)	12/25/2009	420		Yes	N	U			420	38	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/25/2009	420		Yes	N	U			420	34	ug/kg
PCM-06-DS-091209	K0911919-003	MCPA	12/25/2009	84000		Yes	N	U			84000	22000	ug/kg
PCM-06-DS-091209	K0911919-003	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/25/2009	420		Yes	N	U			420	34	ug/kg
PCM-06-DS-091209	K0911919-003	2,4-DB (2,4-D derivative)	12/25/2009	420		Yes	N	Ui			420	35	ug/kg
PCM-06-DS-091209	K0911919-003	Dinoseb	12/25/2009	420		Yes	N	U			420	23	ug/kg
PCM-06-DS-091209	K0911919-003	Dichlorprop	12/25/2009	420		Yes	N	U			420	76	ug/kg
PCM-06-DS-091209	K0911919-003	Dicamba	12/25/2009	420		Yes	N	U			420	37	ug/kg
PCM-06-DS-091209	K0911919-003	Mecoprop (MCPP)	12/25/2009	84000		Yes	N	U			84000	22000	ug/kg
PCM-09-DS-091209	K0911919-004	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/25/2009	390		Yes	N	U			390	31	ug/kg
PCM-09-DS-091209	K0911919-004	2,4-DB (2,4-D derivative)	12/25/2009	390		Yes	N	U			390	29	ug/kg
PCM-09-DS-091209	K0911919-004	MCPA	12/25/2009	77000		Yes	N	U			77000	20000	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/25/2009	390		Yes	N	U			390	31	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,5-TP (Silvex)	12/25/2009	390		Yes	N	U			390	35	ug/kg
PCM-09-DS-091209	K0911919-004	Mecoprop (MCPP)	12/25/2009	77000		Yes	N	U			77000	20000	ug/kg
PCM-09-DS-091209	K0911919-004	2,2-Dichloropropionic acid (Dalapon)	12/25/2009	390		Yes	N	U	UJ	5,10	390	47	ug/kg
PCM-09-DS-091209	K0911919-004	Dicamba	12/25/2009	390		Yes	N	U			390	34	ug/kg

Analytical Method	SW8151A											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	Dichlorprop	12/25/2009	390		Yes	N	U			390	70	ug/kg
PCM-09-DS-091209	K0911919-004	Dinoseb	12/25/2009	390		Yes	N	U			390	21	ug/kg

Analytical Method	SW8151M											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	2,3,4,5-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.91	ug/kg
PCM-02-DS-091209	K0911919-001	Pentachlorophenol	12/22/2009	12		Yes	N	U			12	1.7	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,5-Trichlorophenol	12/22/2009	12		Yes	N	U			12	0.82	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,6-Trichlorophenol	12/22/2009	12		Yes	N	U			12	1.1	ug/kg
PCM-02-DS-091209	K0911919-001	2,3,5,6-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.79	ug/kg
PCM-04-DS-091209	K0911919-002	2,3,4,5-Tetrachlorophenol	12/22/2009	11		Yes	N	Ui			11	0.84	ug/kg
PCM-04-DS-091209	K0911919-002	2,4,5-Trichlorophenol	12/22/2009	11		Yes	N	U			11	0.75	ug/kg
PCM-04-DS-091209	K0911919-002	2,3,5,6-Tetrachlorophenol	12/22/2009	11		Yes	N	U			11	0.73	ug/kg
PCM-04-DS-091209	K0911919-002	2,4,6-Trichlorophenol	12/22/2009	11		Yes	N	U			11	0.94	ug/kg
PCM-04-DS-091209	K0911919-002	Pentachlorophenol	12/22/2009	11		Yes	N	Ui			11	11	ug/kg
PCM-06-DS-091209	K0911919-003	2,3,5,6-Tetrachlorophenol	12/22/2009	14		Yes	N	U			14	0.95	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,6-Trichlorophenol	12/22/2009	14		Yes	N	U			14	1.3	ug/kg
PCM-06-DS-091209	K0911919-003	Pentachlorophenol	12/22/2009	14		Yes	N	Ui			14	3.3	ug/kg
PCM-06-DS-091209	K0911919-003	2,3,4,5-Tetrachlorophenol	12/22/2009	14		Yes	N	Ui			14	1.3	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,5-Trichlorophenol	12/22/2009	14		Yes	N	Ui			14	1.5	ug/kg
PCM-09-DS-091209	K0911919-004	2,3,4,5-Tetrachlorophenol	12/22/2009	13		Yes	N	Ui			13	1.3	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,5-Trichlorophenol	12/22/2009	13		Yes	N	U			13	0.88	ug/kg
PCM-09-DS-091209	K0911919-004	2,3,5,6-Tetrachlorophenol	12/22/2009	13		Yes	N	U			13	0.85	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,6-Trichlorophenol	12/22/2009	13		Yes	N	U			13	1.1	ug/kg
PCM-09-DS-091209	K0911919-004	Pentachlorophenol	12/22/2009	5		Yes	Y	J			13	1.8	ug/kg

Analytical Method SW8260

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Naphthalene	12/21/2009	59		Yes	Y				3.7	0.13	mg/kg
PCM-02-DS-091209	K0911919-001	2-Butanone (MEK)	12/21/2009	0.88	7.4	Yes	N	J	U	7	7.4	0.78	mg/kg
PCM-02-DS-091209	K0911919-001	Ethylbenzene	12/21/2009	0.19		Yes	N	U			0.19	0.017	mg/kg
PCM-02-DS-091209	K0911919-001	o-Xylene	12/21/2009	0.19		Yes	N	U			0.19	0.025	mg/kg
PCM-02-DS-091209	K0911919-001	1,1,2,2-Tetrachloroethane	12/21/2009	0.19		Yes	N	U			0.19	0.027	mg/kg
PCM-02-DS-091209	K0911919-001	1,1,2-Trichloroethane	12/21/2009	0.19		Yes	N	U			0.19	0.037	mg/kg
PCM-02-DS-091209	K0911919-001	Chloroethane	12/21/2009	0.19		Yes	N	U			0.19	0.056	mg/kg
PCM-02-DS-091209	K0911919-001	1,2-Dichloropropane	12/21/2009	0.19		Yes	N	U			0.19	0.031	mg/kg
PCM-02-DS-091209	K0911919-001	Dichlorodifluoromethane	12/21/2009	0.19		Yes	N	U			0.19	0.078	mg/kg
PCM-02-DS-091209	K0911919-001	Trichlorofluoromethane (Fluorotrichloromethane)	12/21/2009	0.19		Yes	N	U			0.19	0.085	mg/kg
PCM-02-DS-091209	K0911919-001	Trichloroethene (TCE)	12/21/2009	0.19		Yes	N	U			0.19	0.048	mg/kg
PCM-02-DS-091209	K0911919-001	trans-1,4-Dichloro-2-butene	12/21/2009	3.7		Yes	N	U			3.7	0.13	mg/kg
PCM-02-DS-091209	K0911919-001	1,2-Dibromoethane (Ethylene dibromide)	12/21/2009	0.74		Yes	N	U			0.74	0.027	mg/kg
PCM-02-DS-091209	K0911919-001	Acrolein	12/21/2009	7.4		Yes	N	U	UJ	5	7.4	0.63	mg/kg
PCM-02-DS-091209	K0911919-001	1,2-Dichloroethane	12/21/2009	0.19		Yes	N	U			0.19	0.020	mg/kg
PCM-02-DS-091209	K0911919-001	Isopropylbenzene (Cumene)	12/21/2009	0.19		Yes	Y	J			0.74	0.035	mg/kg
PCM-02-DS-091209	K0911919-001	Acrylonitrile	12/21/2009	7.4		Yes	N	U	UJ	5	7.4	0.12	mg/kg
PCM-02-DS-091209	K0911919-001	Vinyl acetate	12/21/2009	1.9		Yes	N	U	UJ	5	1.9	0.14	mg/kg
PCM-02-DS-091209	K0911919-001	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/21/2009	7.4		Yes	N	U			7.4	1.3	mg/kg
PCM-02-DS-091209	K0911919-001	Dichloromethane (Methylene chloride)	12/21/2009	0.74		Yes	N	U			0.74	0.027	mg/kg
PCM-02-DS-091209	K0911919-001	Chlorobenzene	12/21/2009	0.19		Yes	N	U			0.19	0.024	mg/kg
PCM-02-DS-091209	K0911919-001	1,3-Dichloropropene, cis-	12/21/2009	0.19		Yes	N	U			0.19	0.033	mg/kg
PCM-02-DS-091209	K0911919-001	2-Chloroethylvinyl ether	12/21/2009	1.9		Yes	N	U	UJ	5	1.9	0.16	mg/kg
PCM-02-DS-091209	K0911919-001	Dibromochloromethane	12/21/2009	0.19		Yes	N	U			0.19	0.025	mg/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Tetrachloroethene (PCE)	12/21/2009	0.19	Yes	N	U			0.19	0.056	mg/kg
PCM-02-DS-091209	K0911919-001	m,p-Xylene	12/21/2009	0.19	Yes	N	U			0.19	0.035	mg/kg
PCM-02-DS-091209	K0911919-001	1,2-Dichloroethene, trans-	12/21/2009	0.19	Yes	N	U			0.19	0.034	mg/kg
PCM-02-DS-091209	K0911919-001	Methyl tert-butyl ether (MTBE)	12/21/2009	0.19	Yes	N	U			0.19	0.056	mg/kg
PCM-02-DS-091209	K0911919-001	Carbon tetrachloride (Tetrachloromethane)	12/21/2009	0.19	Yes	N	U			0.19	0.078	mg/kg
PCM-02-DS-091209	K0911919-001	2-Hexanone (Methyl butyl ketone)	12/21/2009	7.4	Yes	N	U			7.4	0.70	mg/kg
PCM-02-DS-091209	K0911919-001	Toluene	12/21/2009	0.19	Yes	N	U			0.19	0.032	mg/kg
PCM-02-DS-091209	K0911919-001	Chloromethane	12/21/2009	0.19	Yes	N	U			0.19	0.036	mg/kg
PCM-02-DS-091209	K0911919-001	1,1-Dichloroethene	12/21/2009	0.19	Yes	N	U			0.19	0.074	mg/kg
PCM-02-DS-091209	K0911919-001	1,1-Dichloroethane	12/21/2009	0.19	Yes	N	U			0.19	0.032	mg/kg
PCM-02-DS-091209	K0911919-001	Bromodichloromethane	12/21/2009	0.19	Yes	N	U			0.19	0.032	mg/kg
PCM-02-DS-091209	K0911919-001	Bromoform	12/21/2009	0.19	Yes	N	U			0.19	0.036	mg/kg
PCM-02-DS-091209	K0911919-001	Carbon disulfide	12/21/2009	0.19	Yes	N	U			0.19	0.056	mg/kg
PCM-02-DS-091209	K0911919-001	Vinyl chloride	12/21/2009	0.19	Yes	N	U			0.19	0.070	mg/kg
PCM-02-DS-091209	K0911919-001	1,1,1,2-Tetrachloroethane	12/21/2009	0.19	Yes	N	U			0.19	0.030	mg/kg
PCM-02-DS-091209	K0911919-001	Bromochloromethane	12/21/2009	0.19	Yes	N	U			0.19	0.036	mg/kg
PCM-02-DS-091209	K0911919-001	1,4-Dichlorobenzene	12/21/2009	0.19	Yes	N	U			0.19	0.028	mg/kg
PCM-02-DS-091209	K0911919-001	Iodomethane (Methyl iodide)	12/21/2009	1.9	Yes	N	U	UJ	5	1.9	0.24	mg/kg
PCM-02-DS-091209	K0911919-001	1,3-Dichloropropene, trans-	12/21/2009	0.19	Yes	N	U			0.19	0.034	mg/kg
PCM-02-DS-091209	K0911919-001	Bromomethane	12/21/2009	0.19	Yes	N	U			0.19	0.070	mg/kg
PCM-02-DS-091209	K0911919-001	1,1,1-Trichloroethane	12/21/2009	0.19	Yes	N	U			0.19	0.012	mg/kg
PCM-02-DS-091209	K0911919-001	Benzene	12/21/2009	0.19	Yes	N	U			0.19	0.025	mg/kg
PCM-02-DS-091209	K0911919-001	Chloroform	12/21/2009	0.19	Yes	N	U			0.19	0.034	mg/kg
PCM-02-DS-091209	K0911919-001	Acetone	12/21/2009	7.4	Yes	N	U			7.4	0.89	mg/kg
PCM-02-DS-091209	K0911919-001	Styrene	12/21/2009	0.19	Yes	N	U			0.19	0.017	mg/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	1,2,3-Trichloropropane	12/21/2009	0.19		Yes	N	U			0.19	0.078	mg/kg
PCM-02-DS-091209	K0911919-001	Dibromomethane	12/21/2009	0.19		Yes	N	U			0.19	0.063	mg/kg
PCM-04-DS-091209	K0911919-002	1,4-Dichlorobenzene	12/18/2009	1.1		Yes	N	U			1.1	0.27	ug/kg
PCM-04-DS-091209	K0911919-002	Acrolein	12/18/2009	110		Yes	N	U	UJ	5	110	2.8	ug/kg
PCM-04-DS-091209	K0911919-002	Acetone	12/18/2009	1.8	11	Yes	N	J	U	7	11	1.8	ug/kg
PCM-04-DS-091209	K0911919-002	1,1,1,2-Tetrachloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.27	ug/kg
PCM-04-DS-091209	K0911919-002	2-Hexanone (Methyl butyl ketone)	12/18/2009	5.3		Yes	N	U			5.3	0.98	ug/kg
PCM-04-DS-091209	K0911919-002	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.1		Yes	N	U			1.1	0.38	ug/kg
PCM-04-DS-091209	K0911919-002	1,3-Dichlorobenzene	12/18/2009	1.1		Yes	N	U			1.1	0.26	ug/kg
PCM-04-DS-091209	K0911919-002	Methyl tert-butyl ether (MTBE)	12/18/2009	0.29	2.1	Yes	N	J	U	7	2.1	0.19	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichloroethene, trans-	12/18/2009	1.1		Yes	N	U			1.1	0.37	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichloroethene, cis-	12/18/2009	1.1		Yes	N	U			1.1	0.25	ug/kg
PCM-04-DS-091209	K0911919-002	m,p-Xylene	12/18/2009	2.1		Yes	N	U			2.1	0.39	ug/kg
PCM-04-DS-091209	K0911919-002	Tetrachloroethene (PCE)	12/18/2009	1.1		Yes	N	U			1.1	0.28	ug/kg
PCM-04-DS-091209	K0911919-002	Dibromochloromethane	12/18/2009	1.1		Yes	N	U			1.1	0.20	ug/kg
PCM-04-DS-091209	K0911919-002	Chloroform	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	trans-1,4-Dichloro-2-butene	12/18/2009	2.1		Yes	N	U			2.1	0.29	ug/kg
PCM-04-DS-091209	K0911919-002	2-Chloroethylvinyl ether	12/18/2009	5.3		Yes	N	U			5.3	0.51	ug/kg
PCM-04-DS-091209	K0911919-002	Toluene	12/18/2009	1.1		Yes	N	U			1.1	0.19	ug/kg
PCM-04-DS-091209	K0911919-002	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.1		Yes	N	U			2.1	0.78	ug/kg
PCM-04-DS-091209	K0911919-002	Vinyl acetate	12/18/2009	2.1		Yes	N	U	UJ	5	2.1	0.97	ug/kg
PCM-04-DS-091209	K0911919-002	Acrylonitrile	12/18/2009	2.1		Yes	N	U			2.1	1.3	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.063	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	21		Yes	N	U			21	0.29	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	1,3-Dichloropropene, trans-	12/18/2009	1.1		Yes	N	U			1.1	0.36	ug/kg
PCM-04-DS-091209	K0911919-002	1,3-Dichloropropene, cis-	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	Styrene	12/18/2009	1.1		Yes	N	U			1.1	0.14	ug/kg
PCM-04-DS-091209	K0911919-002	Ethylbenzene	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	Isopropylbenzene (Cumene)	12/18/2009	0.16		Yes	Y	J			1.1	0.14	ug/kg
PCM-04-DS-091209	K0911919-002	1,2,4-Trichlorobenzene	12/18/2009	21		Yes	N	U			21	0.25	ug/kg
PCM-04-DS-091209	K0911919-002	2-Butanone (MEK)	12/18/2009	4.2		Yes	N	U			4.2	1.1	ug/kg
PCM-04-DS-091209	K0911919-002	Chlorobenzene	12/18/2009	1.1		Yes	N	U			1.1	0.27	ug/kg
PCM-04-DS-091209	K0911919-002	Benzene	12/18/2009	1.9		Yes	Y				1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichlorobenzene	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	o-Xylene	12/18/2009	1.1		Yes	N	U			1.1	0.14	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachlorobutadiene	12/18/2009	2.1		Yes	N	U			2.1	0.23	ug/kg
PCM-04-DS-091209	K0911919-002	1,1,2,2-Tetrachloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.38	ug/kg
PCM-04-DS-091209	K0911919-002	1,1,2-Trichloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.25	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichloropropane	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	Dichlorodifluoromethane	12/18/2009	1.1		Yes	N	U			1.1	0.24	ug/kg
PCM-04-DS-091209	K0911919-002	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.1		Yes	N	U			1.1	0.23	ug/kg
PCM-04-DS-091209	K0911919-002	1,1-Dichloroethene	12/18/2009	1.1		Yes	N	U			1.1	0.25	ug/kg
PCM-04-DS-091209	K0911919-002	1,1-Dichloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.21	ug/kg
PCM-04-DS-091209	K0911919-002	Bromochloromethane	12/18/2009	1.1		Yes	N	U			1.1	0.15	ug/kg
PCM-04-DS-091209	K0911919-002	1,1,1-Trichloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.37	ug/kg
PCM-04-DS-091209	K0911919-002	Trichloroethene (TCE)	12/18/2009	1.1		Yes	N	U			1.1	0.29	ug/kg
PCM-04-DS-091209	K0911919-002	1,2,3-Trichloropropane	12/18/2009	2.1		Yes	N	U			2.1	0.40	ug/kg
PCM-04-DS-091209	K0911919-002	Chloromethane	12/18/2009	1.1		Yes	N	U			1.1	0.39	ug/kg
PCM-04-DS-091209	K0911919-002	Dibromomethane	12/18/2009	1.1		Yes	N	U			1.1	0.30	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	Bromomethane	12/18/2009	1.1		Yes	N	U	UJ	5	1.1	0.66	ug/kg
PCM-04-DS-091209	K0911919-002	Chloroethane	12/18/2009	1.1		Yes	N	U			1.1	0.25	ug/kg
PCM-04-DS-091209	K0911919-002	Vinyl chloride	12/18/2009	1.1		Yes	N	U			1.1	0.15	ug/kg
PCM-04-DS-091209	K0911919-002	Dichloromethane (Methylene chloride)	12/18/2009	5.3		Yes	N	U			5.3	0.13	ug/kg
PCM-04-DS-091209	K0911919-002	Carbon disulfide	12/18/2009	1.1		Yes	N	U			1.1	0.28	ug/kg
PCM-04-DS-091209	K0911919-002	Bromoform	12/18/2009	1.1		Yes	N	U			1.1	0.32	ug/kg
PCM-04-DS-091209	K0911919-002	Bromodichloromethane	12/18/2009	1.1		Yes	N	U			1.1	0.16	ug/kg
PCM-04-DS-091209	K0911919-002	Iodomethane (Methyl iodide)	12/18/2009	11		Yes	N	U	UJ	5,10	11	0.60	ug/kg
PCM-06-DS-091209	K0911919-003	m,p-Xylene	12/18/2009	2.8		Yes	N	U			2.8	0.51	ug/kg
PCM-06-DS-091209	K0911919-003	Tetrachloroethene (PCE)	12/18/2009	1.4		Yes	N	U			1.4	0.36	ug/kg
PCM-06-DS-091209	K0911919-003	1,3-Dichlorobenzene	12/18/2009	1.4		Yes	N	U			1.4	0.34	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichloroethene, cis-	12/18/2009	1.4		Yes	N	U			1.4	0.32	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichloroethene, trans-	12/18/2009	1.4		Yes	N	U			1.4	0.49	ug/kg
PCM-06-DS-091209	K0911919-003	Methyl tert-butyl ether (MTBE)	12/18/2009	0.41	2.8	Yes	N	J	U	7	2.8	0.25	ug/kg
PCM-06-DS-091209	K0911919-003	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.4		Yes	N	U			1.4	0.50	ug/kg
PCM-06-DS-091209	K0911919-003	2-Hexanone (Methyl butyl ketone)	12/18/2009	6.9		Yes	N	U			6.9	1.3	ug/kg
PCM-06-DS-091209	K0911919-003	1,1,1,2-Tetrachloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.35	ug/kg
PCM-06-DS-091209	K0911919-003	Acetone	12/18/2009	14		Yes	N	U			14	2.4	ug/kg
PCM-06-DS-091209	K0911919-003	Benzene	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	Dibromochloromethane	12/18/2009	1.4		Yes	N	U			1.4	0.27	ug/kg
PCM-06-DS-091209	K0911919-003	1,4-Dichlorobenzene	12/18/2009	1.4		Yes	N	U			1.4	0.35	ug/kg
PCM-06-DS-091209	K0911919-003	Chloroform	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	1,2,4-Trichlorobenzene	12/18/2009	28		Yes	N	U			28	0.32	ug/kg
PCM-06-DS-091209	K0911919-003	2-Chloroethylvinyl ether	12/18/2009	6.9		Yes	N	U			6.9	0.67	ug/kg
PCM-06-DS-091209	K0911919-003	trans-1,4-Dichloro-2-butene	12/18/2009	2.8		Yes	N	U			2.8	0.38	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DS-091209	K0911919-003	Chlorobenzene	12/18/2009	1.4		Yes	N	U			1.4	0.35	ug/kg
PCM-06-DS-091209	K0911919-003	Toluene	12/18/2009	1.4		Yes	N	U			1.4	0.25	ug/kg
PCM-06-DS-091209	K0911919-003	Ethylbenzene	12/18/2009	1.9		Yes	Y				1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	Styrene	12/18/2009	1.4		Yes	N	U			1.4	0.18	ug/kg
PCM-06-DS-091209	K0911919-003	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.8		Yes	N	U			2.8	1.1	ug/kg
PCM-06-DS-091209	K0911919-003	Vinyl acetate	12/18/2009	2.8		Yes	N	U	UJ	5	2.8	1.3	ug/kg
PCM-06-DS-091209	K0911919-003	Acrylonitrile	12/18/2009	2.8		Yes	N	U			2.8	1.7	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.083	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	28		Yes	N	U			28	0.38	ug/kg
PCM-06-DS-091209	K0911919-003	1,3-Dichloropropene, trans-	12/18/2009	1.4		Yes	N	U			1.4	0.47	ug/kg
PCM-06-DS-091209	K0911919-003	1,1-Dichloroethene	12/18/2009	1.4		Yes	N	U			1.4	0.32	ug/kg
PCM-06-DS-091209	K0911919-003	Acrolein	12/18/2009	140		Yes	N	U	UJ	5	140	3.6	ug/kg
PCM-06-DS-091209	K0911919-003	2-Butanone (MEK)	12/18/2009	5.6		Yes	N	U			5.6	1.4	ug/kg
PCM-06-DS-091209	K0911919-003	Vinyl chloride	12/18/2009	1.4		Yes	N	U			1.4	0.20	ug/kg
PCM-06-DS-091209	K0911919-003	Dichloromethane (Methylene chloride)	12/18/2009	6.9		Yes	N	U			6.9	0.17	ug/kg
PCM-06-DS-091209	K0911919-003	Carbon disulfide	12/18/2009	1.4		Yes	N	U			1.4	0.36	ug/kg
PCM-06-DS-091209	K0911919-003	Bromoform	12/18/2009	1.4		Yes	N	U			1.4	0.42	ug/kg
PCM-06-DS-091209	K0911919-003	1,1-Dichloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.28	ug/kg
PCM-06-DS-091209	K0911919-003	Bromodichloromethane	12/18/2009	1.4		Yes	N	U			1.4	0.21	ug/kg
PCM-06-DS-091209	K0911919-003	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.4		Yes	N	U			1.4	0.29	ug/kg
PCM-06-DS-091209	K0911919-003	Chloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.32	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichloropropane	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	1,3-Dichloropropene, cis-	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	1,1,2-Trichloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.32	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DS-091209	K0911919-003	Trichloroethene (TCE)	12/18/2009	1.4		Yes	N	U			1.4	0.38	ug/kg
PCM-06-DS-091209	K0911919-003	1,1,2,2-Tetrachloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.50	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachlorobutadiene	12/18/2009	2.8		Yes	N	U			2.8	0.29	ug/kg
PCM-06-DS-091209	K0911919-003	o-Xylene	12/18/2009	1.9		Yes	Y				1.4	0.18	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichlorobenzene	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	1,2,3-Trichloropropane	12/18/2009	2.8		Yes	N	U			2.8	0.53	ug/kg
PCM-06-DS-091209	K0911919-003	Isopropylbenzene (Cumene)	12/18/2009	0.77		Yes	Y	J			1.4	0.18	ug/kg
PCM-06-DS-091209	K0911919-003	Dichlorodifluoromethane	12/18/2009	1.4		Yes	N	U			1.4	0.31	ug/kg
PCM-06-DS-091209	K0911919-003	Dibromomethane	12/18/2009	1.4		Yes	N	U			1.4	0.39	ug/kg
PCM-06-DS-091209	K0911919-003	Iodomethane (Methyl iodide)	12/18/2009	14		Yes	N	U	UJ	5,10	14	0.79	ug/kg
PCM-06-DS-091209	K0911919-003	Chloromethane	12/18/2009	1.4		Yes	N	U			1.4	0.51	ug/kg
PCM-06-DS-091209	K0911919-003	Bromomethane	12/18/2009	1.4		Yes	N	U	UJ	5	1.4	0.86	ug/kg
PCM-06-DS-091209	K0911919-003	1,1,1-Trichloroethane	12/18/2009	1.4		Yes	N	U			1.4	0.49	ug/kg
PCM-06-DS-091209	K0911919-003	Bromochloromethane	12/18/2009	1.4		Yes	N	U			1.4	0.20	ug/kg
PCM-09-DS-091209	K0911919-004	Dibromochloromethane	12/18/2009	1.3		Yes	N	U			1.3	0.24	ug/kg
PCM-09-DS-091209	K0911919-004	Carbon disulfide	12/18/2009	1.3		Yes	N	U			1.3	0.33	ug/kg
PCM-09-DS-091209	K0911919-004	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.3		Yes	N	U			1.3	0.46	ug/kg
PCM-09-DS-091209	K0911919-004	1,3-Dichlorobenzene	12/18/2009	1.3		Yes	N	U			1.3	0.31	ug/kg
PCM-09-DS-091209	K0911919-004	Methyl tert-butyl ether (MTBE)	12/18/2009	0.26	2.6	Yes	N	J	U	7	2.6	0.23	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dichloroethene, trans-	12/18/2009	1.3		Yes	N	U			1.3	0.45	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dichloroethene, cis-	12/18/2009	1.3		Yes	N	U			1.3	0.30	ug/kg
PCM-09-DS-091209	K0911919-004	Dichloromethane (Methylene chloride)	12/18/2009	6.4		Yes	N	U			6.4	0.16	ug/kg
PCM-09-DS-091209	K0911919-004	Tetrachloroethene (PCE)	12/18/2009	1.3		Yes	N	U			1.3	0.33	ug/kg
PCM-09-DS-091209	K0911919-004	Iodomethane (Methyl iodide)	12/18/2009	13		Yes	N	U	UJ	5,10	13	0.72	ug/kg
PCM-09-DS-091209	K0911919-004	2-Chloroethylvinyl ether	12/18/2009	6.4		Yes	N	U			6.4	0.61	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	trans-1,4-Dichloro-2-butene	12/18/2009	2.6	Yes	N	U			2.6	0.35	ug/kg
PCM-09-DS-091209	K0911919-004	m,p-Xylene	12/18/2009	2.6	Yes	N	U			2.6	0.47	ug/kg
PCM-09-DS-091209	K0911919-004	Vinyl chloride	12/18/2009	1.3	Yes	N	U			1.3	0.18	ug/kg
PCM-09-DS-091209	K0911919-004	Chloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg
PCM-09-DS-091209	K0911919-004	Isopropylbenzene (Cumene)	12/18/2009	1.3	Yes	N	U			1.3	0.17	ug/kg
PCM-09-DS-091209	K0911919-004	Dibromomethane	12/18/2009	1.3	Yes	N	U			1.3	0.36	ug/kg
PCM-09-DS-091209	K0911919-004	Chloromethane	12/18/2009	1.3	Yes	N	U			1.3	0.47	ug/kg
PCM-09-DS-091209	K0911919-004	Bromomethane	12/18/2009	1.3	Yes	N	U	UJ	5	1.3	0.79	ug/kg
PCM-09-DS-091209	K0911919-004	1,1,1-Trichloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.45	ug/kg
PCM-09-DS-091209	K0911919-004	2-Hexanone (Methyl butyl ketone)	12/18/2009	6.4	Yes	N	U			6.4	1.2	ug/kg
PCM-09-DS-091209	K0911919-004	1,1,1,2-Tetrachloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.32	ug/kg
PCM-09-DS-091209	K0911919-004	Acetone	12/18/2009	13	Yes	N	U			13	2.2	ug/kg
PCM-09-DS-091209	K0911919-004	Chloroform	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	Benzene	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	1,2,4-Trichlorobenzene	12/18/2009	26	Yes	N	U			26	0.30	ug/kg
PCM-09-DS-091209	K0911919-004	Bromochloromethane	12/18/2009	1.3	Yes	N	U			1.3	0.18	ug/kg
PCM-09-DS-091209	K0911919-004	Bromodichloromethane	12/18/2009	1.3	Yes	N	U			1.3	0.19	ug/kg
PCM-09-DS-091209	K0911919-004	Chlorobenzene	12/18/2009	1.3	Yes	N	U			1.3	0.32	ug/kg
PCM-09-DS-091209	K0911919-004	1,2,3-Trichloropropane	12/18/2009	2.6	Yes	N	U			2.6	0.48	ug/kg
PCM-09-DS-091209	K0911919-004	o-Xylene	12/18/2009	1.3	Yes	N	U			1.3	0.17	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorobutadiene	12/18/2009	2.6	Yes	N	U			2.6	0.27	ug/kg
PCM-09-DS-091209	K0911919-004	1,1,2,2-Tetrachloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.46	ug/kg
PCM-09-DS-091209	K0911919-004	Trichloroethene (TCE)	12/18/2009	1.3	Yes	N	U			1.3	0.35	ug/kg
PCM-09-DS-091209	K0911919-004	1,1,2-Trichloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg
PCM-09-DS-091209	K0911919-004	2-Butanone (MEK)	12/18/2009	5.1	Yes	N	U			5.1	1.3	ug/kg

Analytical Method	SW8260											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	1,2-Dichloropropane	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	Dichlorodifluoromethane	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.3	Yes	N	U			1.3	0.27	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dichlorobenzene	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	1,1-Dichloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.26	ug/kg
PCM-09-DS-091209	K0911919-004	Toluene	12/18/2009	1.3	Yes	N	U			1.3	0.23	ug/kg
PCM-09-DS-091209	K0911919-004	Bromoform	12/18/2009	1.3	Yes	N	U			1.3	0.38	ug/kg
PCM-09-DS-091209	K0911919-004	Ethylbenzene	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	Styrene	12/18/2009	1.3	Yes	N	U			1.3	0.17	ug/kg
PCM-09-DS-091209	K0911919-004	1,3-Dichloropropene, cis-	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-09-DS-091209	K0911919-004	1,3-Dichloropropene, trans-	12/18/2009	1.3	Yes	N	U			1.3	0.43	ug/kg
PCM-09-DS-091209	K0911919-004	1,4-Dichlorobenzene	12/18/2009	1.3	Yes	N	U			1.3	0.32	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	26	Yes	N	U			26	0.35	ug/kg
PCM-09-DS-091209	K0911919-004	Acrolein	12/18/2009	130	Yes	N	U	UJ	5	130	3.3	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dichloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.076	ug/kg
PCM-09-DS-091209	K0911919-004	Acrylonitrile	12/18/2009	2.6	Yes	N	U			2.6	1.6	ug/kg
PCM-09-DS-091209	K0911919-004	Vinyl acetate	12/18/2009	2.6	Yes	N	U	UJ	5	2.6	1.2	ug/kg
PCM-09-DS-091209	K0911919-004	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.6	Yes	N	U			2.6	0.94	ug/kg
PCM-09-DS-091209	K0911919-004	1,1-Dichloroethene	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg

Analytical Method	SW8270											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	1,4-Dichlorobenzene	12/28/2009	300	Yes	N	U			300	85	ug/kg
PCM-02-DS-091209	K0911919-001	N-Nitrosodi-N-propylamine	12/28/2009	300	Yes	N	U			300	70	ug/kg
PCM-02-DS-091209	K0911919-001	Dimethyl phthalate	12/28/2009	300	Yes	N	U			300	30	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Isophorone	12/28/2009	300	Yes	N	U			300	30	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachlorocyclopentadiene	12/28/2009	1500	Yes	N	U			1500	850	ug/kg
PCM-02-DS-091209	K0911919-001	4-Chlorophenyl phenyl ether	12/28/2009	300	Yes	N	U			300	41	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachloroethane	12/28/2009	300	Yes	N	U			300	91	ug/kg
PCM-02-DS-091209	K0911919-001	Di-n-butyl phthalate	12/28/2009	590	Yes	N	U			590	230	ug/kg
PCM-02-DS-091209	K0911919-001	Aniline	12/28/2009	590	Yes	N	U			590	44	ug/kg
PCM-02-DS-091209	K0911919-001	Butylbenzyl phthalate	12/28/2009	300	Yes	N	U			300	94	ug/kg
PCM-02-DS-091209	K0911919-001	2,6-Dinitrotoluene	12/28/2009	300	Yes	N	U			300	59	ug/kg
PCM-02-DS-091209	K0911919-001	4-Chloro-3-methylphenol	12/28/2009	300	Yes	N	U			300	41	ug/kg
PCM-02-DS-091209	K0911919-001	1,3-Dichlorobenzene	12/28/2009	300	Yes	N	U			300	88	ug/kg
PCM-02-DS-091209	K0911919-001	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/28/2009	3000	Yes	N	U			3000	41	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-Dinitrophenol	12/28/2009	5900	Yes	N	U			5900	500	ug/kg
PCM-02-DS-091209	K0911919-001	bis(2-Chloroisopropyl) ether	12/28/2009	300	Yes	N	U			300	76	ug/kg
PCM-02-DS-091209	K0911919-001	Benzoic acid	12/28/2009	5900	Yes	N	U	UJ	10	5900	2800	ug/kg
PCM-02-DS-091209	K0911919-001	2-Chloronaphthalene	12/28/2009	300	Yes	N	U			300	47	ug/kg
PCM-02-DS-091209	K0911919-001	Phenol	12/28/2009	880	Yes	N	U			880	59	ug/kg
PCM-02-DS-091209	K0911919-001	3-Nitroaniline	12/28/2009	590	Yes	N	U			590	73	ug/kg
PCM-02-DS-091209	K0911919-001	Nitrobenzene	12/28/2009	300	Yes	N	U			300	65	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,5-Trichlorophenol	12/28/2009	300	Yes	N	U			300	44	ug/kg
PCM-02-DS-091209	K0911919-001	2-Chlorophenol	12/28/2009	300	Yes	N	U			300	59	ug/kg
PCM-02-DS-091209	K0911919-001	Diethyl phthalate	12/28/2009	300	Yes	N	U			300	38	ug/kg
PCM-02-DS-091209	K0911919-001	2-Methylphenol (o-Cresol)	12/28/2009	300	Yes	N	U	UJ	10	300	44	ug/kg
PCM-02-DS-091209	K0911919-001	2-Nitrophenol	12/28/2009	300	Yes	N	U			300	44	ug/kg
PCM-02-DS-091209	K0911919-001	2-Nitroaniline	12/28/2009	590	Yes	N	U			590	94	ug/kg
PCM-02-DS-091209	K0911919-001	2,4,6-Trichlorophenol	12/28/2009	300	Yes	N	U			300	41	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Pentachlorophenol	12/28/2009	3000		Yes	N	U			3000	590	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachlorobutadiene	12/28/2009	300		Yes	N	U			300	73	ug/kg
PCM-02-DS-091209	K0911919-001	Carbazole	12/28/2009	960		Yes	Y	D			300	38	ug/kg
PCM-02-DS-091209	K0911919-001	N-Nitrosodiphenylamine	12/28/2009	300		Yes	N	U			300	47	ug/kg
PCM-02-DS-091209	K0911919-001	1,2-Dichlorobenzene	12/28/2009	300		Yes	N	U			300	85	ug/kg
PCM-02-DS-091209	K0911919-001	Hexachlorobenzene	12/28/2009	300		Yes	N	U			300	35	ug/kg
PCM-02-DS-091209	K0911919-001	3,3'-Dichlorobenzidine	12/28/2009	3000		Yes	N	U			3000	110	ug/kg
PCM-02-DS-091209	K0911919-001	4-Nitroaniline	12/28/2009	590		Yes	N	U	UJ	5	590	53	ug/kg
PCM-02-DS-091209	K0911919-001	4-Nitrophenol	12/28/2009	3000		Yes	N	U			3000	530	ug/kg
PCM-02-DS-091209	K0911919-001	Benzyl alcohol	12/28/2009	590		Yes	N	U			590	62	ug/kg
PCM-02-DS-091209	K0911919-001	4-Bromophenyl-phenyl ether	12/28/2009	300		Yes	N	U			300	47	ug/kg
PCM-02-DS-091209	K0911919-001	Azobenzene	12/28/2009	300		Yes	N	U			300	33	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-Dimethylphenol	12/28/2009	1500		Yes	N	U	UJ	10	1500	170	ug/kg
PCM-02-DS-091209	K0911919-001	4-Methylphenol (p-Cresol)	12/28/2009	300		Yes	N	U			300	44	ug/kg
PCM-02-DS-091209	K0911919-001	4-Chloroaniline	12/28/2009	300		Yes	N	U			300	56	ug/kg
PCM-02-DS-091209	K0911919-001	bis(2-Chloroethyl)ether	12/28/2009	300		Yes	N	U			300	56	ug/kg
PCM-02-DS-091209	K0911919-001	bis(2-Chloroethoxy)methane	12/28/2009	300		Yes	N	U			300	44	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-Dinitrotoluene	12/28/2009	300		Yes	N	U			300	44	ug/kg
PCM-02-DS-091209	K0911919-001	Di-n-octyl phthalate	12/28/2009	300		Yes	N	U			300	50	ug/kg
PCM-02-DS-091209	K0911919-001	2,4-Dichlorophenol	12/28/2009	300		Yes	N	U			300	30	ug/kg
PCM-02-DS-091209	K0911919-001	1,2,4-Trichlorobenzene	12/28/2009	300		Yes	N	U			300	76	ug/kg
PCM-02-DS-091209	K0911919-001	Bis(2-ethylhexyl) phthalate	12/28/2009	3000		Yes	N	U			3000	210	ug/kg
PCM-04-DS-091209	K0911919-002	Diethyl phthalate	12/28/2009	540		Yes	N	U			540	70	ug/kg
PCM-04-DS-091209	K0911919-002	bis(2-Chloroethyl)ether	12/28/2009	540		Yes	N	U			540	110	ug/kg
PCM-04-DS-091209	K0911919-002	bis(2-Chloroethoxy)methane	12/28/2009	540		Yes	N	U			540	80	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	Bis(2-ethylhexyl) phthalate	12/28/2009	5400		Yes	N	U			5400	380	ug/kg
PCM-04-DS-091209	K0911919-002	Di-n-octyl phthalate	12/28/2009	540		Yes	N	U			540	91	ug/kg
PCM-04-DS-091209	K0911919-002	Di-n-butyl phthalate	12/28/2009	1100		Yes	N	U			1100	420	ug/kg
PCM-04-DS-091209	K0911919-002	1,2,4-Trichlorobenzene	12/28/2009	540		Yes	N	U			540	140	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-Dichlorophenol	12/28/2009	540		Yes	N	U			540	54	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-Dinitrotoluene	12/28/2009	540		Yes	N	U			540	80	ug/kg
PCM-04-DS-091209	K0911919-002	Dimethyl phthalate	12/28/2009	540		Yes	N	U			540	54	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-Dinitrophenol	12/28/2009	11000		Yes	N	U			11000	910	ug/kg
PCM-04-DS-091209	K0911919-002	Aniline	12/28/2009	1100		Yes	N	U			1100	80	ug/kg
PCM-04-DS-091209	K0911919-002	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/28/2009	5400		Yes	N	U			5400	75	ug/kg
PCM-04-DS-091209	K0911919-002	Isophorone	12/28/2009	540		Yes	N	U			540	54	ug/kg
PCM-04-DS-091209	K0911919-002	1,3-Dichlorobenzene	12/28/2009	540		Yes	N	U			540	160	ug/kg
PCM-04-DS-091209	K0911919-002	4-Chloro-3-methylphenol	12/28/2009	540		Yes	N	U			540	75	ug/kg
PCM-04-DS-091209	K0911919-002	2,6-Dinitrotoluene	12/28/2009	540		Yes	N	U			540	110	ug/kg
PCM-04-DS-091209	K0911919-002	N-Nitrosodi-N-propylamine	12/28/2009	540		Yes	N	U			540	130	ug/kg
PCM-04-DS-091209	K0911919-002	Benzyl alcohol	12/28/2009	1100		Yes	N	U			1100	120	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachlorocyclopentadiene	12/28/2009	2700		Yes	N	U			2700	1600	ug/kg
PCM-04-DS-091209	K0911919-002	4-Chlorophenyl phenyl ether	12/28/2009	540		Yes	N	U			540	75	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachloroethane	12/28/2009	540		Yes	N	U			540	170	ug/kg
PCM-04-DS-091209	K0911919-002	Benzoic acid	12/28/2009	11000		Yes	N	U	UJ	10	11000	5100	ug/kg
PCM-04-DS-091209	K0911919-002	bis(2-Chloroisopropyl) ether	12/28/2009	540		Yes	N	U			540	140	ug/kg
PCM-04-DS-091209	K0911919-002	2,4,5-Trichlorophenol	12/28/2009	540		Yes	N	U			540	80	ug/kg
PCM-04-DS-091209	K0911919-002	Butylbenzyl phthalate	12/28/2009	540		Yes	N	U			540	170	ug/kg
PCM-04-DS-091209	K0911919-002	N-Nitrosodiphenylamine	12/28/2009	520		Yes	Y	JD			540	85	ug/kg
PCM-04-DS-091209	K0911919-002	Carbazole	12/28/2009	920		Yes	Y	D			540	70	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	Hexachlorobutadiene	12/28/2009	540		Yes	N	U			540	140	ug/kg
PCM-04-DS-091209	K0911919-002	Pentachlorophenol	12/28/2009	5400		Yes	N	U			5400	1100	ug/kg
PCM-04-DS-091209	K0911919-002	2,4,6-Trichlorophenol	12/28/2009	540		Yes	N	U			540	75	ug/kg
PCM-04-DS-091209	K0911919-002	2-Nitroaniline	12/28/2009	1100		Yes	N	U			1100	170	ug/kg
PCM-04-DS-091209	K0911919-002	2-Nitrophenol	12/28/2009	540		Yes	N	U			540	80	ug/kg
PCM-04-DS-091209	K0911919-002	2-Chloronaphthalene	12/28/2009	540		Yes	N	U			540	85	ug/kg
PCM-04-DS-091209	K0911919-002	3,3'-Dichlorobenzidine	12/28/2009	5400		Yes	N	U			5400	200	ug/kg
PCM-04-DS-091209	K0911919-002	2-Methylphenol (o-Cresol)	12/28/2009	540		Yes	N	U	UJ	10	540	80	ug/kg
PCM-04-DS-091209	K0911919-002	Azobenzene	12/28/2009	540		Yes	N	U			540	59	ug/kg
PCM-04-DS-091209	K0911919-002	2-Chlorophenol	12/28/2009	540		Yes	N	U			540	110	ug/kg
PCM-04-DS-091209	K0911919-002	Phenol	12/28/2009	1600		Yes	N	U			1600	110	ug/kg
PCM-04-DS-091209	K0911919-002	Nitrobenzene	12/28/2009	540		Yes	N	U			540	120	ug/kg
PCM-04-DS-091209	K0911919-002	3-Nitroaniline	12/28/2009	1100		Yes	N	U			1100	140	ug/kg
PCM-04-DS-091209	K0911919-002	4-Nitroaniline	12/28/2009	1100		Yes	N	U	UJ	5	1100	96	ug/kg
PCM-04-DS-091209	K0911919-002	4-Nitrophenol	12/28/2009	5400		Yes	N	U			5400	960	ug/kg
PCM-04-DS-091209	K0911919-002	4-Bromophenyl-phenyl ether	12/28/2009	540		Yes	N	U			540	85	ug/kg
PCM-04-DS-091209	K0911919-002	Hexachlorobenzene	12/28/2009	540		Yes	N	U			540	64	ug/kg
PCM-04-DS-091209	K0911919-002	2,4-Dimethylphenol	12/28/2009	2700		Yes	N	U	UJ	10	2700	300	ug/kg
PCM-04-DS-091209	K0911919-002	4-Methylphenol (p-Cresol)	12/28/2009	540		Yes	N	U			540	80	ug/kg
PCM-04-DS-091209	K0911919-002	1,4-Dichlorobenzene	12/28/2009	540		Yes	N	U			540	160	ug/kg
PCM-04-DS-091209	K0911919-002	4-Chloroaniline	12/28/2009	540		Yes	N	U			540	110	ug/kg
PCM-04-DS-091209	K0911919-002	1,2-Dichlorobenzene	12/28/2009	540		Yes	N	U			540	160	ug/kg
PCM-06-DS-091209	K0911919-003	2,6-Dinitrotoluene	12/28/2009	70		Yes	N	U			70	14	ug/kg
PCM-06-DS-091209	K0911919-003	Dimethyl phthalate	12/28/2009	70		Yes	N	U			70	7.0	ug/kg
PCM-06-DS-091209	K0911919-003	bis(2-Chloroisopropyl) ether	12/28/2009	70		Yes	N	U			70	19	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DS-091209	K0911919-003	2,4-Dinitrophenol	12/28/2009	1400		Yes	N	U			1400	120	ug/kg
PCM-06-DS-091209	K0911919-003	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/28/2009	700		Yes	N	U			700	9.8	ug/kg
PCM-06-DS-091209	K0911919-003	4-Chloro-3-methylphenol	12/28/2009	70		Yes	N	U			70	9.8	ug/kg
PCM-06-DS-091209	K0911919-003	N-Nitrosodi-N-propylamine	12/28/2009	70		Yes	N	U			70	17	ug/kg
PCM-06-DS-091209	K0911919-003	Aniline	12/28/2009	140		Yes	N	U			140	11	ug/kg
PCM-06-DS-091209	K0911919-003	Benzoic acid	12/28/2009	1400		Yes	N	U	UJ	10	1400	670	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachloroethane	12/28/2009	70		Yes	N	U			70	22	ug/kg
PCM-06-DS-091209	K0911919-003	4-Chlorophenyl phenyl ether	12/28/2009	70		Yes	N	U			70	9.8	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachlorocyclopentadiene	12/28/2009	350		Yes	N	U			350	210	ug/kg
PCM-06-DS-091209	K0911919-003	Isophorone	12/28/2009	70		Yes	N	U			70	7.0	ug/kg
PCM-06-DS-091209	K0911919-003	2,4-Dinitrotoluene	12/28/2009	70		Yes	N	U			70	11	ug/kg
PCM-06-DS-091209	K0911919-003	4-Nitroaniline	12/28/2009	140		Yes	N	U	UJ	5	140	13	ug/kg
PCM-06-DS-091209	K0911919-003	1,3-Dichlorobenzene	12/28/2009	70		Yes	N	U			70	21	ug/kg
PCM-06-DS-091209	K0911919-003	4-Chloroaniline	12/28/2009	70		Yes	N	U			70	14	ug/kg
PCM-06-DS-091209	K0911919-003	3-Nitroaniline	12/28/2009	140		Yes	N	U			140	18	ug/kg
PCM-06-DS-091209	K0911919-003	4-Nitrophenol	12/28/2009	700		Yes	N	U			700	130	ug/kg
PCM-06-DS-091209	K0911919-003	Diethyl phthalate	12/28/2009	70		Yes	N	U			70	9.1	ug/kg
PCM-06-DS-091209	K0911919-003	4-Bromophenyl-phenyl ether	12/28/2009	70		Yes	N	U			70	12	ug/kg
PCM-06-DS-091209	K0911919-003	Azobenzene	12/28/2009	70		Yes	N	U			70	7.7	ug/kg
PCM-06-DS-091209	K0911919-003	2,4-Dimethylphenol	12/28/2009	350		Yes	N	U	UJ	10	350	39	ug/kg
PCM-06-DS-091209	K0911919-003	Benzyl alcohol	12/28/2009	140		Yes	N	U			140	15	ug/kg
PCM-06-DS-091209	K0911919-003	1,4-Dichlorobenzene	12/28/2009	70		Yes	N	U			70	21	ug/kg
PCM-06-DS-091209	K0911919-003	2,4-Dichlorophenol	12/28/2009	70		Yes	N	U			70	7.0	ug/kg
PCM-06-DS-091209	K0911919-003	Phenol	12/28/2009	210		Yes	N	U			210	14	ug/kg
PCM-06-DS-091209	K0911919-003	bis(2-Chloroethyl)ether	12/28/2009	70		Yes	N	U			70	14	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-06-DS-091209	K0911919-003	bis(2-Chloroethoxy)methane	12/28/2009	70		Yes	N	U			70	11	ug/kg
PCM-06-DS-091209	K0911919-003	Bis(2-ethylhexyl) phthalate	12/28/2009	77		Yes	Y	JD			700	49	ug/kg
PCM-06-DS-091209	K0911919-003	Di-n-octyl phthalate	12/28/2009	70		Yes	N	U			70	12	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachlorobenzene	12/28/2009	70		Yes	N	U			70	8.4	ug/kg
PCM-06-DS-091209	K0911919-003	1,2,4-Trichlorobenzene	12/28/2009	70		Yes	N	U			70	19	ug/kg
PCM-06-DS-091209	K0911919-003	4-Methylphenol (p-Cresol)	12/28/2009	70		Yes	N	U			70	11	ug/kg
PCM-06-DS-091209	K0911919-003	3,3'-Dichlorobenzidine	12/28/2009	700		Yes	N	U			700	26	ug/kg
PCM-06-DS-091209	K0911919-003	Di-n-butyl phthalate	12/28/2009	140		Yes	N	U			140	55	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,5-Trichlorophenol	12/28/2009	70		Yes	N	U			70	11	ug/kg
PCM-06-DS-091209	K0911919-003	2-Chlorophenol	12/28/2009	70		Yes	N	U			70	14	ug/kg
PCM-06-DS-091209	K0911919-003	2-Methylphenol (o-Cresol)	12/28/2009	70		Yes	N	U	UJ	10	70	11	ug/kg
PCM-06-DS-091209	K0911919-003	Nitrobenzene	12/28/2009	70		Yes	N	U			70	16	ug/kg
PCM-06-DS-091209	K0911919-003	2-Chloronaphthalene	12/28/2009	70		Yes	N	U			70	12	ug/kg
PCM-06-DS-091209	K0911919-003	2-Nitrophenol	12/28/2009	70		Yes	N	U			70	11	ug/kg
PCM-06-DS-091209	K0911919-003	2-Nitroaniline	12/28/2009	140		Yes	N	U			140	23	ug/kg
PCM-06-DS-091209	K0911919-003	2,4,6-Trichlorophenol	12/28/2009	70		Yes	N	U			70	9.8	ug/kg
PCM-06-DS-091209	K0911919-003	Pentachlorophenol	12/28/2009	700		Yes	N	U			700	140	ug/kg
PCM-06-DS-091209	K0911919-003	Hexachlorobutadiene	12/28/2009	70		Yes	N	U			70	18	ug/kg
PCM-06-DS-091209	K0911919-003	Carbazole	12/28/2009	200		Yes	Y	D			70	9.1	ug/kg
PCM-06-DS-091209	K0911919-003	N-Nitrosodiphenylamine	12/28/2009	41		Yes	Y	JD			70	12	ug/kg
PCM-06-DS-091209	K0911919-003	Butylbenzyl phthalate	12/28/2009	70		Yes	N	U			70	23	ug/kg
PCM-06-DS-091209	K0911919-003	1,2-Dichlorobenzene	12/28/2009	70		Yes	N	U			70	21	ug/kg
PCM-09-DS-091209	K0911919-004	2,6-Dinitrotoluene	12/28/2009	64		Yes	N	U			64	13	ug/kg
PCM-09-DS-091209	K0911919-004	Dimethyl phthalate	12/28/2009	64		Yes	N	U			64	6.4	ug/kg
PCM-09-DS-091209	K0911919-004	bis(2-Chloroisopropyl) ether	12/28/2009	64		Yes	N	U			64	17	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	2,4-Dinitrophenol	12/28/2009	1300		Yes	N	U			1300	110	ug/kg
PCM-09-DS-091209	K0911919-004	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/28/2009	640		Yes	N	U			640	9.0	ug/kg
PCM-09-DS-091209	K0911919-004	1,3-Dichlorobenzene	12/28/2009	64		Yes	N	U			64	20	ug/kg
PCM-09-DS-091209	K0911919-004	4-Chloro-3-methylphenol	12/28/2009	64		Yes	N	U			64	9.0	ug/kg
PCM-09-DS-091209	K0911919-004	N-Nitrosodi-N-propylamine	12/28/2009	64		Yes	N	U			64	16	ug/kg
PCM-09-DS-091209	K0911919-004	Aniline	12/28/2009	130		Yes	N	U			130	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	Benzoic acid	12/28/2009	1300		Yes	N	U	UJ	10	1300	620	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachloroethane	12/28/2009	64		Yes	N	U			64	20	ug/kg
PCM-09-DS-091209	K0911919-004	4-Chlorophenyl phenyl ether	12/28/2009	64		Yes	N	U			64	9.0	ug/kg
PCM-09-DS-091209	K0911919-004	2,4-Dinitrotoluene	12/28/2009	64		Yes	N	U			64	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	Diethyl phthalate	12/28/2009	64		Yes	N	U			64	8.3	ug/kg
PCM-09-DS-091209	K0911919-004	1,4-Dichlorobenzene	12/28/2009	64		Yes	N	U			64	19	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorocyclopentadiene	12/28/2009	320		Yes	N	U			320	190	ug/kg
PCM-09-DS-091209	K0911919-004	4-Chloroaniline	12/28/2009	64		Yes	N	U			64	13	ug/kg
PCM-09-DS-091209	K0911919-004	4-Nitroaniline	12/28/2009	130		Yes	N	U	UJ	5	130	12	ug/kg
PCM-09-DS-091209	K0911919-004	4-Nitrophenol	12/28/2009	640		Yes	N	U			640	120	ug/kg
PCM-09-DS-091209	K0911919-004	Benzyl alcohol	12/28/2009	130		Yes	N	U			130	14	ug/kg
PCM-09-DS-091209	K0911919-004	4-Bromophenyl-phenyl ether	12/28/2009	64		Yes	N	U			64	11	ug/kg
PCM-09-DS-091209	K0911919-004	Azobenzene	12/28/2009	64		Yes	N	U			64	7.0	ug/kg
PCM-09-DS-091209	K0911919-004	2,4-Dimethylphenol	12/28/2009	320		Yes	N	U	UJ	10	320	35	ug/kg
PCM-09-DS-091209	K0911919-004	Phenol	12/28/2009	200		Yes	N	U			200	13	ug/kg
PCM-09-DS-091209	K0911919-004	Di-n-butyl phthalate	12/28/2009	130		Yes	N	U			130	51	ug/kg
PCM-09-DS-091209	K0911919-004	2,4-Dichlorophenol	12/28/2009	64		Yes	N	U			64	6.4	ug/kg
PCM-09-DS-091209	K0911919-004	bis(2-Chloroethyl)ether	12/28/2009	64		Yes	N	U			64	13	ug/kg
PCM-09-DS-091209	K0911919-004	bis(2-Chloroethoxy)methane	12/28/2009	64		Yes	N	U			64	9.6	ug/kg

Analytical Method	SW8270											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Mod Res**	**Report**	**Detect**	**Lab Qual**	**Val Qual**	**Reason**	**RL**	**MDL**	**Units**
PCM-09-DS-091209	K0911919-004	Bis(2-ethylhexyl) phthalate	12/28/2009	110		Yes	Y	JD			640	45	ug/kg
PCM-09-DS-091209	K0911919-004	Di-n-octyl phthalate	12/28/2009	64		Yes	N	U			64	11	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorobenzene	12/28/2009	64		Yes	N	U			64	7.7	ug/kg
PCM-09-DS-091209	K0911919-004	1,2,4-Trichlorobenzene	12/28/2009	64		Yes	N	U			64	17	ug/kg
PCM-09-DS-091209	K0911919-004	4-Methylphenol (p-Cresol)	12/28/2009	64		Yes	N	U			64	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	3,3'-Dichlorobenzidine	12/28/2009	640		Yes	N	U			640	24	ug/kg
PCM-09-DS-091209	K0911919-004	Carbazole	12/28/2009	77		Yes	Y	D			64	8.3	ug/kg
PCM-09-DS-091209	K0911919-004	Hexachlorobutadiene	12/28/2009	64		Yes	N	U			64	16	ug/kg
PCM-09-DS-091209	K0911919-004	Pentachlorophenol	12/28/2009	640		Yes	N	U			640	130	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,6-Trichlorophenol	12/28/2009	64		Yes	N	U			64	9.0	ug/kg
PCM-09-DS-091209	K0911919-004	2-Nitroaniline	12/28/2009	130		Yes	N	U			130	21	ug/kg
PCM-09-DS-091209	K0911919-004	N-Nitrosodiphenylamine	12/28/2009	20		Yes	Y	JD			64	11	ug/kg
PCM-09-DS-091209	K0911919-004	2-Chloronaphthalene	12/28/2009	64		Yes	N	U			64	11	ug/kg
PCM-09-DS-091209	K0911919-004	2-Methylphenol (o-Cresol)	12/28/2009	64		Yes	N	U	UJ	10	64	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	Butylbenzyl phthalate	12/28/2009	64		Yes	N	U			64	21	ug/kg
PCM-09-DS-091209	K0911919-004	1,2-Dichlorobenzene	12/28/2009	64		Yes	N	U			64	19	ug/kg
PCM-09-DS-091209	K0911919-004	Isophorone	12/28/2009	64		Yes	N	U			64	6.4	ug/kg
PCM-09-DS-091209	K0911919-004	2,4,5-Trichlorophenol	12/28/2009	64		Yes	N	U			64	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	Nitrobenzene	12/28/2009	64		Yes	N	U			64	14	ug/kg
PCM-09-DS-091209	K0911919-004	3-Nitroaniline	12/28/2009	130		Yes	N	U			130	16	ug/kg
PCM-09-DS-091209	K0911919-004	2-Nitrophenol	12/28/2009	64		Yes	N	U			64	9.6	ug/kg
PCM-09-DS-091209	K0911919-004	2-Chlorophenol	12/28/2009	64		Yes	N	U			64	13	ug/kg

Analytical Method	SW8270CSIM											
Sample ID	**Lab Sample ID**	**Chemical Name**	**Anal Date**	**Result**	**Mod Res**	**Report**	**Detect**	**Lab Qual**	**Val Qual**	**Reason**	**RL**	**MDL**	**Units**
PCM-02-DS-091209	K0911919-001	Pyrene	12/23/2009	37000		Yes	Y	D			150	38	ug/kg

Analytical Method	SW8270CSIM											
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Phenanthrene	12/23/2009	23000	Yes	Y	D			150	70	ug/kg
PCM-02-DS-091209	K0911919-001	Naphthalene	12/23/2009	11000	Yes	Y	D			150	30	ug/kg
PCM-02-DS-091209	K0911919-001	2-Methylnaphthalene	12/23/2009	1300	Yes	Y	D			150	23	ug/kg
PCM-02-DS-091209	K0911919-001	Fluorene	12/23/2009	3100	Yes	Y	D			150	31	ug/kg
PCM-02-DS-091209	K0911919-001	Benzo(g,h,i)perylene	12/23/2009	15000	Yes	Y	D			150	43	ug/kg
PCM-02-DS-091209	K0911919-001	Indeno(1,2,3-c,d)pyrene	12/23/2009	13000	Yes	Y	D			150	44	ug/kg
PCM-02-DS-091209	K0911919-001	Benzo(b)fluoranthene	12/23/2009	15000	Yes	Y	D			150	46	ug/kg
PCM-02-DS-091209	K0911919-001	Dibenzo(a,h)anthracene	12/23/2009	1600	Yes	Y	D			150	40	ug/kg
PCM-02-DS-091209	K0911919-001	Acenaphthene	12/23/2009	6500	Yes	Y	D			150	25	ug/kg
PCM-02-DS-091209	K0911919-001	Anthracene	12/23/2009	6200	Yes	Y	D			150	28	ug/kg
PCM-02-DS-091209	K0911919-001	Benzo(a)anthracene	12/23/2009	11000	Yes	Y	D			150	36	ug/kg
PCM-02-DS-091209	K0911919-001	Fluoranthene	12/23/2009	29000	Yes	Y	D			150	49	ug/kg
PCM-02-DS-091209	K0911919-001	Benzo(a)pyrene	12/23/2009	17000	Yes	Y	D			150	38	ug/kg
PCM-02-DS-091209	K0911919-001	Chrysene	12/23/2009	13000	Yes	Y	D			150	40	ug/kg
PCM-02-DS-091209	K0911919-001	Acenaphthylene	12/23/2009	1500	Yes	Y	D			150	28	ug/kg
PCM-02-DS-091209	K0911919-001	Benzo(k)fluoranthene	12/23/2009	5000	Yes	Y	D			150	44	ug/kg
PCM-04-DS-091209	K0911919-002	Benzo(a)pyrene	12/23/2009	43000	Yes	Y	D			140	38	ug/kg
PCM-04-DS-091209	K0911919-002	Naphthalene	12/23/2009	4500	Yes	Y	D			140	30	ug/kg
PCM-04-DS-091209	K0911919-002	Fluorene	12/23/2009	4400	Yes	Y	D			140	31	ug/kg
PCM-04-DS-091209	K0911919-002	Phenanthrene	12/23/2009	42000	Yes	Y	D			140	70	ug/kg
PCM-04-DS-091209	K0911919-002	Acenaphthene	12/23/2009	6400	Yes	Y	D			140	25	ug/kg
PCM-04-DS-091209	K0911919-002	Benzo(a)anthracene	12/23/2009	27000	Yes	Y	D			140	36	ug/kg
PCM-04-DS-091209	K0911919-002	Dibenzo(a,h)anthracene	12/23/2009	3900	Yes	Y	D			140	40	ug/kg
PCM-04-DS-091209	K0911919-002	2-Methylnaphthalene	12/23/2009	890	Yes	Y	D			140	23	ug/kg
PCM-04-DS-091209	K0911919-002	Chrysene	12/23/2009	31000	Yes	Y	D			140	40	ug/kg

Analytical Method	SW8270CSIM												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-04-DS-091209	K0911919-002	Acenaphthylene	12/23/2009	4300		Yes	Y	D			140	28	ug/kg
PCM-04-DS-091209	K0911919-002	Benzo(k)fluoranthene	12/23/2009	14000		Yes	Y	D			140	44	ug/kg
PCM-04-DS-091209	K0911919-002	Benzo(b)fluoranthene	12/23/2009	37000		Yes	Y	D			140	46	ug/kg
PCM-04-DS-091209	K0911919-002	Indeno(1,2,3-c,d)pyrene	12/23/2009	30000		Yes	Y	D			140	44	ug/kg
PCM-04-DS-091209	K0911919-002	Anthracene	12/23/2009	10000		Yes	Y	D			140	28	ug/kg
PCM-04-DS-091209	K0911919-002	Benzo(g,h,i)perylene	12/23/2009	35000		Yes	Y	D			140	43	ug/kg
PCM-04-DS-091209	K0911919-002	Fluoranthene	12/24/2009	76000		Yes	Y	D			670	250	ug/kg
PCM-04-DS-091209	K0911919-002	Pyrene	12/24/2009	110000		Yes	Y	D			670	190	ug/kg
PCM-06-DS-091209	K0911919-003	Benzo(a)anthracene	12/23/2009	2600		Yes	Y	D			35	7.2	ug/kg
PCM-06-DS-091209	K0911919-003	Anthracene	12/23/2009	930		Yes	Y	D			35	5.5	ug/kg
PCM-06-DS-091209	K0911919-003	Benzo(a)pyrene	12/23/2009	4100		Yes	Y	D			35	7.6	ug/kg
PCM-06-DS-091209	K0911919-003	Naphthalene	12/23/2009	5500		Yes	Y	D			35	6.0	ug/kg
PCM-06-DS-091209	K0911919-003	Fluorene	12/23/2009	290		Yes	Y	D			35	6.1	ug/kg
PCM-06-DS-091209	K0911919-003	Acenaphthene	12/23/2009	770		Yes	Y	D			35	5.0	ug/kg
PCM-06-DS-091209	K0911919-003	2-Methylnaphthalene	12/23/2009	140		Yes	Y	D			35	4.6	ug/kg
PCM-06-DS-091209	K0911919-003	Dibenzo(a,h)anthracene	12/23/2009	400		Yes	Y	D			35	8.0	ug/kg
PCM-06-DS-091209	K0911919-003	Chrysene	12/23/2009	3000		Yes	Y	D			35	8.0	ug/kg
PCM-06-DS-091209	K0911919-003	Acenaphthylene	12/23/2009	310		Yes	Y	D			35	5.6	ug/kg
PCM-06-DS-091209	K0911919-003	Benzo(k)fluoranthene	12/23/2009	1300		Yes	Y	D			35	8.7	ug/kg
PCM-06-DS-091209	K0911919-003	Fluoranthene	12/23/2009	5600		Yes	Y	D			35	9.8	ug/kg
PCM-06-DS-091209	K0911919-003	Benzo(b)fluoranthene	12/23/2009	3600		Yes	Y	D			35	9.2	ug/kg
PCM-06-DS-091209	K0911919-003	Indeno(1,2,3-c,d)pyrene	12/23/2009	3100		Yes	Y	D			35	8.7	ug/kg
PCM-06-DS-091209	K0911919-003	Benzo(g,h,i)perylene	12/23/2009	3700		Yes	Y	D			35	8.5	ug/kg
PCM-06-DS-091209	K0911919-003	Pyrene	12/23/2009	7200		Yes	Y	D			35	7.6	ug/kg
PCM-06-DS-091209	K0911919-003	Phenanthrene	12/23/2009	3000		Yes	Y	D			35	14	ug/kg

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-09-DS-091209	K0911919-004	Chrysene	12/24/2009	3200		Yes	Y	D			32	8.0	ug/kg
PCM-09-DS-091209	K0911919-004	Anthracene	12/24/2009	690		Yes	Y	D			32	5.5	ug/kg
PCM-09-DS-091209	K0911919-004	Pyrene	12/24/2009	6800		Yes	Y	D			32	7.6	ug/kg
PCM-09-DS-091209	K0911919-004	Benzo(g,h,i)perylene	12/24/2009	5100		Yes	Y	D			32	8.5	ug/kg
PCM-09-DS-091209	K0911919-004	Benzo(b)fluoranthene	12/24/2009	4100		Yes	Y	D			32	9.2	ug/kg
PCM-09-DS-091209	K0911919-004	Benzo(k)fluoranthene	12/24/2009	1400		Yes	Y	D			32	8.7	ug/kg
PCM-09-DS-091209	K0911919-004	Acenaphthylene	12/24/2009	530		Yes	Y	D			32	5.6	ug/kg
PCM-09-DS-091209	K0911919-004	Benzo(a)pyrene	12/24/2009	5000		Yes	Y	D			32	7.6	ug/kg
PCM-09-DS-091209	K0911919-004	Dibenzo(a,h)anthracene	12/24/2009	510		Yes	Y	D			32	8.0	ug/kg
PCM-09-DS-091209	K0911919-004	Benzo(a)anthracene	12/24/2009	2800		Yes	Y	D			32	7.2	ug/kg
PCM-09-DS-091209	K0911919-004	Acenaphthene	12/24/2009	330		Yes	Y	D			32	5.0	ug/kg
PCM-09-DS-091209	K0911919-004	Phenanthrene	12/24/2009	1800		Yes	Y	D			32	14	ug/kg
PCM-09-DS-091209	K0911919-004	Fluorene	12/24/2009	200		Yes	Y	D			32	6.1	ug/kg
PCM-09-DS-091209	K0911919-004	2-Methylnaphthalene	12/24/2009	100		Yes	Y	D			32	4.6	ug/kg
PCM-09-DS-091209	K0911919-004	Indeno(1,2,3-c,d)pyrene	12/24/2009	4000		Yes	Y	D			32	8.7	ug/kg
PCM-09-DS-091209	K0911919-004	Naphthalene	12/24/2009	460		Yes	Y	D			32	6.0	ug/kg
PCM-09-DS-091209	K0911919-004	Fluoranthene	12/24/2009	5200		Yes	Y	D			32	9.8	ug/kg

Analytical Method SW9012A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Cyanide	12/16/2009	1.77		Yes	Y				0.53	0.11	mg/kg
PCM-04-DS-091209	K0911919-002	Cyanide	12/16/2009	0.65		Yes	Y				0.34	0.07	mg/kg
PCM-06-DS-091209	K0911919-003	Cyanide	12/16/2009	0.57		Yes	N	U			0.57	0.12	mg/kg
PCM-09-DS-091209	K0911919-004	Cyanide	12/16/2009	0.59		Yes	N	U			0.59	0.12	mg/kg

Analytical Method SW9030

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units

Analytical Method SW9030

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-02-DS-091209	K0911919-001	Sulfide	12/16/2009	158		Yes	Y				12	4.7	mg/kg
PCM-04-DS-091209	K0911919-002	Sulfide	12/16/2009	95		Yes	Y				11	4.3	mg/kg
PCM-06-DS-091209	K0911919-003	Sulfide	12/16/2009	122		Yes	Y				14	5.6	mg/kg
PCM-09-DS-091209	K0911919-004	Sulfide	12/16/2009	130		Yes	Y				13	4.5	mg/kg

NW Natural Gasco Pilot Cap Monitoring Year 3
Data Validation Reports
LDC #22482

K0911973

LDC

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 9 through December 10, 2009
LDC Report Date:	February 11, 2010
Matrix:	Water/Sediment
Parameters:	Volatiles
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-DRB-091210
PCM-FB-091210
PCM-TB-091209
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-22-DS-091210MS
PCM-22-DS-091210MSD

Introduction

This data review covers 4 water samples and 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all volatile target compounds and system performance check compounds (SPCCs) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
10/28/09	Acrolein Vinyl acetate	0.0337 (≥0.05) 0.0387 (≥0.05)	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209 KWG0911998-MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
10/25/09	Acrolein Vinyl acetate	0.0353 (≥0.05) 0.0418 (≥0.05)	All sediment samples in SDG K0911973	J (all detects) UJ (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/18/09	Bromomethane Iodomethane	27 60	All sediment samples in SDG K0911973	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/21/09	2-Chloroethylvinyl ether	30	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209 KWG0911998-MB	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
12/18/09	Acrolein Vinyl acetate	0.0357 (≥0.05) 0.0403 (≥0.05)	All sediment samples in SDG K0911973	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/21/09	Acrolein Vinyl acetate	0.0367 (≥0.05) 0.0322 (≥0.05)	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209 KWG0911998-MB	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0911998-4	12/21/09	Benzene	0.040 ug/L	All water samples in SDG K0911973
KWG0911937-5	12/18/09	Acetone Methylene chloride Methyl-tert-butyl ether	6.7 ug/Kg 1.5 ug/Kg 0.47 ug/Kg	All sediment samples in SDG K0911973

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
PCM-DSRB-091210	Benzene	0.040 ug/L	0.50U ug/L
PCM-DRB-091210	Benzene	0.040 ug/L	0.50U ug/L
PCM-FB-091210	Benzene	0.050 ug/L	0.50U ug/L
PCM-TB-091209	Benzene	0.040 ug/L	0.50U ug/L
PCM-14-DS-091210	Methyl-tert-butyl ether	0.31 ug/Kg	2.3U ug/Kg
PCM-15-DS-091210	Methylene chloride	0.50 ug/Kg	5.8U ug/Kg
PCM-22-DS-091210	Methylene chloride	0.56 ug/Kg	6.4U ug/Kg

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-22-DS-091210MS/MSD (PCM-22-DS-091210)	Carbon tetrachloride Toluene 2-Hexanone Chlorobenzene Ethylbenzene 1,2,3-Trichloropropane	47 (50-140) 49 (50-140) 48 (50-140) 37 (50-140) 38 (50-140) 49 (50-140)	- - - 44 (50-140) 47 (50-140) -	- - - - - -	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0911937-LCS/LCSD (All sediment samples in SDG K0911973)	Iodomethane	154 (50-140)	155 (50-140)	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration RRF and %D, and MS/MSD %R problems, data were qualified as estimated in six samples.

Due to method blank contamination problems, data were qualified as not detected in seven samples.

No data were qualified due to high LCS/LCSD %Rs, the associated results were non-detected.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample PCM-TB-091209 was identified as a trip blank. No volatile contaminants were found in this blank with the following exceptions:

Trip Blank ID	Compound	Concentration (ug/L)
PCM-TB-091209	Chloromethane Benzene	0.060 0.040

Sample PCM-FB-091210 was identified as a field blank. No volatile contaminants were found in this blank with the following exceptions:

Field Blank ID	Compound	Concentration (ug/L)
PCM-FB-091210	Methylene chloride Chloroform Benzene Toluene	0.78 3.9 0.050 1.7

Samples PCM-DSRB-091210 and PCM-DRB-091210 were identified as rinsate blanks. No volatile contaminants were found in these blanks with the following exceptions:

Rinsate Blank ID	Compound	Concentration (ug/L)
PCM-DSRB-091210	Chloromethane Methylene chloride Chloroform Benzene Toluene	0.060 1.1 3.9 0.040 1.9
PCM-DRB-091210	Benzene	0.040

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects)	A	Initial calibration (RRF)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Bromomethane Iodomethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209	2-Chloroethylvinyl ether	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
K0911973	PCM-DSRB-091210 PCM-FB-091210 PCM-TB-091209	Acrolein Vinyl acetate	J (all detects) UJ (all non-detects)	A	Continuing calibration (RRF)
K0911973	PCM-22-DS-091210	Carbon tetrachloride Toluene 2-Hexanone Chlorobenzene Ethylbenzene 1,2,3-Trichloropropane	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Iodomethane	J (all detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Volatiles - Laboratory Blank Data Qualification Summary - SDG K0911973

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K0911973	PCM-DSRB-091210	Benzene	0.50U ug/L	A
K0911973	PCM-DRB-091210	Benzene	0.50U ug/L	A
K0911973	PCM-FB-091210	Benzene	0.50U ug/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K0911973	PCM-TB-091209	Benzene	0.50U ug/L	A
K0911973	PCM-14-DS-091210	Methyl-tert-butyl ether	2.3U ug/Kg	A
K0911973	PCM-15-DS-091210	Methylene chloride	5.8U ug/Kg	A
K0911973	PCM-22-DS-091210	Methylene chloride	6.4U ug/Kg	A

LDC #: 22482C1
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2/8/10
Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

cooler Temp 6.8 + 10.1°C Pent

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/9 – 12/10/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	SW	% RSD, r^2
IV.	Continuing calibration/ICV	SW	
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	RB = 1, 2 FB = 3 TB = 4

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
sediments + water

1	1	PCM-DSRB-091210	W	11	KWG0911998-MB1		21	31	
2	1	PCM-DRB-091210		12	KWG0911937-MB2		18	32	
3	1	PCM-FB-091210		13			23	33	
4	1	PCM-TB-091209		14			24	34	
5	2	PCM-14-DS-091210	Sed	15			25	35	
6	2	PCM-15-DS-091210		16			26	36	
7	2	PCM-22-DS-091210		17			27	37	
8	2	PCM-22-DS-091210MS		18			28	38	
9	2	PCM-22-DS-091210MSD		19			29	39	
10				20			30	40	

BTEX only

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 22482C1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
Y N N/A Were percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCC's and SPCC's?
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?_____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Were all %RSDs and RRFs within the validation criteria of ≤30 %RSD and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %RSD (Limit: <30.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	10/28/09	CAL8957	FFFF		0.0337	~~All water +~~ 1,3,4	~~All~~ ~~DCA~~ J/UJ/A
			HH		0.0387	KWG0911998-MB	↓
	10/25/09	CAL9083	FFFF		0.0353	All soils +	J/UJ/A
			HH		0.0418	KWG0911937-MB	↓

INICAL.1S

LDC #: 22482C1
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?
Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?
Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	12/18/09	1218F007	B	27		All soils +	J/UJ/A
			Iodomethane	60		KWG0911937-MB	↓
			FFFF		0.0357	↓	↓
			HH		0.0403		
	12/21/09	1221F004	FFFF		0.0367	~~All water +~~ 1,3,4	J/UJ/A
			HH		0.0322	KWG0911998-MB	↓
			II	30		↓	↓

CONCAL_8260B.1S

LDC #: 22482C1
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 12/21/09
Conc. units: ug/L
Associated Samples: All water

Compound	Blank ID	Sample Identification								
	KWG091	1998-4		1	2	3		4		
V	0.040			0.040/0.50U	0.040/0.50U	0.050/0.50U		0.040/0.50U		
CRQL										

Blank analysis date: 12/18/09
Conc. units: ug/kg
Associated Samples: all soils

Compound	Blank ID	Sample Identification								
	KWG0911	937-5	5	6	7					
~~Methylene chloride~~ F	6.7		-	-	-					
~~Acetone~~ E	1.5		-	0.50/5.8U	0.56/6.4U					
LL	0.47		0.31/2.3U	-	-					
KKK	1.3		-	-	-					
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 22482C1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: ✓

METHOD : GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8+9	O	47 (50-140)	( )	( )	7	J/UJ/A
			CC	49 ( )	( )	( )		
			Z	48 ( )	( )	( )		
			DD	37 ( )	44 (50-140)	( )		
			EE	38 ( )	47 ( )	( )		
			XX	49 ( )	( )	( )		
			JJJ	19 ( )	22 ( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC #: 22482C1
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		KWG0911937-	Iodomethane	154 (50-140)	155 (50-140)	( )	All soil +	J/Pdet
		LCS ID		( )	( )	( )	KWG0911937-MB	
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

LDC #: 22482C1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 12/10/09
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: RB = 1, 2 FB = 3 Associated Samples: 5, 6, 7

Compound		Blank ID	Blk ID	Blk ID	Sample Identification						
		1	2	3		~~6~~	~~7~~				
~~Methylene chloride~~	A	0.060	-	-							
Acetone	E	1.1	-	0.78		0.50/5.84	0.56/6.44				
~~Chloroform~~	K	3.9	-	3.9							
	V	0.040	0.040	0.050							
	CC	1.9	-	1.7		~~0.31/1.24~~	~~0.57/1.34~~				
	~~K~~			~~3.9~~							
CRQL											

Blank units: ug/L **Associated sample units:** ug/L + ug/kg
Sampling date: 12/9/09
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: TB = 4 Associated Samples: ~~1-3~~ ~~1-2-3~~, 5, 6, 7

Compound		Blank ID	Sample Identification								
		4	~~1~~	~~2~~	~~3~~						
~~Methylene chloride~~	A	0.060	0.060/0.50 U		-						
Acetone	V	0.040	~~0.040/0.50 U~~	~~0.040/0.50 U~~	~~0.050/0.50 U~~						
~~Chloroform~~											
CRQL											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 22482 C1
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Y N /N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/L
Sampling date: 12/9/09
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other: TB Associated Samples: 2

Compound	Blank ID	Sample Identification									
	4		~~2~~								
~~Methylene chloride~~ V	0.040		~~0.040~~ 0.504								
Acetone											
~~Chloroform~~											
CRQL											

Blank units:_____ **Associated sample units:**_____
Sampling date:_____
Field blank type: (circle one) Field Blank / Rinsate / Trip Blank / Other:_____ Associated Samples:_____

Compound	Blank ID	Sample Identification									
Methylene chloride											
Acetone											
Chloroform											
CRQL											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as Methylene chloride, Acetone, 2-Butanone and Carbon disulfide that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Semivolatiles
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210

Introduction

This data review covers 2 water samples and 3 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all semivolatile target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
12/23/09	4-Nitroaniline	28	KWG0911917-MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0911681-3	12/14/09	Di-n-butylphthalate Butylbenzylphthalate Bis(2-ethylhexyl)phthalate	0.043 ug/L 0.052 ug/L 0.22 ug/L	All water samples in SDG K0911973

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
PCM-DSRB-091210	Di-n-butylphthalate Butylbenzylphthalate Bis(2-ethylhexyl)phthalate	0.071 ug/L 0.044 ug/L 0.37 ug/L	0.21U ug/L 0.21U ug/L 1.1U ug/L
PCM-FB-091210	Di-n-butylphthalate Butylbenzylphthalate Bis(2-ethylhexyl)phthalate	0.064 ug/L 0.078 ug/L 0.35 ug/L	0.20U ug/L 0.20U ug/L 0.97U ug/L

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0911917-LCS/LCSD (All sediment samples in SDG K0911973)	2-Methylphenol 2,4-Dimethylphenol Benzoic acid	- 47 (50-140) 18 (50-140)	48 (50-140) 49 (50-140) 20 (50-140)	- - -	J (all detects) UJ (all non-detects)	P
KWG0911681-LCS/LCSD (All water samples in SDG K0911973)	Aniline 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Hexachloroethane 2,4-Dimethylphenol Benzoic acid 1,2,4-Trichlorobenzene 4-Chloroaniline Hexachlorobutadiene Hexachlorocyclopentadiene 2,4-Dinitrophenol	48 (55-135) 53 (55-135) 52 (55-135) 54 (55-135) 49 (55-135) - 35 (55-135) 54 (55-135) 26 (55-135) 50 (55-135) 18 (55-135) 47 (55-135)	53 (55-135) - - - - 49 (55-135) 20 (55-135) - 14 (55-135) - 18 (55-135) 33 (55-135)	- - - - - - 55 (≤30) - 56 (≤30) - - 34 (≤30)	J (all detects) UJ (all non-detects)	P
KWG0911681-LCS/LCSD (All water samples in SDG K0911973)	3,3'-Dichlorobenzidine	0 (55-135)	0 (55-135)	-	J (all detects) R (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The analysis was conducted within all specifications of the method.

Due to severe problems with the LCS/LCSD %Rs, 3,3-dichlorobenzidine results were rejected in two samples.

Due to LCS/LCSD %R and RPD problems, data were qualified as estimated in five samples.

Due to method blank contamination problems, data were qualified as not detected in two samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No semivolatile contaminants were found in this blank with the following exceptions:

Field Blank ID	Compound	Concentration (ug/L)
PCM-FB-091210	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate Butylbenzylphthalate	0.056 0.064 0.35 0.078

Sample PCM-DSRB-091210 was identified as a rinsate blank. No semivolatile contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (ug/L)
PCM-DSRB-091210	Diethylphthalate Di-n-butylphthalate Bis(2-ethylhexyl)phthalate Butylbenzylphthalate	0.14 0.071 0.37 0.044

NW Natural - Gasco Pilot Cap Monitoring Year 3
Semivolatiles - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	2-Methylphenol 2,4-Dimethylphenol Benzoic acid	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K0911973	PCM-DSRB-091210 PCM-FB-091210	Aniline 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene Hexachloroethane 2,4-Dimethylphenol 1,2,4-Trichlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K0911973	PCM-DSRB-091210 PCM-FB-091210	Benzoic acid 4-Chloroaniline 2,4-Dinitrophenol	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (RPD)
K0911973	PCM-DSRB-091210 PCM-FB-091210	3,3'-Dichlorobenzidine	J (all detects) R (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG K0911973

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K0911973	PCM-DSRB-091210	Di-n-butylphthalate Butylbenzylphthalate Bis(2-ethylhexyl)phthalate	0.21U ug/L 0.21U ug/L 1.1U ug/L	A
K0911973	PCM-FB-091210	Di-n-butylphthalate Butylbenzylphthalate Bis(2-ethylhexyl)phthalate	0.20U ug/L 0.20U ug/L 0.97U ug/L	A

LDC #: 22482C2a

SDG #: K0911973

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/8/10

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

cooler temp 6.8 + 10.1°C text

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration A	~~SW~~	% RSD, r^2
IV.	Continuing calibration	SW	ICV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	PCM-02-DS-091209 MS/D
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	RB = 1 FB = 2

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

Sediments + Water

1	PCM-DSRB-091210 W	11	KWG0911681-MB	21	21	31	
2	PCM-FB-091210	12	KWG0911917-MB	22		32	
3	PCM-14-DS-091210 Sed	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 22482 c2a

SDG #: See cover

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: Ft

2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	12/23/09	CAL9096-1CV	00	28		~~All soils +~~ KWG0911917-MB	J/UJ/A

CONCAL.2S

LDC #: 22482 C2a
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/14/09 **Blank analysis date:** 12/21/09
Conc. units: ug/L Associated Samples: All water

Compound		Blank ID	Sample Identification								
		KWG0911681-3	1		2						
Di-n-butylphthalate	XX	0.043		0.071/0.21U		0.064/0.20U					
Butylbenzylphthalate	AAA	0.052		0.044/0.21U		0.078/0.20U					
Bis(2-ethylhexyl)phthalate	EEE	0.22		0.37/1.1U		0.35/0.97U					
~~Di-n-octylphthalate~~											
CRQL											
TICs:											
4-Hydroxy-4-methyl-2-pentanone											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 22482C2a
SDG #: pu covers

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
25	P2	PCM-02-DS-091209MSID	general compounds	outside %R limit ( )	( )	+ % RPD ( )	none	no qual
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 22482 C2a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS/LCSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		KWG0911917-	G	( )	48 (50-140)	( )	all soils +	J/UJ/P
		LCSD	O	47 (50-140)	49 ( )	( )	KWG0911917-MB	↓
			PPP	18 (↓)	20 (↓)	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		KWG0911681-	NNN	48 (55-135)	53 (55-135)	( )	all water +	J/UJ/P
		LCSD	D	53 ( )	( )	( )	KWG0911681-MB	↓
			E	52 ( )	( )	( )	↓	↓
			F	54 ( )	( )	( )	↓	↓
			K	49 ( )	( )	( )	↓	↓
			O	( )	49 ( )	( )	↓	↓
			PPP	35 ( )	20 ( )	55 (30)	↓	↓
			R	54 ( )	( )	( )	↓	↓
			T	26 ( )	14 ( )	56 (↓)	↓	↓
			U	50 ( )	( )	( )	↓	↓
			X	18 ( )	18 ( )	( )	↓	↓
			HH	47 ( )	33 ( )	34 (30)	↓	↓
			BBB	0 (↓)	0 (↓)	( )	↓	J/R/P
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 22482C2/9
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: B
2nd Reviewer: L

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/l **Associated sample units:** ug/kg
Sampling date: 12/10/09
Field blank type: (circle one) Field Blank / Rinsate / Other: 1= RB 2= FB Associated Samples: All soils (ND + 710X)

Compound	Blank ID	Blk ID	Sample Identification							
	1	2								
Diethylphthalate LL	0.14	0.056								
Di-n-butylphthalate XX	0.071	0.064								
Bis(2-ethylhexyl)phthalate EEE	0.37	0.39								
ΔΔΔ	0.044	0.078								
CRQL										

Blank units:_____ **Associated sample units:**_____
Sampling date:_____
Field blank type: (circle one) Field Blank / Rinsate / Other:_____ Associated Samples:_____

Compound	Blank ID	Sample Identification								
Diethylphthalate										
Di-n-butylphthalate										
Bis(2-ethylhexyl)phthalate										
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.2S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Polynuclear Aromatic Hydrocarbons
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DRB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210

Introduction

This data review covers one water sample and 3 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all target compounds were within validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration RRF values were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0911677-MB	12/11/09	Benzo(a)anthracene Benzo(g,h,i)perylene	0.0031 ug/L 0.0030 ug/L	All water samples in SDG K0911973

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

XVII. Field Blanks

Sample PCM-DRB-091210 was identified as a rinsate blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (ug/L)
PCM-DRB-091210	Naphthalene Phenanthrene	0.0042 0.0050

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C2b

SDG #: K0911973

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2/8/10

Page: 1 of 1

Reviewer:

2nd Reviewer:

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

cooler Temp 6.8 + 10.1 °C test

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Continuing calibration/ICV	A	ICV ~~SA~~
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	PCM-02-DS-091209 MS/D
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	N	
XII.	Compound quantitation/CRQLs	N	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	N	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	RB = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Sediments + water

1	PCM-DRB-091210 W	11	KWG0911677-MB	21		31	
2	PCM-14-DS-091210 Sed	12	KWG0911915-MB	22		32	
3	PCM-15-DS-091210 Sed	13		23		33	
4	PCM-22-DS-091210	14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

A. Phenol**	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol**	III. Benzo(a)pyrene**
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol**	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene**	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol*	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene**	T. 4-Chloroaniline	II. 4-Nitrophenol*	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene**	JJ. Dibenzofuran	YY. Fluoranthene**	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol**	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene*	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine*	Y. 2,4,6-Trichlorophenol**	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT.
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)**	FFF. Di-n-octylphthalate**	UUU.
N. 2-Nitrophenol**	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 22482cab
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: PZ
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

Blank extraction date: 12/11/09 **Blank analysis date:** 12/18/09
Conc. units: ug/L Associated Samples: all water (ND)

Compound	Blank ID	Sample Identification								
	KWG0911677-MB									
Di-n-butylphthalate CCL	0.0031									
Butylbenzylphthalate LLL	0.0030									
Bis(2-ethylhexyl)phthalate										
Di-n-octylphthalate										
CRQL										
TICs:										
4-Hydroxy-4-methyl-2-pentanone										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 22482c2b
SDG #: SEE COVER

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: Ft
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
50X	DL	PCM-02-DS-091209MS/D	several compounds outside (limit)	> %R + %	( )	RPD ( )	none	no qual
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG.	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 22482c06
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 12/10/09
Field blank type: (circle one) Field Blank / Rinsate / Other: RB Associated Samples: ~~All soils (75%)~~

Compound	Blank ID	Sample Identification									
	1										
~~Diethylphthalate~~ S	0.0042										
Di-n-butylphthalate UU	0.0050										
~~Bis(2-ethylhexyl)phthalate~~											
CRQL											

Blank units: _____ **Associated sample units:** _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification									
Diethylphthalate											
Di-n-butylphthalate											
Bis(2-ethylhexyl)phthalate											
CRQL											

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

FBLKASC2.2S

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Chlorinated Pesticides
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210

Introduction

This data review covers 2 water samples and 3 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/24/09	1224F004.D	DB-XLB	Mirex	21	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210 KWG0911913-BLK	J (all detects) UJ (all non-detects)	A
12/24/09	1224F004.D	DB-35MS	Mirex	21	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210 KWG0911913-BLK	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG0911775-BLK	12/15/09	4,4'-DDD	0.0016 ug/L	PCM-DSRB-091210 PCM-FB-091210

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
KWG0911913-LCS	Hexachlorobenzene	49 (50-140)	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210 KWG011913-BLK	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D and LCS %R problems, mirex and hexachlorobenzene results were qualified as estimated in three samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No chlorinated pesticide contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No chlorinated pesticide contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Mirex	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Hexachlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Mirex	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Hexachlorobenzene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C3a
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Chlorinated Pesticides (EPA SW 846 Method 8081A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp = 6.8, 10.1 (insufficient time to cool)
II.	GC/ECD Instrument Performance Check	A	
III.	Initial calibration	A	%RSD
IV.	Continuing calibration/ICV	S.W.	ICV/CCV ≤ 20%
V.	Blanks	S.W.	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	S.W.	no associated samples, no qual
VIII.	Laboratory control samples	S.W.	LCS/D
IX.	Regional quality assurance and quality control	N	
Xa.	Florisil cartridge check	N	
Xb.	GPC Calibration	N	
XI.	Target compound identification	N	
XII.	Compound quantitation and reported CRQLs	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N.D.	RB=1, FB=2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911775-BLK W
2	PCM-FB-091210 W	12		22		32	KWG0911913-BLK Sed.
3	PCM-14-DS-091210 Sed	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG. trans-Nonachlor
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Mirex
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Hexachloroethane
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. Hexachlorobutadiene
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK. 2,4'-DDE
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL. 2,4'-DDD
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. Hexachlorobenzene	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. oxychlordane	NN.

Notes:_____

C:\docs\Work\Pesticides\COMPLST-3S.wpd

LDC #: 12482C3a
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)
Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?
Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
Y N N/A Was at least one standard run daily to verify the working curve?
Y N N/A Did the continuing calibration standards meet the percent difference (%D) of ≤20.0%?

Level IV/D Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	12/24/09	1224F004.D	DB-XLP	HH	21	( )	3-5, KWG0911913-BLK	J/UJ/A
			DB-35MS	HH	21	( )		↓
						( )		
						( )		
						( )		
						( )		
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A. alpha-BHC
B. beta-BHC
C. delta-BHC
D. gamma-BHC
E. Heptachlor
F. Aldrin
G. Heptachlor epoxide
H. Endosulfan I
I. Dieldrin
J. 4,4'-DDE
K. Endrin
L. Endosulfan II
M. 4,4'-DDD
N. Endosulfan sulfate
O. 4,4'-DDT
P. Methoxychlor
Q. Endrin ketone
R. Endrin aldehyde
S. alpha-Chlordane
T. gamma-Chlordane
U. Toxaphene
V. Aroclor-1016
W. Aroclor-1221
X. Aroclor-1232
Y. Aroclor-1242
Z. Aroclor-1248
AA. Aroclor-1254
BB. Aroclor-1260
CC. DB 608
DD. DB 1701
EE.
FF.
GG.
HH.
II.
JJ.

CONCAL.3S.wpd

LDC #: 22482C30
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were all samples associated with a given method blank?
(Y) N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
(Y) N N/A Was a method blank performed with each extraction batch?
(Y) N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N (N/A) (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N (N/A) Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 12/15/09 **Blank analysis date:** 12/18/09 **Associated samples:** 1+2 (Both N.D)
Conc. units: ug/L

Compound	Blank ID	Sample Identification						
	KWG0911775-1BLK							
M	.0016							

Blank extraction date:_____ **Blank analysis date:**_____ **Associated samples:**_____
Conc. units:_____

Compound	Blank ID	Sample Identification						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22482 C3a
SDG #: see cover

METHOD: X GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N (N/A) Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	KWG0911913-LCS	EE	49 (50-140)	( )	( )	3-5, KWG0911913-BLK	J/UJ/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Polychlorinated Biphenyls
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-14-DS-091210MS
PCM-14-DS-091210MSD

Introduction

This data review covers 2 water samples and 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Pesticide Cleanup Checks

a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XI. Target Compound Identification

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and Reported CRQLs

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No polychlorinated biphenyl contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No polychlorinated biphenyl contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polychlorinated Biphenyls - Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C3b
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-16
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp=6.8, 10.1°C (insufficient time to cool)
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	0/0 RSD
IV.	Continuing calibration/ICV	A	ICV/CCV ≤20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional quality assurance and quality control	N	
Xa.	Florisil cartridge check	N	
Xb.	GPC Calibration	N	
XI.	Target compound identification	N	
XII.	Compound quantitation and reported CRQLs	N	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	N.D.	RB=1, FB=2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911776-BLK	W	
2	PCM-FB-091210 W	12		22		32	KWG0911914-BLK	Sed.	
3	PCM-14-DS-091210 Sed	13		23		33			
4	PCM-15-DS-091210	14		24		34			
5	PCM-22-DS-091210	15		25		35			
6	PCM-14-DS-091210MS	16		26		36			
7	PCM-14-DS-091210MSD	17		27		37			
8		18		28		38			
9		19		29		39			
10		20		30		40			

LDC Report# 22482C4

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Metals
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-DRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-DSRB-091210MS
PCM-DSRB-091210DUP
PCM-FB-091210MS
PCM-FB-091210DUP
PCM-15-DS-091210MS
PCM-15-DS-091210DUP

Introduction

This data review covers 7 water samples and 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020 and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Selenium, Silver, and Zinc.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blanks are summarized in Section IV.

Field duplicates are summarized in Section XIV.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Chromium Copper Nickel	0.16 ug/L 0.05 ug/L 0.06 ug/L	PCM-DSRB-091210 PCM-FB-091210
ICB/CCB	Silver Zinc	0.005 ug/L 0.2 ug/L	PCM-DSRB-091210 PCM-FB-091210
ICB/CCB	Iron	5.8 ug/L	PCM-DRB-091210
PB (prep blank)	Aluminum Chromium Lead Mercury Nickel	1.1 mg/Kg 0.17 mg/Kg 0.016 mg/Kg 0.002 mg/Kg 0.06 mg/Kg	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210
ICB/CCB	Aluminum Chromium Selenium	3.0 ug/L 0.12 ug/L 0.12 ug/L	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
PCM-DSRB-091210	Chromium Copper Zinc	0.57 ug/L 0.04 ug/L 0.52 ug/L	0.57U ug/L 0.10U ug/L 0.52U ug/L
PCM-FB-091210	Chromium Copper	0.54 ug/L 0.02 ug/L	0.54U ug/L 0.10U ug/L

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
PCM-15-DS-091210DUP All sediment samples in SDG K0911973)	Lead	22.8 (≤20)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Internal Standards (ICP-MS)

Raw data was not reviewed for this SDG.

X. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
PCM-15-DS-091210L	Lead	19 (≤10)	All sediment samples in SDG K0911973	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

Raw data were not reviewed for this SDG.

XIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to duplicate RPD and serial dilution %D problems, lead results were qualified as estimated in three samples.

Due to calibration and method blank contamination problems, data were qualified as not detected in two samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

No field duplicates were identified in this SDG.

XV. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No metal contaminants were found in this blank with the following exceptions:

Field Blank ID	Analyte	Concentration (ug/L)
PCM-FB-091210	Aluminum Chromium Copper	0.9 0.54 0.02

Samples PCM-DSRB-091210 and PCM-DRB-091210 was identified as rinsate blanks. No metal contaminants were found in these blanks with the following exceptions:

Rinsate Blank ID	Analyte	Concentration (ug/L)
PCM-DSRB-091210	Aluminum Chromium Chromium Lead Zinc	1.5 0.57 0.04 0.042 0.52

NW Natural - Gasco Pilot Cap Monitoring Year 3
Metals - Data Qualification Summary - SDG K0911973

SDG	Sample	Analyte	Flag	A or P	Reason
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Lead	J (all detects) UJ (all non-detects)	A	Duplicate analysis (RPD)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Lead	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Metals - Laboratory Blank Data Qualification Summary - SDG K0911973

SDG	Sample	Analyte	Modified Final Concentration	A or P
K0911973	PCM-DSRB-091210	Chromium Copper Zinc	0.57U ug/L 0.10U ug/L 0.52U ug/L	A
K0911973	PCM-FB-091210	Chromium Copper	0.54U ug/L 0.10U ug/L	A

LDC #: 22482C4
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-2-10
Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	A	
VI.	Matrix Spike Analysis	A	MS
VII.	Duplicate Sample Analysis	SW	Dup
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	Not reviewed
X.	Furnace Atomic Absorption QC	A	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	N	
XV	Field Blanks	SW	R=1,2 FB=3

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: sediment/water

1	PCM-DSRB-091210 W	11	PCM-15-DS-091210MS S	21	PBS	31	
2	PCM-DRB-091210	12	PCM-15-DS-091210DUP	22	PBW	32	
3	PCM-FB-091210	13		23		33	
4	PCM-14-DS-091210 S	14		24		34	
5	PCM-15-DS-091210	15		25		35	
6	PCM-22-DS-091210	16		26		36	
7	PCM-DSRB-091210MS W	17		27		37	
8	PCM-DSRB-091210DUP	18		28		38	
9	PCM-FB-091210MS W	19		29		39	
10	PCM-FB-091210DUP	20		30		40	

Notes:

LDC #: 22482C4
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: [initials]
2nd reviewer: [initials]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1,3-6	W/S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
2	W	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
QC:7,8	W	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
9,10		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
11,12		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___

Analysis Method		
ICP	S/W	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
ICP Trace		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
ICP-MS	S/W	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___
GFAA	S	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN⁻, ___ ___

Comments: Mercury by CVAA if performed

ELEMENTS.4

LDC #: 22482C4
SDG #: See Cover
METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Soil preparation factor applied: 50x (Al, Se@2x), (Cr @5x)

Reviewer: CR
2nd Reviewer: [illegible]

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 1, 3

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	3								
Cr		0.16		0.8	0.57	0.54								
Cu		0.05		0.25	0.04/0.10	0.02/0.10								
Ni		0.06		0.3										
Ag			0.005	0.025										
Zn			0.2	1	0.52									

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Fe			5.8	29										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Sediment

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Al	1.1		3.0	5.5										
Cr	0.17		0.12	0.85										
Pb	0.016			0.08										
Hg	0.002			0.01										
Ni	0.06			0.3										
Se			0.12	0.06										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U".
Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 22482C4
SDG #: K0911973

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: SR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
	12	Sed	Pb	22.8 (≤20)		All sediment	J/UJ/A

Comments:

DUP.4S2

LDC #: 22482C4
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: AR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A If analyte concentrations were > 50X the IDL, was an ICP serial dilution analyzed?
Y N N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y N N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:
Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Diluted Sample ID	Matrix	Analyte	%D	Associated Samples	Qualifications
	5	Sed	Pb	19	All Sediment	J/UJ/A

Comments:

SDIL4S2

LDC #: 22482C4
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: OR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/7000)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?

Sample: 1 Field Blank / Trip Blank / Rinsate / Other_____(circle one)

Analyte	Concentration Units (µg/L)
Al	1.5
Cr	0.57
Cu	0.04
Pb	0.042
Zn	0.52

Sample: 3 Field Blank / Trip Blank / Rinsate / Other_____ (circle one)

Analyte	Concentration Units (µg/L)
Al	0.9
Cr	0.54
Cu	0.02

LDC Report# 22482C5

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Herbicides
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-22-DS-091210MS
PCM-22-DS-091210MSD

Introduction

This data review covers 2 water samples and 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/22/09	1221F003.D	1	MCPA	23	PCM-DSRB-091210 PCM-FB-091210 KWG1911716-BLK	J (all detects) UJ (all non-detects)	A
12/22/09	1221F003.D	2	MCPA	22	PCM-DSRB-091210 PCM-FB-091210 KWG1911716-BLK	J (all detects) UJ (all non-detects)	A
12/22/09	1221F022.D	1	Dalapon Dicamba MCPA Dichlorprop 2,4-D 2,4,5-TP (Silver) 2,4,5-T 2,4-DB Dinoseb	36 29 22 31 30 23 26 21 21	PCM-22-DS-091210MS PCM-22-DS-091210MSD	J (all detects) UJ (all non-detects)	P

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-22-DS-091210MS/MSD (PCM-22-DS-091210)	Dalapon	-	42 (50-140)	-	J (all detects) UJ (all non-detects)	A

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0911718-LCS (PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210 KWG0911718-BLK)	Dalapon	44 (50-140)	-	-	J (all detects) UJ (all non-detects)	P

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D, MSD %R, and LCS %R problems, data were qualified as estimated in five samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No herbicide contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No herbicide contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Herbicides - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-DSRB-091210 PCM-FB-091210	MCPA	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-22-DS-091210	Dalapon	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Dalapon	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Herbicides - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C5
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp= 6.8, 10.1 (insufficient time)
IIa.	Initial calibration	A	0/0 RSD r2
IIb.	Calibration verification/ICV	S.W.	ICV/CCV ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	S.W.	
IVc.	Laboratory control samples	S.W.	LCS/D
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N.D.	RB=1 FB=2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911716-BLK W
2	PCM-FB-091210 W	12		22		32	KWG0911718-BLK Seed
3	PCM-14-DS-091210 Seed	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6	PCM-22-DS-091210MS	16		26		36	
7	PCM-22-DS-091210MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482C5
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? X %D or __ RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	12/22/09	1221F003.D	#1	MCPA	23	( )	1+2, KWG0911716-BLK	J/UJ/A
			#2	MCPA	22	( )		
						( )		
	12/22/09	1221F022.D	#1	Dalapon	36	( )	6+7	J/UJ/P
				Dicamba	29	( )		
				MCPA	22	( )		
				Dichlorprop	31	( )		
				2,4-D	30	( )		
				2,4,5-TP (silvex)	23	( )		
				2,4,5-T	24	( )		
				2,4-DB	21	( )		
				Dinoseb	21	( )		
						( )		
						( )		
						( )		
						( )		
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LDC #: 22482C5
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
Y N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y N N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	6, 7	Dalapon	( )	47 (50-140)	( )	5	J/UJ/A
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: 22482C5
SDG #: See cover

METHOD: X GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	KWG0911718-LCS	Dalapon	44 (50-140)	( )	( )	3-5, KWG0911718-BLK	J/UJ/P
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		

LDC Report# 22482C6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Wet Chemistry
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DRB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-DRB-091210MS
PCM-DRB-091210MSD
PCM-DRB-091210DUP
PCM-14-DS-091210MS
PCM-14-DS-091210MSD
PCM-14-DS-091210DUP
PCM-14-DS-091210TRP
PCM-22-DS-091210DUP
PCM-22-DS-091210TRP

Introduction

This data review covers 4 water samples and 9 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 350.1 for Ammonia as Nitrogen, EPA SW 846 Method 9012A and Standard Method 4500-CN-E for Total Cyanide, ASTM D4282-02 for Free Cyanide, Standard Method 4500-CN-E for Amendable to Chlorine Cyanide, EPA SW 846 Method 7196A for Hexavalent Chromium, PSEP Method for Particle Size and Total Organic Carbon, EPA SW 846 Method 9030M for Sulfide, and EPA Method 160.3 for Total Solids.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (October 2004) as there are no current guidelines for the methods stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
PCM-DRB-091210 PCM-DRB-091210MS PCM-DRB-091210MSD PCM-DRB-091210DUP	Free cyanide	49.75 hours	48 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Calibration

a. Initial Calibration

All criteria for the initial calibration of each method were met.

b. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Concentration	Associated Samples
PB (prep blank)	Total cyanide	0.11 mg/L	All sediment samples in SDG K0911973

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks.

IV. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
PCM-04-06-091209 (All sediment samples in SDG K0911973)	Hexavalent chromium	45 (65-135)	46 (65-135)	-	J (all detects) UJ (all non-detects)	A
PCM-DRB-091210MS/MSD (All water samples in SDG K0911973)	Amenable cyanide	179 (55-135)	187 (55-135)	-	J (all detects)	A

V. Duplicates/Triplicates

Duplicate (DUP) and Triplicate (TRP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VI. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Analyte	%R (Limits)	Associated Samples	Flag	A or P
LCS	Amenable cyanide	168 (55-135)	All water samples in SDG K0911973	J (all detects)	P

VII. Sample Result Verification

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to holding time, MS/MSD %R, and LCS %R problems, data were qualified as estimated in four samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-DRB-091210 was identified as a rinsate blank. No contaminant concentrations were found in this blank with the following exceptions:

Rinsate Blank ID	Analyte	Concentration (mg/L)
PCM-DRB-091210	Total cyanide Amenable cyanide	0.015 0.015

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Data Qualification Summary -SDG K0911973

SDG	Sample	Analyte	Flag	A or P	Reason
K0911973	PCM-DRB-091210	Free cyanide	J (all detects) UJ (all non-detects)	P	Technical holding times
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Hexavalent chromium	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K0911973	PCM-DRB-091210	Amenable cyanide	J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
K0911973	PCM-DRB-091210	Amenable cyanide	J (all detects)	P	Laboratory control samples (%R)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Wet Chemistry -Laboratory Blank Data Qualification Summary -SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C6

SDG #: K0911973

Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET

Level III

Date: 2-2-10

Page: 1 of 1

Reviewer: CR

2nd Reviewer: M

METHOD: Ammonia-N (~~Plumb 5-1981 KCl~~ 350.1), Total Cyanide (EPA SW846 Method 9012A), Free Cyanide (ASTM D4282-02), Amenable to Chlorine Cyanide (SM 4500-CN-~~G~~ G), Hexavalent Chromium (EPA SW846 Method 7196A), Particle Size (PSEP), Sulfide (EPA SW846 Method 9030M), Total Solids (EPA Method 160.3), TOC (PSEP Method), + SM4500-CN-E

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 12/10/09
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	SW	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS/D
V	Duplicates / Triplicate	A	DUP, TRP
VI.	Laboratory control samples	SW	
VII.	Sample result verification	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X	Field blanks	SW	R = 1

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: sediment/water

1	PCM-DRB-091210	W	11	PCM-14-DS-091210TRP	S	21	PBW	31	
2	PCM-14-DS-091210	S	12	PCM-22-DS-091210DUP	↓	22	PBS	32	
3	PCM-15-DS-091210	↓	13	PCM-22-DS-091210TRP	↓	23		33	
4	PCM-22-DS-091210	↓	14			24		34	
5	PCM-DRB-091210MS	W	15			25		35	
6	PCM-DRB-091210MSD	↓	16			26		36	
7	PCM-DRB-091210DUP	↓	17			27		37	
8	PCM-14-DS-091210MS	S	18			28		38	
9	PCM-14-DS-091210MSD	↓	19			29		39	
10	PCM-14-DS-091210DUP	↓	20			30		40	

Notes:

LDC #: 22482C6
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer: ✓

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
2-4		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
QC 5		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
6		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
7		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
8		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
9		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
10		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
11		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
12		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
13		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
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		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size
		pH TS NH_3 TOC CN Free CN Amenable CN CR^{6+} S TOC Particle Size

Comments:

LDC #: 22482C6
SDG #: K0911973

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: CB
2nd reviewer: W

All circled dates have exceeded the technical holding time.
Y N N/A Were all samples preserved as applicable to each method ?
Y N N/A Were all cooler temperatures within validation criteria?

Method:		0428-02					
Parameters:		Free CN⁻					
Technical holding time:		48hrs					
Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
1	12/10/09 1330	12/12/09 1518	(49.75hrs)				J/UJ/P
GC: 5		1519					
6							
7		1520					

LDC #: 22482C6
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were all samples associated with a given method blank?
Y N N/A Were any inorganic contaminants detected above the reporting limit in the method blanks? If yes, please see qualifications below.

Conc. units: mg/kg **Associated Samples:** All Sediment

Analyte	Blank ID	Maximum ICB/CCB	Blank Action Limit	Sample Identification								
	PB (mg/kg)			No Qual								
CN, Total	0.11		0.55									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22482C6
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Inorganics, EPA Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y N N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125?~~ 65-135 If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
1	RCM-04-DS-[illegible] (SDG# R0911919)	sed	Cr^{6+}	45 (65-135)	46 (65-135)		All sediment	J/UJ/A
2	5/6	water	Amenable CN	179 (55-135)	187 (55-135)		All water	J det/A

Comments:

MSD.6

LDC #: 22482C6
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

METHOD: Inorganics, Method see cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a laboratory control sample (LCS) analyzed for each matrix in this SDG?

Y (N) N/A Were all LCS percent recoveries (%R) within the control limits of ~~80-120%~~ (85-115% for Method 300.0)?

LEVEL IV ONLY:

Y N (N/A) Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	LCS ID	Matrix	Analyte	%R (limits)	Associated Samples	Qualifications
	LCS	water	Amenable CN-	168 (55-135)	All water	J det / P

Comments:

LDC #: 22482C6
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: Inorganics, EPA Method See cover

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target anlytes detected in the field blanks?

Sample: 1 Field Blank / Trip Blank / Rinsate (circle one)

Analyte	Concentration Units (mg/L)
Total Cyanide	0.015
Amenable Cyanide	0.015

Sample: _____ Field Blank / Trip Blank / Rinsate (circle one)

Analyte	Concentration Units ( )

FLDBLK2.6

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Gasoline Range Organics
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-DSRB-091210DUP
PCM-14-DS-091210DUP

Introduction

This data review covers 3 water samples and 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per NWTPH-Gx Method for Gasoline Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No gasoline range organic contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Relative percent differences (RPD) were not within QC limits. Since the results were <5X the reporting limit, data were not qualified.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No gasoline range organic contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No gasoline range organic contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (ug/L)
PCM-DSRB-091210	Gasoline range organics	13

NW Natural - Gasco Pilot Cap Monitoring Year 3
Gasoline Range Organics - Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Gasoline Range Organics - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C7
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: bt
2nd Reviewer: [illegible]

METHOD: Gasoline Range Organics (NWTPH-Gx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp = 6.8, 10.1 °C (insufficient time to cool)
IIa.	Initial calibration	A	%RSD
IIb.	Calibration verification/ICV	A	Icv/ccv ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates /D	S.W.	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	S.W.	RB = 1 FB = 2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG091790-BLK W
2	PCM-FB-091210 W	12		22		32	KWG091824-BLK S
3	PCM-14-DS-091210 Sed	13		23		33	
4	PCM-15-DS-091210 Sed	14		24		34	
5	PCM-22-DS-091210 Sed	15		25		35	
6	PCM-DSRB-091210DUP W	16		26		36	
7	PCM-14-DS-091210DUP Sed	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482C7
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC (~~EPA~~ NWTPH-Gx)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?
Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 30 ?

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Compound	RPD (Limits)	Associated Samples	Qualifications
	12/15/09	6	W	A	81 (30)	1	~~J dets/A~~ no qual, results <SXRL

Comments: A) Gasoline Range organics - NWTPH

LDC #: 224827
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: X **GC** __ **HPLC**

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: 1 Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other RB		(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: _____ Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____	
Compound	**Concentration (ug/L)**	**Compound**	**Concentration ( )**
Gasoline Range Organics	13		

(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: _____ Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____		(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: _____ Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____	
Compound	**Concentration ( )**	**Compound**	**Concentration ( )**

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Diesel Range Organics & Residual Range Organics
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-22-DS-091210DUP

Introduction

This data review covers 2 water samples and 4 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per NWTPH-Dx Method for Diesel Range Organics and Residual Range Organics.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for all samples were reported at 6.8°C and 10.1°C upon receipt by the laboratory. The samples were picked up in the field and did not have sufficient time to cool down. No data was qualified based on the cooler temperature.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No diesel range organic or residual range organic contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
KWG0911772-BLK	12/15/09	Diesel range organics Residual range organics	13 ug/L 20 ug/L	PCM-DSRB-091210 PCM-FB-091210
KWG0911738-BLK	12/14/09	Diesel range organics Residual range organics	3.0 mg/Kg 5.8 mg/Kg	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
PCM-DSRB-091210	Diesel range organics Residual range organics	29 ug/L 31 ug/L	270U ug/L 530U ug/L
PCM-FB-091210	Diesel range organics Residual range organics	22 ug/L 33 ug/L	270U ug/L 530U ug/L

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to method blank contamination problems, data were qualified as not detected in two samples.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No diesel range organic or residual range organics contaminants were found in this blank with the following exceptions:

Field Blank ID	Compound	Concentration (ug/L)
PCM-FB-091210	Diesel range organics Residual range organics	22 ug/L 33 ug/L

Sample PCM-DSRB-091210 was identified as a rinsate blank. No diesel range organic or residual range organic contaminants were found in this blank with the following exceptions:

Rinsate Blank ID	Compound	Concentration (ug/L)
PCM-DSRB-091210	Diesel range organics Residual range organics	29 ug/L 31 ug/L

NW Natural - Gasco Pilot Cap Monitoring Year 3
Diesel Range Organics & Residual Range Organics - Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Diesel Range Organics & Residual Range Organics - Laboratory Blank Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Modified Final Concentration	A or P
K0911973	PCM-DSRB-091210	Diesel range organics Residual range organics	270U ug/L 530U ug/L	A
K0911973	PCM-FB-091210	Diesel range organics Residual range organics	270U ug/L 530U ug/L	A

LDC #: 22482C8
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Diesel Range Organics & Residual Range Organics (NWTPH-Dx)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp = 6.8, 10.1 (insufficient time for cooling)
IIa.	Initial calibration	A	0/0RSD
IIb.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
III.	Blanks	S.W.	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates /Dup	N/A	Client specified
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	S.W.	RB = 1, FB = 2

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911772-BLK W
2	PCM-FB-091210 W	12		22		32	KWG0911738-BLK S
3	PCM-14-DS-091210 Soil	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6	PCM-22-DS-091210DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482C8
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

Blank extraction date: 12/15/09 **Blank analysis date:** 12/16/09 **Associated samples:** 1+2
Conc. units: ug/L

Compound	Blank ID	Sample Identification						
	KLG091772-BLK	1	2					
DRO	13	29/270U	22/270U					
RRO	20	31/530U	33/530U					

Blank extraction date: 12/14/09 **Blank analysis date:** 12/15/09 **Associated samples:** 3-5
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
	KLG091738-BLK							
DRO	3.0							
RRO	5.8		ALL 75X					

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 22482C8
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: X GC __ HPLC

(N) N N/A Were field blanks identified in this SDG?
(Y) N N/A Were target compounds detected in the field blanks?

(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: 1 Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other RB		(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: 2 Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____	
Compound	**Concentration (ug/L)**	**Compound**	**Concentration (ug/L)**
DRO	29	DRO	22
RRO	31	RRO	33

(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: _____ Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____		(Circle One) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank Sample: _____ Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other ____	
Compound	**Concentration ( )**	**Compound**	**Concentration ( )**

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Water/Sediment
Parameters:	Butyltins
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210

Introduction

This data review covers 2 water samples and 3 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per Krone Method for Butyltins.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and the confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
12/14/09	RTX-1	Tetra-n-butyltin n-butyltin	24 21	PCM-DSRB-091210 PCM-FB-091210 KWG0911674-BLK	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
12/23/09	RTX-1	Tetra-n-butyltin	21	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210 KWG0911724-BLK	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
11/23/09	RTX-35	Tetra-n-butyltin	32	All samples in SDG K0911973	J (all detects) UJ (all non-detects)	A

III. Blanks

Method blanks were reviewed for each matrix as applicable. No butyltin contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since there were no associated samples, no data were qualified.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

Due to calibration %D problems, data were qualified as estimated in five samples.

The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the Level III data validation all other results are considered valid and usable for all purposes.

Data flags are summarized at the end of this report if data has been qualified.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No butyltin contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No butyltin contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Butyltins - Data Qualification Summary - SDG K0911973

SDG	Sample	Compound	Flag	A or P	Reason
K0911973	PCM-DSRB-091210 PCM-FB-091210	Tetra-n-butyltin n-butyltin	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Tetra-n-butyltin	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K0911973	PCM-DSRB-091210 PCM-FB-091210 PCM-14-DS-091210 PCM-15-DS-091210 PCM-22-DS-091210	Tetra-n-butyltin	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D)

NW Natural - Gasco Pilot Cap Monitoring Year 3
Butyltins - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C19
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Butyltins (Krone Method)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp = 6.8, 10.1°C (insufficient time to cool)
IIa.	Initial calibration	A	0/0RSD
IIb.	Calibration verification/ICV	S.W.	
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	S.W.	no associated samples, no qual
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N.D.	RB=1 FB=2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911674-BLK W
2	PCM-FB-091210 W	12		22		32	KWG0911724-BLK S
3	PCM-14-DS-091210 Sed	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 22482c19
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? X %D or __ RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20.0%?

Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	11/23/09	1123FA2c,d (ICV)	RTX-35	A	32	( )	ALL + BLKS	J/UJ/A
						( )		
						( )		
	12/14/09	1214F003.D	RTX-1	A	24	( )	1 + 2, KWG0911674-BLK	J/UJ/A
			↓	B	21	( )		d
						( )		
	12/23/09	1223F003.D	RTX-1	A	21	( )	3-5, KWG0911724-BLK	J/UJ/A
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

A) Tetra-n-butyltin
B) n-Butyltin
C)

CONCALNew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	NW Natural - Gasco Pilot Cap Monitoring Year 3
Collection Date:	December 10, 2009
LDC Report Date:	February 10, 2010
Matrix:	Sediment
Parameters:	Phenols
Validation Level:	EPA Level III
Laboratory:	Columbia Analytical Services, Inc.
Sample Delivery Group (SDG):	K0911973

Sample Identification

PCM-DSRB-091210
PCM-FB-091210
PCM-14-DS-091210
PCM-15-DS-091210
PCM-22-DS-091210
PCM-22-DS-091210MS
PCM-22-DS-091210MSD

Introduction

This data review covers 2 water samples and 5 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151M for Phenols.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008) as there are no current guidelines for the method stated above.

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. Cooler temperatures for samples in this SDG were reported at 6.8°C and 10.1°C upon receipt by the laboratory. Samples received the same day that they were collected, time did not allow for sufficient cooling of the samples, therefore no data were qualified.

II. Calibration

a. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for selected compounds.

A curve fit, based on the initial calibration, was established for quantitation for selected compounds. The coefficient of determination (r^2) was greater than or equal to 0.990 .

b. Calibration Verification

Calibration verification was performed at the required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

III. Blanks

Method blanks were reviewed for each matrix as applicable. No phenol contaminants were found in the method blanks.

IV. Accuracy and Precision Data

a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

b. Matrix Spike/(Matrix Spike) Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

V. Target Compound Identification

Raw data were not reviewed for this SDG.

VI. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

VII. System Performance

Raw data were not reviewed for this SDG.

VIII. Overall Assessment of Data

The analysis was conducted within all specifications of the method. No results were rejected in this SDG.

The quality control criteria reviewed were met and are considered acceptable. Based upon the Level III data validation all results are considered valid and usable for all purposes.

IX. Field Duplicates

No field duplicates were identified in this SDG.

X. Field Blanks

Sample PCM-FB-091210 was identified as a field blank. No phenol contaminants were found in this blank.

Sample PCM-DSRB-091210 was identified as a rinsate blank. No phenol contaminants were found in this blank.

NW Natural - Gasco Pilot Cap Monitoring Year 3
Phenols - Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

NW Natural - Gasco Pilot Cap Monitoring Year 3
Phenols - Laboratory Blank Data Qualification Summary - SDG K0911973

No Sample Data Qualified in this SDG

LDC #: 22482C33
SDG #: K0911973
Laboratory: Columbia Analytical Services

VALIDATION COMPLETENESS WORKSHEET
Level III

Date: 2-5-10
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Phenols (EPA SW 846 Method 8151M)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/10/09 Temp = 6.8, 10.1 (insufficient time to cool)
IIa.	Initial calibration	A	%RSD, r^2
IIb.	Calibration verification/ICV	A	ICV / CCV ≤ 20%
III.	Blanks	A	
IVa.	Surrogate recovery	A	
IVb.	Matrix spike/Matrix spike duplicates	A	
IVc.	Laboratory control samples	A	LCS
V.	Target compound identification	N	
VI.	Compound Quantitation and CRQLs	N	
VII.	System Performance	N	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	Field blanks	N.D.	RB = 1 FB = 2

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet

ND = No compounds detected
R = Rinsate
FB = Field blank

D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:

1	PCM-DSRB-091210 W	11		21		31	KWG0911774-BLK W
2	PCM-FB-091210 W	12		22		32	KWG0911717-BLK S
3	PCM-14-DS-091210 Sed	13		23		33	
4	PCM-15-DS-091210	14		24		34	
5	PCM-22-DS-091210	15		25		35	
6	PCM-22-DS-091210MS	16		26		36	
7	PCM-22-DS-091210MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

Analytical Method A4500CN-E

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DRB-091210	K0911973-002	Cyanide	12/18/2009	0.015		Yes	Y				0.010	0.003	mg/l
PCM-DRB-091210	K0911973-002	Cyanide, amenable	12/29/2009	0.015		Yes	Y		J	8,10	0.010	0.003	mg/l

Analytical Method D4282-02

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DRB-091210	K0911973-002	Cyanide, Free	12/12/2009	10		Yes	N	U	UJ	1	10	5	ug/l

Analytical Method E160.3

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Total solids	12/14/2009	44.7		Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Total solids	12/14/2009	42.3		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Total solids	12/14/2009	39.2		Yes	Y						pct

Analytical Method E350.1M

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Ammonia	12/17/2009	53.7		Yes	Y				1.2	0.09	mg/kg
PCM-15-DS-091210	K0911973-006	Ammonia	12/17/2009	28		Yes	Y				1.2	0.10	mg/kg
PCM-22-DS-091210	K0911973-007	Ammonia	12/17/2009	91.6		Yes	Y				6.4	0.52	mg/kg

Analytical Method Krone

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	n-Butyltin (ion)	12/23/2009	1.6		Yes	Y	J			2.3	0.58	ug/kg
PCM-14-DS-091210	K0911973-005	Dibutyltin (ion)	12/23/2009	1.7		Yes	Y	JP			2.3	0.43	ug/kg
PCM-14-DS-091210	K0911973-005	Tributyltin (ion)	12/23/2009	3.6		Yes	Y	P			2.3	0.96	ug/kg
PCM-14-DS-091210	K0911973-005	Tetrabutyltin (ion)	12/23/2009	2.3		Yes	N	U	UJ	5	2.3	0.98	ug/kg
PCM-15-DS-091210	K0911973-006	n-Butyltin (ion)	12/23/2009	1.4		Yes	Y	JP			2.4	0.62	ug/kg
PCM-15-DS-091210	K0911973-006	Tributyltin (ion)	12/23/2009	5.1		Yes	Y	P			2.4	1.1	ug/kg
PCM-15-DS-091210	K0911973-006	Dibutyltin (ion)	12/23/2009	1.6		Yes	Y	JP			2.4	0.45	ug/kg
PCM-15-DS-091210	K0911973-006	Tetrabutyltin (ion)	12/23/2009	2.4		Yes	N	U	UJ	5	2.4	1.1	ug/kg

Analytical Method Krone

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Dibutyltin (ion)	12/23/2009	1.8		Yes	Y	J			2.6	0.49	ug/kg
PCM-22-DS-091210	K0911973-007	Tetrabutyltin (ion)	12/23/2009	2.6		Yes	N	U	UJ	5	2.6	1.2	ug/kg
PCM-22-DS-091210	K0911973-007	Tributyltin (ion)	12/23/2009	3.5		Yes	Y				2.6	1.1	ug/kg
PCM-22-DS-091210	K0911973-007	n-Butyltin (ion)	12/23/2009	1.6		Yes	Y	J			2.6	0.67	ug/kg
PCM-DSRB-091210	K0911973-001	Tributyltin (ion)	12/14/2009	0.05		Yes	N	U			0.050	0.012	ug/l
PCM-DSRB-091210	K0911973-001	Dibutyltin (ion)	12/14/2009	0.05		Yes	N	U			0.050	0.0073	ug/l
PCM-DSRB-091210	K0911973-001	n-Butyltin (ion)	12/14/2009	0.05		Yes	N	U	UJ	5	0.050	0.029	ug/l
PCM-DSRB-091210	K0911973-001	Tetrabutyltin (ion)	12/14/2009	0.05		Yes	N	U	UJ	5	0.050	0.038	ug/l
PCM-FB-091210	K0911973-003	Dibutyltin (ion)	12/14/2009	0.05		Yes	N	U			0.050	0.0073	ug/l
PCM-FB-091210	K0911973-003	n-Butyltin (ion)	12/14/2009	0.05		Yes	N	U	UJ	5	0.050	0.029	ug/l
PCM-FB-091210	K0911973-003	Tributyltin (ion)	12/14/2009	0.05		Yes	N	U			0.050	0.012	ug/l
PCM-FB-091210	K0911973-003	Tetrabutyltin (ion)	12/14/2009	0.05		Yes	N	U	UJ	5	0.050	0.038	ug/l

Analytical Method NWTPHDx

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Residual Range Hydrocarbons	12/15/2009	240		Yes	Y	O			230	6.5	mg/kg
PCM-14-DS-091210	K0911973-005	Diesel Range Hydrocarbons	12/15/2009	64		Yes	Y	H			56	2.7	mg/kg
PCM-15-DS-091210	K0911973-006	Diesel Range Hydrocarbons	12/15/2009	59		Yes	Y	J			59	2.9	mg/kg
PCM-15-DS-091210	K0911973-006	Residual Range Hydrocarbons	12/15/2009	260		Yes	Y	O			240	6.9	mg/kg
PCM-22-DS-091210	K0911973-007	Residual Range Hydrocarbons	12/15/2009	270		Yes	Y	O			260	7.4	mg/kg
PCM-22-DS-091210	K0911973-007	Diesel Range Hydrocarbons	12/15/2009	86		Yes	Y	H			64	3.1	mg/kg
PCM-DSRB-091210	K0911973-001	Residual Range Hydrocarbons	12/17/2009	31	530	Yes	N	J	U	7	530	21	ug/l
PCM-DSRB-091210	K0911973-001	Diesel Range Hydrocarbons	12/17/2009	29	270	Yes	N	J	U	7	270	12	ug/l
PCM-FB-091210	K0911973-003	Diesel Range Hydrocarbons	12/17/2009	22	270	Yes	N	J	U	7	270	12	ug/l
PCM-FB-091210	K0911973-003	Residual Range Hydrocarbons	12/17/2009	33	530	Yes	N	J	U	7	530	21	ug/l

Analytical Method NWTPHGx

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Gasoline Range Hydrocarbons	12/15/2009	9.6	Yes	Y	J			15	4.3	mg/kg
PCM-15-DS-091210	K0911973-006	Gasoline Range Hydrocarbons	12/15/2009	15	Yes	N	U			15	4.5	mg/kg
PCM-22-DS-091210	K0911973-007	Gasoline Range Hydrocarbons	12/15/2009	17	Yes	N	U			17	4.9	mg/kg
PCM-DSRB-091210	K0911973-001	Gasoline Range Hydrocarbons	12/15/2009	13	Yes	Y	J			250	13	ug/l
PCM-FB-091210	K0911973-003	Gasoline Range Hydrocarbons	12/15/2009	250	Yes	N	U			250	13	ug/l

Analytical Method PSEP

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Total organic carbon	12/16/2009	1.65	Yes	Y				0.050	0.020	pct
PCM-14-DS-091210	K0911973-005	Sand, Coarse	12/18/2009	7.39	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Gravel	12/18/2009	1.56	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Silt	12/18/2009	47.8	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Sand, Very Fine	12/18/2009	7.42	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Sand, Very Coarse	12/18/2009	2.96	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Sand, Fine	12/18/2009	9.31	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Sand, Medium	12/18/2009	27.4	Yes	Y						pct
PCM-14-DS-091210	K0911973-005	Clay	12/18/2009	3.34	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Total organic carbon	12/16/2009	1.79	Yes	Y				0.050	0.020	pct
PCM-15-DS-091210	K0911973-006	Sand, Very Coarse	12/18/2009	2.09	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Sand, Very Fine	12/18/2009	5.89	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Silt	12/18/2009	54.5	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Sand, Fine	12/18/2009	6.08	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Sand, Coarse	12/18/2009	4.32	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Clay	12/18/2009	2.98	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Sand, Medium	12/18/2009	20.6	Yes	Y						pct
PCM-15-DS-091210	K0911973-006	Gravel	12/18/2009	4.84	Yes	Y						pct

Analytical Method PSEP

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Total organic carbon	12/16/2009	2.39		Yes	Y				0.050	0.020	pct
PCM-22-DS-091210	K0911973-007	Sand, Very Fine	12/18/2009	13		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Silt	12/18/2009	67.9		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Sand, Medium	12/18/2009	3.65		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Gravel	12/18/2009	0.09		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Clay	12/18/2009	5.09		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Sand, Coarse	12/18/2009	1.59		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Sand, Fine	12/18/2009	5.52		Yes	Y						pct
PCM-22-DS-091210	K0911973-007	Sand, Very Coarse	12/18/2009	0.77		Yes	Y						pct

Analytical Method SW6010

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Zinc	1/13/2010	86.8		Yes	Y				2.0	0.3	mg/kg
PCM-14-DS-091210	K0911973-005	Aluminum	1/13/2010	18400		Yes	Y				10.1	0.4	mg/kg
PCM-15-DS-091210	K0911973-006	Zinc	1/13/2010	91.1		Yes	Y				2.2	0.3	mg/kg
PCM-15-DS-091210	K0911973-006	Aluminum	1/13/2010	17900		Yes	Y				10.7	0.4	mg/kg
PCM-22-DS-091210	K0911973-007	Aluminum	1/13/2010	27000		Yes	Y				9.4	0.4	mg/kg
PCM-22-DS-091210	K0911973-007	Zinc	1/13/2010	121		Yes	Y				1.9	0.3	mg/kg
PCM-DRB-091210	K0911973-002	Iron	12/16/2009	20		Yes	N	U			20.0	0.8	ug/l

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Nickel	1/15/2010	18.2		Yes	Y				0.20	0.02	mg/kg
PCM-14-DS-091210	K0911973-005	Copper	1/15/2010	26.4		Yes	Y				0.10	0.08	mg/kg
PCM-14-DS-091210	K0911973-005	Chromium	1/15/2010	19.9		Yes	Y				0.20	0.02	mg/kg
PCM-14-DS-091210	K0911973-005	Cadmium	1/15/2010	0.25		Yes	Y				0.020	0.004	mg/kg
PCM-14-DS-091210	K0911973-005	Lead	1/15/2010	8.32		Yes	Y	*	J	9,16	0.051	0.006	mg/kg

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Arsenic	1/15/2010	3.56		Yes	Y				0.51	0.05	mg/kg
PCM-14-DS-091210	K0911973-005	Silver	1/18/2010	0.096		Yes	Y				0.020	0.004	mg/kg
PCM-14-DS-091210	K0911973-005	Antimony	1/18/2010	0.115		Yes	Y				0.051	0.020	mg/kg
PCM-15-DS-091210	K0911973-006	Lead	1/15/2010	11.2		Yes	Y	*	J	9,16	0.053	0.006	mg/kg
PCM-15-DS-091210	K0911973-006	Arsenic	1/15/2010	3.61		Yes	Y				0.54	0.05	mg/kg
PCM-15-DS-091210	K0911973-006	Copper	1/15/2010	29.4		Yes	Y				0.11	0.09	mg/kg
PCM-15-DS-091210	K0911973-006	Cadmium	1/15/2010	0.21		Yes	Y				0.021	0.004	mg/kg
PCM-15-DS-091210	K0911973-006	Nickel	1/15/2010	18.7		Yes	Y				0.21	0.02	mg/kg
PCM-15-DS-091210	K0911973-006	Chromium	1/15/2010	23		Yes	Y				0.21	0.02	mg/kg
PCM-15-DS-091210	K0911973-006	Silver	1/18/2010	0.098		Yes	Y				0.021	0.004	mg/kg
PCM-15-DS-091210	K0911973-006	Antimony	1/18/2010	0.104		Yes	Y				0.054	0.021	mg/kg
PCM-22-DS-091210	K0911973-007	Nickel	1/15/2010	25.2		Yes	Y				0.19	0.02	mg/kg
PCM-22-DS-091210	K0911973-007	Lead	1/15/2010	13.1		Yes	Y	*	J	9,16	0.047	0.006	mg/kg
PCM-22-DS-091210	K0911973-007	Cadmium	1/15/2010	0.265		Yes	Y				0.019	0.004	mg/kg
PCM-22-DS-091210	K0911973-007	Chromium	1/15/2010	31.1		Yes	Y				0.19	0.01	mg/kg
PCM-22-DS-091210	K0911973-007	Copper	1/15/2010	43.8		Yes	Y				0.09	0.08	mg/kg
PCM-22-DS-091210	K0911973-007	Arsenic	1/15/2010	4.57		Yes	Y				0.47	0.05	mg/kg
PCM-22-DS-091210	K0911973-007	Antimony	1/18/2010	0.154		Yes	Y				0.047	0.019	mg/kg
PCM-22-DS-091210	K0911973-007	Silver	1/18/2010	0.142		Yes	Y				0.019	0.004	mg/kg
PCM-DSRB-091210	K0911973-001	Copper	12/28/2009	0.04	0.10	Yes	N	J	U	7	0.10	0.02	ug/l
PCM-DSRB-091210	K0911973-001	Zinc	12/28/2009	0.52		Yes	N		U	7	0.50	0.20	ug/l
PCM-DSRB-091210	K0911973-001	Chromium	12/28/2009	0.57		Yes	N		U	7	0.20	0.04	ug/l
PCM-DSRB-091210	K0911973-001	Cadmium	12/28/2009	0.02		Yes	N	U			0.020	0.003	ug/l
PCM-DSRB-091210	K0911973-001	Arsenic	12/28/2009	0.5		Yes	N	U			0.50	0.07	ug/l
PCM-DSRB-091210	K0911973-001	Antimony	12/28/2009	0.05		Yes	N	U			0.05	0.02	ug/l

Analytical Method SW6020

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Nickel	12/28/2009	0.2		Yes	N	U			0.20	0.03	ug/l
PCM-DSRB-091210	K0911973-001	Lead	12/28/2009	0.042		Yes	Y				0.020	0.005	ug/l
PCM-DSRB-091210	K0911973-001	Selenium	12/28/2009	1		Yes	N	U			1.0	0.3	ug/l
PCM-DSRB-091210	K0911973-001	Aluminum	1/6/2010	1.5		Yes	Y	J			2.0	0.3	ug/l
PCM-DSRB-091210	K0911973-001	Silver	1/6/2010	0.02		Yes	N	U			0.020	0.004	ug/l
PCM-FB-091210	K0911973-003	Zinc	12/28/2009	0.5		Yes	N	U			0.50	0.20	ug/l
PCM-FB-091210	K0911973-003	Copper	12/28/2009	0.02	0.10	Yes	N	J	U	7	0.10	0.02	ug/l
PCM-FB-091210	K0911973-003	Chromium	12/28/2009	0.54		Yes	N		U	7	0.20	0.04	ug/l
PCM-FB-091210	K0911973-003	Cadmium	12/28/2009	0.02		Yes	N	U			0.020	0.003	ug/l
PCM-FB-091210	K0911973-003	Arsenic	12/28/2009	0.5		Yes	N	U			0.50	0.07	ug/l
PCM-FB-091210	K0911973-003	Antimony	12/28/2009	0.05		Yes	N	U			0.05	0.02	ug/l
PCM-FB-091210	K0911973-003	Lead	12/28/2009	0.02		Yes	N	U			0.020	0.005	ug/l
PCM-FB-091210	K0911973-003	Selenium	12/28/2009	1		Yes	N	U			1.0	0.3	ug/l
PCM-FB-091210	K0911973-003	Nickel	12/28/2009	0.2		Yes	N	U			0.20	0.03	ug/l
PCM-FB-091210	K0911973-003	Aluminum	1/6/2010	0.9		Yes	Y	J			2.0	0.3	ug/l
PCM-FB-091210	K0911973-003	Silver	1/6/2010	0.02		Yes	N	U			0.020	0.004	ug/l

Analytical Method SW7196

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Chromium VI	12/23/2009	0.18		Yes	Y	J	J	8	1.2	0.18	mg/kg
PCM-15-DS-091210	K0911973-006	Chromium VI	12/23/2009	0.22		Yes	Y	J	J	8	1.2	0.19	mg/kg
PCM-22-DS-091210	K0911973-007	Chromium VI	12/23/2009	0.24		Yes	Y	J	J	8	1.3	0.20	mg/kg

Analytical Method SW7470

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Mercury	12/16/2009	0.2		Yes	N	U			0.20	0.02	ug/l
PCM-FB-091210	K0911973-003	Mercury	12/16/2009	0.2		Yes	N	U			0.20	0.02	ug/l

Analytical Method SW7471

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Mercury	12/17/2009	0.06		Yes	Y				0.019	0.002	mg/kg
PCM-15-DS-091210	K0911973-006	Mercury	12/17/2009	0.049		Yes	Y				0.021	0.002	mg/kg
PCM-22-DS-091210	K0911973-007	Mercury	12/17/2009	0.069		Yes	Y				0.020	0.002	mg/kg

Analytical Method SW7742

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Selenium	1/14/2010	0.15		Yes	Y				0.10	0.03	mg/kg
PCM-15-DS-091210	K0911973-006	Selenium	1/14/2010	0.2		Yes	Y				0.11	0.03	mg/kg
PCM-22-DS-091210	K0911973-007	Selenium	1/14/2010	0.18		Yes	Y				0.09	0.03	mg/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Endrin ketone	12/25/2009	1.2		Yes	N	U			1.2	0.11	ug/kg
PCM-14-DS-091210	K0911973-005	Endrin aldehyde	12/25/2009	1.2		Yes	N	Ui			1.2	0.18	ug/kg
PCM-14-DS-091210	K0911973-005	4,4'-DDE (p,p'-DDE)	12/25/2009	1.8		Yes	Y				1.2	0.13	ug/kg
PCM-14-DS-091210	K0911973-005	4,4'-DDD (p,p'-DDD)	12/25/2009	4		Yes	Y	P			1.2	0.13	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorobenzene	12/25/2009	1.2		Yes	N	U	UJ	10	1.2	0.23	ug/kg
PCM-14-DS-091210	K0911973-005	Methoxychlor	12/25/2009	1.2		Yes	N	Ui			1.2	0.27	ug/kg
PCM-14-DS-091210	K0911973-005	Endrin	12/25/2009	1.2		Yes	N	U			1.2	0.11	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachloroethane	12/25/2009	1.2		Yes	N	U			1.2	0.37	ug/kg
PCM-14-DS-091210	K0911973-005	2,4'-DDT (o,p'-DDT)	12/25/2009	1.5		Yes	Y				1.2	0.065	ug/kg
PCM-14-DS-091210	K0911973-005	gamma-BHC (Lindane)	12/25/2009	0.61		Yes	Y	JP			1.2	0.090	ug/kg
PCM-14-DS-091210	K0911973-005	Toxaphene	12/25/2009	61		Yes	N	Ui			61	61	ug/kg
PCM-14-DS-091210	K0911973-005	2,4'-DDD (o,p'-DDD)	12/25/2009	1.8		Yes	Y				1.2	0.15	ug/kg
PCM-14-DS-091210	K0911973-005	beta-Chlordane (trans-Chlordane)	12/25/2009	1.2		Yes	N	U			1.2	0.11	ug/kg
PCM-14-DS-091210	K0911973-005	Mirex	12/25/2009	1.2		Yes	N	U	UJ	5	1.2	0.12	ug/kg
PCM-14-DS-091210	K0911973-005	cis-Nonachlor	12/25/2009	1.2		Yes	N	Ui			1.2	0.90	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.2		Yes	N	U			1.2	0.12	ug/kg
PCM-14-DS-091210	K0911973-005	Oxychlordane	12/25/2009	1.2		Yes	N	Ui			1.2	0.22	ug/kg
PCM-14-DS-091210	K0911973-005	Dieldrin	12/25/2009	1.2		Yes	N	U			1.2	0.16	ug/kg
PCM-14-DS-091210	K0911973-005	4,4'-DDT (p,p'-DDT)	12/25/2009	16		Yes	Y				1.2	0.19	ug/kg
PCM-14-DS-091210	K0911973-005	Aldrin	12/25/2009	1.2		Yes	N	U			1.2	0.18	ug/kg
PCM-14-DS-091210	K0911973-005	2,4'-DDE (o,p'-DDE)	12/25/2009	1.2		Yes	N	Ui			1.2	0.32	ug/kg
PCM-14-DS-091210	K0911973-005	Heptachlor	12/25/2009	1.2		Yes	N	U			1.2	0.14	ug/kg
PCM-14-DS-091210	K0911973-005	Endosulfan-beta (II)	12/25/2009	1.2		Yes	N	U			1.2	0.16	ug/kg
PCM-14-DS-091210	K0911973-005	beta-BHC	12/25/2009	1.2		Yes	N	U			1.2	0.21	ug/kg
PCM-14-DS-091210	K0911973-005	alpha-BHC	12/25/2009	1.2		Yes	N	U			1.2	0.13	ug/kg
PCM-14-DS-091210	K0911973-005	trans-Nonachlor	12/25/2009	1.2		Yes	N	U			1.2	0.097	ug/kg
PCM-14-DS-091210	K0911973-005	Heptachlor epoxide	12/25/2009	1.2		Yes	N	Ui			1.2	1.2	ug/kg
PCM-14-DS-091210	K0911973-005	Endosulfan sulfate	12/25/2009	1.2		Yes	N	Ui			1.2	1.2	ug/kg
PCM-14-DS-091210	K0911973-005	Endosulfan-alpha (I)	12/25/2009	1.2		Yes	N	U			1.2	0.071	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorobutadiene	12/25/2009	1.2		Yes	N	U			1.2	0.24	ug/kg
PCM-14-DS-091210	K0911973-005	delta-BHC	12/25/2009	1.2		Yes	N	U			1.2	0.083	ug/kg
PCM-15-DS-091210	K0911973-006	Dieldrin	12/25/2009	1.2		Yes	N	U			1.2	0.17	ug/kg
PCM-15-DS-091210	K0911973-006	cis-Nonachlor	12/25/2009	1.2		Yes	N	Ui			1.2	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.2		Yes	N	U			1.2	0.12	ug/kg
PCM-15-DS-091210	K0911973-006	4,4'-DDT (p,p'-DDT)	12/25/2009	3.1		Yes	Y				1.2	0.21	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachloroethane	12/25/2009	1.2		Yes	N	U			1.2	0.39	ug/kg
PCM-15-DS-091210	K0911973-006	gamma-BHC (Lindane)	12/25/2009	0.77		Yes	Y	J			1.2	0.095	ug/kg
PCM-15-DS-091210	K0911973-006	2,4'-DDD (o,p'-DDD)	12/25/2009	2.4		Yes	Y	P			1.2	0.16	ug/kg
PCM-15-DS-091210	K0911973-006	Methoxychlor	12/25/2009	1.2		Yes	N	U			1.2	0.23	ug/kg
PCM-15-DS-091210	K0911973-006	Endrin	12/25/2009	1.2		Yes	N	U			1.2	0.12	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	trans-Nonachlor	12/25/2009	1.2	Yes	N	U			1.2	0.11	ug/kg
PCM-15-DS-091210	K0911973-006	2,4'-DDE (o,p'-DDE)	12/25/2009	1.2	Yes	N	Ui			1.2	0.28	ug/kg
PCM-15-DS-091210	K0911973-006	Endosulfan-beta (II)	12/25/2009	1.2	Yes	N	Ui			1.2	0.30	ug/kg
PCM-15-DS-091210	K0911973-006	delta-BHC	12/25/2009	1.2	Yes	N	U			1.2	0.088	ug/kg
PCM-15-DS-091210	K0911973-006	beta-BHC	12/25/2009	1.2	Yes	N	Ui			1.2	0.30	ug/kg
PCM-15-DS-091210	K0911973-006	4,4'-DDD (p,p'-DDD)	12/25/2009	4.6	Yes	Y				1.2	0.13	ug/kg
PCM-15-DS-091210	K0911973-006	Aldrin	12/25/2009	1.2	Yes	N	U			1.2	0.19	ug/kg
PCM-15-DS-091210	K0911973-006	Endrin ketone	12/25/2009	1.2	Yes	N	Ui			1.2	0.16	ug/kg
PCM-15-DS-091210	K0911973-006	Oxychlordane	12/25/2009	1.2	Yes	N	U			1.2	0.11	ug/kg
PCM-15-DS-091210	K0911973-006	Mirex	12/25/2009	1.2	Yes	N	U	UJ	5	1.2	0.12	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorobenzene	12/25/2009	1.2	Yes	N	U	UJ	10	1.2	0.24	ug/kg
PCM-15-DS-091210	K0911973-006	Endosulfan sulfate	12/25/2009	1.2	Yes	N	Ui			1.2	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	Heptachlor epoxide	12/25/2009	1.2	Yes	N	U			1.2	0.10	ug/kg
PCM-15-DS-091210	K0911973-006	alpha-BHC	12/25/2009	1.2	Yes	N	U			1.2	0.13	ug/kg
PCM-15-DS-091210	K0911973-006	beta-Chlordane (trans-Chlordane)	12/25/2009	0.22	Yes	Y	J			1.2	0.11	ug/kg
PCM-15-DS-091210	K0911973-006	4,4'-DDE (p,p'-DDE)	12/25/2009	1.4	Yes	Y				1.2	0.13	ug/kg
PCM-15-DS-091210	K0911973-006	Endosulfan-alpha (I)	12/25/2009	1.2	Yes	N	U			1.2	0.075	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorobutadiene	12/25/2009	1.2	Yes	N	U			1.2	0.25	ug/kg
PCM-15-DS-091210	K0911973-006	Toxaphene	12/25/2009	60	Yes	N	Ui			60	57	ug/kg
PCM-15-DS-091210	K0911973-006	2,4'-DDT (o,p'-DDT)	12/25/2009	0.8	Yes	Y	JP			1.2	0.069	ug/kg
PCM-15-DS-091210	K0911973-006	Heptachlor	12/25/2009	1.2	Yes	N	U			1.2	0.15	ug/kg
PCM-15-DS-091210	K0911973-006	Endrin aldehyde	12/25/2009	0.25	Yes	Y	J			1.2	0.15	ug/kg
PCM-22-DS-091210	K0911973-007	Dieldrin	12/25/2009	1.3	Yes	N	U			1.3	0.18	ug/kg
PCM-22-DS-091210	K0911973-007	Oxychlordane	12/25/2009	1.3	Yes	N	U			1.3	0.11	ug/kg
PCM-22-DS-091210	K0911973-007	trans-Nonachlor	12/25/2009	1.3	Yes	N	Ui			1.3	0.13	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Endrin ketone	12/25/2009	1.3	Yes	N	U			1.3	0.12	ug/kg
PCM-22-DS-091210	K0911973-007	2,4'-DDD (o,p'-DDD)	12/25/2009	4.5	Yes	Y	P			1.3	0.17	ug/kg
PCM-22-DS-091210	K0911973-007	beta-Chlordane (trans-Chlordane)	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	cis-Nonachlor	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	alpha-Chlordane (cis-Chlordane)	12/25/2009	1.3	Yes	N	U			1.3	0.13	ug/kg
PCM-22-DS-091210	K0911973-007	4,4'-DDT (p,p'-DDT)	12/25/2009	6.2	Yes	Y				1.3	0.22	ug/kg
PCM-22-DS-091210	K0911973-007	gamma-BHC (Lindane)	12/25/2009	2.2	Yes	Y	P			1.3	0.11	ug/kg
PCM-22-DS-091210	K0911973-007	Endosulfan-beta (II)	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	beta-BHC	12/25/2009	1.3	Yes	N	U			1.3	0.23	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachloroethane	12/25/2009	1.3	Yes	N	U			1.3	0.43	ug/kg
PCM-22-DS-091210	K0911973-007	Aldrin	12/25/2009	1.3	Yes	N	Ui			1.3	0.54	ug/kg
PCM-22-DS-091210	K0911973-007	2,4'-DDE (o,p'-DDE)	12/25/2009	1.3	Yes	N	Ui			1.3	0.36	ug/kg
PCM-22-DS-091210	K0911973-007	Mirex	12/25/2009	1.3	Yes	N	U	UJ	5	1.3	0.13	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachlorobenzene	12/25/2009	1.3	Yes	N	U	UJ	10	1.3	0.26	ug/kg
PCM-22-DS-091210	K0911973-007	Endosulfan sulfate	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	Heptachlor epoxide	12/25/2009	1.4	Yes	N	Ui			1.4	1.4	ug/kg
PCM-22-DS-091210	K0911973-007	alpha-BHC	12/25/2009	1.3	Yes	N	U			1.3	0.15	ug/kg
PCM-22-DS-091210	K0911973-007	Endosulfan-alpha (I)	12/25/2009	1.3	Yes	N	U			1.3	0.081	ug/kg
PCM-22-DS-091210	K0911973-007	Methoxychlor	12/25/2009	1.3	Yes	N	Ui			1.3	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	4,4'-DDD (p,p'-DDD)	12/25/2009	11	Yes	Y				1.3	0.15	ug/kg
PCM-22-DS-091210	K0911973-007	4,4'-DDE (p,p'-DDE)	12/25/2009	2.9	Yes	Y				1.3	0.15	ug/kg
PCM-22-DS-091210	K0911973-007	Endrin aldehyde	12/25/2009	1.3	Yes	N	Ui			1.3	0.21	ug/kg
PCM-22-DS-091210	K0911973-007	Heptachlor	12/25/2009	1.3	Yes	N	U			1.3	0.16	ug/kg
PCM-22-DS-091210	K0911973-007	2,4'-DDT (o,p'-DDT)	12/25/2009	1.1	Yes	Y	J			1.3	0.074	ug/kg
PCM-22-DS-091210	K0911973-007	Toxaphene	12/25/2009	180	Yes	N	Ui			180	180	ug/kg

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Hexachlorobutadiene	12/25/2009	1.3		Yes	N	U			1.3	0.27	ug/kg
PCM-22-DS-091210	K0911973-007	delta-BHC	12/25/2009	1.3		Yes	N	U			1.3	0.095	ug/kg
PCM-22-DS-091210	K0911973-007	Endrin	12/25/2009	1.3		Yes	N	U			1.3	0.12	ug/kg
PCM-DSRB-091210	K0911973-001	4,4'-DDT (p,p'-DDT)	12/18/2009	0.011		Yes	N	U			0.011	0.00062	ug/l
PCM-DSRB-091210	K0911973-001	trans-Nonachlor	12/18/2009	0.011		Yes	N	U			0.011	0.00097	ug/l
PCM-DSRB-091210	K0911973-001	2,4'-DDE (o,p'-DDE)	12/18/2009	0.011		Yes	N	U			0.011	0.00053	ug/l
PCM-DSRB-091210	K0911973-001	Endosulfan-beta (II)	12/18/2009	0.011		Yes	N	Ui			0.011	0.00093	ug/l
PCM-DSRB-091210	K0911973-001	delta-BHC	12/18/2009	0.011		Yes	N	Ui			0.011	0.00081	ug/l
PCM-DSRB-091210	K0911973-001	alpha-Chlordane (cis-Chlordane)	12/18/2009	0.011		Yes	N	U			0.011	0.0043	ug/l
PCM-DSRB-091210	K0911973-001	alpha-BHC	12/18/2009	0.011		Yes	N	U			0.011	0.00035	ug/l
PCM-DSRB-091210	K0911973-001	Toxaphene	12/18/2009	0.53		Yes	N	Ui			0.53	0.17	ug/l
PCM-DSRB-091210	K0911973-001	beta-BHC	12/18/2009	0.011		Yes	N	U			0.011	0.00088	ug/l
PCM-DSRB-091210	K0911973-001	cis-Nonachlor	12/18/2009	0.011		Yes	N	Ui			0.011	0.00067	ug/l
PCM-DSRB-091210	K0911973-001	4,4'-DDE (p,p'-DDE)	12/18/2009	0.011		Yes	N	U			0.011	0.00038	ug/l
PCM-DSRB-091210	K0911973-001	beta-Chlordane (trans-Chlordane)	12/18/2009	0.011		Yes	N	U			0.011	0.00034	ug/l
PCM-DSRB-091210	K0911973-001	Aldrin	12/18/2009	0.011		Yes	N	U			0.011	0.00043	ug/l
PCM-DSRB-091210	K0911973-001	Hexachlorobutadiene	12/18/2009	0.011		Yes	N	U			0.011	0.0020	ug/l
PCM-DSRB-091210	K0911973-001	gamma-BHC (Lindane)	12/18/2009	0.011		Yes	N	U			0.011	0.00047	ug/l
PCM-DSRB-091210	K0911973-001	2,4'-DDT (o,p'-DDT)	12/18/2009	0.011		Yes	N	U			0.011	0.00063	ug/l
PCM-DSRB-091210	K0911973-001	Heptachlor	12/18/2009	0.011		Yes	N	U			0.011	0.00038	ug/l
PCM-DSRB-091210	K0911973-001	4,4'-DDD (p,p'-DDD)	12/18/2009	0.011		Yes	N	Ui			0.011	0.0034	ug/l
PCM-DSRB-091210	K0911973-001	Endrin aldehyde	12/18/2009	0.011		Yes	N	U			0.011	0.00049	ug/l
PCM-DSRB-091210	K0911973-001	Endosulfan-alpha (I)	12/18/2009	0.011		Yes	N	U			0.011	0.00047	ug/l
PCM-DSRB-091210	K0911973-001	Mirex	12/18/2009	0.011		Yes	N	U			0.011	0.00086	ug/l
PCM-DSRB-091210	K0911973-001	Hexachlorobenzene	12/18/2009	0.011		Yes	N	U			0.011	0.00033	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Endosulfan sulfate	12/18/2009	0.011	Yes	N	U			0.011	0.00050	ug/l
PCM-DSRB-091210	K0911973-001	Endrin ketone	12/18/2009	0.011	Yes	N	U			0.011	0.00070	ug/l
PCM-DSRB-091210	K0911973-001	Dieldrin	12/18/2009	0.011	Yes	N	U			0.011	0.00037	ug/l
PCM-DSRB-091210	K0911973-001	Hexachloroethane	12/18/2009	0.011	Yes	N	U			0.011	0.0013	ug/l
PCM-DSRB-091210	K0911973-001	Methoxychlor	12/18/2009	0.011	Yes	N	U			0.011	0.00098	ug/l
PCM-DSRB-091210	K0911973-001	Endrin	12/18/2009	0.011	Yes	N	U			0.011	0.00072	ug/l
PCM-DSRB-091210	K0911973-001	Oxychlordane	12/18/2009	0.011	Yes	N	U			0.011	0.0011	ug/l
PCM-DSRB-091210	K0911973-001	Heptachlor epoxide	12/18/2009	0.011	Yes	N	U			0.011	0.00034	ug/l
PCM-DSRB-091210	K0911973-001	2,4'-DDD (o,p'-DDD)	12/18/2009	0.011	Yes	N	U			0.011	0.00060	ug/l
PCM-FB-091210	K0911973-003	Endrin aldehyde	12/18/2009	0.01	Yes	N	U			0.010	0.00046	ug/l
PCM-FB-091210	K0911973-003	Endrin ketone	12/18/2009	0.01	Yes	N	U			0.010	0.00066	ug/l
PCM-FB-091210	K0911973-003	gamma-BHC (Lindane)	12/18/2009	0.01	Yes	N	U			0.010	0.00044	ug/l
PCM-FB-091210	K0911973-003	Dieldrin	12/18/2009	0.01	Yes	N	Ui			0.010	0.00054	ug/l
PCM-FB-091210	K0911973-003	Hexachloroethane	12/18/2009	0.01	Yes	N	U			0.010	0.0012	ug/l
PCM-FB-091210	K0911973-003	Endrin	12/18/2009	0.01	Yes	N	Ui			0.010	0.0016	ug/l
PCM-FB-091210	K0911973-003	Methoxychlor	12/18/2009	0.01	Yes	N	U			0.010	0.00093	ug/l
PCM-FB-091210	K0911973-003	4,4'-DDE (p,p'-DDE)	12/18/2009	0.01	Yes	N	U			0.010	0.00036	ug/l
PCM-FB-091210	K0911973-003	alpha-Chlordane (cis-Chlordane)	12/18/2009	0.01	Yes	N	U			0.010	0.0040	ug/l
PCM-FB-091210	K0911973-003	Heptachlor	12/18/2009	0.01	Yes	N	U			0.010	0.00036	ug/l
PCM-FB-091210	K0911973-003	2,4'-DDT (o,p'-DDT)	12/18/2009	0.01	Yes	N	U			0.010	0.00059	ug/l
PCM-FB-091210	K0911973-003	Toxaphene	12/18/2009	0.5	Yes	N	Ui			0.50	0.21	ug/l
PCM-FB-091210	K0911973-003	Hexachlorobutadiene	12/18/2009	0.01	Yes	N	U			0.010	0.0019	ug/l
PCM-FB-091210	K0911973-003	Endosulfan-alpha (I)	12/18/2009	0.01	Yes	N	U			0.010	0.00044	ug/l
PCM-FB-091210	K0911973-003	2,4'-DDD (o,p'-DDD)	12/18/2009	0.01	Yes	N	U			0.010	0.00057	ug/l
PCM-FB-091210	K0911973-003	4,4'-DDD (p,p'-DDD)	12/18/2009	0.01	Yes	N	Ui			0.010	0.010	ug/l

Analytical Method SW8081

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	alpha-BHC	12/18/2009	0.01		Yes	N	U			0.010	0.00033	ug/l
PCM-FB-091210	K0911973-003	beta-Chlordane (trans-Chlordane)	12/18/2009	0.01		Yes	N	U			0.010	0.00032	ug/l
PCM-FB-091210	K0911973-003	Endosulfan sulfate	12/18/2009	0.01		Yes	N	U			0.010	0.00047	ug/l
PCM-FB-091210	K0911973-003	Hexachlorobenzene	12/18/2009	0.01		Yes	N	U			0.010	0.00031	ug/l
PCM-FB-091210	K0911973-003	Mirex	12/18/2009	0.01		Yes	N	U			0.010	0.00081	ug/l
PCM-FB-091210	K0911973-003	Aldrin	12/18/2009	0.01		Yes	N	U			0.010	0.00040	ug/l
PCM-FB-091210	K0911973-003	Heptachlor epoxide	12/18/2009	0.01		Yes	N	U			0.010	0.00032	ug/l
PCM-FB-091210	K0911973-003	beta-BHC	12/18/2009	0.01		Yes	N	Ui			0.010	0.0011	ug/l
PCM-FB-091210	K0911973-003	delta-BHC	12/18/2009	0.01		Yes	N	U			0.010	0.00057	ug/l
PCM-FB-091210	K0911973-003	Endosulfan-beta (II)	12/18/2009	0.01		Yes	N	Ui			0.010	0.0011	ug/l
PCM-FB-091210	K0911973-003	2,4'-DDE (o,p'-DDE)	12/18/2009	0.01		Yes	N	U			0.010	0.00050	ug/l
PCM-FB-091210	K0911973-003	trans-Nonachlor	12/18/2009	0.01		Yes	N	U			0.010	0.00092	ug/l
PCM-FB-091210	K0911973-003	4,4'-DDT (p,p'-DDT)	12/18/2009	0.01		Yes	N	U			0.010	0.00058	ug/l
PCM-FB-091210	K0911973-003	cis-Nonachlor	12/18/2009	0.01		Yes	N	Ui			0.010	0.00075	ug/l
PCM-FB-091210	K0911973-003	Oxychlordane	12/18/2009	0.01		Yes	N	U			0.010	0.0010	ug/l

Analytical Method SW8082

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Aroclor 1254	12/23/2009	12		Yes	N	Ui			12	12	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1242	12/23/2009	12		Yes	N	U			12	2.4	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1262	12/23/2009	12		Yes	N	Ui			12	3.0	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1016	12/23/2009	12		Yes	N	Ui			12	3.1	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1248	12/23/2009	12		Yes	N	U			12	2.4	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1232	12/23/2009	12		Yes	N	Ui			12	12	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1268	12/23/2009	12		Yes	N	U			12	2.4	ug/kg
PCM-14-DS-091210	K0911973-005	Aroclor 1260	12/23/2009	12		Yes	N	Ui			12	3.8	ug/kg

Analytical Method SW8082

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Aroclor 1221	12/23/2009	23		Yes	N	Ui			23	3.3	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1268	12/24/2009	12		Yes	N	U			12	2.5	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1262	12/24/2009	12		Yes	N	Ui			12	4.0	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1016	12/24/2009	12		Yes	N	U			12	2.5	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1248	12/24/2009	12		Yes	N	Ui			12	4.9	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1221	12/24/2009	24		Yes	N	Ui			24	9.3	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1260	12/24/2009	12		Yes	N	Ui			12	5.1	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1254	12/24/2009	13		Yes	N	Ui			13	13	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1242	12/24/2009	12		Yes	N	U			12	2.5	ug/kg
PCM-15-DS-091210	K0911973-006	Aroclor 1232	12/24/2009	12		Yes	N	Ui			12	4.4	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1221	12/24/2009	26		Yes	N	Ui			26	26	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1242	12/24/2009	13		Yes	N	Ui			13	4.9	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1262	12/24/2009	13		Yes	N	Ui			13	4.9	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1016	12/24/2009	13		Yes	N	Ui			13	5.9	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1232	12/24/2009	13		Yes	N	Ui			13	8.8	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1268	12/24/2009	13		Yes	N	U			13	2.7	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1254	12/24/2009	25		Yes	N	Ui			25	25	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1260	12/24/2009	13		Yes	N	Ui			13	6.4	ug/kg
PCM-22-DS-091210	K0911973-007	Aroclor 1248	12/24/2009	13		Yes	N	Ui			13	5.2	ug/kg
PCM-DSRB-091210	K0911973-001	Aroclor 1221	12/17/2009	0.43		Yes	N	U			0.43	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1242	12/17/2009	0.22		Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1268	12/17/2009	0.22		Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1260	12/17/2009	0.22		Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1232	12/17/2009	0.22		Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1248	12/17/2009	0.22		Yes	N	U			0.22	0.0099	ug/l

Analytical Method SW8082

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Aroclor 1016	12/17/2009	0.22	Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1254	12/17/2009	0.22	Yes	N	U			0.22	0.0099	ug/l
PCM-DSRB-091210	K0911973-001	Aroclor 1262	12/17/2009	0.22	Yes	N	U			0.22	0.0099	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1232	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1242	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1262	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1016	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1248	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1221	12/17/2009	0.4	Yes	N	U			0.40	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1268	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1260	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l
PCM-FB-091210	K0911973-003	Aroclor 1254	12/17/2009	0.2	Yes	N	U			0.20	0.0094	ug/l

Analytical Method SW8151A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Dicamba	12/24/2009	140	Yes	N	U			140	12	ug/kg
PCM-14-DS-091210	K0911973-005	2,2-Dichloropropionic acid (Dalapon)	12/24/2009	140	Yes	N	U	UJ	10	140	17	ug/kg
PCM-14-DS-091210	K0911973-005	Dinoseb	12/24/2009	140	Yes	N	U			140	7.3	ug/kg
PCM-14-DS-091210	K0911973-005	2,4,5-TP (Silvex)	12/24/2009	140	Yes	N	U			140	13	ug/kg
PCM-14-DS-091210	K0911973-005	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/24/2009	140	Yes	N	U			140	11	ug/kg
PCM-14-DS-091210	K0911973-005	MCPA	12/24/2009	27000	Yes	N	U			27000	7000	ug/kg
PCM-14-DS-091210	K0911973-005	Dichlorprop	12/24/2009	140	Yes	N	U			140	25	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-DB (2,4-D derivative)	12/24/2009	140	Yes	N	U			140	10	ug/kg
PCM-14-DS-091210	K0911973-005	Mecoprop (MCPP)	12/24/2009	27000	Yes	N	Ui			27000	12000	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/24/2009	140	Yes	N	U			140	11	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-DB (2,4-D derivative)	12/24/2009	150	Yes	N	U			150	11	ug/kg

Analytical Method SW8151A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	2,2-Dichloropropionic acid (Dalapon)	12/24/2009	150	Yes	N	U	UJ	10	150	18	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/24/2009	150	Yes	N	U			150	12	ug/kg
PCM-15-DS-091210	K0911973-006	Dichlorprop	12/24/2009	150	Yes	N	U			150	26	ug/kg
PCM-15-DS-091210	K0911973-006	Dicamba	12/24/2009	150	Yes	N	U			150	13	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,5-TP (Silvex)	12/24/2009	150	Yes	N	U			150	13	ug/kg
PCM-15-DS-091210	K0911973-006	Dinoseb	12/24/2009	150	Yes	N	U			150	7.7	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/24/2009	150	Yes	N	U			150	12	ug/kg
PCM-15-DS-091210	K0911973-006	MCPA	12/24/2009	29000	Yes	N	U			29000	7400	ug/kg
PCM-15-DS-091210	K0911973-006	Mecoprop (MCPP)	12/24/2009	29000	Yes	N	Ui			29000	12000	ug/kg
PCM-22-DS-091210	K0911973-007	Dicamba	12/24/2009	160	Yes	N	U			160	14	ug/kg
PCM-22-DS-091210	K0911973-007	2,2-Dichloropropionic acid (Dalapon)	12/24/2009	160	Yes	N	U	UJ	8,10	160	19	ug/kg
PCM-22-DS-091210	K0911973-007	Dichlorprop	12/24/2009	160	Yes	N	U			160	28	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/24/2009	160	Yes	N	U			160	13	ug/kg
PCM-22-DS-091210	K0911973-007	MCPA	12/24/2009	31000	Yes	N	U			31000	8000	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/24/2009	160	Yes	N	U			160	13	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-DB (2,4-D derivative)	12/24/2009	160	Yes	N	U			160	12	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,5-TP (Silvex)	12/24/2009	160	Yes	N	U			160	14	ug/kg
PCM-22-DS-091210	K0911973-007	Mecoprop (MCPP)	12/24/2009	31000	Yes	N	Ui			31000	13000	ug/kg
PCM-22-DS-091210	K0911973-007	Dinoseb	12/24/2009	160	Yes	N	U			160	8.3	ug/kg
PCM-DSRB-091210	K0911973-001	2,4-DB (2,4-D derivative)	12/22/2009	0.44	Yes	N	U			0.44	0.19	ug/l
PCM-DSRB-091210	K0911973-001	Dicamba	12/22/2009	0.22	Yes	N	U			0.22	0.11	ug/l
PCM-DSRB-091210	K0911973-001	2,2-Dichloropropionic acid (Dalapon)	12/22/2009	0.44	Yes	N	U			0.44	0.11	ug/l
PCM-DSRB-091210	K0911973-001	Dinoseb	12/22/2009	0.22	Yes	N	U			0.22	0.054	ug/l
PCM-DSRB-091210	K0911973-001	Mecoprop (MCPP)	12/22/2009	110	Yes	N	U			110	34	ug/l

Analytical Method SW8151A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	2,4,5-TP (Silvex)	12/22/2009	0.22		Yes	N	U			0.22	0.059	ug/l
PCM-DSRB-091210	K0911973-001	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/22/2009	0.22		Yes	N	U			0.22	0.063	ug/l
PCM-DSRB-091210	K0911973-001	MCPA	12/22/2009	110		Yes	N	U	UJ	5	110	38	ug/l
PCM-DSRB-091210	K0911973-001	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/22/2009	0.44		Yes	N	U			0.44	0.059	ug/l
PCM-DSRB-091210	K0911973-001	Dichlorprop	12/22/2009	0.44		Yes	N	U			0.44	0.065	ug/l
PCM-FB-091210	K0911973-003	2,4-DB (2,4-D derivative)	12/22/2009	0.4		Yes	N	U			0.40	0.17	ug/l
PCM-FB-091210	K0911973-003	Dinoseb	12/22/2009	0.2		Yes	N	U			0.20	0.050	ug/l
PCM-FB-091210	K0911973-003	Dichlorprop	12/22/2009	0.4		Yes	N	U			0.40	0.060	ug/l
PCM-FB-091210	K0911973-003	2,2-Dichloropropionic acid (Dalapon)	12/22/2009	0.4		Yes	N	U			0.40	0.095	ug/l
PCM-FB-091210	K0911973-003	Mecoprop (MCPP)	12/22/2009	100		Yes	N	U			100	31	ug/l
PCM-FB-091210	K0911973-003	2,4,5-TP (Silvex)	12/22/2009	0.2		Yes	N	U			0.20	0.054	ug/l
PCM-FB-091210	K0911973-003	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)	12/22/2009	0.2		Yes	N	U			0.20	0.058	ug/l
PCM-FB-091210	K0911973-003	MCPA	12/22/2009	100		Yes	N	U	UJ	5	100	35	ug/l
PCM-FB-091210	K0911973-003	2,4-D (2,4-Dichlorophenoxyacetic acid)	12/22/2009	0.4		Yes	N	U			0.40	0.054	ug/l
PCM-FB-091210	K0911973-003	Dicamba	12/22/2009	0.2		Yes	N	U			0.20	0.10	ug/l

Analytical Method SW8151M

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	2,4,6-Trichlorophenol	12/22/2009	12		Yes	N	U			12	0.98	ug/kg
PCM-14-DS-091210	K0911973-005	2,3,5,6-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.76	ug/kg
PCM-14-DS-091210	K0911973-005	Pentachlorophenol	12/22/2009	12		Yes	N	U			12	1.6	ug/kg
PCM-14-DS-091210	K0911973-005	2,3,4,5-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.87	ug/kg
PCM-14-DS-091210	K0911973-005	2,4,5-Trichlorophenol	12/22/2009	6		Yes	Y	JP			12	0.78	ug/kg
PCM-15-DS-091210	K0911973-006	2,3,4,5-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.90	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,6-Trichlorophenol	12/22/2009	12		Yes	N	U			12	1.1	ug/kg

Analytical Method SW8151M

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	2,3,5,6-Tetrachlorophenol	12/22/2009	12		Yes	N	U			12	0.79	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,5-Trichlorophenol	12/22/2009	6.1		Yes	Y	JP			12	0.81	ug/kg
PCM-15-DS-091210	K0911973-006	Pentachlorophenol	12/22/2009	5.3		Yes	Y	JP			12	1.7	ug/kg
PCM-22-DS-091210	K0911973-007	2,3,4,5-Tetrachlorophenol	12/22/2009	13		Yes	N	U			13	0.97	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,5-Trichlorophenol	12/22/2009	5.7		Yes	Y	JP			13	0.88	ug/kg
PCM-22-DS-091210	K0911973-007	2,3,5,6-Tetrachlorophenol	12/22/2009	13		Yes	N	U			13	0.85	ug/kg
PCM-22-DS-091210	K0911973-007	Pentachlorophenol	12/22/2009	13		Yes	N	U			13	1.8	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,6-Trichlorophenol	12/22/2009	13		Yes	N	U			13	1.1	ug/kg
PCM-DSRB-091210	K0911973-001	2,4,6-Trichlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.098	ug/l
PCM-DSRB-091210	K0911973-001	2,3,4,5-Tetrachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.25	ug/l
PCM-DSRB-091210	K0911973-001	Pentachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-DSRB-091210	K0911973-001	2,4,5-Trichlorophenol	12/17/2009	1		Yes	N	U			1.0	0.47	ug/l
PCM-DSRB-091210	K0911973-001	2,3,5,6-Tetrachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.24	ug/l
PCM-FB-091210	K0911973-003	2,4,5-Trichlorophenol	12/17/2009	1		Yes	N	U			1.0	0.47	ug/l
PCM-FB-091210	K0911973-003	2,3,5,6-Tetrachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.24	ug/l
PCM-FB-091210	K0911973-003	2,4,6-Trichlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.098	ug/l
PCM-FB-091210	K0911973-003	Pentachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	2,3,4,5-Tetrachlorophenol	12/17/2009	0.5		Yes	N	U			0.50	0.25	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Ethylbenzene	12/18/2009	0.27		Yes	Y	J			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	Isopropylbenzene (Cumene)	12/18/2009	5.5		Yes	Y				1.2	0.15	ug/kg
PCM-14-DS-091210	K0911973-005	Toluene	12/18/2009	1.2		Yes	N	U			1.2	0.20	ug/kg
PCM-14-DS-091210	K0911973-005	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.3		Yes	N	U			2.3	0.83	ug/kg
PCM-14-DS-091210	K0911973-005	Vinyl acetate	12/18/2009	2.3		Yes	N	U	UJ	5	2.3	1.1	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Acrylonitrile	12/18/2009	2.3	Yes	N	U			2.3	1.4	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dichloroethane	12/18/2009	1.2	Yes	N	U			1.2	0.067	ug/kg
PCM-14-DS-091210	K0911973-005	Acrolein	12/18/2009	120	Yes	N	U	UJ	5	120	2.9	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	23	Yes	N	U			23	0.30	ug/kg
PCM-14-DS-091210	K0911973-005	1,4-Dichlorobenzene	12/18/2009	0.83	Yes	Y	J			1.2	0.28	ug/kg
PCM-14-DS-091210	K0911973-005	1,3-Dichloropropene, trans-	12/18/2009	1.2	Yes	N	U			1.2	0.38	ug/kg
PCM-14-DS-091210	K0911973-005	Chlorobenzene	12/18/2009	0.78	Yes	Y	J			1.2	0.28	ug/kg
PCM-14-DS-091210	K0911973-005	Styrene	12/18/2009	1.2	Yes	N	U			1.2	0.15	ug/kg
PCM-14-DS-091210	K0911973-005	1,1,2,2-Tetrachloroethane	12/18/2009	1.2	Yes	N	U			1.2	0.40	ug/kg
PCM-14-DS-091210	K0911973-005	1,2,3-Trichloropropane	12/18/2009	2.3	Yes	N	U			2.3	0.43	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dichlorobenzene	12/18/2009	0.52	Yes	Y	J			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	o-Xylene	12/18/2009	2.2	Yes	Y				1.2	0.15	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorobutadiene	12/18/2009	2.3	Yes	N	U			2.3	0.24	ug/kg
PCM-14-DS-091210	K0911973-005	Dibromochloromethane	12/18/2009	1.2	Yes	N	U			1.2	0.22	ug/kg
PCM-14-DS-091210	K0911973-005	Dichlorodifluoromethane	12/18/2009	1.2	Yes	N	U			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dichloropropane	12/18/2009	1.2	Yes	N	U			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	2-Butanone (MEK)	12/18/2009	4.5	Yes	N	U			4.5	1.1	ug/kg
PCM-14-DS-091210	K0911973-005	1,1,2-Trichloroethane	12/18/2009	1.2	Yes	N	U			1.2	0.26	ug/kg
PCM-14-DS-091210	K0911973-005	Trichloroethene (TCE)	12/18/2009	1.2	Yes	N	U			1.2	0.30	ug/kg
PCM-14-DS-091210	K0911973-005	1,3-Dichloropropene, cis-	12/18/2009	1.2	Yes	N	U			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	1,1-Dichloroethene	12/18/2009	1.2	Yes	N	U			1.2	0.26	ug/kg
PCM-14-DS-091210	K0911973-005	Iodomethane (Methyl iodide)	12/18/2009	12	Yes	N	U	UJ	5,10	12	0.64	ug/kg
PCM-14-DS-091210	K0911973-005	Dibromomethane	12/18/2009	1.2	Yes	N	U			1.2	0.32	ug/kg
PCM-14-DS-091210	K0911973-005	Bromochloromethane	12/18/2009	1.2	Yes	N	U			1.2	0.16	ug/kg
PCM-14-DS-091210	K0911973-005	Chloroethane	12/18/2009	1.2	Yes	N	U			1.2	0.26	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Vinyl chloride	12/18/2009	1.2		Yes	N	U			1.2	0.16	ug/kg
PCM-14-DS-091210	K0911973-005	Dichloromethane (Methylene chloride)	12/18/2009	5.6		Yes	N	U			5.6	0.14	ug/kg
PCM-14-DS-091210	K0911973-005	Carbon disulfide	12/18/2009	1.2		Yes	N	U			1.2	0.29	ug/kg
PCM-14-DS-091210	K0911973-005	Bromoform	12/18/2009	1.2		Yes	N	U			1.2	0.34	ug/kg
PCM-14-DS-091210	K0911973-005	Bromodichloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.17	ug/kg
PCM-14-DS-091210	K0911973-005	Bromomethane	12/18/2009	1.2		Yes	N	U	UJ	5	1.2	0.69	ug/kg
PCM-14-DS-091210	K0911973-005	1,1,1-Trichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.39	ug/kg
PCM-14-DS-091210	K0911973-005	Benzene	12/18/2009	1.2		Yes	N	U			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	2-Chloroethylvinyl ether	12/18/2009	5.6		Yes	N	U			5.6	0.54	ug/kg
PCM-14-DS-091210	K0911973-005	1,1-Dichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.23	ug/kg
PCM-14-DS-091210	K0911973-005	Methyl tert-butyl ether (MTBE)	12/18/2009	0.31	2.3	Yes	N	J	U	7	2.3	0.20	ug/kg
PCM-14-DS-091210	K0911973-005	1,2,4-Trichlorobenzene	12/18/2009	23		Yes	N	U			23	0.26	ug/kg
PCM-14-DS-091210	K0911973-005	Chloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.42	ug/kg
PCM-14-DS-091210	K0911973-005	Tetrachloroethene (PCE)	12/18/2009	1.2		Yes	N	U			1.2	0.29	ug/kg
PCM-14-DS-091210	K0911973-005	m,p-Xylene	12/18/2009	2.3		Yes	N	U			2.3	0.42	ug/kg
PCM-14-DS-091210	K0911973-005	Chloroform	12/18/2009	1.2		Yes	N	U			1.2	0.25	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dichloroethene, trans-	12/18/2009	1.2		Yes	N	U			1.2	0.39	ug/kg
PCM-14-DS-091210	K0911973-005	trans-1,4-Dichloro-2-butene	12/18/2009	2.3		Yes	N	U			2.3	0.30	ug/kg
PCM-14-DS-091210	K0911973-005	1,3-Dichlorobenzene	12/18/2009	1.2		Yes	N	U			1.2	0.27	ug/kg
PCM-14-DS-091210	K0911973-005	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.2		Yes	N	U			1.2	0.40	ug/kg
PCM-14-DS-091210	K0911973-005	2-Hexanone (Methyl butyl ketone)	12/18/2009	5.6		Yes	N	U			5.6	1.1	ug/kg
PCM-14-DS-091210	K0911973-005	1,1,1,2-Tetrachloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.28	ug/kg
PCM-14-DS-091210	K0911973-005	Acetone	12/18/2009	12		Yes	N	U			12	1.9	ug/kg
PCM-14-DS-091210	K0911973-005	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.2		Yes	N	U			1.2	0.24	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	1,2-Dichloroethene, cis-	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	Ethylbenzene	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	Tetrachloroethene (PCE)	12/18/2009	1.2		Yes	N	U			1.2	0.30	ug/kg
PCM-15-DS-091210	K0911973-006	Acetone	12/18/2009	75		Yes	Y				12	2.0	ug/kg
PCM-15-DS-091210	K0911973-006	1,1,1,2-Tetrachloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.29	ug/kg
PCM-15-DS-091210	K0911973-006	2-Hexanone (Methyl butyl ketone)	12/18/2009	5.8		Yes	N	U			5.8	1.1	ug/kg
PCM-15-DS-091210	K0911973-006	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.2		Yes	N	U			1.2	0.42	ug/kg
PCM-15-DS-091210	K0911973-006	1,3-Dichlorobenzene	12/18/2009	1.2		Yes	N	U			1.2	0.28	ug/kg
PCM-15-DS-091210	K0911973-006	Methyl tert-butyl ether (MTBE)	12/18/2009	2.4		Yes	N	U			2.4	0.21	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichloroethene, trans-	12/18/2009	1.2		Yes	N	U			1.2	0.41	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichloroethene, cis-	12/18/2009	1.2		Yes	N	U			1.2	0.27	ug/kg
PCM-15-DS-091210	K0911973-006	Styrene	12/18/2009	1.2		Yes	N	U			1.2	0.15	ug/kg
PCM-15-DS-091210	K0911973-006	1,3-Dichloropropene, trans-	12/18/2009	1.2		Yes	N	U			1.2	0.40	ug/kg
PCM-15-DS-091210	K0911973-006	1,4-Dichlorobenzene	12/18/2009	1.2		Yes	N	U			1.2	0.29	ug/kg
PCM-15-DS-091210	K0911973-006	Chloroform	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	m,p-Xylene	12/18/2009	2.4		Yes	N	U			2.4	0.43	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	24		Yes	N	U			24	0.32	ug/kg
PCM-15-DS-091210	K0911973-006	Dibromochloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.22	ug/kg
PCM-15-DS-091210	K0911973-006	Acrylonitrile	12/18/2009	2.4		Yes	N	U			2.4	1.4	ug/kg
PCM-15-DS-091210	K0911973-006	Vinyl acetate	12/18/2009	2.4		Yes	N	U	UJ	5	2.4	1.1	ug/kg
PCM-15-DS-091210	K0911973-006	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.4		Yes	N	U			2.4	0.86	ug/kg
PCM-15-DS-091210	K0911973-006	Toluene	12/18/2009	0.31		Yes	Y	J			1.2	0.21	ug/kg
PCM-15-DS-091210	K0911973-006	1,2,4-Trichlorobenzene	12/18/2009	24		Yes	N	U			24	0.27	ug/kg
PCM-15-DS-091210	K0911973-006	2-Chloroethylvinyl ether	12/18/2009	5.8		Yes	N	U			5.8	0.56	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	trans-1,4-Dichloro-2-butene	12/18/2009	2.4		Yes	N	U			2.4	0.32	ug/kg
PCM-15-DS-091210	K0911973-006	Chlorobenzene	12/18/2009	1.2		Yes	N	U			1.2	0.29	ug/kg
PCM-15-DS-091210	K0911973-006	1,3-Dichloropropene, cis-	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	Isopropylbenzene (Cumene)	12/18/2009	1.2		Yes	N	U			1.2	0.15	ug/kg
PCM-15-DS-091210	K0911973-006	Acrolein	12/18/2009	120		Yes	N	U	UJ	5	120	3.0	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichloropropane	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	1,2,3-Trichloropropane	12/18/2009	2.4		Yes	N	U			2.4	0.44	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichlorobenzene	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.070	ug/kg
PCM-15-DS-091210	K0911973-006	Benzene	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorobutadiene	12/18/2009	2.4		Yes	N	U			2.4	0.25	ug/kg
PCM-15-DS-091210	K0911973-006	1,1,2,2-Tetrachloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.42	ug/kg
PCM-15-DS-091210	K0911973-006	Trichloroethene (TCE)	12/18/2009	0.36		Yes	Y	J			1.2	0.32	ug/kg
PCM-15-DS-091210	K0911973-006	2-Butanone (MEK)	12/18/2009	4.2		Yes	Y	J			4.7	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	o-Xylene	12/18/2009	1.2		Yes	N	U			1.2	0.15	ug/kg
PCM-15-DS-091210	K0911973-006	Dichlorodifluoromethane	12/18/2009	1.2		Yes	N	U			1.2	0.26	ug/kg
PCM-15-DS-091210	K0911973-006	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.2		Yes	N	U			1.2	0.25	ug/kg
PCM-15-DS-091210	K0911973-006	1,1-Dichloroethene	12/18/2009	1.2		Yes	N	U			1.2	0.27	ug/kg
PCM-15-DS-091210	K0911973-006	1,1-Dichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.24	ug/kg
PCM-15-DS-091210	K0911973-006	Iodomethane (Methyl iodide)	12/18/2009	12		Yes	N	U	UJ	5,10	12	0.66	ug/kg
PCM-15-DS-091210	K0911973-006	1,1,1-Trichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.41	ug/kg
PCM-15-DS-091210	K0911973-006	Bromomethane	12/18/2009	1.2		Yes	N	U	UJ	5	1.2	0.72	ug/kg
PCM-15-DS-091210	K0911973-006	1,1,2-Trichloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.27	ug/kg
PCM-15-DS-091210	K0911973-006	Chloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.43	ug/kg
PCM-15-DS-091210	K0911973-006	Dibromomethane	12/18/2009	1.2		Yes	N	U			1.2	0.33	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	Bromochloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.17	ug/kg
PCM-15-DS-091210	K0911973-006	Chloroethane	12/18/2009	1.2		Yes	N	U			1.2	0.27	ug/kg
PCM-15-DS-091210	K0911973-006	Bromodichloromethane	12/18/2009	1.2		Yes	N	U			1.2	0.18	ug/kg
PCM-15-DS-091210	K0911973-006	Vinyl chloride	12/18/2009	1.2		Yes	N	U			1.2	0.17	ug/kg
PCM-15-DS-091210	K0911973-006	Dichloromethane (Methylene chloride)	12/18/2009	0.5	5.8	Yes	N	J	U	7	5.8	0.14	ug/kg
PCM-15-DS-091210	K0911973-006	Carbon disulfide	12/18/2009	0.9		Yes	Y	J			1.2	0.30	ug/kg
PCM-15-DS-091210	K0911973-006	Bromoform	12/18/2009	1.2		Yes	N	U			1.2	0.35	ug/kg
PCM-22-DS-091210	K0911973-007	Methyl tert-butyl ether (MTBE)	12/18/2009	2.6		Yes	N	U			2.6	0.23	ug/kg
PCM-22-DS-091210	K0911973-007	1,2,4-Trichlorobenzene	12/18/2009	26		Yes	N	U			26	0.30	ug/kg
PCM-22-DS-091210	K0911973-007	Acetone	12/18/2009	120		Yes	Y				13	2.2	ug/kg
PCM-22-DS-091210	K0911973-007	Dibromochloromethane	12/18/2009	1.3		Yes	N	U			1.3	0.25	ug/kg
PCM-22-DS-091210	K0911973-007	Tetrachloroethene (PCE)	12/18/2009	1.3		Yes	N	U			1.3	0.33	ug/kg
PCM-22-DS-091210	K0911973-007	m,p-Xylene	12/18/2009	2.6		Yes	N	U			2.6	0.47	ug/kg
PCM-22-DS-091210	K0911973-007	Carbon tetrachloride (Tetrachloromethane)	12/18/2009	1.3		Yes	N	U	UJ	8	1.3	0.46	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichloroethene, trans-	12/18/2009	1.3		Yes	N	U			1.3	0.45	ug/kg
PCM-22-DS-091210	K0911973-007	2-Hexanone (Methyl butyl ketone)	12/18/2009	6.4		Yes	N	U	UJ	8	6.4	1.2	ug/kg
PCM-22-DS-091210	K0911973-007	1,3-Dichlorobenzene	12/18/2009	1.3		Yes	N	U			1.3	0.31	ug/kg
PCM-22-DS-091210	K0911973-007	1,1,1,2-Tetrachloroethane	12/18/2009	1.3		Yes	N	U			1.3	0.32	ug/kg
PCM-22-DS-091210	K0911973-007	2-Chloroethylvinyl ether	12/18/2009	6.4		Yes	N	U			6.4	0.61	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichloroethene, cis-	12/18/2009	1.3		Yes	N	U			1.3	0.30	ug/kg
PCM-22-DS-091210	K0911973-007	trans-1,4-Dichloro-2-butene	12/18/2009	2.6		Yes	N	U			2.6	0.35	ug/kg
PCM-22-DS-091210	K0911973-007	Toluene	12/18/2009	0.57		Yes	Y	J	J	8	1.3	0.23	ug/kg
PCM-22-DS-091210	K0911973-007	Vinyl acetate	12/18/2009	2.6		Yes	N	U	UJ	5	2.6	1.2	ug/kg
PCM-22-DS-091210	K0911973-007	Acrylonitrile	12/18/2009	2.6		Yes	N	U			2.6	1.6	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichloroethane	12/18/2009	1.3		Yes	N	U			1.3	0.076	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Acrolein	12/18/2009	130	Yes	N	U	UJ	5	130	3.3	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dibromoethane (Ethylene dibromide)	12/18/2009	26	Yes	N	U			26	0.35	ug/kg
PCM-22-DS-091210	K0911973-007	1,4-Dichlorobenzene	12/18/2009	1.3	Yes	N	U			1.3	0.32	ug/kg
PCM-22-DS-091210	K0911973-007	1,3-Dichloropropene, trans-	12/18/2009	1.3	Yes	N	U			1.3	0.43	ug/kg
PCM-22-DS-091210	K0911973-007	Styrene	12/18/2009	1.3	Yes	N	U			1.3	0.17	ug/kg
PCM-22-DS-091210	K0911973-007	Ethylbenzene	12/18/2009	0.39	Yes	Y	J	J	8	1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	Chloroform	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	Chlorobenzene	12/18/2009	1.3	Yes	N	U	UJ	8	1.3	0.32	ug/kg
PCM-22-DS-091210	K0911973-007	1,3-Dichloropropene, cis-	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	1,1-Dichloroethene	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg
PCM-22-DS-091210	K0911973-007	Benzene	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	Isopropylbenzene (Cumene)	12/18/2009	1.3	Yes	N	U			1.3	0.17	ug/kg
PCM-22-DS-091210	K0911973-007	1,2,3-Trichloropropane	12/18/2009	2.6	Yes	N	U	UJ	8	2.6	0.49	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichlorobenzene	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	o-Xylene	12/18/2009	0.39	Yes	Y	J			1.3	0.17	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachlorobutadiene	12/18/2009	2.6	Yes	N	U			2.6	0.27	ug/kg
PCM-22-DS-091210	K0911973-007	1,1,2,2-Tetrachloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.46	ug/kg
PCM-22-DS-091210	K0911973-007	Trichloroethene (TCE)	12/18/2009	1.3	Yes	N	U			1.3	0.35	ug/kg
PCM-22-DS-091210	K0911973-007	1,1,2-Trichloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg
PCM-22-DS-091210	K0911973-007	2-Butanone (MEK)	12/18/2009	13	Yes	Y				5.1	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichloropropane	12/18/2009	1.3	Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/18/2009	2.6	Yes	N	U			2.6	0.94	ug/kg
PCM-22-DS-091210	K0911973-007	Trichlorofluoromethane (Fluorotrichloromethane)	12/18/2009	1.3	Yes	N	U			1.3	0.27	ug/kg
PCM-22-DS-091210	K0911973-007	Chloroethane	12/18/2009	1.3	Yes	N	U			1.3	0.30	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	1,1,1-Trichloroethane	12/18/2009	1.3		Yes	N	U			1.3	0.45	ug/kg
PCM-22-DS-091210	K0911973-007	Bromomethane	12/18/2009	1.3		Yes	N	U	UJ	5	1.3	0.79	ug/kg
PCM-22-DS-091210	K0911973-007	Chloromethane	12/18/2009	1.3		Yes	N	U			1.3	0.47	ug/kg
PCM-22-DS-091210	K0911973-007	Iodomethane (Methyl iodide)	12/18/2009	13		Yes	N	U	UJ	5,10	13	0.73	ug/kg
PCM-22-DS-091210	K0911973-007	Dichlorodifluoromethane	12/18/2009	1.3		Yes	N	U			1.3	0.28	ug/kg
PCM-22-DS-091210	K0911973-007	Bromochloromethane	12/18/2009	1.3		Yes	N	U			1.3	0.18	ug/kg
PCM-22-DS-091210	K0911973-007	Vinyl chloride	12/18/2009	1.3		Yes	N	U			1.3	0.18	ug/kg
PCM-22-DS-091210	K0911973-007	Dichloromethane (Methylene chloride)	12/18/2009	0.56	6.4	Yes	N	J	U	7	6.4	0.16	ug/kg
PCM-22-DS-091210	K0911973-007	Carbon disulfide	12/18/2009	1.4		Yes	Y				1.3	0.33	ug/kg
PCM-22-DS-091210	K0911973-007	Bromoform	12/18/2009	1.3		Yes	N	U			1.3	0.38	ug/kg
PCM-22-DS-091210	K0911973-007	Bromodichloromethane	12/18/2009	1.3		Yes	N	U			1.3	0.19	ug/kg
PCM-22-DS-091210	K0911973-007	1,1-Dichloroethane	12/18/2009	1.3		Yes	N	U			1.3	0.26	ug/kg
PCM-22-DS-091210	K0911973-007	Dibromomethane	12/18/2009	1.3		Yes	N	U			1.3	0.36	ug/kg
PCM-DRB-091210	K0911973-002	Toluene	12/21/2009	0.5		Yes	N	U			0.50	0.052	ug/l
PCM-DRB-091210	K0911973-002	o-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-DRB-091210	K0911973-002	Ethylbenzene	12/21/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-DRB-091210	K0911973-002	Benzene	12/21/2009	0.04	0.50	Yes	N	J	U	7	0.50	0.038	ug/l
PCM-DRB-091210	K0911973-002	m,p-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-DSRB-091210	K0911973-001	1,3-Dichloropropene, cis-	12/21/2009	0.5		Yes	N	U			0.50	0.18	ug/l
PCM-DSRB-091210	K0911973-001	Carbon tetrachloride (Tetrachloromethane)	12/21/2009	0.5		Yes	N	U			0.50	0.096	ug/l
PCM-DSRB-091210	K0911973-001	Methyl tert-butyl ether (MTBE)	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l
PCM-DSRB-091210	K0911973-001	1,2-Dichloroethene, trans-	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-DSRB-091210	K0911973-001	m,p-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-DSRB-091210	K0911973-001	Tetrachloroethene (PCE)	12/21/2009	0.5		Yes	N	U			0.50	0.066	ug/l
PCM-DSRB-091210	K0911973-001	Dibromochloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.14	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	1,2,3-Trichloropropane	12/21/2009	0.5		Yes	N	U			0.50	0.20	ug/l
PCM-DSRB-091210	K0911973-001	o-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-DSRB-091210	K0911973-001	1,1,2,2-Tetrachloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-DSRB-091210	K0911973-001	Trichloroethene (TCE)	12/21/2009	0.5		Yes	N	U			0.50	0.10	ug/l
PCM-DSRB-091210	K0911973-001	Styrene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-DSRB-091210	K0911973-001	1,3-Dichloropropene, trans-	12/21/2009	0.5		Yes	N	U			0.50	0.068	ug/l
PCM-DSRB-091210	K0911973-001	1,4-Dichlorobenzene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-DSRB-091210	K0911973-001	1,2-Dibromoethane (Ethylene dibromide)	12/21/2009	2		Yes	N	U			2.0	0.10	ug/l
PCM-DSRB-091210	K0911973-001	Acrolein	12/21/2009	20		Yes	N	U	UJ	5	20	0.96	ug/l
PCM-DSRB-091210	K0911973-001	1,2-Dichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.080	ug/l
PCM-DSRB-091210	K0911973-001	Acrylonitrile	12/21/2009	5		Yes	N	U			5.0	0.26	ug/l
PCM-DSRB-091210	K0911973-001	Vinyl acetate	12/21/2009	5		Yes	N	U	UJ	5	5.0	0.43	ug/l
PCM-DSRB-091210	K0911973-001	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/21/2009	20		Yes	N	U			20	2.6	ug/l
PCM-DSRB-091210	K0911973-001	Toluene	12/21/2009	1.9		Yes	Y				0.50	0.052	ug/l
PCM-DSRB-091210	K0911973-001	Chlorobenzene	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l
PCM-DSRB-091210	K0911973-001	trans-1,4-Dichloro-2-butene	12/21/2009	10		Yes	N	U			10	0.35	ug/l
PCM-DSRB-091210	K0911973-001	Vinyl chloride	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-DSRB-091210	K0911973-001	Ethylbenzene	12/21/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-DSRB-091210	K0911973-001	Dibromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.15	ug/l
PCM-DSRB-091210	K0911973-001	Dichlorodifluoromethane	12/21/2009	0.5		Yes	N	U			0.50	0.13	ug/l
PCM-DSRB-091210	K0911973-001	1,2-Dichloropropane	12/21/2009	0.5		Yes	N	U			0.50	0.095	ug/l
PCM-DSRB-091210	K0911973-001	1,1-Dichloroethene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-DSRB-091210	K0911973-001	1,1-Dichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.077	ug/l
PCM-DSRB-091210	K0911973-001	Bromodichloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-DSRB-091210	K0911973-001	Bromoform	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Trichlorofluoromethane (Fluorotrichloromethane)	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-DSRB-091210	K0911973-001	Carbon disulfide	12/21/2009	0.5		Yes	N	U			0.50	0.10	ug/l
PCM-DSRB-091210	K0911973-001	Dichloromethane (Methylene chloride)	12/21/2009	1.1		Yes	Y	J			2.0	0.17	ug/l
PCM-DSRB-091210	K0911973-001	Bromochloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-DSRB-091210	K0911973-001	2-Chloroethylvinyl ether	12/21/2009	5		Yes	N	U	UJ	5	5.0	0.16	ug/l
PCM-DSRB-091210	K0911973-001	2-Hexanone (Methyl butyl ketone)	12/21/2009	20		Yes	N	U			20	2.7	ug/l
PCM-DSRB-091210	K0911973-001	Iodomethane (Methyl iodide)	12/21/2009	5		Yes	N	U			5.0	0.11	ug/l
PCM-DSRB-091210	K0911973-001	Chloromethane	12/21/2009	0.06		Yes	Y	J			0.50	0.053	ug/l
PCM-DSRB-091210	K0911973-001	Bromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.090	ug/l
PCM-DSRB-091210	K0911973-001	1,1,1-Trichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-DSRB-091210	K0911973-001	Benzene	12/21/2009	0.04	0.50	Yes	N	J	U	7	0.50	0.038	ug/l
PCM-DSRB-091210	K0911973-001	Chloroform	12/21/2009	3.9		Yes	Y				0.50	0.064	ug/l
PCM-DSRB-091210	K0911973-001	Acetone	12/21/2009	20		Yes	N	U			20	3.3	ug/l
PCM-DSRB-091210	K0911973-001	2-Butanone (MEK)	12/21/2009	20		Yes	N	U			20	1.9	ug/l
PCM-DSRB-091210	K0911973-001	1,1,2-Trichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.14	ug/l
PCM-DSRB-091210	K0911973-001	1,1,1,2-Tetrachloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l
PCM-DSRB-091210	K0911973-001	Isopropylbenzene (Cumene)	12/21/2009	2		Yes	N	U			2.0	0.091	ug/l
PCM-DSRB-091210	K0911973-001	Chloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	Dichlorodifluoromethane	12/21/2009	0.5		Yes	N	U			0.50	0.13	ug/l
PCM-FB-091210	K0911973-003	Vinyl chloride	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-FB-091210	K0911973-003	Carbon tetrachloride (Tetrachloromethane)	12/21/2009	0.5		Yes	N	U			0.50	0.096	ug/l
PCM-FB-091210	K0911973-003	2-Hexanone (Methyl butyl ketone)	12/21/2009	20		Yes	N	U			20	2.7	ug/l
PCM-FB-091210	K0911973-003	1,1,1,2-Tetrachloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l
PCM-FB-091210	K0911973-003	Acetone	12/21/2009	20		Yes	N	U			20	3.3	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	Chloroform	12/21/2009	3.9		Yes	Y				0.50	0.064	ug/l
PCM-FB-091210	K0911973-003	Benzene	12/21/2009	0.05	0.50	Yes	N	J	U	7	0.50	0.038	ug/l
PCM-FB-091210	K0911973-003	1,1,1-Trichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-FB-091210	K0911973-003	Bromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.090	ug/l
PCM-FB-091210	K0911973-003	Chloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.053	ug/l
PCM-FB-091210	K0911973-003	Iodomethane (Methyl iodide)	12/21/2009	5		Yes	N	U			5.0	0.11	ug/l
PCM-FB-091210	K0911973-003	Dibromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.15	ug/l
PCM-FB-091210	K0911973-003	2-Butanone (MEK)	12/21/2009	20		Yes	N	U			20	1.9	ug/l
PCM-FB-091210	K0911973-003	Chloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	1,1-Dichloroethene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-FB-091210	K0911973-003	1,2,3-Trichloropropane	12/21/2009	0.5		Yes	N	U			0.50	0.20	ug/l
PCM-FB-091210	K0911973-003	o-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-FB-091210	K0911973-003	1,1,2,2-Tetrachloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	Trichloroethene (TCE)	12/21/2009	0.5		Yes	N	U			0.50	0.10	ug/l
PCM-FB-091210	K0911973-003	1,1,2-Trichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.14	ug/l
PCM-FB-091210	K0911973-003	Bromochloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	Trichlorofluoromethane (Fluorotrichloromethane)	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-FB-091210	K0911973-003	Isopropylbenzene (Cumene)	12/21/2009	2		Yes	N	U			2.0	0.091	ug/l
PCM-FB-091210	K0911973-003	1,1-Dichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.077	ug/l
PCM-FB-091210	K0911973-003	Bromodichloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-FB-091210	K0911973-003	Bromoform	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-FB-091210	K0911973-003	Carbon disulfide	12/21/2009	0.5		Yes	N	U			0.50	0.10	ug/l
PCM-FB-091210	K0911973-003	Dichloromethane (Methylene chloride)	12/21/2009	0.78		Yes	Y	J			2.0	0.17	ug/l
PCM-FB-091210	K0911973-003	1,2-Dichloropropane	12/21/2009	0.5		Yes	N	U			0.50	0.095	ug/l
PCM-FB-091210	K0911973-003	Methyl tert-butyl ether (MTBE)	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	1,2-Dichloroethene, trans-	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-FB-091210	K0911973-003	m,p-Xylene	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-FB-091210	K0911973-003	Tetrachloroethene (PCE)	12/21/2009	0.5		Yes	N	U			0.50	0.066	ug/l
PCM-FB-091210	K0911973-003	Acrylonitrile	12/21/2009	5		Yes	N	U			5.0	0.26	ug/l
PCM-FB-091210	K0911973-003	2-Chloroethylvinyl ether	12/21/2009	5		Yes	N	U	UJ	5	5.0	0.16	ug/l
PCM-FB-091210	K0911973-003	trans-1,4-Dichloro-2-butene	12/21/2009	10		Yes	N	U			10	0.35	ug/l
PCM-FB-091210	K0911973-003	Chlorobenzene	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l
PCM-FB-091210	K0911973-003	Toluene	12/21/2009	1.7		Yes	Y				0.50	0.052	ug/l
PCM-FB-091210	K0911973-003	1,3-Dichloropropene, trans-	12/21/2009	0.5		Yes	N	U			0.50	0.068	ug/l
PCM-FB-091210	K0911973-003	Dibromochloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.14	ug/l
PCM-FB-091210	K0911973-003	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/21/2009	20		Yes	N	U			20	2.6	ug/l
PCM-FB-091210	K0911973-003	Acrolein	12/21/2009	20		Yes	N	U	UJ	5	20	0.96	ug/l
PCM-FB-091210	K0911973-003	1,4-Dichlorobenzene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-FB-091210	K0911973-003	1,2-Dichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.080	ug/l
PCM-FB-091210	K0911973-003	1,3-Dichloropropene, cis-	12/21/2009	0.5		Yes	N	U			0.50	0.18	ug/l
PCM-FB-091210	K0911973-003	Styrene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-FB-091210	K0911973-003	Ethylbenzene	12/21/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-FB-091210	K0911973-003	Vinyl acetate	12/21/2009	5		Yes	N	U	UJ	5	5.0	0.43	ug/l
PCM-FB-091210	K0911973-003	1,2-Dibromoethane (Ethylene dibromide)	12/21/2009	2		Yes	N	U			2.0	0.10	ug/l
PCM-TB-091209	K0911973-004	1,2-Dichloropropane	12/21/2009	0.5		Yes	N	U			0.50	0.095	ug/l
PCM-TB-091209	K0911973-004	Tetrachloroethene (PCE)	12/21/2009	0.5		Yes	N	U			0.50	0.066	ug/l
PCM-TB-091209	K0911973-004	Benzene	12/21/2009	0.04	0.50	Yes	N	J	U	7	0.50	0.038	ug/l
PCM-TB-091209	K0911973-004	Chloroform	12/21/2009	0.5		Yes	N	U			0.50	0.064	ug/l
PCM-TB-091209	K0911973-004	Acetone	12/21/2009	20		Yes	N	U			20	3.3	ug/l
PCM-TB-091209	K0911973-004	1,1,1,2-Tetrachloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.11	ug/l

Analytical Method SW8260

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-TB-091209	K0911973-004	2-Hexanone (Methyl butyl ketone)	12/21/2009	20	Yes	N	U			20	2.7	ug/l
PCM-TB-091209	K0911973-004	Carbon tetrachloride (Tetrachloromethane)	12/21/2009	0.5	Yes	N	U			0.50	0.096	ug/l
PCM-TB-091209	K0911973-004	Methyl tert-butyl ether (MTBE)	12/21/2009	0.5	Yes	N	U			0.50	0.11	ug/l
PCM-TB-091209	K0911973-004	1,2-Dichloroethane	12/21/2009	0.5	Yes	N	U			0.50	0.080	ug/l
PCM-TB-091209	K0911973-004	m,p-Xylene	12/21/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-TB-091209	K0911973-004	Chloromethane	12/21/2009	0.06	Yes	Y	J			0.50	0.053	ug/l
PCM-TB-091209	K0911973-004	Dibromochloromethane	12/21/2009	0.5	Yes	N	U			0.50	0.14	ug/l
PCM-TB-091209	K0911973-004	2-Chloroethylvinyl ether	12/21/2009	5	Yes	N	U	UJ	5	5.0	0.16	ug/l
PCM-TB-091209	K0911973-004	trans-1,4-Dichloro-2-butene	12/21/2009	10	Yes	N	U			10	0.35	ug/l
PCM-TB-091209	K0911973-004	Chlorobenzene	12/21/2009	0.5	Yes	N	U			0.50	0.11	ug/l
PCM-TB-091209	K0911973-004	Toluene	12/21/2009	0.5	Yes	N	U			0.50	0.052	ug/l
PCM-TB-091209	K0911973-004	Methyl isobutyl ketone (4-Methyl-2-pentanone or (MIBK))	12/21/2009	20	Yes	N	U			20	2.6	ug/l
PCM-TB-091209	K0911973-004	Vinyl acetate	12/21/2009	5	Yes	N	U	UJ	5	5.0	0.43	ug/l
PCM-TB-091209	K0911973-004	Acrylonitrile	12/21/2009	5	Yes	N	U			5.0	0.26	ug/l
PCM-TB-091209	K0911973-004	1,2-Dichloroethene, trans-	12/21/2009	0.5	Yes	N	U			0.50	0.091	ug/l
PCM-TB-091209	K0911973-004	Bromoform	12/21/2009	0.5	Yes	N	U			0.50	0.16	ug/l
PCM-TB-091209	K0911973-004	Isopropylbenzene (Cumene)	12/21/2009	2	Yes	N	U			2.0	0.091	ug/l
PCM-TB-091209	K0911973-004	1,2,3-Trichloropropane	12/21/2009	0.5	Yes	N	U			0.50	0.20	ug/l
PCM-TB-091209	K0911973-004	o-Xylene	12/21/2009	0.5	Yes	N	U			0.50	0.074	ug/l
PCM-TB-091209	K0911973-004	1,1,2,2-Tetrachloroethane	12/21/2009	0.5	Yes	N	U			0.50	0.16	ug/l
PCM-TB-091209	K0911973-004	Trichloroethene (TCE)	12/21/2009	0.5	Yes	N	U			0.50	0.10	ug/l
PCM-TB-091209	K0911973-004	1,1,2-Trichloroethane	12/21/2009	0.5	Yes	N	U			0.50	0.14	ug/l
PCM-TB-091209	K0911973-004	Trichlorofluoromethane (Fluorotrichloromethane)	12/21/2009	0.5	Yes	N	U			0.50	0.12	ug/l
PCM-TB-091209	K0911973-004	Dichlorodifluoromethane	12/21/2009	0.5	Yes	N	U			0.50	0.13	ug/l

Analytical Method	SW8260												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-TB-091209	K0911973-004	1,1,1-Trichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-TB-091209	K0911973-004	Bromodichloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.091	ug/l
PCM-TB-091209	K0911973-004	Bromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.090	ug/l
PCM-TB-091209	K0911973-004	Carbon disulfide	12/21/2009	0.5		Yes	N	U			0.50	0.10	ug/l
PCM-TB-091209	K0911973-004	Dichloromethane (Methylene chloride)	12/21/2009	2		Yes	N	U			2.0	0.17	ug/l
PCM-TB-091209	K0911973-004	Vinyl chloride	12/21/2009	0.5		Yes	N	U			0.50	0.075	ug/l
PCM-TB-091209	K0911973-004	Chloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-TB-091209	K0911973-004	Bromochloromethane	12/21/2009	0.5		Yes	N	U			0.50	0.16	ug/l
PCM-TB-091209	K0911973-004	Dibromomethane	12/21/2009	0.5		Yes	N	U			0.50	0.15	ug/l
PCM-TB-091209	K0911973-004	Iodomethane (Methyl iodide)	12/21/2009	5		Yes	N	U			5.0	0.11	ug/l
PCM-TB-091209	K0911973-004	1,1-Dichloroethene	12/21/2009	0.5		Yes	N	U			0.50	0.074	ug/l
PCM-TB-091209	K0911973-004	1,1-Dichloroethane	12/21/2009	0.5		Yes	N	U			0.50	0.077	ug/l
PCM-TB-091209	K0911973-004	1,2-Dibromoethane (Ethylene dibromide)	12/21/2009	2		Yes	N	U			2.0	0.10	ug/l
PCM-TB-091209	K0911973-004	1,4-Dichlorobenzene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-TB-091209	K0911973-004	1,3-Dichloropropene, trans-	12/21/2009	0.5		Yes	N	U			0.50	0.068	ug/l
PCM-TB-091209	K0911973-004	1,3-Dichloropropene, cis-	12/21/2009	0.5		Yes	N	U			0.50	0.18	ug/l
PCM-TB-091209	K0911973-004	Styrene	12/21/2009	0.5		Yes	N	U			0.50	0.12	ug/l
PCM-TB-091209	K0911973-004	Ethylbenzene	12/21/2009	0.5		Yes	N	U			0.50	0.050	ug/l
PCM-TB-091209	K0911973-004	Acrolein	12/21/2009	20		Yes	N	U	UJ	5	20	0.96	ug/l
PCM-TB-091209	K0911973-004	2-Butanone (MEK)	12/21/2009	20		Yes	N	U			20	1.9	ug/l

Analytical Method	SW8270												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Aniline	1/4/2010	23		Yes	N	U			23	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	N-Nitrosodiphenylamine	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-14-DS-091210	K0911973-005	Butylbenzyl phthalate	1/4/2010	12		Yes	N	U			12	3.6	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Di-n-butyl phthalate	1/4/2010	23	Yes	N	U			23	8.9	ug/kg
PCM-14-DS-091210	K0911973-005	Diethyl phthalate	1/4/2010	12	Yes	N	U			12	1.5	ug/kg
PCM-14-DS-091210	K0911973-005	Isophorone	1/4/2010	12	Yes	N	U			12	1.2	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorocyclopentadiene	1/4/2010	56	Yes	N	U			56	33	ug/kg
PCM-14-DS-091210	K0911973-005	4-Chlorophenyl phenyl ether	1/4/2010	12	Yes	N	U			12	1.6	ug/kg
PCM-14-DS-091210	K0911973-005	Carbazole	1/4/2010	140	Yes	Y				12	1.5	ug/kg
PCM-14-DS-091210	K0911973-005	Benzoic acid	1/4/2010	240	Yes	Y		J	10	230	110	ug/kg
PCM-14-DS-091210	K0911973-005	3,3'-Dichlorobenzidine	1/4/2010	120	Yes	N	U			120	4.2	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachloroethane	1/4/2010	12	Yes	N	U			12	3.5	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorobutadiene	1/4/2010	12	Yes	N	U			12	2.8	ug/kg
PCM-14-DS-091210	K0911973-005	2,4,6-Trichlorophenol	1/4/2010	12	Yes	N	U			12	1.6	ug/kg
PCM-14-DS-091210	K0911973-005	N-Nitrosodi-N-propylamine	1/4/2010	12	Yes	N	U			12	2.7	ug/kg
PCM-14-DS-091210	K0911973-005	2-Chloronaphthalene	1/4/2010	12	Yes	N	U			12	1.8	ug/kg
PCM-14-DS-091210	K0911973-005	Pentachlorophenol	1/4/2010	120	Yes	N	U			120	23	ug/kg
PCM-14-DS-091210	K0911973-005	2-Methylphenol (o-Cresol)	1/4/2010	12	Yes	N	U	UJ	10	12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	1,2-Dichlorobenzene	1/4/2010	12	Yes	N	U			12	3.3	ug/kg
PCM-14-DS-091210	K0911973-005	2-Chlorophenol	1/4/2010	12	Yes	N	U			12	2.3	ug/kg
PCM-14-DS-091210	K0911973-005	2,4,5-Trichlorophenol	1/4/2010	12	Yes	N	U			12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	Nitrobenzene	1/4/2010	12	Yes	N	U			12	2.5	ug/kg
PCM-14-DS-091210	K0911973-005	3-Nitroaniline	1/4/2010	23	Yes	N	U			23	2.8	ug/kg
PCM-14-DS-091210	K0911973-005	2-Nitrophenol	1/4/2010	12	Yes	N	U			12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	4-Methylphenol (p-Cresol)	1/4/2010	12	Yes	N	U			12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	4-Nitrophenol	1/4/2010	120	Yes	N	U			120	21	ug/kg
PCM-14-DS-091210	K0911973-005	4-Nitroaniline	1/4/2010	23	Yes	N	U			23	2.1	ug/kg
PCM-14-DS-091210	K0911973-005	2-Nitroaniline	1/4/2010	23	Yes	N	U			23	3.6	ug/kg

Analytical Method SW8270

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	2,6-Dinitrotoluene	1/4/2010	12		Yes	N	U			12	2.3	ug/kg
PCM-14-DS-091210	K0911973-005	Benzyl alcohol	1/4/2010	23		Yes	N	U			23	2.4	ug/kg
PCM-14-DS-091210	K0911973-005	4-Bromophenyl-phenyl ether	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-Dimethylphenol	1/4/2010	56		Yes	N	U	UJ	10	56	6.2	ug/kg
PCM-14-DS-091210	K0911973-005	1,4-Dichlorobenzene	1/4/2010	12		Yes	N	U			12	3.3	ug/kg
PCM-14-DS-091210	K0911973-005	4-Chloroaniline	1/4/2010	12		Yes	N	U			12	2.2	ug/kg
PCM-14-DS-091210	K0911973-005	Phenol	1/4/2010	2.9		Yes	Y	J			34	2.3	ug/kg
PCM-14-DS-091210	K0911973-005	bis(2-Chloroethyl)ether	1/4/2010	12		Yes	N	U			12	2.2	ug/kg
PCM-14-DS-091210	K0911973-005	bis(2-Chloroethoxy)methane	1/4/2010	12		Yes	N	U			12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	Dimethyl phthalate	1/4/2010	12		Yes	N	U			12	1.2	ug/kg
PCM-14-DS-091210	K0911973-005	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	1/4/2010	120		Yes	N	U			120	1.6	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-Dinitrophenol	1/4/2010	230		Yes	N	U			230	19	ug/kg
PCM-14-DS-091210	K0911973-005	Azobenzene	1/4/2010	12		Yes	N	U			12	1.3	ug/kg
PCM-14-DS-091210	K0911973-005	1,3-Dichlorobenzene	1/4/2010	12		Yes	N	U			12	3.4	ug/kg
PCM-14-DS-091210	K0911973-005	4-Chloro-3-methylphenol	1/4/2010	12		Yes	N	U			12	1.6	ug/kg
PCM-14-DS-091210	K0911973-005	bis(2-Chloroisopropyl) ether	1/4/2010	12		Yes	N	U			12	3.0	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-Dinitrotoluene	1/4/2010	12		Yes	N	U			12	1.7	ug/kg
PCM-14-DS-091210	K0911973-005	2,4-Dichlorophenol	1/4/2010	12		Yes	N	U			12	1.2	ug/kg
PCM-14-DS-091210	K0911973-005	1,2,4-Trichlorobenzene	1/4/2010	12		Yes	N	U			12	3.0	ug/kg
PCM-14-DS-091210	K0911973-005	Hexachlorobenzene	1/4/2010	12		Yes	N	U			12	1.4	ug/kg
PCM-14-DS-091210	K0911973-005	Di-n-octyl phthalate	1/4/2010	12		Yes	N	U			12	1.9	ug/kg
PCM-14-DS-091210	K0911973-005	Bis(2-ethylhexyl) phthalate	1/4/2010	39		Yes	Y	J			120	7.9	ug/kg
PCM-15-DS-091210	K0911973-006	bis(2-Chloroisopropyl) ether	1/4/2010	12		Yes	N	U			12	3.1	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorocyclopentadiene	1/4/2010	59		Yes	N	U			59	35	ug/kg
PCM-15-DS-091210	K0911973-006	N-Nitrosodi-N-propylamine	1/4/2010	12		Yes	N	U			12	2.9	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	1,3-Dichlorobenzene	1/4/2010	12		Yes	N	U			12	3.6	ug/kg
PCM-15-DS-091210	K0911973-006	Dimethyl phthalate	1/4/2010	12		Yes	N	U			12	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	2,6-Dinitrotoluene	1/4/2010	12		Yes	N	U			12	2.4	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-Dinitrophenol	1/4/2010	240		Yes	N	U			240	21	ug/kg
PCM-15-DS-091210	K0911973-006	Aniline	1/4/2010	24		Yes	N	U			24	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	Benzoic acid	1/4/2010	270		Yes	Y		J	10	240	120	ug/kg
PCM-15-DS-091210	K0911973-006	4-Chlorophenyl phenyl ether	1/4/2010	12		Yes	N	U			12	1.7	ug/kg
PCM-15-DS-091210	K0911973-006	Di-n-butyl phthalate	1/4/2010	24		Yes	N	U			24	9.4	ug/kg
PCM-15-DS-091210	K0911973-006	Isophorone	1/4/2010	12		Yes	N	U			12	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-Dinitrotoluene	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	Azobenzene	1/4/2010	12		Yes	N	U			12	1.3	ug/kg
PCM-15-DS-091210	K0911973-006	Diethyl phthalate	1/4/2010	12		Yes	N	U			12	1.6	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachloroethane	1/4/2010	12		Yes	N	U			12	3.7	ug/kg
PCM-15-DS-091210	K0911973-006	4-Chloroaniline	1/4/2010	12		Yes	N	U			12	2.3	ug/kg
PCM-15-DS-091210	K0911973-006	4-Chloro-3-methylphenol	1/4/2010	12		Yes	N	U			12	1.7	ug/kg
PCM-15-DS-091210	K0911973-006	Butylbenzyl phthalate	1/4/2010	12		Yes	N	U			12	3.8	ug/kg
PCM-15-DS-091210	K0911973-006	4-Nitroaniline	1/4/2010	24		Yes	N	U			24	2.2	ug/kg
PCM-15-DS-091210	K0911973-006	4-Nitrophenol	1/4/2010	120		Yes	N	U			120	22	ug/kg
PCM-15-DS-091210	K0911973-006	Benzyl alcohol	1/4/2010	24		Yes	N	U			24	2.5	ug/kg
PCM-15-DS-091210	K0911973-006	4-Bromophenyl-phenyl ether	1/4/2010	12		Yes	N	U			12	1.9	ug/kg
PCM-15-DS-091210	K0911973-006	4-Methylphenol (p-Cresol)	1/4/2010	5.1		Yes	Y	J			12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	1,4-Dichlorobenzene	1/4/2010	12		Yes	N	U			12	3.5	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-Dichlorophenol	1/4/2010	12		Yes	N	U			12	1.2	ug/kg
PCM-15-DS-091210	K0911973-006	Phenol	1/4/2010	5		Yes	Y	J			36	2.4	ug/kg
PCM-15-DS-091210	K0911973-006	bis(2-Chloroethyl)ether	1/4/2010	12		Yes	N	U			12	2.3	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	bis(2-Chloroethoxy)methane	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	Bis(2-ethylhexyl) phthalate	1/4/2010	62		Yes	Y	J			120	8.3	ug/kg
PCM-15-DS-091210	K0911973-006	Di-n-octyl phthalate	1/4/2010	12		Yes	N	U			12	2.1	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorobenzene	1/4/2010	12		Yes	N	U			12	1.5	ug/kg
PCM-15-DS-091210	K0911973-006	1,2,4-Trichlorobenzene	1/4/2010	12		Yes	N	U			12	3.1	ug/kg
PCM-15-DS-091210	K0911973-006	2,4-Dimethylphenol	1/4/2010	59		Yes	N	U	UJ	10	59	6.5	ug/kg
PCM-15-DS-091210	K0911973-006	2-Chlorophenol	1/4/2010	12		Yes	N	U			12	2.4	ug/kg
PCM-15-DS-091210	K0911973-006	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	1/4/2010	120		Yes	N	U			120	1.7	ug/kg
PCM-15-DS-091210	K0911973-006	3-Nitroaniline	1/4/2010	24		Yes	N	U			24	3.0	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,5-Trichlorophenol	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	1,2-Dichlorobenzene	1/4/2010	12		Yes	N	U			12	3.5	ug/kg
PCM-15-DS-091210	K0911973-006	2-Methylphenol (o-Cresol)	1/4/2010	12		Yes	N	U	UJ	10	12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	3,3'-Dichlorobenzidine	1/4/2010	120		Yes	N	U			120	4.4	ug/kg
PCM-15-DS-091210	K0911973-006	2-Chloronaphthalene	1/4/2010	12		Yes	N	U			12	1.9	ug/kg
PCM-15-DS-091210	K0911973-006	2-Nitroaniline	1/4/2010	24		Yes	N	U			24	3.8	ug/kg
PCM-15-DS-091210	K0911973-006	2,4,6-Trichlorophenol	1/4/2010	12		Yes	N	U			12	1.7	ug/kg
PCM-15-DS-091210	K0911973-006	Pentachlorophenol	1/4/2010	120		Yes	N	U			120	24	ug/kg
PCM-15-DS-091210	K0911973-006	Hexachlorobutadiene	1/4/2010	12		Yes	N	U			12	3.0	ug/kg
PCM-15-DS-091210	K0911973-006	Carbazole	1/4/2010	45		Yes	Y				12	1.6	ug/kg
PCM-15-DS-091210	K0911973-006	2-Nitrophenol	1/4/2010	12		Yes	N	U			12	1.8	ug/kg
PCM-15-DS-091210	K0911973-006	N-Nitrosodiphenylamine	1/4/2010	12		Yes	N	U			12	1.9	ug/kg
PCM-15-DS-091210	K0911973-006	Nitrobenzene	1/4/2010	12		Yes	N	U			12	2.6	ug/kg
PCM-22-DS-091210	K0911973-007	4-Chloro-3-methylphenol	1/5/2010	13		Yes	N	U			13	1.8	ug/kg
PCM-22-DS-091210	K0911973-007	Diethyl phthalate	1/5/2010	13		Yes	N	U			13	1.7	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachlorocyclopentadiene	1/5/2010	64		Yes	N	U			64	37	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Hexachloroethane	1/5/2010	13	Yes	N	U			13	4.0	ug/kg
PCM-22-DS-091210	K0911973-007	Benzoic acid	1/5/2010	140	Yes	Y	J	J	10	260	130	ug/kg
PCM-22-DS-091210	K0911973-007	Aniline	1/5/2010	26	Yes	N	U			26	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	2,6-Dinitrotoluene	1/5/2010	13	Yes	N	U			13	2.6	ug/kg
PCM-22-DS-091210	K0911973-007	Di-n-butyl phthalate	1/5/2010	26	Yes	N	U			26	11	ug/kg
PCM-22-DS-091210	K0911973-007	2-Chloronaphthalene	1/5/2010	13	Yes	N	U			13	2.1	ug/kg
PCM-22-DS-091210	K0911973-007	N-Nitrosodi-N-propylamine	1/5/2010	13	Yes	N	U			13	3.1	ug/kg
PCM-22-DS-091210	K0911973-007	Butylbenzyl phthalate	1/5/2010	12	Yes	Y	J			13	4.1	ug/kg
PCM-22-DS-091210	K0911973-007	N-Nitrosodiphenylamine	1/5/2010	13	Yes	N	U			13	2.1	ug/kg
PCM-22-DS-091210	K0911973-007	Carbazole	1/5/2010	56	Yes	Y				13	1.7	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachlorobutadiene	1/5/2010	13	Yes	N	U			13	3.2	ug/kg
PCM-22-DS-091210	K0911973-007	Pentachlorophenol	1/5/2010	130	Yes	N	U			130	26	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,6-Trichlorophenol	1/5/2010	13	Yes	N	U			13	1.8	ug/kg
PCM-22-DS-091210	K0911973-007	1,3-Dichlorobenzene	1/5/2010	13	Yes	N	U			13	3.9	ug/kg
PCM-22-DS-091210	K0911973-007	2-Nitrophenol	1/5/2010	13	Yes	N	U			13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	Di-n-octyl phthalate	1/5/2010	13	Yes	N	U			13	2.2	ug/kg
PCM-22-DS-091210	K0911973-007	3,3'-Dichlorobenzidine	1/5/2010	130	Yes	N	U			130	4.8	ug/kg
PCM-22-DS-091210	K0911973-007	2-Nitroaniline	1/5/2010	26	Yes	N	U			26	4.1	ug/kg
PCM-22-DS-091210	K0911973-007	bis(2-Chloroethoxy)methane	1/5/2010	13	Yes	N	U			13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	4-Nitroaniline	1/5/2010	26	Yes	N	U			26	2.3	ug/kg
PCM-22-DS-091210	K0911973-007	4-Nitrophenol	1/5/2010	130	Yes	N	U			130	23	ug/kg
PCM-22-DS-091210	K0911973-007	Benzyl alcohol	1/5/2010	26	Yes	N	U			26	2.7	ug/kg
PCM-22-DS-091210	K0911973-007	4-Bromophenyl-phenyl ether	1/5/2010	13	Yes	N	U			13	2.1	ug/kg
PCM-22-DS-091210	K0911973-007	Azobenzene	1/5/2010	13	Yes	N	U			13	1.4	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-Dimethylphenol	1/5/2010	64	Yes	N	U	UJ	10	64	7.0	ug/kg

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	4-Methylphenol (p-Cresol)	1/5/2010	9.2		Yes	Y	J			13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	1,4-Dichlorobenzene	1/5/2010	5.6		Yes	Y	J			13	3.7	ug/kg
PCM-22-DS-091210	K0911973-007	4-Chloroaniline	1/5/2010	13		Yes	N	U			13	2.5	ug/kg
PCM-22-DS-091210	K0911973-007	1,2,4-Trichlorobenzene	1/5/2010	13		Yes	N	U			13	3.4	ug/kg
PCM-22-DS-091210	K0911973-007	bis(2-Chloroethyl)ether	1/5/2010	13		Yes	N	U			13	2.5	ug/kg
PCM-22-DS-091210	K0911973-007	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	1/5/2010	130		Yes	N	U			130	1.8	ug/kg
PCM-22-DS-091210	K0911973-007	Bis(2-ethylhexyl) phthalate	1/5/2010	110		Yes	Y	J			130	9.0	ug/kg
PCM-22-DS-091210	K0911973-007	Isophorone	1/5/2010	13		Yes	N	U			13	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	Hexachlorobenzene	1/5/2010	13		Yes	N	U			13	1.6	ug/kg
PCM-22-DS-091210	K0911973-007	2-Methylphenol (o-Cresol)	1/5/2010	13		Yes	N	U	UJ	10	13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-Dichlorophenol	1/5/2010	13		Yes	N	U			13	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-Dinitrotoluene	1/5/2010	13		Yes	N	U			13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	Dimethyl phthalate	1/5/2010	13		Yes	N	U			13	1.3	ug/kg
PCM-22-DS-091210	K0911973-007	bis(2-Chloroisopropyl) ether	1/5/2010	13		Yes	N	U			13	3.4	ug/kg
PCM-22-DS-091210	K0911973-007	2,4-Dinitrophenol	1/5/2010	260		Yes	N	U			260	22	ug/kg
PCM-22-DS-091210	K0911973-007	Phenol	1/5/2010	4.6		Yes	Y	J			39	2.6	ug/kg
PCM-22-DS-091210	K0911973-007	2-Chlorophenol	1/5/2010	13		Yes	N	U			13	2.6	ug/kg
PCM-22-DS-091210	K0911973-007	2,4,5-Trichlorophenol	1/5/2010	13		Yes	N	U			13	2.0	ug/kg
PCM-22-DS-091210	K0911973-007	Nitrobenzene	1/5/2010	13		Yes	N	U			13	2.8	ug/kg
PCM-22-DS-091210	K0911973-007	3-Nitroaniline	1/5/2010	26		Yes	N	U			26	3.2	ug/kg
PCM-22-DS-091210	K0911973-007	1,2-Dichlorobenzene	1/5/2010	13		Yes	N	U			13	3.7	ug/kg
PCM-22-DS-091210	K0911973-007	4-Chlorophenyl phenyl ether	1/5/2010	13		Yes	N	U			13	1.8	ug/kg
PCM-DSRB-091210	K0911973-001	2,4-Dinitrophenol	12/21/2009	4.2		Yes	N	U	UJ	10	4.2	0.18	ug/l
PCM-DSRB-091210	K0911973-001	Benzo(a)pyrene	12/21/2009	0.21		Yes	N	U			0.21	0.032	ug/l
PCM-DSRB-091210	K0911973-001	Anthracene	12/21/2009	0.21		Yes	N	U			0.21	0.025	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/21/2009	2.1	Yes	N	U			2.1	0.026	ug/l
PCM-DSRB-091210	K0911973-001	Dibenzo(a,h)anthracene	12/21/2009	0.21	Yes	N	U			0.21	0.018	ug/l
PCM-DSRB-091210	K0911973-001	1,3-Dichlorobenzene	12/21/2009	0.21	Yes	N	U	UJ	10	0.21	0.022	ug/l
PCM-DSRB-091210	K0911973-001	bis(2-Chloroisopropyl) ether	12/21/2009	0.21	Yes	N	U			0.21	0.027	ug/l
PCM-DSRB-091210	K0911973-001	4-Nitrophenol	12/21/2009	2.1	Yes	N	U			2.1	0.29	ug/l
PCM-DSRB-091210	K0911973-001	Benzo(b)fluoranthene	12/21/2009	0.21	Yes	N	U			0.21	0.018	ug/l
PCM-DSRB-091210	K0911973-001	4-Bromophenyl-phenyl ether	12/21/2009	0.21	Yes	N	U			0.21	0.027	ug/l
PCM-DSRB-091210	K0911973-001	Azobenzene	12/21/2009	0.21	Yes	N	U			0.21	0.022	ug/l
PCM-DSRB-091210	K0911973-001	2,4-Dimethylphenol	12/21/2009	4.2	Yes	N	U	UJ	10	4.2	2.3	ug/l
PCM-DSRB-091210	K0911973-001	2,6-Dinitrotoluene	12/21/2009	0.21	Yes	N	U			0.21	0.034	ug/l
PCM-DSRB-091210	K0911973-001	Chrysene	12/21/2009	0.21	Yes	N	U			0.21	0.029	ug/l
PCM-DSRB-091210	K0911973-001	Acenaphthylene	12/21/2009	0.21	Yes	N	U			0.21	0.016	ug/l
PCM-DSRB-091210	K0911973-001	4-Methylphenol (p-Cresol)	12/21/2009	0.52	Yes	N	U			0.52	0.13	ug/l
PCM-DSRB-091210	K0911973-001	Fluoranthene	12/21/2009	0.21	Yes	N	U			0.21	0.021	ug/l
PCM-DSRB-091210	K0911973-001	Benzyl alcohol	12/21/2009	0.52	Yes	N	U			0.52	0.075	ug/l
PCM-DSRB-091210	K0911973-001	Indeno(1,2,3-c,d)pyrene	12/21/2009	0.21	Yes	N	U			0.21	0.022	ug/l
PCM-DSRB-091210	K0911973-001	Benzo(g,h,i)perylene	12/21/2009	0.21	Yes	N	U			0.21	0.020	ug/l
PCM-DSRB-091210	K0911973-001	Dibenzofuran	12/21/2009	0.21	Yes	N	U			0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	Dimethyl phthalate	12/21/2009	0.21	Yes	N	U			0.21	0.022	ug/l
PCM-DSRB-091210	K0911973-001	Pyrene	12/21/2009	0.21	Yes	N	U			0.21	0.020	ug/l
PCM-DSRB-091210	K0911973-001	2,4-Dinitrotoluene	12/21/2009	0.21	Yes	N	U			0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	2,4-Dichlorophenol	12/21/2009	0.52	Yes	N	U			0.52	0.049	ug/l
PCM-DSRB-091210	K0911973-001	1,2,4-Trichlorobenzene	12/21/2009	0.21	Yes	N	U	UJ	10	0.21	0.017	ug/l
PCM-DSRB-091210	K0911973-001	Benzo(k)fluoranthene	12/21/2009	0.21	Yes	N	U			0.21	0.025	ug/l
PCM-DSRB-091210	K0911973-001	bis(2-Chloroethoxy)methane	12/21/2009	0.21	Yes	N	U			0.21	0.025	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Benzo(a)anthracene	12/21/2009	0.21		Yes	N	U			0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	4-Chloro-3-methylphenol	12/21/2009	0.52		Yes	N	U			0.52	0.038	ug/l
PCM-DSRB-091210	K0911973-001	4-Nitroaniline	12/21/2009	1.1		Yes	N	U			1.1	0.020	ug/l
PCM-DSRB-091210	K0911973-001	Bis(2-ethylhexyl) phthalate	12/21/2009	0.37	1.1	Yes	N	J	U	7	1.1	0.14	ug/l
PCM-DSRB-091210	K0911973-001	Di-n-octyl phthalate	12/21/2009	0.21		Yes	N	U			0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	Hexachlorobenzene	12/21/2009	0.21		Yes	N	U			0.21	0.023	ug/l
PCM-DSRB-091210	K0911973-001	Phenol	12/21/2009	0.52		Yes	N	U			0.52	0.065	ug/l
PCM-DSRB-091210	K0911973-001	4-Chloroaniline	12/21/2009	0.21		Yes	N	U	UJ	10	0.21	0.026	ug/l
PCM-DSRB-091210	K0911973-001	1,4-Dichlorobenzene	12/21/2009	0.21		Yes	N	U	UJ	10	0.21	0.030	ug/l
PCM-DSRB-091210	K0911973-001	bis(2-Chloroethyl)ether	12/21/2009	0.21		Yes	N	U			0.21	0.036	ug/l
PCM-DSRB-091210	K0911973-001	2-Nitroaniline	12/21/2009	0.21		Yes	N	U			0.21	0.025	ug/l
PCM-DSRB-091210	K0911973-001	2,4,6-Trichlorophenol	12/21/2009	0.52		Yes	N	U			0.52	0.060	ug/l
PCM-DSRB-091210	K0911973-001	3,3'-Dichlorobenzidine	12/21/2009	2.1		Yes	N	U	R	10	2.1	0.44	ug/l
PCM-DSRB-091210	K0911973-001	2-Nitrophenol	12/21/2009	0.52		Yes	N	U			0.52	0.065	ug/l
PCM-DSRB-091210	K0911973-001	Naphthalene	12/21/2009	0.21		Yes	N	U			0.21	0.023	ug/l
PCM-DSRB-091210	K0911973-001	2-Chloronaphthalene	12/21/2009	0.21		Yes	N	U			0.21	0.043	ug/l
PCM-DSRB-091210	K0911973-001	2-Methylphenol (o-Cresol)	12/21/2009	0.52		Yes	N	U			0.52	0.12	ug/l
PCM-DSRB-091210	K0911973-001	1,2-Dichlorobenzene	12/21/2009	0.21		Yes	N	U	UJ	10	0.21	0.023	ug/l
PCM-DSRB-091210	K0911973-001	2-Chlorophenol	12/21/2009	0.52		Yes	N	U			0.52	0.056	ug/l
PCM-DSRB-091210	K0911973-001	2,4,5-Trichlorophenol	12/21/2009	0.52		Yes	N	U			0.52	0.032	ug/l
PCM-DSRB-091210	K0911973-001	3-Nitroaniline	12/21/2009	1.1		Yes	N	U			1.1	0.030	ug/l
PCM-DSRB-091210	K0911973-001	Hexachlorobutadiene	12/21/2009	0.21		Yes	N	U	UJ	10	0.21	0.028	ug/l
PCM-DSRB-091210	K0911973-001	Diethyl phthalate	12/21/2009	0.14		Yes	Y	J			0.21	0.013	ug/l
PCM-DSRB-091210	K0911973-001	Nitrobenzene	12/21/2009	0.21		Yes	N	U			0.21	0.029	ug/l
PCM-DSRB-091210	K0911973-001	Hexachlorocyclopentadiene	12/21/2009	1.1		Yes	N	U	UJ	10	1.1	0.20	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-DSRB-091210	K0911973-001	Aniline	12/21/2009	1.1		Yes	N	U	UJ	10	1.1	0.045	ug/l
PCM-DSRB-091210	K0911973-001	Phenanthrene	12/21/2009	0.21		Yes	N	U			0.21	0.023	ug/l
PCM-DSRB-091210	K0911973-001	Carbazole	12/21/2009	0.21		Yes	N	U			0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	Benzoic acid	12/21/2009	5.2		Yes	N	U	UJ	10	5.2	1.2	ug/l
PCM-DSRB-091210	K0911973-001	4-Chlorophenyl phenyl ether	12/21/2009	0.21		Yes	N	U			0.21	0.028	ug/l
PCM-DSRB-091210	K0911973-001	N-Nitrosodi-N-propylamine	12/21/2009	0.21		Yes	N	U			0.21	0.038	ug/l
PCM-DSRB-091210	K0911973-001	Isophorone	12/21/2009	0.21		Yes	N	U			0.21	0.017	ug/l
PCM-DSRB-091210	K0911973-001	Acenaphthene	12/21/2009	0.21		Yes	N	U			0.21	0.027	ug/l
PCM-DSRB-091210	K0911973-001	Di-n-butyl phthalate	12/21/2009	0.071	0.21	Yes	N	J	U	7	0.21	0.024	ug/l
PCM-DSRB-091210	K0911973-001	Butylbenzyl phthalate	12/21/2009	0.044	0.21	Yes	N	J	U	7	0.21	0.019	ug/l
PCM-DSRB-091210	K0911973-001	N-Nitrosodiphenylamine	12/21/2009	0.21		Yes	N	U			0.21	0.050	ug/l
PCM-DSRB-091210	K0911973-001	Fluorene	12/21/2009	0.21		Yes	N	U			0.21	0.028	ug/l
PCM-DSRB-091210	K0911973-001	Hexachloroethane	12/21/2009	0.21		Yes	N	U	UJ	10	0.21	0.025	ug/l
PCM-FB-091210	K0911973-003	4-Nitrophenol	12/21/2009	2		Yes	N	U			2.0	0.28	ug/l
PCM-FB-091210	K0911973-003	Azobenzene	12/21/2009	0.2		Yes	N	U			0.20	0.021	ug/l
PCM-FB-091210	K0911973-003	1,4-Dichlorobenzene	12/21/2009	0.2		Yes	N	U	UJ	10	0.20	0.029	ug/l
PCM-FB-091210	K0911973-003	4-Methylphenol (p-Cresol)	12/21/2009	0.49		Yes	N	U			0.49	0.12	ug/l
PCM-FB-091210	K0911973-003	2,4-Dimethylphenol	12/21/2009	3.9		Yes	N	U	UJ	10	3.9	2.2	ug/l
PCM-FB-091210	K0911973-003	4-Bromophenyl-phenyl ether	12/21/2009	0.2		Yes	N	U			0.20	0.026	ug/l
PCM-FB-091210	K0911973-003	Benzyl alcohol	12/21/2009	0.49		Yes	N	U			0.49	0.073	ug/l
PCM-FB-091210	K0911973-003	4-Chloroaniline	12/21/2009	0.2		Yes	N	U	UJ	10	0.20	0.025	ug/l
PCM-FB-091210	K0911973-003	4-Nitroaniline	12/21/2009	0.97		Yes	N	U			0.97	0.019	ug/l
PCM-FB-091210	K0911973-003	Hexachlorobutadiene	12/21/2009	0.2		Yes	N	U	UJ	10	0.20	0.027	ug/l
PCM-FB-091210	K0911973-003	2-Chloronaphthalene	12/21/2009	0.2		Yes	N	U			0.20	0.041	ug/l
PCM-FB-091210	K0911973-003	Carbazole	12/21/2009	0.2		Yes	N	U			0.20	0.018	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	2,4,6-Trichlorophenol	12/21/2009	0.49	Yes	N	U			0.49	0.058	ug/l
PCM-FB-091210	K0911973-003	2-Nitroaniline	12/21/2009	0.2	Yes	N	U			0.20	0.024	ug/l
PCM-FB-091210	K0911973-003	2-Nitrophenol	12/21/2009	0.49	Yes	N	U			0.49	0.063	ug/l
PCM-FB-091210	K0911973-003	Naphthalene	12/21/2009	0.2	Yes	N	U			0.20	0.022	ug/l
PCM-FB-091210	K0911973-003	3,3'-Dichlorobenzidine	12/21/2009	2	Yes	N	U	R	10	2.0	0.43	ug/l
PCM-FB-091210	K0911973-003	2-Methylphenol (o-Cresol)	12/21/2009	0.49	Yes	N	U			0.49	0.11	ug/l
PCM-FB-091210	K0911973-003	1,2-Dichlorobenzene	12/21/2009	0.2	Yes	N	U	UJ	10	0.20	0.022	ug/l
PCM-FB-091210	K0911973-003	2-Chlorophenol	12/21/2009	0.49	Yes	N	U			0.49	0.054	ug/l
PCM-FB-091210	K0911973-003	Nitrobenzene	12/21/2009	0.2	Yes	N	U			0.20	0.028	ug/l
PCM-FB-091210	K0911973-003	4-Chloro-3-methylphenol	12/21/2009	0.49	Yes	N	U			0.49	0.037	ug/l
PCM-FB-091210	K0911973-003	Fluorene	12/21/2009	0.2	Yes	N	U			0.20	0.027	ug/l
PCM-FB-091210	K0911973-003	2,4,5-Trichlorophenol	12/21/2009	0.49	Yes	N	U			0.49	0.031	ug/l
PCM-FB-091210	K0911973-003	1,2,4-Trichlorobenzene	12/21/2009	0.2	Yes	N	U	UJ	10	0.20	0.016	ug/l
PCM-FB-091210	K0911973-003	N-Nitrosodi-N-propylamine	12/21/2009	0.2	Yes	N	U			0.20	0.037	ug/l
PCM-FB-091210	K0911973-003	Fluoranthene	12/21/2009	0.2	Yes	N	U			0.20	0.020	ug/l
PCM-FB-091210	K0911973-003	Benzo(b)fluoranthene	12/21/2009	0.2	Yes	N	U			0.20	0.017	ug/l
PCM-FB-091210	K0911973-003	Indeno(1,2,3-c,d)pyrene	12/21/2009	0.2	Yes	N	U			0.20	0.021	ug/l
PCM-FB-091210	K0911973-003	Benzo(g,h,i)perylene	12/21/2009	0.2	Yes	N	U			0.20	0.019	ug/l
PCM-FB-091210	K0911973-003	Dibenzofuran	12/21/2009	0.2	Yes	N	U			0.20	0.018	ug/l
PCM-FB-091210	K0911973-003	Dimethyl phthalate	12/21/2009	0.2	Yes	N	U			0.20	0.021	ug/l
PCM-FB-091210	K0911973-003	Pyrene	12/21/2009	0.2	Yes	N	U			0.20	0.019	ug/l
PCM-FB-091210	K0911973-003	Acenaphthylene	12/21/2009	0.2	Yes	N	U			0.20	0.015	ug/l
PCM-FB-091210	K0911973-003	2,4-Dichlorophenol	12/21/2009	0.49	Yes	N	U			0.49	0.047	ug/l
PCM-FB-091210	K0911973-003	Chrysene	12/21/2009	0.2	Yes	N	U			0.20	0.028	ug/l
PCM-FB-091210	K0911973-003	Anthracene	12/21/2009	0.2	Yes	N	U			0.20	0.024	ug/l

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Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Med Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	Hexachlorobenzene	12/21/2009	0.2		Yes	N	U			0.20	0.022	ug/l
PCM-FB-091210	K0911973-003	Di-n-octyl phthalate	12/21/2009	0.2		Yes	N	U			0.20	0.018	ug/l
PCM-FB-091210	K0911973-003	Bis(2-ethylhexyl) phthalate	12/21/2009	0.35	0.97	Yes	N	J	U	7	0.97	0.13	ug/l
PCM-FB-091210	K0911973-003	bis(2-Chloroethoxy)methane	12/21/2009	0.2		Yes	N	U			0.20	0.024	ug/l
PCM-FB-091210	K0911973-003	bis(2-Chloroethyl)ether	12/21/2009	0.2		Yes	N	U			0.20	0.035	ug/l
PCM-FB-091210	K0911973-003	Phenol	12/21/2009	0.49		Yes	N	U			0.49	0.063	ug/l
PCM-FB-091210	K0911973-003	3-Nitroaniline	12/21/2009	0.97		Yes	N	U			0.97	0.029	ug/l
PCM-FB-091210	K0911973-003	2,4-Dinitrotoluene	12/21/2009	0.2		Yes	N	U			0.20	0.018	ug/l
PCM-FB-091210	K0911973-003	Aniline	12/21/2009	0.97		Yes	N	U	UJ	10	0.97	0.043	ug/l
PCM-FB-091210	K0911973-003	Butylbenzyl phthalate	12/21/2009	0.078	0.20	Yes	N	J	U	7	0.20	0.018	ug/l
PCM-FB-091210	K0911973-003	Phenanthrene	12/21/2009	0.2		Yes	N	U			0.20	0.022	ug/l
PCM-FB-091210	K0911973-003	Di-n-butyl phthalate	12/21/2009	0.064	0.20	Yes	N	J	U	7	0.20	0.023	ug/l
PCM-FB-091210	K0911973-003	Diethyl phthalate	12/21/2009	0.056		Yes	Y	J			0.20	0.012	ug/l
PCM-FB-091210	K0911973-003	Acenaphthene	12/21/2009	0.2		Yes	N	U			0.20	0.026	ug/l
PCM-FB-091210	K0911973-003	Isophorone	12/21/2009	0.2		Yes	N	U			0.20	0.016	ug/l
PCM-FB-091210	K0911973-003	Hexachlorocyclopentadiene	12/21/2009	0.97		Yes	N	U	UJ	10	0.97	0.19	ug/l
PCM-FB-091210	K0911973-003	4-Chlorophenyl phenyl ether	12/21/2009	0.2		Yes	N	U			0.20	0.027	ug/l
PCM-FB-091210	K0911973-003	Benzo(k)fluoranthene	12/21/2009	0.2		Yes	N	U			0.20	0.024	ug/l
PCM-FB-091210	K0911973-003	Benzoic acid	12/21/2009	4.9		Yes	N	U	UJ	10	4.9	1.1	ug/l
PCM-FB-091210	K0911973-003	N-Nitrosodiphenylamine	12/21/2009	0.2		Yes	N	U			0.20	0.048	ug/l
PCM-FB-091210	K0911973-003	2,6-Dinitrotoluene	12/21/2009	0.2		Yes	N	U			0.20	0.033	ug/l
PCM-FB-091210	K0911973-003	Benzo(a)anthracene	12/21/2009	0.2		Yes	N	U			0.20	0.018	ug/l
PCM-FB-091210	K0911973-003	1,3-Dichlorobenzene	12/21/2009	0.2		Yes	N	U	UJ	10	0.20	0.021	ug/l
PCM-FB-091210	K0911973-003	Dibenzo(a,h)anthracene	12/21/2009	0.2		Yes	N	U			0.20	0.017	ug/l
PCM-FB-091210	K0911973-003	Dinitro-o-cresol (4,6-Dinitro-2-methylphenol)	12/21/2009	2		Yes	N	U			2.0	0.025	ug/l

Analytical Method	SW8270												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-FB-091210	K0911973-003	2,4-Dinitrophenol	12/21/2009	3.9		Yes	N	U	UJ	10	3.9	0.17	ug/l
PCM-FB-091210	K0911973-003	Benzo(a)pyrene	12/21/2009	0.2		Yes	N	U			0.20	0.031	ug/l
PCM-FB-091210	K0911973-003	bis(2-Chloroisopropyl) ether	12/21/2009	0.2		Yes	N	U			0.20	0.026	ug/l
PCM-FB-091210	K0911973-003	Hexachloroethane	12/21/2009	0.2		Yes	N	U	UJ	10	0.20	0.024	ug/l

Analytical Method	SW8270CSIM												
Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Benzo(a)anthracene	12/23/2009	300		Yes	Y				2.8	0.72	ug/kg
PCM-14-DS-091210	K0911973-005	Naphthalene	12/23/2009	120		Yes	Y				2.8	0.60	ug/kg
PCM-14-DS-091210	K0911973-005	Fluorene	12/23/2009	140		Yes	Y				2.8	0.61	ug/kg
PCM-14-DS-091210	K0911973-005	Phenanthrene	12/23/2009	410		Yes	Y				2.8	1.4	ug/kg
PCM-14-DS-091210	K0911973-005	Acenaphthene	12/23/2009	410		Yes	Y				2.8	0.50	ug/kg
PCM-14-DS-091210	K0911973-005	2-Methylnaphthalene	12/23/2009	35		Yes	Y				2.8	0.46	ug/kg
PCM-14-DS-091210	K0911973-005	Indeno(1,2,3-c,d)pyrene	12/23/2009	400		Yes	Y				2.8	0.87	ug/kg
PCM-14-DS-091210	K0911973-005	Anthracene	12/23/2009	110		Yes	Y				2.8	0.55	ug/kg
PCM-14-DS-091210	K0911973-005	Pyrene	12/23/2009	620		Yes	Y				2.8	0.76	ug/kg
PCM-14-DS-091210	K0911973-005	Chrysene	12/23/2009	380		Yes	Y				2.8	0.80	ug/kg
PCM-14-DS-091210	K0911973-005	Benzo(g,h,i)perylene	12/23/2009	510		Yes	Y				2.8	0.85	ug/kg
PCM-14-DS-091210	K0911973-005	Dibenzo(a,h)anthracene	12/23/2009	57		Yes	Y				2.8	0.80	ug/kg
PCM-14-DS-091210	K0911973-005	Benzo(b)fluoranthene	12/23/2009	460		Yes	Y				2.8	0.92	ug/kg
PCM-14-DS-091210	K0911973-005	Fluoranthene	12/23/2009	530		Yes	Y				2.8	0.98	ug/kg
PCM-14-DS-091210	K0911973-005	Benzo(k)fluoranthene	12/23/2009	170		Yes	Y				2.8	0.87	ug/kg
PCM-14-DS-091210	K0911973-005	Acenaphthylene	12/23/2009	40		Yes	Y				2.8	0.56	ug/kg
PCM-14-DS-091210	K0911973-005	Benzo(a)pyrene	12/23/2009	530		Yes	Y				2.8	0.76	ug/kg
PCM-15-DS-091210	K0911973-006	Benzo(k)fluoranthene	12/24/2009	550		Yes	Y				3.0	0.87	ug/kg
PCM-15-DS-091210	K0911973-006	Acenaphthylene	12/24/2009	180		Yes	Y				3.0	0.56	ug/kg

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res	Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-15-DS-091210	K0911973-006	Dibenzo(a,h)anthracene	12/24/2009	230		Yes	Y				3.0	0.80	ug/kg
PCM-15-DS-091210	K0911973-006	Acenaphthene	12/24/2009	80		Yes	Y				3.0	0.50	ug/kg
PCM-15-DS-091210	K0911973-006	2-Methylnaphthalene	12/24/2009	60		Yes	Y				3.0	0.46	ug/kg
PCM-15-DS-091210	K0911973-006	Naphthalene	12/24/2009	250		Yes	Y				3.0	0.60	ug/kg
PCM-15-DS-091210	K0911973-006	Fluorene	12/24/2009	76		Yes	Y				3.0	0.61	ug/kg
PCM-15-DS-091210	K0911973-006	Benzo(a)anthracene	12/24/2009	1600		Yes	Y	D			30	7.2	ug/kg
PCM-15-DS-091210	K0911973-006	Indeno(1,2,3-c,d)pyrene	12/24/2009	1800		Yes	Y	D			30	8.7	ug/kg
PCM-15-DS-091210	K0911973-006	Anthracene	12/24/2009	1100		Yes	Y	D			30	5.5	ug/kg
PCM-15-DS-091210	K0911973-006	Phenanthrene	12/24/2009	1500		Yes	Y	D			30	14	ug/kg
PCM-15-DS-091210	K0911973-006	Benzo(a)pyrene	12/24/2009	2400		Yes	Y	D			30	7.6	ug/kg
PCM-15-DS-091210	K0911973-006	Chrysene	12/24/2009	2600		Yes	Y	D			30	8.0	ug/kg
PCM-15-DS-091210	K0911973-006	Fluoranthene	12/24/2009	3800		Yes	Y	D			30	9.8	ug/kg
PCM-15-DS-091210	K0911973-006	Benzo(b)fluoranthene	12/24/2009	2000		Yes	Y	D			30	9.2	ug/kg
PCM-15-DS-091210	K0911973-006	Benzo(g,h,i)perylene	12/24/2009	2100		Yes	Y	D			30	8.5	ug/kg
PCM-15-DS-091210	K0911973-006	Pyrene	12/24/2009	5200		Yes	Y	D			30	7.6	ug/kg
PCM-22-DS-091210	K0911973-007	Anthracene	12/24/2009	520		Yes	Y				3.2	0.55	ug/kg
PCM-22-DS-091210	K0911973-007	2-Methylnaphthalene	12/24/2009	120		Yes	Y				3.2	0.46	ug/kg
PCM-22-DS-091210	K0911973-007	Acenaphthylene	12/24/2009	140		Yes	Y				3.2	0.56	ug/kg
PCM-22-DS-091210	K0911973-007	Dibenzo(a,h)anthracene	12/24/2009	250		Yes	Y				3.2	0.80	ug/kg
PCM-22-DS-091210	K0911973-007	Acenaphthene	12/24/2009	410		Yes	Y				3.2	0.50	ug/kg
PCM-22-DS-091210	K0911973-007	Fluorene	12/24/2009	250		Yes	Y				3.2	0.61	ug/kg
PCM-22-DS-091210	K0911973-007	Naphthalene	12/24/2009	280		Yes	Y				3.2	0.60	ug/kg
PCM-22-DS-091210	K0911973-007	Benzo(k)fluoranthene	12/24/2009	590		Yes	Y				3.2	0.87	ug/kg
PCM-22-DS-091210	K0911973-007	Chrysene	12/24/2009	1800		Yes	Y	D			32	8.0	ug/kg
PCM-22-DS-091210	K0911973-007	Pyrene	12/24/2009	4000		Yes	Y	D			32	7.6	ug/kg

Analytical Method SW8270CSIM

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-22-DS-091210	K0911973-007	Benzo(g,h,i)perylene	12/24/2009	2300	Yes	Y	D			32	8.5	ug/kg
PCM-22-DS-091210	K0911973-007	Indeno(1,2,3-c,d)pyrene	12/24/2009	2000	Yes	Y	D			32	8.7	ug/kg
PCM-22-DS-091210	K0911973-007	Fluoranthene	12/24/2009	3100	Yes	Y	D			32	9.8	ug/kg
PCM-22-DS-091210	K0911973-007	Benzo(a)pyrene	12/24/2009	2500	Yes	Y	D			32	7.6	ug/kg
PCM-22-DS-091210	K0911973-007	Benzo(a)anthracene	12/24/2009	1600	Yes	Y	D			32	7.2	ug/kg
PCM-22-DS-091210	K0911973-007	Phenanthrene	12/24/2009	2200	Yes	Y	D			32	14	ug/kg
PCM-22-DS-091210	K0911973-007	Benzo(b)fluoranthene	12/24/2009	2100	Yes	Y	D			32	9.2	ug/kg
PCM-DRB-091210	K0911973-002	Benzo(a)pyrene	12/21/2009	0.02	Yes	N	U			0.020	0.0043	ug/l
PCM-DRB-091210	K0911973-002	Acenaphthene	12/21/2009	0.02	Yes	N	U			0.020	0.0044	ug/l
PCM-DRB-091210	K0911973-002	2-Methylnaphthalene	12/21/2009	0.02	Yes	N	U			0.020	0.0023	ug/l
PCM-DRB-091210	K0911973-002	Naphthalene	12/21/2009	0.0042	Yes	Y	J			0.020	0.0030	ug/l
PCM-DRB-091210	K0911973-002	Acenaphthylene	12/21/2009	0.02	Yes	N	U			0.020	0.0034	ug/l
PCM-DRB-091210	K0911973-002	Phenanthrene	12/21/2009	0.005	Yes	Y	J			0.020	0.0050	ug/l
PCM-DRB-091210	K0911973-002	Anthracene	12/21/2009	0.02	Yes	N	U			0.020	0.0036	ug/l
PCM-DRB-091210	K0911973-002	Benzo(a)anthracene	12/21/2009	0.02	Yes	N	U			0.020	0.0026	ug/l
PCM-DRB-091210	K0911973-002	Dibenzo(a,h)anthracene	12/21/2009	0.02	Yes	N	U			0.020	0.0025	ug/l
PCM-DRB-091210	K0911973-002	Chrysene	12/21/2009	0.02	Yes	N	U			0.020	0.0034	ug/l
PCM-DRB-091210	K0911973-002	Benzo(k)fluoranthene	12/21/2009	0.02	Yes	N	U			0.020	0.0025	ug/l
PCM-DRB-091210	K0911973-002	Fluoranthene	12/21/2009	0.02	Yes	N	U			0.020	0.0044	ug/l
PCM-DRB-091210	K0911973-002	Benzo(b)fluoranthene	12/21/2009	0.02	Yes	N	U			0.020	0.0023	ug/l
PCM-DRB-091210	K0911973-002	Indeno(1,2,3-c,d)pyrene	12/21/2009	0.02	Yes	N	U			0.020	0.0026	ug/l
PCM-DRB-091210	K0911973-002	Benzo(g,h,i)perylene	12/21/2009	0.02	Yes	N	U			0.020	0.0029	ug/l
PCM-DRB-091210	K0911973-002	Pyrene	12/21/2009	0.02	Yes	N	U			0.020	0.0035	ug/l
PCM-DRB-091210	K0911973-002	Fluorene	12/21/2009	0.02	Yes	N	U			0.020	0.0038	ug/l

Analytical Method SW9012A

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Cyanide	12/16/2009	0.4	Yes	N	U			0.40	0.08	mg/kg
PCM-15-DS-091210	K0911973-006	Cyanide	12/16/2009	1.19	Yes	Y				0.55	0.11	mg/kg
PCM-22-DS-091210	K0911973-007	Cyanide	12/16/2009	0.57	Yes	N	U			0.57	0.12	mg/kg

Analytical Method SW9030

Sample ID	Lab Sample ID	Chemical Name	Anal Date	Result	Mod Res Report	Detect	Lab Qual	Val Qual	Reason	RL	MDL	Units
PCM-14-DS-091210	K0911973-005	Sulfide	12/16/2009	139	Yes	Y				12	4.5	mg/kg
PCM-15-DS-091210	K0911973-006	Sulfide	12/16/2009	102	Yes	Y				12	4.8	mg/kg
PCM-22-DS-091210	K0911973-007	Sulfide	12/16/2009	173	Yes	Y				13	5.2	mg/kg