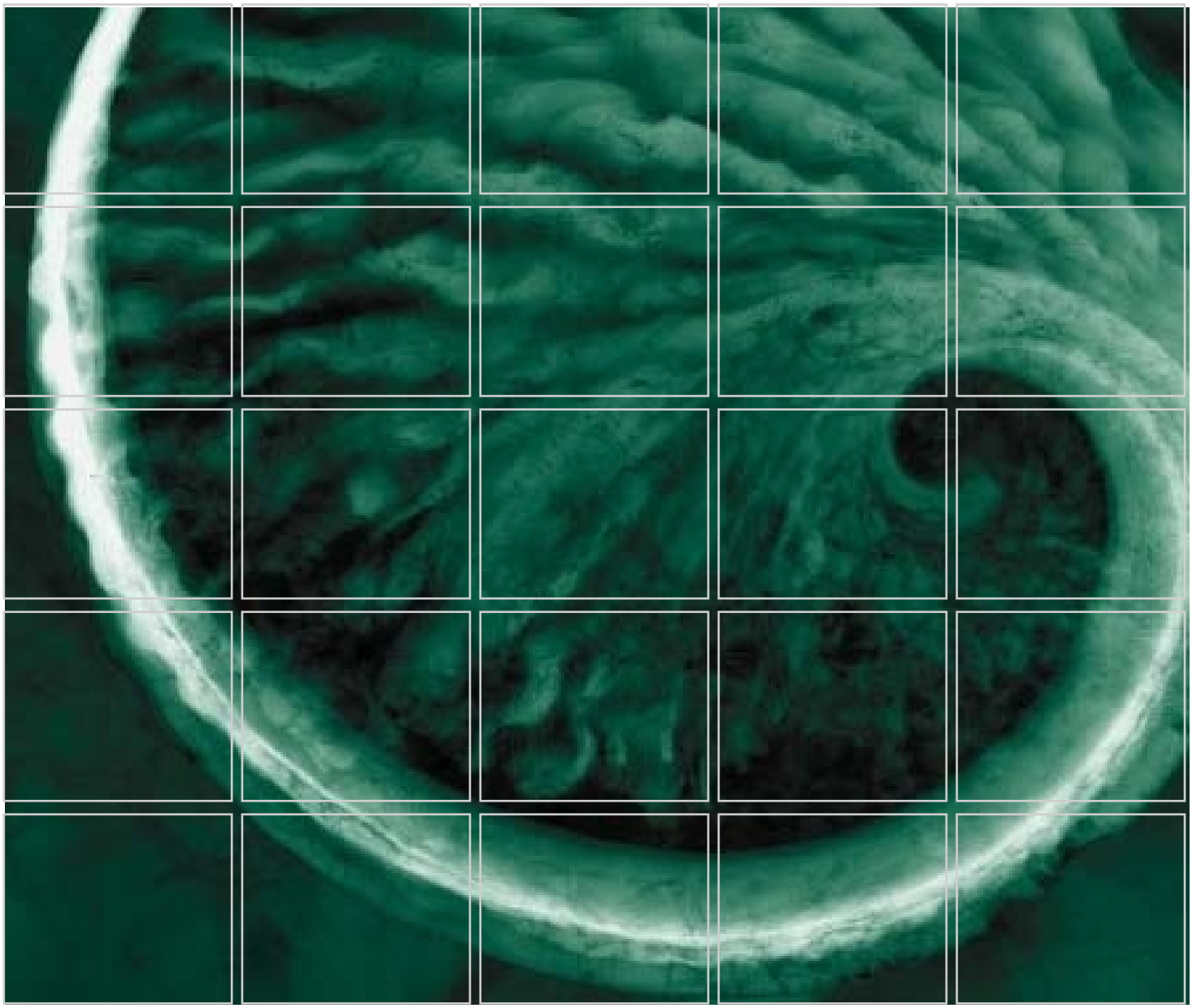

Supplemental Environmental Assessment Information for 4500 West Marginal Way SW Property – Seattle, WA

Prepared for:
CenterPoint Properties Trust

August 2014

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CenterPoint Properties Trust

Supplemental Environmental Assessment Information

4500 West Marginal Way Southwest Seattle, King County, Washington

August 2014

Project No. 0203067

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1.0 INTRODUCTION

The property at 4500 West Marginal Way SW, Seattle, Washington, (King County Parcel 7666703680; Washington State Department of Ecology [Ecology] Facility ID 83317575) is currently owned by CenterPoint Properties Trust (CenterPoint; Figure 1).[1] This property was a portion of the former Seaboard Lumber Company site (No. 88471591) that was cleaned up and granted an opinion of No Further Action (NFA) by Ecology under the Voluntary Cleanup Program (VCP; Appendix A). CenterPoint has entered Ecology's VCP with the goal of obtaining a property-specific NFA opinion from Ecology for the 4500 West Marginal Way SW parcel. This report supplements the VCP application by presenting environmental assessment information recently collected by ERM-West, Inc., (ERM) on behalf of CenterPoint.

[1] Ecology documents refer to the Evergreen Trails property. CenterPoint purchased the property from Evergreen Trails (via Seattle Property 2012 Inc.) in 2013.

2.0 BACKGROUND

The ownership, operational, regulatory, and cleanup history of the subject property is fully documented in a number of reports maintained in Ecology files and is not recounted here. Thorough summaries based on these reports and records are also contained in recently published Lower Duwamish Waterway (LDW) source control documents (Ecology 2012; Ecology 2013). The CenterPoint property has previously been referred to as Evergreen Trails (Ecology Site No. 83317575) and is a portion of what was historically referred to as the Seaboard Lumber Site No. 88471591.

The former Seaboard Lumber Site was granted an NFA determination in 2012 (Appendix A) under the authority of the Leaky Underground Storage Tank (LUST) program. The NFA letter was ambiguous in that the narrative discussed cleanup of contamination at the site in the broadest sense, not just contamination from the LUST release. An inquiry to Ecology on this ambiguity elicited the following regulatory interpretation (Personal communication with Sonia Fernandez; 15 January 2014) and is the basis for CenterPoint entering the VCP program:

> "[The subject property] is part of a large group of historical sites designated as Reportedly Cleaned Up (RCU) we evaluated in 2011….. Based on the information we reviewed in the Central Records files about your facility, we determined that the cleanup conducted for the Site was in compliance with the regulation….. Although the reviews were done through an EPA grant for LUST, we reviewed everything that was in the file at that point (2011). That is likely why the list of contaminants include all the [contaminants of concern] but the letter really is specifically designed for the LUSTs. The determination does not cover anything else that might have happened after August 2011. I understand that massive excavations and restoration [were] conducted in both the Paccar parcels, and from the notes I have, it seems that everything was cleaned up to the regulation so the NFA was granted. As it is right now, the site status is listed as an NFA …… Since your client would like a more standard letter and more certainty on the Site, I think that you may be able to enter the VCP….and get a more formal review…..."

3.0 RECENT ENVIRONMENTAL ASSESSMENT INFORMATION

ERM performed an environmental assessment of the subject property on behalf of CenterPoint in 2013. The work was undertaken in compliance with requirements of the Model Toxics Control Act (MTCA; Washington Administrative Code [WAC] 173-340). Objectives of the assessment were to assess:

- Soil quality in the vicinity of existing underground storage tanks (USTs);
- Soil quality in the vicinity of formerly remediated (excavated) areas; and
- Groundwater quality.

Appendix B contains the Sampling and Analysis Plan (SAP) that details the scope of work and procedures for field sampling, data gathering, and laboratory analysis. The fundamental scope of work elements were:

- Soil borings, sampling, and analysis;
- Monitoring well construction, development, and surveying; and
- Groundwater level gauging, sampling, and analysis

The field-sampling procedures and data gathering methods were selected to ensure the data collected over the course of the project are of known quality to meet their intended use, and that all components of data acquisition are documented, verifiable, and defensible. Details regarding the performance of these tasks are presented in the following subsections.

3.1 SOIL BORINGS AND SOIL SAMPLING

On 26 and 28 August 2013, Cascade Drilling, Inc. (CDI) advanced eight soil borings (SB–1 through SB-8A) using: (1) a combination of air knife and vacuum truck for the uppermost 8 feet of the borings to minimize the risk of penetrating unidentified subsurface utilities while advancing the borings through this critical zone, and (2) a truck-mounted direct-push drill rig from 8 feet below ground surface (bgs) to the specified total depth of each boring. Four soil borings were advanced to a depth of 18 feet bgs around the existing USTs, and four soil borings were advanced to a depth of 12 feet bgs within the former remedial excavations. The locations of the borings are shown on Figure 2. An ERM geologist logged the soil borings,

field screened the soil approximately every 2.5 feet for signs of contamination using a Mini Rae 10.6 eV photoionization detector (PID), and collected soil samples from each boring for laboratory analysis. The soil boring logs are presented in Appendix C.

One soil sample was collected from each boring for laboratory analysis. The soil samples were collected from the soil intervals exhibiting the highest degree of contaminant evidence based on the field screening data. The soil samples were collected, packaged, and transmitted to Test America Laboratories (TA), a Washington-certified laboratory located in Fife, Washington, for analysis as specified in the SAP (Appendix B).

3.2 MONITORING WELL CONSTRUCTION, SURVEYING AND DEVELOPMENT

On 27 August 2013, CDI advanced soil borings for construction of five monitoring wells using: (1) a combination of air knife and vacuum truck for the uppermost 8 feet of the borings to minimize the risk of penetrating unidentified subsurface utilities while advancing the borings through this critical zone, and (2) a truck-mounted direct-push drill rig from 8 feet bgs to the specified total depth of each boring. Permanent monitoring wells were constructed in each of the borings as specified in the SAP (Appendix B). Well construction logs for the five monitoring wells (MW-1 through MW-5) are included in Appendix B, and the well construction details are summarized on Table 1. The locations of the monitoring wells are shown on Figure 2. True North Land Surveying, Inc., a Washington-licensed land surveyor, surveyed the horizontal locations and top of casing elevations of the monitoring wells as specified in the SAP (Appendix B). Survey data are provided in Appendix D, and summarized for each monitoring well on Table 1.

On 28 September 2013, the monitoring wells were developed by surging and then purging groundwater from each well using a bailer and the peristaltic pump tubing as specified in the SAP (Appendix B). PCBs, dioxins, and furans have low solubility, are highly hydrophobic, and are consequently extremely sensitive to bias from very low levels of artificially-suspended solids in sample water. As a result, the goal of well development was a final turbidity reading of 5 Nephelometric Turbidity Units (NTUs) or less in each well. Well development logs are included as Appendix E.

3.3 STATIC WATER LEVEL AND FREE PRODUCT MEASUREMENT

On 29 August 2013, an ERM geologist collected a complete round of static water level and free product measurements from the monitoring wells and recorded the data in the field log book. The measurements were obtained using an electronic product level indicator that senses both the top of the free product and the interface between the free product and the groundwater. The product level indicator was decontaminated between each well using a scrub brush, an Alconox wash, and a de-ionized water rinse. Water level measurement data are provided in Table 2.

3.4 GROUNDWATER SAMPLING

Groundwater was sampled on 29 and 30 August 2013 using a peristaltic pump and a combination of no-purge and low-flow sampling techniques as specified in the SAP (Appendix B). As previously indicated, PCBs, dioxins, and furans are extremely sensitive to bias from very low levels of artificially-suspended solids in sample water. Therefore, PCB, dioxin, and furan samples were collected prior to purging the well in an attempt to minimize potential bias from sampling-induced turbidity.

At each monitoring well, a new piece of disposable polyethylene tubing was attached to the peristaltic pump and lowered slowly within the upper one foot of the water column to minimize re-suspension of any silt in the well casing. After the PCB, dioxin, and furan samples were collected, the tubing intake was lowered to the middle of the screened interval and the well was purged in accordance with low-flow sampling techniques. On average, the monitoring wells were purged at a rate of 95 milliliters per minute to minimize drawdown in the well.

During purging, water quality parameters (pH, temperature, electrical conductivity [EC], dissolved oxygen [DO], oxidation reduction potential [ORP], and turbidity) were monitored approximately every three to four minutes using a Horiba U-52 and a multi-parameter water quality meter equipped with an in-line flow cell. Turbidity measurements were obtained using a Hach 2100P. In general, purging stopped when the following parameters stabilized for three successive readings:

- Temperature: + 1 degree Celsius (˚C);
- pH: + 0.1 units; and
- EC: + 10 percent.

After the in-line flow cell was disconnected, groundwater samples were collected directly into laboratory-provided sample containers. Groundwater samples collected for dissolved metals analysis were field filtered using a 0.45 micron in-line filter. Purge logs are provided as Appendix F, and Water Quality Parameter Data are summarized on Table 3.

The groundwater samples were packaged and transmitted to TA for analysis as specified in the SAP (Appendix B).

4.0 ASSESSMENT FINDINGS

The field and laboratory data collected during the field investigation and an evaluation of the results are presented in the following subsections. Laboratory data reports for the soil and groundwater sample testing are presented in Appendix G.

4.1 SITE GEOLOGY AND HYDROGEOLOGY

The subsurface soils were generally consistent with descriptions presented in previous environmental investigation and remediation reports for the subject property. The ground surface is covered with approximately 4 inches of asphalt overlying approximately 3 feet of gravel subgrade. There are two layers of asphalt and subgrade across portions of the western side of the subject property. The underlying soils (approximately 3.3 to 7.5 feet) consist of variable fill composed of sand, gravel, cobbles with minor quantities of silt, clay, and organic matter. The variable fill is underlain (approximately 7.5 to 10 feet) by hydraulic fill (i.e., dredge spoils placed hydraulically), consisting of unbedded sand with some silt, gravel, clay, and organic matter (peat and woody debris). The hydraulic fill is underlain by alluvium (10 to 18 feet), which is bedded, but otherwise has a similar composition as the overlying hydraulic fill.

Groundwater was encountered between 2.3 and 7.8 feet bgs and is unconfined (Table 2). A groundwater table map constructed from these data (Figure 3) shows groundwater flowing toward the east/southeast, where it likely discharges to the LDW or the intertidal basin at Herring's House Park, which discharges to the LDW. The average horizontal hydraulic gradient of the shallow groundwater was estimated at approximately 0.014 foot/foot. Based on the recharge rates observed during purging of the monitoring wells, the hydraulic conductivity of the shallow water-bearing zone is highly variable.

No free phase product was detected.

4.2 SOIL RESULTS

Table 4 contains soil analytical results for the subject property and compares contaminant concentrations to screening levels for protection of

the LDW. It is appropriate to evaluate the recently obtained soil data in the context of protecting the LDW for the following reasons.

- Although Ecology determined that the previous cleanup of the Former Seaboard Lumber Company site met the requirements for an NFA determination (Ecology, 2012), one of Ecology's Source Control Action Plans for the LDW (Ecology, 2013) identifies the 4500 Marginal Way property as a potential upland source of contamination to the LDW (Ecology 2013).
- The U.S. Environmental Protection Agency (USEPA) published the final list of chemicals of concern for the LDW in the proposed plan for the LDW site (EPA; 2013). The list contains specific metals and organic compounds present in LDW media at concentrations above protective levels.
- Ecology provided ERM with screening levels currently being used by Ecology for sites along the LDW. The screening levels are not site-specific and are draft, therefore they are subject to change (Personal correspondence with Ron Timm, Ecology Site Manager; 5 February 2014).

Lead was the only metal analyzed in soil because this specific metal was the driver for the earlier cleanup work done at the former Seaboard Lumber site. As shown in Table 4, lead concentrations were well below the screening level for protection of the LDW. Soil samples SB-4 and SB-7 contained detectable levels of polycyclic aromatic hydrocarbons. Benzo[a]pyrene and Indeno[1,2,3-cd]pyrene concentrations in sample SB-7 slightly exceeded the screening levels.

The soil samples were not analyzed for several LDW chemicals of concern because these metals and compounds were not of concern nor did they drive the earlier investigations and cleanup.

4.3 GROUNDWATER RESULTS

Water Quality Parameters

The results from the water quality (pH, temperature, EC, DO, ORP, and turbidity) measurements obtained during the groundwater sampling are summarized on Table 3. In general, the groundwater is slightly acidic, having pH values ranging from 6.25 to 6.58. The ORP values for the groundwater range from reducing (-78.2 millivolts) to oxidizing (154 millivolts) and averaged 25.2 millivolts. The DO levels range from

0.01 milligrams per liter (mg/L) to 2.71 mg/L and averaged 1.08 mg/L, within the typical range for shallow groundwater. EC values range from 0.136 microSiemens per centimeter (µS/cm) to 15.8 µS/cm and average 3.75 µS/cm. As indicated on Table 3, all of the groundwater samples showed turbidity levels greater less than 5 NTUs. The temperature of groundwater ranges from 21.78 ˚C to 26.05 ˚C and has an average of 23.51 ˚C, within the typical range for groundwater.

LDW COCs

The same rationale presented above for summarizing and screening soil concentration data applies to groundwater. Table 5 contains groundwater analytical results for the subject property and compares the results to screening levels Ecology considers protective of the LDW. An additional rationale in the case of groundwater is that hydrogeologic conditions at the property suggest that groundwater is not a suitable source of drinking water. The property is adjacent to a tidally-influenced section of the LDW that renders the shallow groundwater saline (Table 3) and is therefore non-potable. The maximum beneficial use of the groundwater is therefore protection of adjacent surface water resources in the LDW.

Bis(2-ethylhexyl)phthalate (BEHP) and butyl benzyl phthalate (BBP) are the only two chemicals detected at concentrations exceeding the screening levels. BEHP was detected at 5 and 4.2 µg/L in groundwater samples from MW-3 and MW-5, respectively. These concentrations are slightly higher than the BEHP screening level of 1.2 µg/L. BBP was detected at a concentration of 0.86 µg/L in MW-5, slightly higher than the BBP screening level of 0.41 µg/L.

The BEHP concentrations are attributed to lab contamination and not the site. BEHP is the most common class of phthalate plasticizers and is present in materials used to collect and analyze environmental samples. The National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2008) allows the data reviewer to use professional judgment to attribute concentrations up to 5x the analytical quantitation limit to lab contamination because the laboratory contaminant is of such common nature. The BEHP concentrations detected in the groundwater samples are less than 2x the analytical quantitation limit and less than 5x the screening level. Moreover, the spike results for the samples indicate that the BEHP data are biased high and outside the quality control limits.

BBP's presence in the groundwater is suspect and may not be attributed to site contamination. BBP is a plasticizer used for PVC and vinyl foams. The monitoring wells and other sampling equipment are constructed of PVC.

BBP was not detected in the laboratory method blank and the spike results are within control limits. However, potential contamination from field sampling equipment cannot be evaluated because a field blank (i.e., equipment rinsate blank) was not tested. BBP is not a known constituent from current or historical activities at the property and was not identified as a contaminant of concern during the cleanup. A weight of evidence evaluation of the data suggests that the low concentration of BBP detected in MW-5 is the result of lab or equipment contamination and not representative of the groundwater.

It is also noted that analytical reporting limits for some chemicals (i.e., cadmium, copper, mercury, several polycyclic aromatic hydrocarbons, BEHP, BBP, two chlorobenzenes, and the PCBs) exceed the screening levels.

5.0 STORM WATER OUTFALL IDENTIFICATION

A LDW source control plan document prepared by Ecology (Ecology 2013) identifies the need to "…verify which outfall (Outfall 2140, 2141, or other) the facility uses to discharge storm water to the intertidal bay at Herring's House Park." The facility referred to in this statement is the CenterPoint (formerly Evergreen Trails) property. Reported here are ERM findings on the precise location of the discharge pipe from which storm water runoff at the subject property is released to the LDW.

ERM field personnel visited the subject property before low tide on 19 April 2014. Rainfall and runoff were causing substantial and observable flow in the oil/water separator, the last downstream storm water device at the facility. Approximately 5 fluid ounces of fluorescent dye were added to the discharge side of the oil water separator. The dye was observed to emerge into the LDW at the location shown in Figure 4. ERM estimates that the top of the discharge pipe, visible below the water surface, is at an elevation of approximately -2 feet mean sea level based on the low tide mark for the day and the estimated depth of pipe below the surface.

It is not clear whether this pipe corresponds to Outfall 2140 or 2141 as identified in Ecology source control documentation. However, based on the field work reported here, the precise location of the discharge pipe is known.

6.0 SUMMARY

Ecology records show that the subject property has undergone multiple cleanups to remove contaminated soil, the primary drivers being lead and petroleum hydrocarbons. The property was formerly part of a larger site (Seaboard Lumber) for which an NFA determination was made based on the outcome of these cleanups. As discussed earlier, ambiguity in the NFA determination has lead CenterPoint to enter the VCP program to seek an unambiguous property-specific NFA determination for 4500 W. Marginal Way SW.

With respect to the supplemental environmental assessment sampling data, only one of the eight soil samples collected from soil borings advanced in the locations of former remedial excavations or around existing USTs contained contaminant concentrations exceeding screening levels. This sample contained concentrations of two PAHs slightly higher than their screening values; however, neither contaminant was detected in the groundwater samples. These results are consistent with data from the previous cleanup work showing contaminated soil exceeding MTCA Method A cleanup levels for these constituents was removed.

Groundwater samples collected from the monitoring wells situated along the downgradient property line contained detectable concentrations of some LDW COCs however, all detections were below the screening levels.

Based on the sampling data from historical remediation efforts as well as the supplemental soil and groundwater samples collected in 2013, the residual contaminant concentrations at the subject property has little or no potential to impact LDW surface water and/or re-contaminate LDW sediment.

7.0 REFERENCES

Ecology 2012; Lower Duwamish Waterway RM 0.0 to 1.0 West (Spokane Street to Kellogg Island), Summary of Existing Information and Identification of Data Gaps, Volume 1: Main Text, Figures, and Tables; prepared for the State of Washington Department of Ecology, Toxics Cleanup Program, prepared by SAIC; September 2012.

Ecology 2013; Lower Duwamish Waterway RM 0.0 to 1.0 West (Spokane Street to Kellogg Island), Source Control Action Plan, Publication No. 12-09-137; prepared by the State of Washington Department of Ecology; February 2013.

Figures

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Date: 08/15/14
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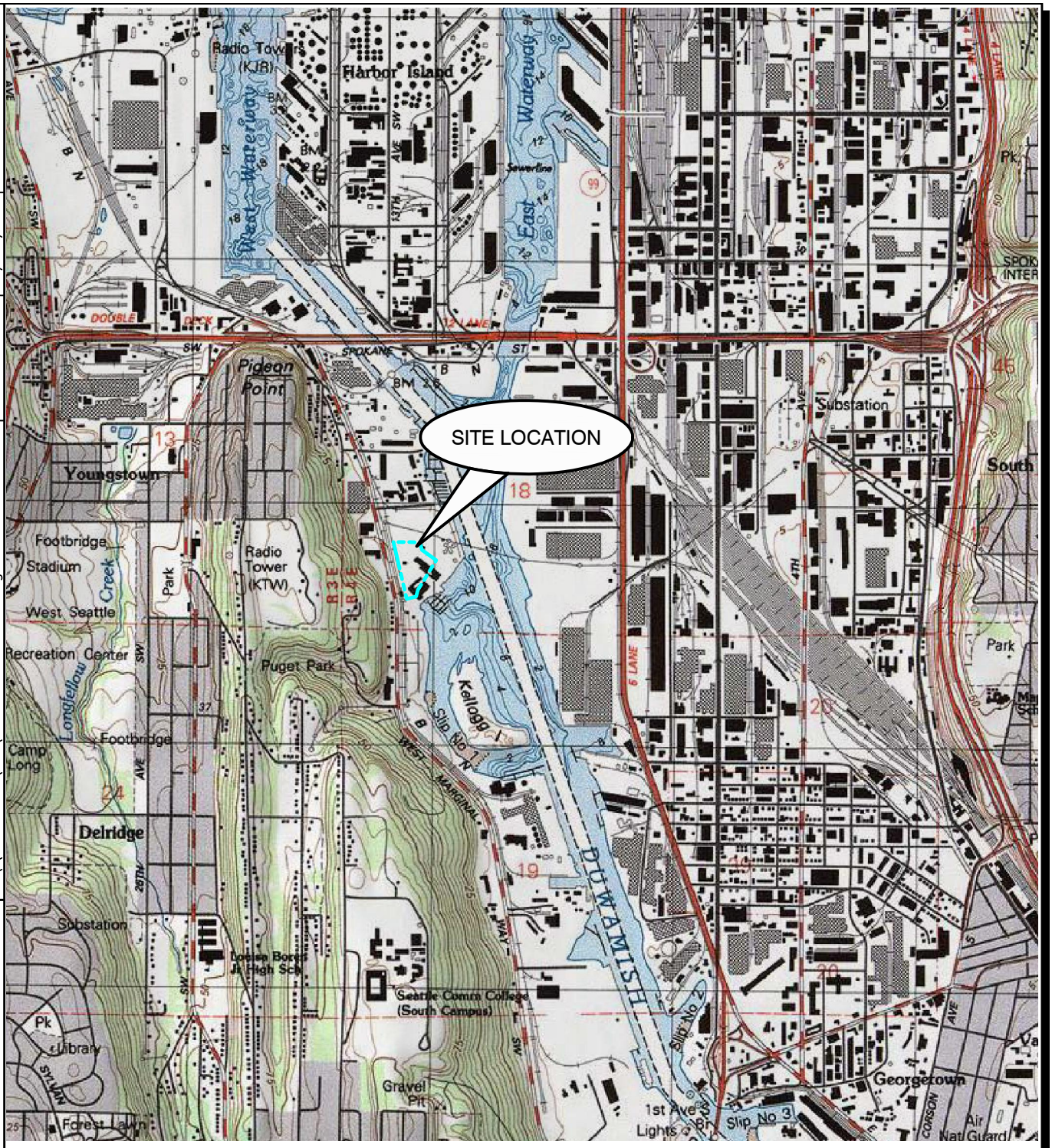

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1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

N

References:
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U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
Seattle South E, WA
Version: 1983; Current: 1978

Figure 1
Site Location Map
Parcel 7666703680
4500 Marginal Way SW
Seattle, Washington

ERM 08/14

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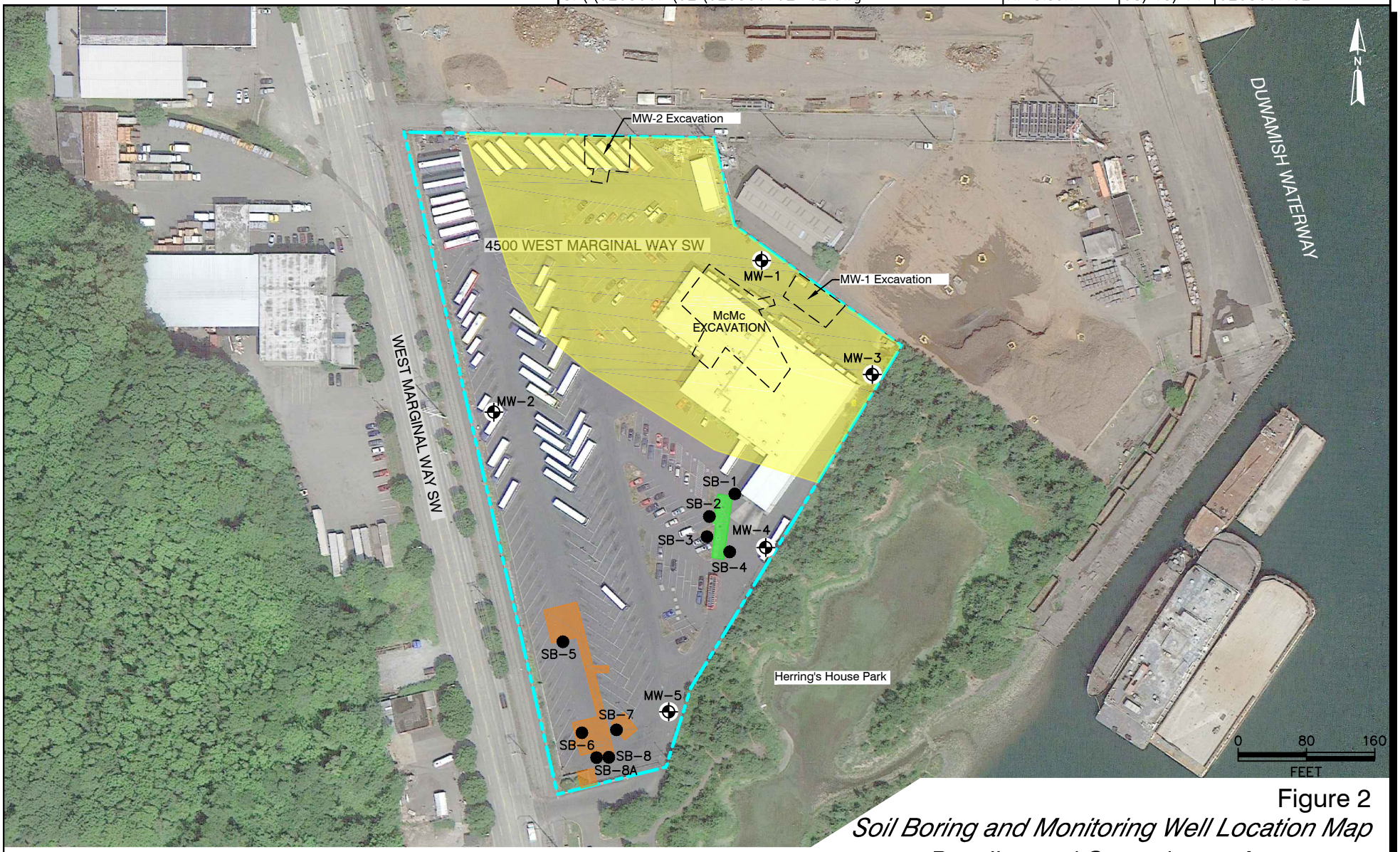

LEGEND

- Monitoring Well Location
- Soil Boring Location
- Parcel Boundary

Aerial Photo Source: © 2012 Google Earth Pro Ver 6.2.2.66.13

- Petroleum-Impacted Soil Excavation
- Location of Underground Storage Tanks
- Lead and Carcinogenic Polycyclic Aromatic Hydrocarbon-Impacted Soil Excavation

Figure 2

Soil Boring and Monitoring Well Location Map

Baseline and Groundwater Assessment

4500 West Marginal Way SW

Seattle, Washington

ERM 08/14

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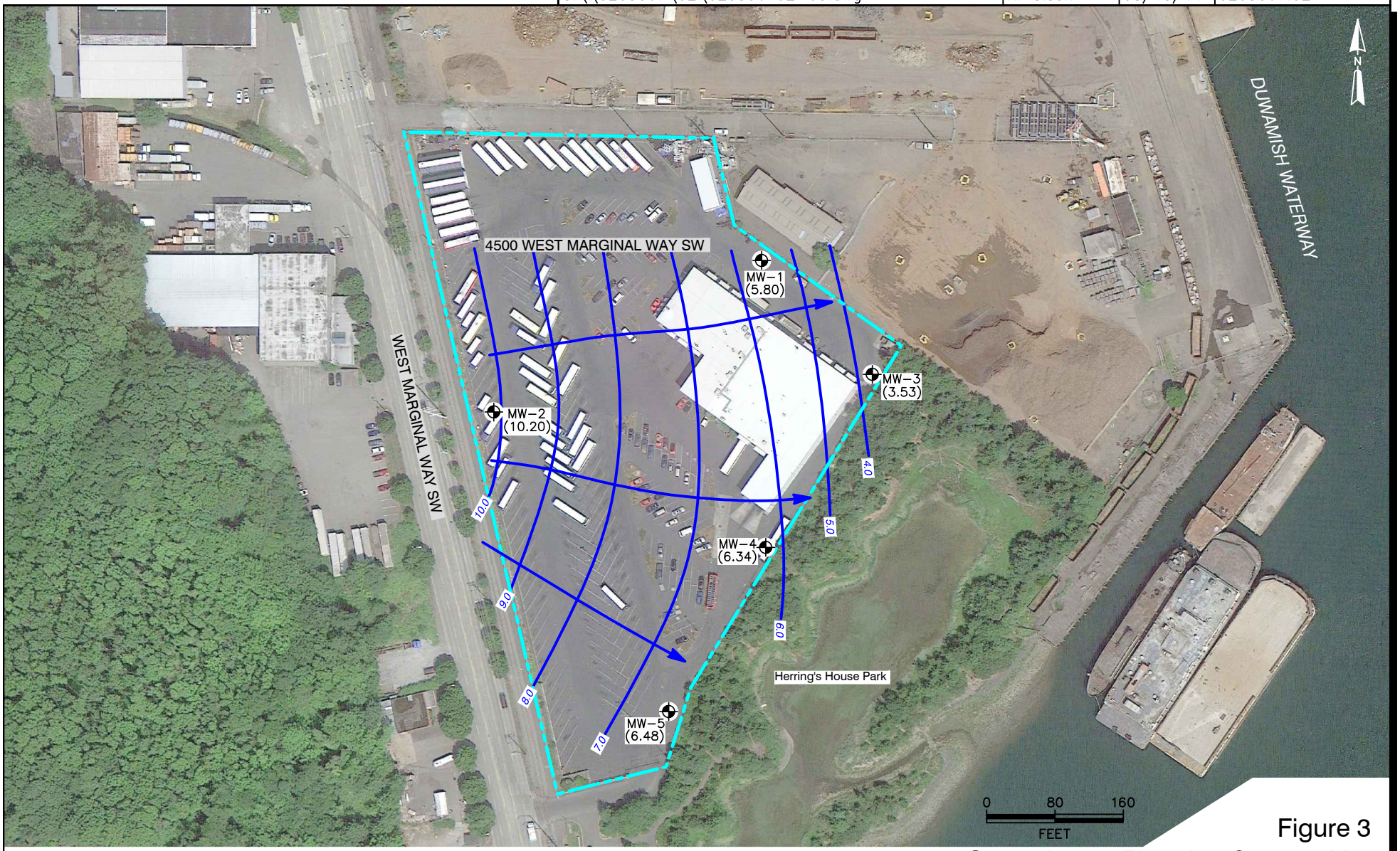


LEGEND

(6.48) Monitoring Well Location
Groundwater Elevation (ft amsl)

Parcel Boundary

6.0 Groundwater Elevation Contour Line

Approximate Direction Of Groundwater Flow

Aerial Photo Source: © 2012 Google Earth Pro Ver 6.2.2.66.13

Figure 3

Groundwater Elevation Contour Map
4500 West Marginal Way SW
Seattle, Washington

ERM 08/14

Created By: Alex Kirk Date: 4/30/2014 Project: 0203067.4

Private Rd

West Marginal Way SW

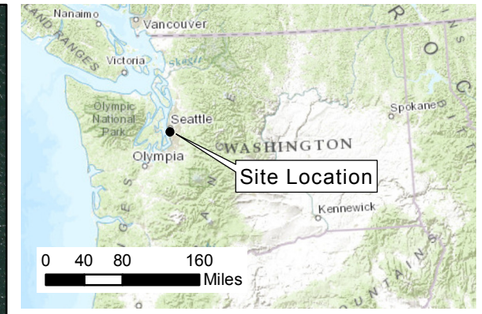
SW Alaska St

Location of oil water separator into which tracer was introduced. Note that the SPU stormwater system layer is slightly offset from the oil water separator (both features should be coincident) but is adequate for this illustration.

Tracer Discharge

0 60 120 240 Feet

F:\Projects\CenterPointe\GIS\maps\Fig 4 Tracer Test Results.mxd



Legend

- Catch Basin
- Outfall
- Drainage/Storm Water Sewer
- Site Boundary

Notes:

Outfall pipe diameter estimated to be 6 inches and top of pipe located at an elevation of approximately -2 ft MLLW. Pipe is not visible (i.e., submerged) in this image.

Stormwater Data Source: City of Seattle GIS
Aerial imagery Source - King County, flown March 23, 2012 at 0.25 ft per pixel.

Figure 4
Tracer Test Results
CenterPoint
4500 W Marginal Way SW
Seattle, Washington

Environmental Resources Management
1001 SW 5th St, Suite 1010
Portland, Oregon 97204

ERM

Tables

Table 1

Summary of Monitoring Well Construction Information

4500 West Marginal Way SW

Seattle, Washington

Monitoring Well ID	Completion Date	Total Well Depth (ft bgs)	Well Construction Material	Casing Diameter (in)	Screen Length (ft)	Screen Slot Size (in)	Screen Zone Interval (ft bgs)	Northing Washington State Plane NAD 83(91) ft	Easting Washington State Plane NAD 83(91) ft	Top of Casing Measuring Point Elevation (ft-amsl)
MW-1	8/27/2013	11.00	PVC	0.75	5	0.01	6-11	209287.36	1265818.37	12.23
MW-2	8/27/2013	7.50	PVC	0.75	5	0.01	2.5-7.5	209109.83	1265504.73	12.53
MW-3	8/27/2013	10.50	PVC	0.75	5	0.01	5.5-10.5	209153.92	1265947.93	11.28
MW-4	8/27/2013	10.50	PVC	0.75	5	0.01	5.5-10.5	208951.32	1265823.26	12.21
MW-5	8/27/2013	9.50	PVC	0.75	5	0.01	4.5-9.5	208759.11	1265709.53	11.51

Notes:

amsl = above mean sea level

PVC = Polyvinyl chloride

bgs = below ground surface

ft = feet

ID = Identification

in = inches

NAD = North American Vertical Datum

Table 2

Groundwater Level Measurements
4500 West Marginal Way SW
Seattle, Washington

Well ID	Measuring Point Elevation (ft-amsl)	Date	Time	Depth to Groundwater (ft-btoc)	Depth to Well Bottom (ft-btoc)	Groundwater Elevation (ft-amsl)
MW-1	12.23	8/29/2013	8:53	6.43	10.92	5.80
MW-2	12.53	8/29/2013	8:50	2.33	7.23	10.20
MW-3	11.28	8/29/2013	9:01	7.75	10.38	3.53
MW-4	12.21	8/29/2013	9:08	5.87	10.54	6.34
MW-5	11.51	8/29/2013	9:12	5.03	9.31	6.48

Notes:
amsl = above mean sea level
btoc = below top of casing
ft = feet
ID = Identification

Table 3

Summary of Groundwater Quality Parameters
4500 West Marginal Way SW
Seattle, Washington

Location	Sample Date	Sample Time*	Temperature (°C)	pH	EC (mS/cm)	DO (mg/L)	ORP (mV)	Turbity (ntu)	Visual Observations
MW-1	08/29/13	12:20, 14:23	26.05	6.25	0.447	2.03	22	0.96	Clear
MW-2	08/29/13	9:29, 11:13	22.77	6.51	0.136	0.23	154	0.96	Clear
MW-3	08/30/13	12:08, 13:34	23.80	6.40	1.881	0.40	-78.2	4.91	Clear
MW-4	08/29/13	16:15, 17:11	21.78	6.58	15.8	0.01	35	0.76	Clear
MW-5	08/30/13	8:04, 10:57	23.13	6.47	0.509	2.71	-3.7	1.18	Clear

Notes:
* = First entry indicates sample time for Dioxins, Furans, and Polychlorinated Biphenyls, second entry indicates sample time for the remainder of the analyses.
DO = Dissolved oxygen
EC = Electrical conductivity
mg/L = milligrams per liter
mS/cm = millisiemens per centimeter
mV = millivolt
ntu = Nephelometric turbidity units
ORP = Oxidation/reduction potential

Table 4

Summary of Soil Analytical Data and Screening Levels
4500 West Marginal Way SW
Seattle, Washington

Parameter[1]	ERM Soil Boring Samples								Screening Value[2]
Boring:	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8A	
Sample I.D.:	SB-1-6	SB-2-8	SB-3-8	SB-4-1.5	SB-5-11.5	SB-6-12	SB-7-12	SB-8A-12	
Depth (ft):	6	8	8	1.5	11.5	12	12	12	
Total Metals (mg/kg)									
Arsenic	--	--	--	--	--	--	--	--	--
Cadmium	--	--	--	--	--	--	--	--	--
Chromium (Total)	--	--	--	--	--	--	--	--	--
Copper	--	--	--	--	--	--	--	--	--
Lead	**1.2**	**6.8**	**4.4**	**5.7**	**1.0**	**1.1**	**5.7**	**1.4**	250
Mercury	--	--	--	--	--	--	--	--	--
Silver	--	--	--	--	--	--	--	--	--
Zinc	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
PAHs (mg/kg)									
2-Methylnaphthalene	--	--	--	--	--	--	--	--	--
Acenaphthylene	--	--	--	--	--	--	--	--	--
Anthracene	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	0.0064 U	0.0071 U	0.0074 U	**0.160**	0.0061 U	0.0058 U	**0.150**	0.0060 U	0.26
Benzo(a)pyrene	0.0064 U	0.0071 U	0.0074 U	**0.120**	0.0061 U	0.0058 U	**0.180**	0.0060 U	0.14
Benzo(g,h,i)perylene	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	0.0064 U	0.0071 U	0.0074 U	**0.190**	0.0061 U	0.0058 U	**0.150**	0.0060 U	0.26
Benzo(k)fluoranthene	0.0064 U	0.0071 U	0.0074 U	**0.061**	0.0061 U	0.0058 U	**0.057**	0.0060 U	0.26
Chrysene	0.0064 U	0.0071 U	0.0074 U	**0.330**	0.0061 U	0.0058 U	**0.150**	0.0060 U	140
Dibenz(a,h)anthracene	0.0064 U	0.0071 U	0.0074 U	**0.020**	0.0061 U	0.0058 U	**0.024**	0.0060 U	0.067
Dibenzofuran	--	--	--	--	--	--	--	--	--
Fluoranthene	--	--	--	--	--	--	--	--	--
Fluorene	--	--	--	--	--	--	--	--	--
Ideno(1,2,3-cd)pyrene	0.0064 U	0.0071 U	0.0074 U	**0.064**	0.0061 U	0.0058 U	**0.100**	0.0060 U	0.067
Naphthalene	0.0064 U	0.0071 U	0.0074 U	0.0062 U	0.0061 U	0.0058 U	**0.010**	0.0060 U	2.1
Phenanthrene	--	--	--	--	--	--	--	--	--
Pyrene	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Phthalates (mg/kg)									
Bis(2-ethylhexyl) phthalate	--	--	--	--	--	--	--	--	--
Butyl benzyl phthalate	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Chlorobenzenes (mg/kg)									
1,2,4-Trichlorobenzene	--	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	--	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Other SVOCs and COCs (mg/kg)									
2,4-Dimethylphenol	--	--	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	--	--	--	--
Benzoic acid	--	--	--	--	--	--	--	--	--
Benzyl alcohol	--	--	--	--	--	--	--	--	--
n-Nitrosodiphenylamine	--	--	--	--	--	--	--	--	--
Pentachlorophenol	--	--	--	--	--	--	--	--	--
Phenol	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
PCBs (mg/kg)									
PCB-1016	--	--	--	--	--	--	--	--	--
PCB-1221	--	--	--	--	--	--	--	--	--
PCB-1232	--	--	--	--	--	--	--	--	--
PCB-1242	--	--	--	--	--	--	--	--	--
PCB-1248	--	--	--	--	--	--	--	--	--
PCB-1254	--	--	--	--	--	--	--	--	--
PCB-1260	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Dioxins/Furans (ng TEQ/kg)									
Calculated TEQ (ND=0):	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**

[1] Constituents of Concern for cleanup of the Lower Duwamish Waterway. (EPA 2013. Proposed Plan Lower Duwamish Waterway Superfund Site)

[2] From Table 1. LDW Site Cleanup Levels - Final Draft

Notes:

All soil samples were collected from 08/27/2013 - 08/28/2013
mg/kg = milligrams per kilogram = parts per million (ppm)
pg/L = picograms per liter
U = Result is ≤ Reporting Limit (RL). Result reported as the RL and is qualified as non detected (ND).
B = Blank contamination.
Bold = Parameter detected above reporting limit
ft = feet
COCs = Consituents of Concern
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated Biphenyls
SVOCs = Semi Volatile Organic Compounds
"--" = Not analyzed for listed parameter

TEQ = Toxicity Equivalency Quotient to 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD). Only positively identified compounds are included in TEQ calculation. NDs are set to equal to zero for TEQ calculation.

Table 5

Summary of Groundwater Analytical Data and Screening Levels
4500 West Marginal Way SW
Seattle, Washington

Parameter[1] / Sample I.D.: / Well Screen Depth (ft):	ERM Monitoring Well Groundwater Samples										Screening Value[2]
	MW-1 6-11		MW-2 2.5-7.5		MW-3 5.5-10.5		MW-4 5.5-10.5		MW-5 4.5-9.5		
Total Metals (µg/L)											
Arsenic	5	U	5	U	5	U	5	U	5	U	5
Cadmium	2	U	2	U	2	U	2	U	2	U	0.25
Chromium (Total)	2	U	2	U	**4.90**		2	U	2	U	74
Copper	5	U	5	U	5	U	5	U	5	U	2.4
Lead	2	U	2	U	2	U	2	U	2	U	2.5
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.012
Silver	2	U	2	U	2	U	2	U	2	U	22
Zinc	**17**		7	U	**8.8**		**27**		0.7	U	56
PAHs (µg/L)											
2-Methylnaphthalene	0.21	U	0.21	U	0.21	U	0.21	U	0.20	U	64
Acenaphthylene	0.11	U	0.11	U	**0.16**		0.1	U	0.082	U	115
Anthracene	0.042	U	0.042	U	**0.13**		0.042	U	0.041	U	199
Benzo(a)anthracene	0.063	U	0.063	U	0.064	U	0.063	U	0.061	U	0.001
Benzo(a)pyrene	0.042	U	0.042	U	0.043	U	0.042	U	0.041	U	0.001
Benzo(g,h,i)perylene	0.063	U	0.063	U	0.064	U	0.063	U	0.061	U	0.0115
Benzo(b)fluoranthene	0.084	U	0.084	U	0.085	U	0.084	U	0.082	U	0.001
Benzo(k)fluoranthene	0.063	U	0.063	U	0.064	U	0.063	U	0.061	U	0.001
Chrysene	0.42	U	0.40	U	0.43	U	0.42	U	0.41	U	0.001
Dibenz(a,h)anthracene	0.063	U	0.063	U	0.064	U	0.063	U	0.061	U	0.001
Dibenzofuran	0.42	U	0.42	U	0.43	U	0.42	U	0.41	U	1.3
Fluoranthene	0.053	U	0.053	U	**0.22**		0.052	U	0.051	U	11
Fluorene	0.063	U	0.063	U	**0.17**		0.063	U	0.061	U	45.2
Ideno(1,2,3-cd)pyrene	0.063	U	0.063	U	0.064	U	0.063	U	0.061	U	0.001
Naphthalene	0.40	U	0.40	U	0.40	U	0.40	U	0.40	U	26
Phenanthrene	0.084	U	0.084	U	**0.78**		0.084	U	0.082	U	4.8
Pyrene	0.063	U	0.063	U	**0.21**		0.063	U	0.061	U	9.8
Phthalates (µg/L)											
Bis(2-ethylhexyl) phthalate	3.2	U	3.2	U	**5**	B	3.1	U	**4.2**	B	1.2
Butyl benzyl phthalate	0.63	U	0.63	U	0.64	U	0.63	U	**0.86**		0.41
Dimethyl phthalate	0.42	U	0.42	U	0.43	U	0.42	U	0.41	U	4236.7
Chlorobenzenes (µg/L)											
1,2,4-Trichlorobenzene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.13
1,2-Dichlorobenzene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	436
1,4-Dichlorobenzene	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	1.7
Hexachlorobenzene	0.42	U	0.42	U	0.43	U	0.42	U	0.41	U	0.00029
Other SVOCs and COCs (µg/L)											
2,4-Dimethylphenol	2.1	U	2.1	U	2.1	U	2.1	U	2.0	U	655
4-Methylphenol	0.84	U	0.84	U	0.85	U	0.84	U	0.82	U	333.8
Benzoic acid	3.2	U	3.2	U	3.2	U	3.1	U	3.1	U	2243.0
Benzyl alcohol	0.42	U	0.42	U	0.43	U	**1.1**		0.41	U	182
n-Nitrosodiphenylamine	0.42	U	0.42	U	0.43	U	0.42	U	0.41	U	1.96
Pentachlorophenol	0.74	U	0.74	U	0.75	U	0.73	U	0.71	U	1.47
Phenol	0.63	U	0.63	U	0.64	U	0.63	U	0.61	U	40694.5
PCBs (µg/L)											
PCB-1016	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.001
PCB-1221	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.014
PCB-1232	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.014
PCB-1242	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.001
PCB-1248	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.001
PCB-1254	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.001
PCB-1260	0.56	U	0.54	U	0.54	U	0.53	U	0.47	U	0.001
Dioxins/Furans (ng TEQ/kg)											
Calculated TEQ (ND=0):	**0.00**		**0.00**		**0.00**		**0.04**		**0.00**		0.51

[1] Constituents of Concern for cleanup of the Lower Duwamish Waterway. (EPA 2013. Proposed Plan Lower Duwamish Waterway Superfund Site)
[2] From Table 1. LDW Site Cleanup Levels - Final Draft

Notes:

All groundwater samples were collected on 08/29/2013
µg/L = micrograms per liter = parts per billion (ppb)
pg/L = picograms per liter
U = Result is ≤ Reporting Limit (RL). Result reported as the RL and is qualified as non detected (ND).
B = Blank contamination.
Bold = Parameter detected above reporting limit
ft = feet
COCs = Consituents of Concern
PAHs = Polycyclic Aromatic Hydrocarbons
PCBs = Polychlorinated Biphenyls
SVOCs = Semi Volatile Organic Compounds
"--" = Not analyzed for listed parameter

TEQ = Toxicity Equivalency Quotient to 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD). Only positively identified compounds are included in TEQ calculation. NDs are set to equal to zero for TEQ calculation.

Appendix A
NFA Letter

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

May 4, 2012

PROPERTY OWNER
Seaboard Lumber Company
4540 W Marginal Way
Seattle, WA 98106

Re: No Further Action (NFA) Determination associated with Leaking Underground Storage Tank (LUST) Site:

- Site Name: Seaboard Lumber Company
- Property Address: 4540 W Marginal Way, Seattle, WA 98106
- Facility/Site No.: 88471591
- LUST ID: 4158

Dear Property Owner:

Based on the historical information in our files and the last documents submitted to us on 4/23/2003, the Washington State Department of Ecology (Ecology) has determined that the Seaboard Lumber Company site has met the substantive requirements for cleanup under the Model Toxics Control Act (MTCA) regulation Chapter 70.105D RCW, and its implementing regulations, Chapter 173-340 WAC (collectively "substantive requirements of MTCA").

The MTCA regulation sets strict cleanup standards for sites in Washington State to ensure that the quality of the cleanup is appropriate and is protective of human health and the environment. Depending on the site circumstances and location, one of the three cleanup criteria established under MTCA is used to assess the quality of the cleanup remedy. These are:

- **Method A Cleanup levels**: Used in simple sites with few contaminants of concern (COCs). The Method A cleanup levels consist of a list of the most common hazardous substances for soil and groundwater. The Method A Cleanup levels are very strict, and if met, they allow the property to be used for unrestricted land use.
- **Method B Cleanup levels**: These cleanup levels are established using applicable state and federal laws and the risk assessment equations and other requirements defined in MTCA. Method B is used in more complex sites where the COCs are not included within the set criteria listed on the Method A tables.

- **Method C Cleanup levels**: Method C uses the same risk assessment equations and other requirements defined in MTCA but also require a full site-specific risk assessment and an Terrestrial Ecological Evaluation (TEE). Method C is used in industrial sites, when Methods A and C are technically unattainable or lower that background concentrations, and when a significant threat to human health or the environment has been identified.

After a site meets the criteria for soil and groundwater (if applicable), the cleanup is considered to be complete and an NFA letter can be issued.

According to our records, you have conducted cleanup independently and your site meets the Method A Cleanup levels.

- LUST ID No.: 4158,
- Release Notification Date: 12/4/1992,
- Contaminants of Concern: TPH, metals, and organic contaminants as PCP and cPAHs,
- Soil is affected: Yes,
- Groundwater is affected: Yes.

Based on this information, **Ecology has determined that no further remedial action is necessary at the Property to clean up contamination associated with the LUST. This determination is made only for impacts associated to releases from LUST No. 4158.** Based on this opinion, Ecology will update the status of remedial action at the Site on our database of hazardous waste sites and will initiate the process of removing the Site from our lists of hazardous waste sites, including (if applicable):

- Hazardous Sites List.
- Confirmed and Suspected Contaminated Sites List.
- Leaking Underground Storage Tank List.

Removing your site from these lists may include a public notice and/or a public comment period. Based on the comments received, Ecology will either remove the Site from the applicable lists or withdraw this opinion.

Please understand that this opinion does not settle liability with the state. Liable persons are strictly liable, jointly and severally, for all remedial action costs and for all natural resource damages resulting from the release or releases of hazardous substances at the Site. This opinion **does not**:

- Change the boundaries of the Site.
- Resolve or alter a person's liability to the state.
- Protect liable persons from contribution claims by third parties.

To settle liability with the state and obtain protection from contribution claims, a person must enter into a consent decree with Ecology under RCW 70.105D.040(4).

In addition, this opinion does not constitute a determination of substantial equivalence. To recover remedial action costs from other liable persons under MTCA, one must demonstrate that the action is the substantial equivalent of an Ecology-conducted or Ecology-supervised action. This opinion does not determine whether the action you proposed will be substantially equivalent. Courts make that determination. See RCW 70.105D.080 and WAC 173-340-545.

Lastly, the state, Ecology, and its officers and employees are immune from all liability, and no cause of action of any nature may arise from any act or omission in providing this opinion. See RCW 70.105D.030(1)(i).

If you have any questions about this opinion, please contact me by e-mail at russ.olsen@ecy.wa.gov or by phone at (425) 649-7038.

Sincerely,

Russell E. Olsen, MPA
Voluntary Cleanup Unit Supervisor
Northwest Regional Office
Toxics Cleanup Program

SF: sf

Appendix B
Sampling and Analysis Plan

1.0 INTRODUCTION

ERM-West, Inc. (ERM) prepared this Sampling and Analysis Plan to guide the Baseline Environmental Assessment (BEA) and site-wide Groundwater Assessment (GWA) to be performed at the property located at 4500 West Marginal Way SW, Seattle, Washington (the "subject property"). A map showing the location of the subject property is included as Figure 1.

This Sampling and Analysis Plan provides procedures for field sampling, data gathering methods, and laboratory analysis activities being performed as part of the BEA and GWA at the site. The field-sampling procedures and data gathering methods were selected to ensure that the data collected over the course of the project are of known quality to meet their intended use, and that all components of data acquisition are thoroughly documented, verifiable, and defensible.

1.1 Background

The subject property is located in an area that is primarily used for commercial and industrial purposes. The subject property has the tax parcel number 766670-3680 and the owner of the subject property is listed as Seattle Property 2012 Inc.

The subject property is generally triangular-shaped and consists of 6 acres of land improved with a two-story main building, a single-story warehouse building, and two temporary tent structures. The main building was built in 1997, and is approximately 40,000 square feet. In 2005, a single-story warehouse building containing approximately 1,200 square feet of space was added to the original building. The subject property is surrounded by a chain-link fence, with a main entrance gate on the south side of the property.

The subject property currently houses two companies as tenants that provide motor coach services to the public: Gray Line of Seattle/Horizon Coach Lines (Gray Line) and Greyhound. The property serves as the main business office and maintenance facility for Gray Line of Seattle. Activities conducted by Gray Line include administration, sales, dispatch, and maintenance. Greyhound primarily uses their space for bus maintenance with some office and warehouse space. The facility operates 24 hours a day, and has approximately 200 staff, including seasonal personnel.

1.2 Scope and Objectives

The objectives of the BEA and GWA are stated below.

- Assess the oil-water separator (OWS) associated with the wastewater system for cracks, holes, or other evidence of potential leakage to the subsurface.
- Assess the soils in the vicinity of the current underground storage tanks (USTs) for evidence of contaminant releases.

- Assess the soils in the vicinity of former excavations (HS-MW-1, HS-0-26, HS-SB-5, HS-MW-4, and HS-SB-4) to verify that the contamination was removed.
- Assess the groundwater migrating onto the subject property along the upgradient (west) property line for evidence of contamination.
- Assess the groundwater migrating off of the subject property along the downgradient (northeast and southeast) property lines for evidence of contamination.

2.0 SCOPE OF WORK

This section describes the scopes of work for the BEA and GWA.

2.1 Work Elements of BEA

- Inspect the OWS associated with the wastewater system for cracks, holes, or other evidence of potential leakage to the subsurface. The inspection will be performed by an ERM field consultant after the OWS has been pumped out by the owner or operators of the subject property. The inspection will be performed from the ground surface using a high-power flashlight to inspect the exposed concrete sides and base of the structure. The structure will not be entered. Observed cracks or holes, if any, will be photographed.
- Conduct a private utility locate in the vicinity of each of the eight planned soil boring locations and adjust the locations as needed to avoid subsurface utilities. Clear each of the locations to a depth of at least 5 feet below ground surface (bgs) using an air knife/vacuum truck.
- Advance four soil borings around the existing USTs (Figure 2). The borings will be advanced using a truck-mounted direct-push rig, and soil samples will be collected continuously to a depth of 18 feet bgs. An ERM field consultant will log the borings and field screen the soils for indications of contamination (i.e., staining, odor, elevated photoionization detector [PID] readings, and/or free product sheen).
- Advance four soil borings in the vicinity of excavations HS-MW-1, HS-0-26, HS-SB-5, HS-MW-4, and HS-SB-4 (Figure 2). The borings will be advanced using a truck-mounted direct-push rig and soil samples will be collected continuously to a depth of 12 feet bgs (i.e., 1 to 6 feet below the groundwater table). An ERM field consultant will log the borings and field screen the soils for indications of contamination (i.e., staining, odor, elevated PID readings and/or free product sheen).
- Collect one soil sample from the interval showing the highest indication of contamination (based on field screening) from each of the eight soil borings.
- Transmit the soil samples under standard chain-of-custody protocol to Test America laboratory for analysis of:

- Gasoline-range petroleum hydrocarbons (TPH-G) by Washington State Department of Ecology (Ecology) Method NWTPH-G;
- Diesel-range petroleum hydrocarbons (TPH-D) and heavy oil-range petroleum hydrocarbons (TPH-HO) by Ecology Method NWTPH-Dx;
- Benzene, toluene, ethyl benzene, and xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8021;
- 1,2-dibromoethane (EDB); 1,2-dichloroethane (EDC); and methyl tertiary-butyl ether (MTBE);
- Total lead USEPA Method 6010/200.8;
- Carcinogenic polynuclear aromatic hydrocarbons (cPAHs) and naphthalenes by USEPA Method 8270-SIM; and/or
- Volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH) by Ecology Methods B and C.

Only the samples collected near the current USTs containing TPH-G, TPH-D, TPH-HO, or BTEX will be run for EDB, EDC, MTBE, VPH, and/or EPH. The BEA analytical program is summarized on Table 1. The laboratory analyses will be performed on a standard 10-day turnaround unless expedited turnaround is needed to meet the project schedule.

2.2 Work Elements of GWA

- Conduct a private utility locate in the vicinity of each of the five planned monitoring well locations (Figure 2) and adjust the locations as needed to avoid subsurface utilities. Clear each of the locations to a depth of at least 5 feet bgs using an air knife/vacuum truck.

- Advance five soil borings using a truck-mounted direct-push rig at the locations shown on Figure 2, and collect soil samples continuously to approximately 4 feet below the water table (i.e., a maximum total depth of 15 feet bgs). An ERM field consultant will log the borings and field screen the soils for indications of contamination (i.e., staining, odor, elevated PID readings, and/or free product sheen). If contaminated soil is encountered, samples will be collected for laboratory analysis and held pending authorization from the Client for a change order to analyze the soil samples.

- Construct permanent monitoring wells in each of the borings. The monitoring wells will be constructed using 5-foot long, 0.75-inch diameter PVC (polyvinyl chloride), 0.010 slot pre-packed screens set with approximately 4 feet of screen below the water table. The screens will be pre-packed with 20/40 Colorado silica sand. Each well will be completed with 0.75-inch diameter Schedule 40 PVC riser, a locking well cap and a flush-mount protective cover cemented in place.

- Direct a Washington State licensed surveyor to survey the vertical and horizontal positions of the monitoring wells. The elevation and horizontal position of each well will be obtained

from the north rim of each well casing utilizing Washington State Plane coordinates and elevation. Horizontal location will be established to an accuracy of 0.1 foot and elevation will be established to an accuracy of 0.01 foot.

- Develop the five monitoring wells by using a bailer and a peristaltic pump to surge and purge the wells to ensure the removal of any drilling fines and to restore the hydraulic properties of the surrounding formation.

- Measure the static water levels in the monitoring wells relative to the surveyed reference points using an electronic water level indicator. The water level data will be used to evaluate the groundwater flow direction and gradient.

- Collect one round of groundwater samples from the monitoring wells using low-flow sampling methods.

- Transmit the groundwater and quality assurance samples under standard chain-of-custody protocol to a local laboratory for analysis of:
  - TPH-G by Ecology Method NWTPH-G;
  - TPH-D and TPH-HO by Ecology Method NWTPH-Dx;
  - Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method 8260;
  - TCL Semi-volatile organic compounds (SVOCs) by USEPA Method 8270-SIM;
  - Dissolved and total Target Analyte List (TAL) metals by USEPA Method 6010/200.8;
  - Polychlorinated biphenyls by USEPA Method 8082; and
  - Doixin/furans by USEPA Method 8290.

The GWA analytical program is summarized on Table 1. The laboratory analyses will be performed on a standard 10 business day turnaround unless expedited turnaround is needed to meet the project schedule.

3.0 STANDARD OPERATING PROCEDURES

3.1 Groundwater Sampling Procedures

Groundwater sampling for all constituents except dioxins and furans will be performed using USEPA low-flow well purging/ sample collection techniques to obtain representative groundwater samples. Groundwater sampling procedures for monitoring wells to be purged and sampled using low-flow protocols is presented below. Groundwater sampling for polychlorinated biphenyls (PCBs), dioxins and furans is summarized in section 3.2.

- Total depth measurements (depth to bottom) will not be collected prior to sampling in order to avoid agitation of sediment at the bottom of the well which may affect the turbidity of the water column.

- Lower tubing intake from a peristaltic pump very slowly into the well to a depth corresponding to the center of the saturated screen section of the well. The pump/tubing intake must be kept at least 2 feet above the bottom of the well to prevent mobilization of any sediment. Lowering the pump/tubing quickly, or even at a moderate rate, will result in disturbing sediment in the well. This is one of the most important steps in low-flow sampling.

- Measure the water level again with the pump tubing in the well before starting the pump. Start pumping the well at 100 to 300 milliliters per minute. Ideally, the pump rate should cause little or no water level drawdown in the well (less than 0.3 foot and the water level should stabilize).

- Measure and record the depth to water and pumping rate every 3 to 5 minutes (or as appropriate) during pumping. If purging continues for more than 30 minutes, readings will be recorded at approximately 10-minute intervals. However, once stabilization is indicated, a minimum of 3 consecutive readings at 3 to 5 minute intervals will be recorded prior to sample collection.

- Care should be taken not to cause pump suction to be broken or entrainment of air or gas in the sample. At no point during sampling should purged water go back into the well. Do not allow the groundwater level to go below the pump intake.

- Pumping rates should, if needed, be reduced to the minimum capabilities of the pump to minimize drawdown and/or to ensure stabilization of indicator parameters. However, if the turbidity criteria are achieved, drawdown is minimal and the indictor parameters are stable, the samplers may use professional judgment to increase the pumping rate up to a maximum of 500 milliliters per minute.

- During purging, measure and record the field indicator parameters (turbidity, temperature, specific conductance, pH, Eh, and dissolved oxygen) using the in-line meter. Record the water quality parameters and any qualitative notes (such as color and odor) on the Groundwater Sampling Log form. If the water quality parameters are stable for three consecutive readings, collect samples for chemical analysis.

- The well is considered stabilized and ready for sample collection once all the field indicator parameter values remain within 10 percent for three consecutive readings.

- Turbidity readings less than or equal to 5 NTUs are desirable for samples analyzed for PCBs, dioxins and furans. As a result monitoring wells will be considered developed when the turbidity readings are 5 NTU's or less and the no purge PCB, dioxin and furan samples will be collected after the well development criteria have been achieved and before the water column is otherwise disturbed. After the no purge PCB, dioxin and furan samples are collected, the purge rate may be increased as long as turbidity readings are less than 10 NTUs prior to collection of samples analyzed for metals.

- Before sampling, either disconnect the in-line cell or use a bypass assembly to collect groundwater samples before the in-line cell. All sample containers should be filled by allowing the pump discharge to flow gently down the inside of the container with minimal turbulence.

- Reduce the pump flow to a rate of less than 300 milliliters per minute, and collect samples. Note: Do not stop the pump after stabilization and prior to sample collection.

- Collect samples from the discharge of the pump and fill the appropriate sample containers. Filtered metals samples will be field-filtered using an in-line, disposable, 0.45-µm filter and collected after the unfiltered metals.

- Label the samples using waterproof labels, or apply clear tape over the paper labels. Place all samples in a cooler with bagged ice or frozen cold packs and maintain at 4 degrees Celsius for delivery to the laboratory.

- Measure and record well depth.

- Secure the well.

3.2 Groundwater Sampling Procedure for PCBs, Dioxins and Furans

Because PCBs, dioxins and furans have low solubility, are highly hydrophobic, and are consequently extremely sensitive to bias from even very low levels of artificially-suspended solids in sample water, samples to be analyzed for dioxins and furans will be collected **prior** to purging the well in an attempt to minimize potential bias from sampling-induced turbidity. Procedures are presented below.

- After measuring water levels, the tubing from a peristaltic pump will be lowered gently to the water surface and then lowered until the bottom of the tube is within the upper part of the screened interval, but at no time deeper than the midpoint of the screened interval.

- Using a low pumping rate (0.025 to 0.05 liters per minute or less), samples will be withdrawn and the sample container for dioxins/furans analysis filled from the end of the pump discharge tubing.

- After a sufficient quantity of sample water has been obtained, the pump will be stopped, the low-flow cell added to the discharge line, and then the well will be purged and sampled as described using the low-flow sampling method described above.

3.3 Monitoring Well Development Procedures

Monitoring wells are developed to remove skin (i.e., near-well-bore formation damage) and to settle and remove fines from the filter pack. Wells will not be developed for 24 hours after completion when a cement bentonite grout is used to seal the annular space; however, wells may be developed before grouting if conditions warrant. Wells must be developed prior to collection of groundwater samples to ensure that samples are representative of site conditions.

Wells will generally be developed by utilizing a 0.75-inch disposable bailer to remove fines from the bottom of the well, followed by surging using the bailer and pumping using a peristaltic pump and new disposable tubing for each well.

Before and/or during development, the well cap and the interior of the well casing above the water table will be washed using only water from that well.

Development will continue until a minimum of 10 well volumes are purged, plus a minimum of three times the volume of any potable water added during drilling, or until turbidity is 5 NTUs or less and field parameters have stabilized as follows:

- Temperature: ± 1 degree Celsius;
- pH: ± 0.1 unit;
- Specific conductance: ± 10 percent; and
- Turbidity: ± 10 percent.

The following steps must be followed when developing wells:

- Don personal protective clothing and equipment as specified in the site-specific Health and Safety Plan.
- Open the well cover and check the condition of the wellhead, including the condition of the surveyed reference mark, if any.
- Measure the depth to static water level and depth to bottom of the casing.
- Prepare the necessary equipment for developing the well.
- During development, water will be removed throughout the entire water column in the well by periodically lowering and raising the bailer or pump intake.
- Continue pumping or bailing until field parameters stabilize, as discussed above, for three consecutive recording intervals or until 10 well volumes have been purged.
- In a low recharge aquifer, the well may pump or bail to dryness before indicator parameters stabilize. In this case, allow the well to recharge and continue purging until parameters have stabilized. Record pertinent data in the field logbook.

- Remove the pump assembly or bailers from the well, decontaminate (if required), and clean up the area. Lock the well cover before leaving. Dispose of development water in steel 55 gallon Department of Transportation-approved drums.

3.4 Equipment Decontamination Procedures

Equipment to be decontaminated will include rods and augers for drilling and hand tools for soil collection. After completing the decontamination process, the equipment will be positioned to preclude inadvertent contamination prior to reuse.

All borehole drilling equipment will be decontaminated using steam and/or high-pressure water.

Decontamination of non-disposable sampling equipment that comes into contact with samples (such as a water level meter) will be performed to prevent the introduction of extraneous material into samples, and to prevent cross-contamination between samples. All non-disposable sampling equipment that is used at multiple locations will be decontaminated by steam cleaning or by washing with a non-phosphate detergent such as Liquinox™ or equivalent. Decontamination water will be collected in appropriate 55-gallon drums or equivalent.

The following procedures will be used for decontamination of non-disposable sampling equipment:

1. If mud or soil is adhering to the sampling equipment, first rinse with potable water. This step will decrease the gross contamination and reduce the frequency at which the non-phosphate detergent and water solution need to be changed.
2. Wash with the non-phosphate detergent and water solution. This step will remove remaining contamination from the equipment. Dilute the non-phosphate detergent as directed by the manufacturer.
3. Rinse with potable water. Change the water frequently.
4. Rinse with distilled water. This step will rinse any detergent solution and potable water residues. Rinsing will be done by applying the distilled water from a clean squeeze bottle (or equivalent) while holding equipment over a bucket.

Table

Table 1

Analytical Summary

Baseline Environmental and Groundwater Assessment

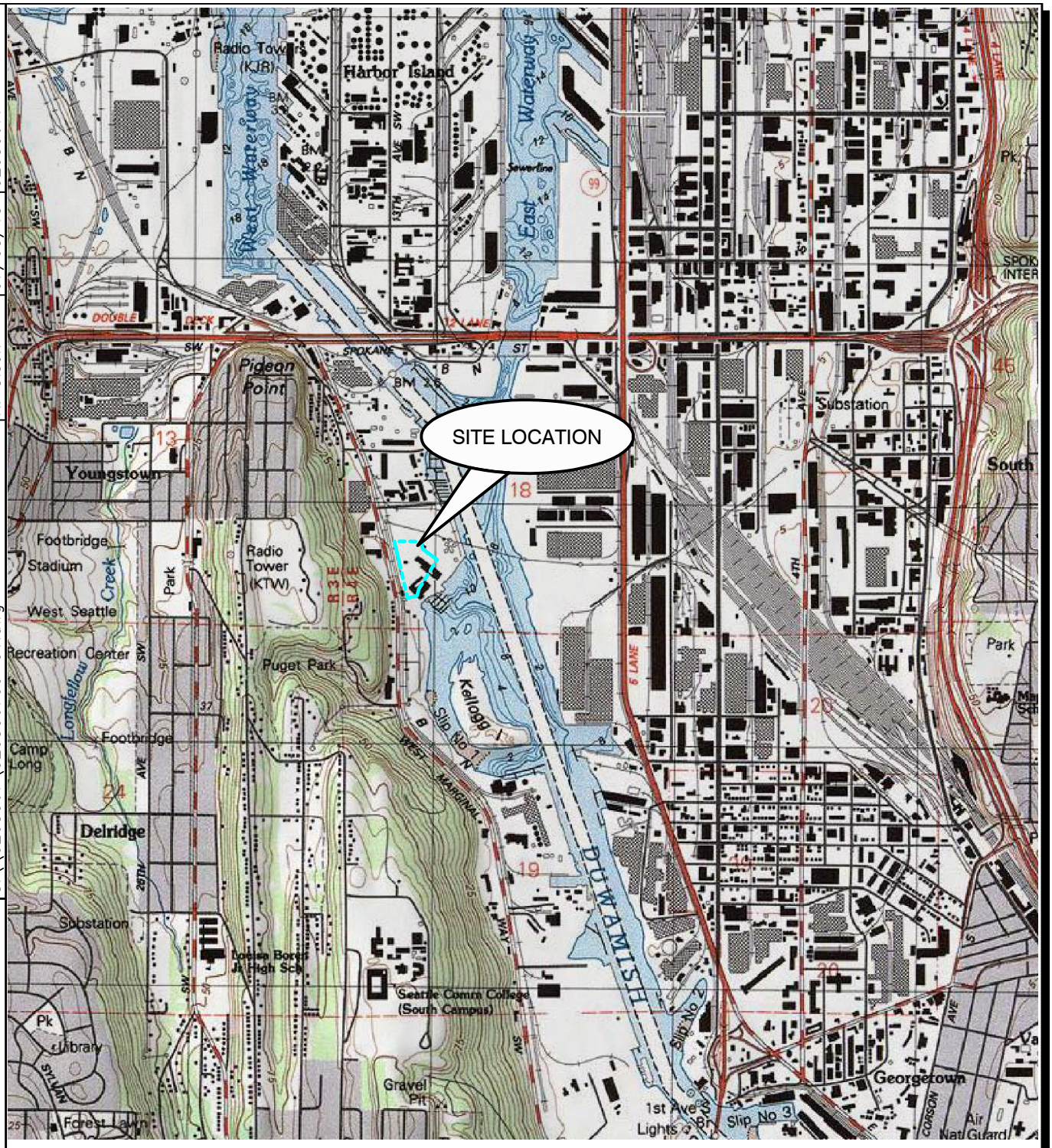
4500 West Marginal Way SW

Seattle, Washington

Analytical Parameter	Matrix	Number of Samples
TPH-g/BTEX w/ 5035 kit	Soil	8
TPH-D/HO	Soil	8
cPAH and Naphthalenes	Soil	8
Total lead	Soil	8
VPH	Soil	4
EPH	Soil	4
EDB/EDC & Oxygenates	Soil	4
TPH-g	Water	5
TPH-D/HO	Water	5
TCL SVOCs	Water	5
TCL VOCs	Water	5
TAL Metals (total)	Water	5
TAL Metals (dissolved)	Water	5
PCBs	Water	5
Dioxin/Furans	Water	5

Figures

Project No. 0203067.***
Date: 07/05/13
Drawn By: R. Olson
CAD File: G:\0203067\020306700-01.dwg



SCALE 1:24,000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

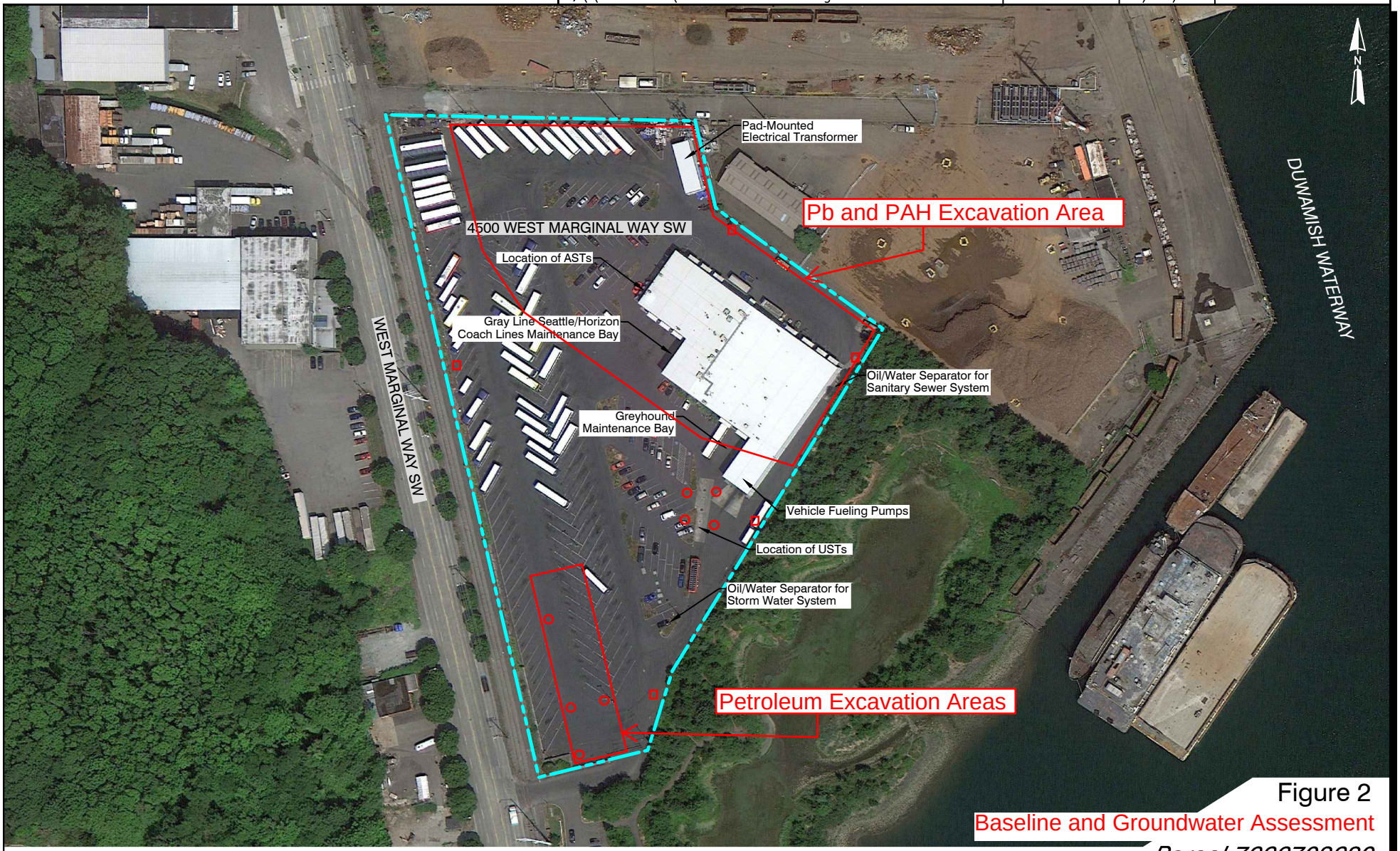
N

References:
TOPO!® Software
U.S.G.S. 7.5 Minute Series (Topographic) Quadrangle,
Seattle South E, WA
Version: 1983; Current: 1978

Figure 1
Site Location Map
Parcel 7666703680
4500 Marginal Way SW
Seattle, Washington

ERM 07/13

CAD File:	Drawn By:	Date:	Project No.
G;\\0203067\020306700-01.dwg	R. Olson	07/10/13	0203067.***



LEGEND

Parcel Boundary

Monitoring Well Location Soil Boring Location

Aerial Photo Source: © 2012 Google Earth Pro
Ver 6.2.2.66.13

0 80 160
FEET

Figure 2

Baseline and Groundwater Assessment

Parcel 7666703680

4500 West Marginal Way SW

Seattle, Washington

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Appendix C
Soil Boring Logs

ERM-West, Inc.
1218 3rd Avenue, Suite 1412
Seattle, Washington 98101
Telephone: 425-462-8591

MW-1

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/27/13
GROUND ELEVATION 12.53 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING 6.00 ft / Elev 6.53 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)	WELL DIAGRAM
0							Casing Top Elev: 12.23 (ft) Casing Type: 2" PVC
				0.3 4 inch asphalt slab.	12.3		Cement Seal
				Subangular COBBLES, trace fine-medium sand. Very stiff.			
				3.5	9.0	0	3/4 inch PVC Well Casing
5		SP		POORLY-GRADED SAND (SP): Dark grey medium SAND, trace silt, coarse sand grains, and fine subrounded gravel. Dry, loose. Weathered lumber/wood scraps in borehole at 3.5 feet bgs.		0	Bentonite Seal
				7.5	5.0		
		SM		7.8 3.5 inches of saturated weathered wood debris at 7.25 feet bgs.	4.8		.010 inch Well Screen
		CL-ML		SILTY SAND (SM): Grey silty fine SAND. Moist, loose.		0	
				9.5 LOW PLASTICITY SILTY CLAY (CL-ML): Grayish-brown silty CLAY with slight natural organic decay odor. Wet, stiff.	3.0		20/40 Silica Sand Filter Pack
10		SM		SILTY SAND (SM): Grey silty fine SAND. Wet, slightly stiff.			
				11.0	1.5		
				Bottom of borehole at 11.0 feet.		0	

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MW-2

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/27/13
GROUND ELEVATION 12.81 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING 3.50 ft / Elev 9.31 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)	WELL DIAGRAM
0							Casing Top Elev: 12.53 (ft) Casing Type: 2" PVC
				0.3 3 inch asphalt slab.	12.6		
				1.5 Subangular COBBLES to 5 inches, trace fine-medium sand.	11.3		
				1.8 3 inch asphalt slab.	11.1		
				2.5 Subangular COBBLES to 5 inches, trace fine-medium sand.	10.3		
		SM		SILTY SAND (SM): Dark grey silty fine-medium SAND, trace coarse sand. Moist, loose.		0	
5				5.0	7.8		
		SP		POORLY-GRADED SAND (SP): Dark brown fine-medium SAND with silt. Wet, loose.	6.8		
		CL-ML		6.0 / 6.5 LOW PLASTICITY SILTY CLAY (CL-ML): Dark grey silty CLAY. Wet, moderately stiff.	6.3		
		SP		7.5 POORLY-GRADED SAND (SP): Dark brown fine-medium SAND with silt. Wet, loose.	5.3	1.4	

Bottom of borehole at 7.5 feet.

Cement Seal
3/4 inch PVC Well Casing
Bentonite Seal
.010 inch Well Screen
20/40 Silica Sand Filter Pack

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MW-3

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/27/13
GROUND ELEVATION 11.64 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING ---
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)	WELL DIAGRAM
0				0.3 4 inch asphalt slab.	11.3		Casing Top Elev: 11.28 (ft) Casing Type: 2" PVC
				Subangular COBBLES to 4 inches, trace fine-medium sand. Very stiff.		0	Cement Seal
				3.0	8.6		
		SP		POORLY GRADED SAND (SP): Dark brownish black fine-medium SAND, trace silt and silt clumps.		0	Bentonite Seal
5				Metal object in borehole at 4 feet bgs. Appears to be railroad tie.			3/4 inch PVC Well Casing
				5.0 Weathered wood scraps in borehole at 4.5 feet bgs.	6.6		
		SM		SILTY SAND (SM): Dark brown silty fine SAND. Wet, slightly stiff.			.010 inch Well Screen
				7.0	4.6		
		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Brown silty CLAY. Wet, stiff.		0.1	
				8.8	2.9		20/40 Silica Sand Filter Pack
		ML		9.3 SANDY SILT (MLS): Fine sandy SILT.	2.4	0.9	
10		SP-SM		POORLY-GRADED SAND WITH SILT (SP-SM): Grayish brown fine-medium silty SAND with natural organic decay odor. Wet, moderately stiff.			
				10.5	1.1		

Bottom of borehole at 10.5 feet.

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MW-4

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/27/13
GROUND ELEVATION 12.49 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 6.00 ft / Elev 6.49 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)	WELL DIAGRAM
0							Casing Top Elev: 12.21 (ft) Casing Type: 2" PVC
				0.3 — 3 inch asphalt slab.	12.2		Cement Seal
				Subangular COBBLES to 4 inches, trace fine-medium sand. Very stiff.			
				3.0	9.5		Bentonite Seal
		SP		POORLY GRADED SAND (SP): Dark grey fine-medium SAND with silt, trace silt clumps. Dry, loose.		0.9	
5				5.0 — Color change to brown at 4 feet bgs.	7.5		3/4 inch PVC Well Casing
		SM		▽ SILTY SAND (SM): Brown silty fine SAND with organic debris (roots, twigs). Moist, slightly stiff.		1.1	
				7.0	5.5		.010 inch Well Screen
		ML		7.3 — SANDY SILT (MLS): Brown fine sand SILT with orange-brown wood debris and natural organic decay odor.	5.2	0.9	
		SM		7.8	4.7		
		SP-SM		8.0 — SILTY SAND (SM): Brown silty fine SAND with organic debris (roots, twigs). Moist, slightly stiff.	4.5	1.7	20/40 Silica Sand Filter Pack
10		SP		10.5 — POORLY-GRADED SAND WITH SILT (SP-SM): Brown fine sand SILT with orange-brown wood debris and natural organic decay odor.	2.0		
				POORLY-GRADED SAND (SP): Dark grey fine-medium SAND, trace silt and subrounded fine gravel.		2	
				Bottom of borehole at 10.5 feet.			

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MW-5

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/27/13
GROUND ELEVATION 11.73 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING ---
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	WELL DIAGRAM
0						Casing Top Elev: 11.51 (ft) Casing Type: 2" PVC
				0.3 3 inch asphalt slab.	11.5	
				0.7 Subangular COBBLES to 5 inches, trace fine-medium sand.	11.1	Cement Seal
				0.9 3 inch asphalt slab.	10.8	
				2.0 Subangular COBBLES to 5 inches, trace fine-medium sand.	9.7	
		SP		3.0 POORLY-GRADED SAND (SP): Dark brown medium SAND, trace silt clumps. Dry, loose.	8.7	Bentonite Seal
		SM		4.0 SILTY SAND (SM): Brown silty fine SAND, trace fine angular gravel. Slightly moist, loose.	7.7	3/4 inch PVC Well Casing
5		CL-ML		5.0 LOW PLASTICITY SILTY CLAY (CL-ML): Dark brown silty CLAY, trace fine sand. Moist, stiff.	6.7	
		SP		Dark Grayish brown medium silty SAND, trace fine subrounded gravel. Wet, loose.		.010 inch Well Screen
				8.8	3.0	20/40 Silica Sand Filter Pack
		CL-ML		9.5 LOW PLASTICITY SILTY CLAY (CL-ML): Medium brown silty CLAY, trace fine sand and organic twigs/roots. Slight natural organic decay odor.	2.2	

Bottom of borehole at 9.5 feet.

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SB-1

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 11.78 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 5.00 ft / Elev 6.78 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.3 4 inch asphalt slab.	11.5	
		SP		POORLY-GRADED SAND (SP): Brown fine to medium SAND with subangular gravel, trace silt. Dry, stiff.		1.1
5				5.0 ▽	6.8	1
	SB-1-6	SM		SILTY SAND (SM): Grey silty fine to medium SAND with trace organic particles. Slightly wet and slightly loose.		0.8
				8.0	3.8	5
		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Grey silty clay, trace organic debris. Stiff, wet.		1.2
				9.5	2.3	
10		SM		10.0 SILTY SAND (SM): Grey silty fine SAND. Stiff, wet.	1.8	
		SP		POORLY-GRADED SAND (SP): Grey fine-coarse SAND, trace silt. Wet, loose.		0.8
				13.5	-1.7	1.1
15		SM		SILTY SAND (SM): Grey fine-medium silty SAND. Wet, slightly stiff.		0.6
				16.5	-4.7	
		SP		POORLY-GRADED SAND (SP): Grey medium-coarse SAND, trace silt and fine subangular gravel. Wet, loose.		
				18.0	-6.2	1.1

Bottom of borehole at 18.0 feet.

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SB-2

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/27/13
GROUND ELEVATION 11.61 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING 6.50 ft / Elev 5.11 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.3 3 inch asphalt slab.	11.4	
		SM		SILTY SAND (SM): Grey silty fine sand, trace subrounded gravel.		1.9
				4.0	7.6	1.8
5		SP		POORLY-GRADED SAND (SP): Brownish grey fine to medium SAND with silt clumps, trace coarse sand and subangular gravel. Slightly moist, loose.		2
				▽		2.5
				8.0	3.6	
	SB-2-8	CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Brownish grey silty CLAY, trace fine sand. Stiff, wet.		2.8
10				10.0	1.6	1.2
		SP		11.0 POORLY-GRADED SAND (SP): Dark grey fine-medium SAND, trace silt, trace coarse sand. Wet, loose.	0.6	
		ML		11.5 SANDY SILT (MLS): Grey fine sandy SILT. Wet, stiff.	0.1	0.8
		SM		SILTY SAND (SM): Grey silty fine SAND. Wet, stiff.		
				14.5	-2.9	
15		SP		15.0 POORLY-GRADED SAND (SP): Grey fine-medium SAND with silt, trace fine subangular gravel. Wet, loose.	-3.4	2
		SM		16.0 SILTY SAND (SM): Grey silty fine SAND.	-4.4	
		SP		POORLY-GRADED SAND (SP): Grey medium-coarse SAND, trace silt. Wet, loose.		
				18.0	-6.4	
				Bottom of borehole at 18.0 feet.		1.7

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Seattle, Washington 98101
Telephone: 425-462-8591

SB-3

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 12.17 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 6.50 ft / Elev 5.67 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.5 Grass and grassroots	11.7	
		SP		POORLY-GRADED SAND (SP): Brown fine to medium sand, trace silt and subangular subrounded gravel with root debris. Dry, stiff. Color change to grey at 1 foot bgs.		
				Slightly moist and loose at 3 feet bgs.		1.4
5						1
				▽		0.8
				8.3	3.9	
	SB-3-8	SM		SILTY SAND (SM): Grey fine silty SAND. Wet, moderately stiff.		6.1
10				10.0	2.2	
		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Grey silty CLAY. Wet, stiff.		1.2
				11.5	0.7	
		SP		POORLY-GRADED SAND (SP): Grey medium-coarse SAND, trace fine subrounded gravel. Wet, loose.		1.8
15						2
				16.5	-4.3	
		CL-ML		16.8 LOW PLASTICITY SILTY CLAY (CL-ML): Silty CLAY with wood debris. Wet, stiff.	-4.6	1.6
		SP		18.0 POORLY-GRADED SAND (SP): Grey medium-coarse SAND, trace fine subrounded gravel. Wet, loose.	-5.8	

Bottom of borehole at 18.0 feet.

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SB-4

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 12.2 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 5.00 ft / Elev 7.20 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0						
				0.3 4 inch asphalt slab.	11.9	
	SB-4-1.5	SP		POORLY-GRADED SAND (SP): Brown fine to medium SAND with subrounded subangular gravel, trace silt. Dry, stiff. Slight petroleum-like odor, color change to grey at 1.5 feet bgs.		7.5
						2.5
5				▽ No odor at 5 feet bgs.		3.1
						1.9
						1.8
10				10.0	2.2	
		SM		SILTY SAND (SM): Silty fine SAND. Wet, stiff. 11.0	1.2	
		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Silty CLAY with wood debris and slight natural organic decay odor. Wet, stiff. 12.0	0.2	1
		SM		SILTY SAND (SM): Grey fine-medium silty SAND, trace fine subangular gravel.		
15						1.4
				17.0	-4.8	
		SP		POORLY-GRADED SAND (SP): Grey medium-coarse SAND, trace silt. Wet, loose. 18.0	-5.8	
				Bottom of borehole at 18.0 feet.		2.3

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Seattle, Washington 98101
Telephone: 425-462-8591

SB-5

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/26/13 **COMPLETED** 8/28/13
GROUND ELEVATION 12 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 4.00 ft / Elev 8.00 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.3 4 inch asphalt slab.	11.8	
				Subangular COBBLES to 5 inches, trace fine-medium sand. Fill.		
				3.0	9.0	
				SILTY SAND (SM): Dark grey silty fine-medium SAND, trace coarse sand. Slightly moist, loose. ▽		0
5		SM				0
				8.0	4.0	
		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Dark Grayish brown silty CLAY. Wet, stiff.		0
				9.0	3.0	
10		SP		POORLY-GRADED SAND (SP): Dark Grayish brown fine-medium SAND with coarse sand, trace fine angular gravel. Wet, stiff.		
	SB-5-11.5			With clasts of marine shells at 11 feet bgs.		0
				12.0	0.0	

Bottom of borehole at 12.0 feet.

ERM-West, Inc.
1218 3rd Avenue, Suite 1412
Seattle, Washington 98101
Telephone: 425-462-8591

SB-6

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 12.88 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 5.00 ft / Elev 7.88 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.4 5 inch asphalt slab.	12.5	
		SP		POORLY-GRADED SAND (SP): Brown fine-medium SAND with subrounded subangular gravel, trace silt. Dry, stiff.		1.2
5				▽ Wet, loose at 5 feet bgs.		0
						0
				6.8	6.1	
		CL-ML		7.5 LOW PLASTICITY SILTY CLAY (CL-ML): Dark grey silty CLAY, trace fine sand. Wet, stiff.	5.4	
		SM		8.0 SILTY SAND (SM): Dark grey mottled with dark rusty brown silty fine-medium SAND, trace coarse sand.	4.9	0
		CL-ML		8.3 LOW PLASTICITY SILTY CLAY (CL-ML): Grey silty CLAY. Wet, stiff.	4.6	
10		SM		9.5 SILTY SAND (SM): Dark grey mottled with dark rusty brown silty fine-medium SAND, trace coarse sand.	3.4	0
	SB-6-12	SP		12.0 POORLY-GRADED SAND (SP): Grey fine-medium SAND with silt and marine shell clasts. Wet, stiff. Trace subangular fine gravel at 10 feet bgs.	0.9	
				Bottom of borehole at 12.0 feet.		

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Seattle, Washington 98101
Telephone: 425-462-8591

SB-7

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 12.14 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 5.00 ft / Elev 7.14 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.3 4 inch asphalt slab.	11.9	
		SP		POORLY-GRADED SAND (SP): Brown fine to medium SAND, trace coarse sand, subangular gravel and silt. Dry, loose.		2
5		SP		▽ No gravel at 5 feet bgs.		2.4 1.6
				8.5	3.6	0
		SM		9.0 SILTY SAND (SM): Grey silty fine SAND, trace weathered wood fragments. Wet, stiff.	3.1	
10		CL-ML		LOW PLASTICITY SILTY CLAY (CL-ML): Grey silty CLAY with slight natural organic decay odor. Wet, stiff.		0
				11.0	1.1	
	SB-7-12	SM		12.0 SILTY SAND (SM): Brownish grey fine-medium silty SAND, trace coarse sand. Wet, stiff. No coarse sand below 11.25 feet bgs.	0.1	0
				Bottom of borehole at 12.0 feet.		

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Seattle, Washington 98101
Telephone: 425-462-8591

SB-8

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/27/13
GROUND ELEVATION 12.61 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
AT TIME OF DRILLING ---
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.4 5 inch asphalt slab.	12.2	
				Subangular COBBLES, trace fine-medium sand.		
				3.0	9.6	
		GP		POORLY-GRADED SANDY GRAVEL (GPS): Subrounded to subangular GRAVEL with fine-medium sand, trace coarse sand and silt. Slightly moist and loose. 4.0	8.6	0.9
5		SP		POORLY-GRADED SAND (SP): Fine to medium SAND with subrounded subangular gravel, trace silt clumps. Slightly moist, loose. 5.0	7.6	1.8
				Observed metal conduit in borehole; ceased intrusive activities.		
				Bottom of borehole at 5.0 feet.		

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Telephone: 425-462-8591

SB-8a

CLIENT CenterPoint Properties Trust
PROJECT NAME Baseline Environmental and Groundwater Assessments
PROJECT NUMBER 203067
PROJECT LOCATION Seattle, Washington
DATE STARTED 8/27/13 **COMPLETED** 8/28/13
GROUND ELEVATION 13.03 feet AMSL **HOLE SIZE** 2.25 inch
CONTRACTOR Cascade Drilling
GROUND WATER LEVELS:
EQUIPMENT Direct Push
▽ **AT TIME OF DRILLING** 5.00 ft / Elev 8.03 ft
LOGGED BY Matt Crandell **CHECKED BY** Cyrus Gorman
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE IDENTIFICATION	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	Elevation (ft)	PID (ppm)
0				0.3 4 inch asphalt slab.	12.8	
				1.5 Subangular COBBLES with fine to medium sand.	11.5	
				1.9 5 inch asphalt slab.	11.1	
				3.0 Subangular COBBLES with fine to medium sand.	10.0	
				4.0 Subangular COBBLES with asphalt clasts.	9.0	
5		SP		▽ POORLY-GRADED SAND (SP): Dark grey fine to medium SAND with silt and trace subangular gravel. Moist, slightly loose.		1.3
				Dark brownish, slight organic odor at 5 feet bgs.		1.1
				8.3	4.8	
		ML		9.0 SANDY SILT (MLS): Brown fine-medium sandy SILT with natural organic decay odor. Wet, stiff.	4.0	0.2
10		SW		10.0 WELL-GRADED SAND (SP): Grey fine-medium SAND with coarse sand, trace silt. Wet, loose.	3.0	
	SB-8a-12	SM		SILTY SAND (SM): Grey silty fine SAND with marine shell fragments. Wet, stiff.		
				12.0	1.0	
				Bottom of borehole at 12.0 feet.		0.1

Appendix D
Survey Data

True NORTH LAND SURVEYING, INC.

4500 West Marginal Way SW, Seattle WA
Survey Date: August 29, 2013

Monitoring Wells

Pt.#	Northing	Easting	Top of metal case Elev.	Top of PVC Elev	Description
100	209287.36	1265818.37	12.53	12.23	MW-1
112	209109.83	1265504.73	12.81	12.53	MW-2
101	209153.92	1265947.93	11.64	11.28	MW-3
102	208951.32	1265823.26	12.49	12.21	MW-4
107	208759.11	1265709.53	11.73	11.51	MW-5

Soil Borings

Pt.#	Northing	Easting	Ground Elev.	Description	Comment
106	209014.14	1265787.02	11.78	SB-1	
105	208987.72	1265757.14	11.61	SB-2	
104	208964.06	1265754.30	12.17	SB-3	
103	208946.32	1265780.83	12.20	SB-4	
111	208841.01	1265585.64	12.00	SB-5	
110	208734.52	1265607.93	12.88	SB-6	
108	208737.91	1265648.42	12.14	SB-7	
113	208705.79	1265639.43	12.61	SB-8	No Sample Taken
109	208705.43	1265625.04	13.03	SB-8A	

Notes:
HORIZONTAL DATUM: NAD 83/91 WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE
VERTICAL DATUM: NAVD 88, BENCH MARK SNV-5323, ELEVATION 20.726 FEET

815 S. Weller Street, Suite 200 Seattle, WA 98104-3023 (206)332-0800 fax (206)332-0802

Appendix E
Well Development Logs

WELL DEVELOPMENT/PURGE FORM

WELL NUMBER MW-5
CLIENT Bestr Point
PROJECT NAME/NUMBER 263067.03
WELL CONSTRUCTION DATA (Y/N) Y
DEPTH TO WATER AT START 5.00 Feet btoc
TD = 9.31 feet btoc

LOCATION SE corner of property
DEVELOPMENT CONTRACTOR ERM
DEVELOPMENT METHOD Peri pump
FIELD SUPERVISOR Cyrus Gorman
DEPTH TO WATER AT END 4.99

DATE 8/28/2017
AIR TEMPERATURE ~80°
CASING VOLUME (GAL.) 0.7
TOTAL GALS. REMOVED ~1.18

TIME HRS/MIN	DURATION (MIN) SURGE	BAIL	PUMP	VOL. GAL.	DEPTH TO WATER	DISCHRG. RATE ~~(gpm)~~	TEMP. F	COND. ---	pH ---	SUSPEND. SOLIDS mg/L	TURBIDITY NTU	REMARKS Disposition of water, etc.)
1536			X		5.00	200 ml/min	7.24	~~[illegible]~~	6.91	10.1	too high	
1540			X			150	77.5	~~1.57~~	6.45	9.76	27.1	
1544			X			150	78.3	1.25	6.96	0.784	18.9	
1550			X			150	78.5	0.543	7.24	0.347	4.76	
1556			X			150	81.1	0.491	6.80	0.319		
1600			X			150	81.2	0.497	6.84	0.311	5.15	
1605			X			150	81.4	0.491	6.85	0.311	3.45	

SIGNATURE [signature]

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500 / 2.5 min

WELL DEVELOPMENT/PURGE FORM

WELL NUMBER MW-1
CLIENT Center Point
PROJECT NAME/NUMBER 203067
WELL CONSTRUCTION DATA (Y/N) Yes
DEPTH TO WATER AT START 6.32 ft btoc
10.92 ft btoc TD

LOCATION NE Corner of bus barn
DEVELOPMENT CONTRACTOR ERM
DEVELOPMENT METHOD peri pump
FIELD SUPERVISOR Cyrus Gorman
DEPTH TO WATER AT END dry

DATE 8/28/13
AIR TEMPERATURE 62 F
CASING VOLUME (GAL.) 0.75
TOTAL GALS. REMOVED ~277

TIME HRS/MIN	DURATION (MIN) SURGE	BAIL	PUMP	VOL. GAL.	DEPTH TO WATER	DISCHRG. RATE (gpm)	TEMP.	COND. mS/cm	pH	SUSPEND. SOLIDS mg/L	TURBIDITY NTU	REMARKS Disposition of water, etc.)
1035 start	surge			5 gal								running dry / turn down peri
1041	surge			↓			78.3	0.548	6.65	0.351		too high
1046				1000			77.9	0.543	6.66	0.351		
1051	surge			1500	well		77.5	0.545	6.63	0.349	855	
1056				2000	too		77.9	0.543	6.63	0.347	313	
1101				2500	small		77.9	0.542	6.62	0.342	189	
1106				3000	for		77.7	0.540	6.58	0.346	154	1103 (144 NTU's)
1111				3500	tubing		78.8	0.533	6.58	0.341	122	
1116				4000	+		78.4	0.538	6.64	0.345	1419	
1121				4500	H2O		78.1	0.529	6.57	0.345		
1126				5000			77.8	0.545	6.49	0.348	96.4	
1131				5500	meter		77.3	0.557	6.52	0.353	72.4	
1136				6000			77.5	0.555	6.53	0.355	63.3	
1141				6500			77.9	0.552	6.47	0.357	64.3	
1146				7000			Disconnect		flow cell		57.6	60.3 @ 1143
1147											49.1	
1156				8500							51.5	
1201				8000							46.1	
1207				9500							46.4	
1213				10000							44.3	
1217				10500							48.3	
1223											45.3	

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1225 43.9 NTU
1229 37.7
1233 22.4
1242 33.3
247 33.9

1251 34.6
1255 34.83 off
1301 16.7
1306 11
1308 12.8 final Called Dave / Dry

WELL DEVELOPMENT/PURGE FORM

WELL NUMBER MW-2
CLIENT CenterPointe
PROJECT NAME/NUMBER 203067
WELL CONSTRUCTION DATA (Y/N) Y
DEPTH TO WATER AT START 2.35 ft ~~bgs~~ btoc
TD 7.23 ft ~~bgs~~ btoc

LOCATION Near northwestern prop. line
DEVELOPMENT CONTRACTOR ERM
DEVELOPMENT METHOD bailer
FIELD SUPERVISOR Cyrus Gorman
DEPTH TO WATER AT END 2.35 ft btoc

DATE 8/28/13
AIR TEMPERATURE 60's F
CASING VOLUME (GAL.) 0.78
TOTAL GALS. REMOVED ~5.54

TIME HRS/MIN	DURATION (MIN) SURGE	BAIL	PUMP	VOL. GAL.	DEPTH TO WATER	DISCHRG. RATE (gpm)	TEMP. F	COND. ms/cm	pH ---	SUSPEND. SOLIDS mg/L	TURBIDITY NTU	REMARKS Disposition of water, etc.)
900 start		B		0.87			71	0.127	6.18	0.149	709	
911				0.35	2.35		71.8					
914				0.42			72.3	0.153	6.49	0.099	NA	too high
918				1.12								switch to peri pump
929 start												
933	w/tubing			1.38			73.1	0.151	6.60	0.098	NA	
935	" "			1.90	well		73.5	0.153	6.37	0.099	710	
939				2.42	diameter		73.6	0.152	6.39	0.099	483	
943	Surge			2.94	too		73.6	0.153	6.37	0.100	[illegible]	too high / was 93.4 before surge
944	Surge	w/tubing		3.46	small							
947				↓	for H2O		73.7	0.157	6.35	0.099	832	
951				3.98	meter		73.7	0.151	6.39	0.098	28	
955				4.5			73.9	0.151	6.38	0.098	15.1	
959				5.02			74.0	0.151	6.37	0.098	8.11	
1003				5.54			74.1	0.151	6.36	0.098	6.10	w/ flow cell connected
					2.35 end							3.83 disconnected
1006												DONE

SIGNATURE [signature] 8/28/13 1008

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2 min .26 gallon
4 min .52 gallon

WELL DEVELOPMENT/PURGE FORM

WELL NUMBER MW-3
CLIENT ERM
PROJECT NAME/NUMBER 203067
WELL CONSTRUCTION DATA (Y/N) YES
DEPTH TO WATER AT START 5.18 feet btoc
10.38 TD (feet btoc)

LOCATION Eastern prop. boundary
DEVELOPMENT CONTRACTOR ERM
DEVELOPMENT METHOD Peri pump
FIELD SUPERVISOR Cyrus Gorani
DEPTH TO WATER AT END 7.75 ft btoc

DATE 8/28/13
AIR TEMPERATURE 65°F
CASING VOLUME (GAL.) 0.84
TOTAL GALS. REMOVED 23

TIME HRS/MIN	DURATION (MIN) SURGE	BAIL	PUMP	VOL. ~~GAL.~~	DEPTH TO WATER	DISCHRG. RATE (gpm)	TEMP.	COND. mS/cm	pH —	SUSPEND. SOLIDS ~~mg~~/L	TURBIDITY NTU	REMARKS Disposition of water, etc.
1331 start												
1333	T			~~.25~~ mL			80.9	1.63	6.77	1.04	—	too high
1340	Surge			.375								
1344				~~.5~~			77.3	1.69	6.56	1.09	182	
1348				2375			77.1	1.72	6.54	1.11	90.2	
1352				2875			77.0	1.75	6.52	1.12	65.2	
1356				3375			77.1	1.75	6.48	1.11	54.9	
1400				3875			71.5	1.73	6.45	1.13	45.2	
1402											36	disconnect flow cell
1405											32.5	
1408											25.9	
1411											20.8	
											20.2	
1421											20.3	
1428											9.49	
1438											8.47	
1457											7.76	
1509											7.14	done

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WELL DEVELOPMENT/PURGE FORM

WELL NUMBER MW-4
CLIENT Center Point
PROJECT NAME/NUMBER 203067
WELL CONSTRUCTION DATA (Y/N) Y
DEPTH TO WATER AT START 5.53 feet btoc
TD = 10.54 feet btoc

LOCATION SE property line
DEVELOPMENT CONTRACTOR ERM
DEVELOPMENT METHOD Bailer, peri pump
FIELD SUPERVISOR Cyrus Gorman
DEPTH TO WATER AT END 5.72' btoc

DATE 8/28/13
AIR TEMPERATURE 68 °F
CASING VOLUME (GAL.) 0.81
TOTAL GALS. REMOVED 092

TIME HRS/MIN	DURATION (MIN) SURGE	BAIL	PUMP	VOL. mL ~~GAL.~~	DEPTH TO WATER	DISCHRG. RATE (gpm)	TEMP.	COND. mS/cm	pH —	SUSPEND. SOLIDS mg/L	TURBIDITY NTU	REMARKS Disposition of water, etc.)
1514	Start											turbid
1526				1500			72.5	16.0	6.90	9.94	396	
1531				2000			72.3	16.1	6.90	9.96	760	
1536				2500			72.1	16.4	6.91	10.1	too high	
1541				3000			74.3	16.2	6.59	10.1	20.5	
1546				3500			77.5	15.7	6.45	9.76	8.61	
					5.72	1.50	77.5	15.7	6.45	9.76	4.58	

SIGNATURE [signature] 8/28/13

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Appendix F
Purge Logs

ERM - Purge Log

Project Name: CenterPoint Seattle
Project Number: 0203067.02

Date: 8/29/2013
Set up time: 1200
Weather: sprinkles
Field Staff: ME / CG

Well # MW-1 **Sample ID:** MW-1-082913

Location: N Parking lot
Construction: 3/4" PVC

Construction Depth: 10.92'
Screened Interval: 6-11'
Pump Intake Depth: 7.2' → D/F's 8.7' → Rest of analytes

Purge Start Time: 1220 → D/F's
Discharge Rate: D/F's → .05 / 250 mL/min
Purge End Time: 1455

Depth to Water: 6.43'
Height of Water Column: 4.49'
Volume of one casing: 0.7187 gallon

Time	Volume (mL)	Depth to Water (ft btoc)	Temp.	pH	EC (mS/cm)	D.O. (mg/L)	Redox	Turbity (ntu)	Color and Odor
	Initial	turn for D/F, PCB					→	0.96	clear
1333	start								
1338	500	—	75.7	6.27	0.437	1.16	11		Clear, no odor
1343	1000	—	75.6	6.25	0.477	0.14	8		
1348	1500	—	76.0	6.27	0.470	1.02	9	29.1	
1353	2000	—	76.5	6.29	0.461	2.41	12	24.1	Air bubbles in line
1358	2500	—	77.0	6.29	0.458	1.66	14	23.5	
1403	3000	—	77.6	6.26	0.454	1.60	18	22.0	
1408	3500	—	78.0	6.26	0.452	1.88	19	18.5	
1413	4000	—	78.5	6.25	0.449	2.38	21	17.1	
1418	4500	—	78.9	6.25	0.447	2.03	22	16.3	
1423		6.70							

FIELD OBSERVATIONS (Well condition, repairs needed)

Sampler Signature(s): ME

D/F, PCB sample time = 1220, 21 minutes to fill bottle
All other analytes sample time = 1423

ERM - Purge Log

Project Name: CenterPoint Seattle
Project Number: 0203067.02

Date: 8/29/2013
Set up time: 0910
Weather: Sprinkles
Field Staff: MC, CG

Well # MW-2 **Sample ID:** MW-2-082913

Location: NW Parking lot
Construction: 3/4" PVC

Construction Depth: 7.23'
Screened Interval: 2.5-7.5'
Pump Intake Depth: D/F, PCBs - 3.00 feet btoc, Rest of samples 4.75 feet btoc

Purge Start Time: 0929 - No purge samples, 1055 off.
Discharge Rate: 0.75 mL/min = no purge sample
Purge End Time: 1157

Depth to Water: 2.33 feet btoc
Height of Water Column: 4.9 feet btoc
Volume of one casing: 0.7987 gallons

Time	Volume (mL)	Depth to Water (ft btoc)	Temp.	pH	EC (mS/cm)	D.O. (mg/L)	Redox	Turbity (ntu)	Color and Odor
1055	Start	2.33							
1058	500		72.8	6.34	0.164	0.43	188	2.12	clear
1101	1000		73.0	6.46	0.149	0.37	174	1.45	
1104	1500		73.0	6.49	0.142	0.28	166	1.13	
1107	2000		73.0	6.51	0.137	0.26	156	0.87	
1110	2500		73.0	6.51	0.136	0.23	154	0.96	
1113									
		Final: 2.61							

FIELD OBSERVATIONS (Well condition, repairs needed)

* Purge rate regular samples = ~~250~~ 166 mL/min

Sampler Signature(s): Jcc

Sample time D/F, PCB = 0929

Sample time rest of samples = 1113

TD of well: 7.23' btoc

ERM - Purge Log

Project Name: CenterPoint Seattle
Project Number: 0203067.02

Date: 8/30/2013
Set up time: 1155
Weather: Sun, 75°
Field Staff: MC

Well # MW-3

Sample ID: MW-3-083013

Location: NE Corner of the site
Construction: 3/4" PVC

Construction Depth: 10.5'
Screened Interval: 5.5-10.5'
Pump Intake Depth: D/F → 8.75' Rest' → 9.3'

Purge Start Time: 1208 → D/Fs, 1259
Discharge Rate: 50 mL/min
Purge End Time: 1400

Depth to Water: 8.09'
Height of Water Column: 2.41'
Volume of one casing: 0.39L

Time	Volume (mL)	Depth to Water (ft btoc)	Temp.	pH	EC (mS/cm)	D.O. (mg/L)	Redox	Turbity (ntu)	Color and Odor
								4.91	→ for D/Fs
1259	start								Clear
1304	250		24.02	6.66	1.905	7.50	-61.5	9.71	
1309	500		23.72	6.45	1.892	2.06	-67.5	9.58	
1314	750		23.91	6.39	1.894	1.44	-72.4	11.4	
1319	1000		23.97	6.39	1.890	0.78	-74.5	9.29	
1324	1250		23.86	6.42	1.887	0.50	-75.4	7.21	
1329	1500		23.80	6.40	1.881	0.40	-79.2	5.84	
1334		9.82 Final							

FIELD OBSERVATIONS (Well condition, repairs needed)

Sampler Signature(s): MC

1334 → Sample time for rest of analytes

1208 → D/F sample time

8.05

ERM - Purge Log

Project Name: CenterPoint Seattle
Project Number: 0203067.02

Date: 8/29/2013
Set up time: 1600
Weather: clouds, 75°
Field Staff: MC/CG

Well # MW-4

Sample ID: MW-4-082913

Location: SE of site
Construction: 3/4" PVC

Construction Depth: 10.5'
Screened Interval: 5.5'-10.5'
Pump Intake Depth: 6.6 feet btoc → D/Fs 8.2 feet btoc → rest of analytes

Purge Start Time: 1615 → D/Fs
Discharge Rate: → D/Fs
Purge End Time: 1809

Depth to Water: 5.87'
Height of Water Column: 4.63'
Volume of one casing: 0.755 gallons

Time	Volume (mL)	Depth to Water (ft btoc)	Temp.	pH	EC (mS/cm)	D.O. (mg/L)	Redox	Turbity (ntu)	Color and Odor
1647	start								
1651	500		77.3	6.36	14.2	0.47	60	459	clear
1655	1000		75.1	6.47	15.0	0.43	47	3.03	
1700	1500		72.9	6.58	15.5	0.03	40	1.07	Air bubbles in line
1704	2000		72.6	6.57	15.7	0.01	36	1.44	
1707	2500		72.2	6.58	15.8	0.01	35	0.76	
		Final: 5.47							

FIELD OBSERVATIONS (Well condition, repairs needed)

Sampler Signature(s): MCP

15 min → fill up 1st P/F bottle.

D/F, PAHs sample time → 1615

1711 → Sample time for remainder of samples

ERM - Purge Log

Project Name: CenterPoint Seattle
Project Number: 0203067.02

Date: 8/30/2013
Set up time: MC
Weather: Sun
Field Staff: MC

Well # MW-5 ~~DUP~~ **Sample ID:** MW-5-083013

Location: SE corner of site
Construction: 3/4" PVC

Construction Depth: 9.5
Screened Interval: 4.5-9.5
Pump Intake Depth: D/F → 5.25' Rest → 7.21'

Purge Start Time: 0804 → D/F 1037
Discharge Rate: ~125 mL/min
Purge End Time: 1115

Depth to Water: 4.92'
Height of Water Column: 4.58'
Volume of one casing: 0.747 gallons

Time	Volume (mL)	Depth to Water (ft btoc)	°C Temp.	pH	EC (mS/cm)	D.O. (mg/L)	Redox	Turbity (ntu)	Color and Odor
~~0804~~ 1037	Start								
1039	250		23.18	6.26	0.537	6.51	67.5	5.27	clear
1041	500		23.08	6.43	0.528	3.14	44.9	3.09	no odor
1043	750		23.04	6.43	0.521	3.04	34.0	2.24	
1045	1000		23.10	6.44	0.517	2.93	22.1	2.35	
1047	1250		27.09	6.46	0.514	2.89	17.1	1.54	
1049	1500		23.10	6.47	0.512	2.80	3.0	0.72	
1051	1750		23.10	6.48	0.510	2.77	-2.0	1.11	
1053	2000		23.11	6.47	0.510	2.73	-2.7	0.92	
1055	2250		27.13	6.47	0.509	2.71	-3.7	1.18	
1057		5.21							

FIELD OBSERVATIONS (Well condition, repairs needed)

Sampler Signature(s): MC

Sample time D/F, PCBs → 0804 26 minutes to fill up bottle
Sample time rest → 1057

Appendix G
Laboratory Analytical Data Packages

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 580-40016-1
Client Project/Site: CenterPoint Seattle

For:
ERM-West
1218 3rd Ave
Suite 1412
Seattle, Washington 98101

Attn: Cyrus Gorman

Kristine D. Allen

Authorized for release by:
9/13/2013 5:03:38 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

Table of Contents

Job ID: 580-40016-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 8/28/2013 4:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.2º C and 1.2º C.

Except:

For the following sample Trip Blank (580-40016-2) the COC does not list date or time. The sample was logged in for earliest sample date of 08/27/2013 and default time of 0000.

The following sample(s) was received on 8/28/2013 and was activated by the client on 9/10/2013.SB-1-6 (580-40016-6), SB-2-8 (580-40016-8), SB-3-8 (580-40016-9), SB-4-1.5 (580-40016-7), SB-5-11.5 (580-40016-1), SB-6-12 (580-40016-3), SB-7-12 (580-40016-5), SB-8a-12 (580-40016-4).

GC/MS VOA - Method(s) 8260B
The surrogate Ethylbenzene-d10 recovery for the following sample(s) was outside the upper control limit: SB-6-12 (580-40016-3), SB-7-12 (580-40016-5), SB-4-1.5 (580-40016-7). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

The Internal standard 1,4-Dichlorobenzene-d4 response for the following sample(s) exceeded the lower control limit: SB-4-1.5 (580-40016-7). As such, the sample results may be biased high. In addition to the low internal standard failure in analytical batch 144096 the surrogate Ethylbenzene-d10 failed high outside the control limit. The sample was reanalyzed in analytical batch 144607 with similar but passing low recovery for the ISTD with similar ND results however the surrogate Toluene-d8 fell below the lower control limit. Therefore the original analysis was reported as the primary result.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C SIM
In analytical batch 144760, the following sample(s) was prepared outside the method defined holding time because the request for the test was made on the evening before the holding time for the sample expired: SB-4-1.5 (580-40016-7).

In analytical batch 144760, the matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 144681 were outside the lower control limits for Benzo(k)fluoranthene. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA - Method(s) NWTPH-Gx
The Gasoline Range Hydrocarbons (GRH) concentration reported for the following sample(s) is due to the presence of a discrete unknown peak: Trip Blank (580-40016-2).

Duplicate results represent only analytical reproducibility. Only one extracted vial was received for each sample, therefore does not provide field sampling, or preservation, reproducibility.

No other analytical or quality issues were noted.

GC Semi VOA - Method(s) NWTPH-Dx
Detected hydrocarbons in the diesel range appear to be due to heavily weathered diesel and/or a light weight oil.SB-4-1.5 (580-40016-7)

Detected hydrocarbons appear to be due to biogenic interference.SB-5-11.5 (580-40016-1)

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

General Chemistry

Job ID: 580-40016-1 (Continued)

Laboratory: TestAmerica Seattle (Continued)

No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

VOA Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: SB-5-11.5
Date Collected: 08/28/13 08:00
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-1
Matrix: Solid
Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
Toluene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
Ethylbenzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
m-Xylene & p-Xylene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
o-Xylene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
Methyl tert-butyl ether	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
1,2-Dichloroethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1
1,2-Dibromoethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 01:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*08/28/13 17:00*	*09/04/13 01:21*	*1*
Ethylbenzene-d10	*109*		*70 - 120*	*08/28/13 17:00*	*09/04/13 01:21*	*1*
Fluorobenzene (Surr)	*96*		*80 - 120*	*08/28/13 17:00*	*09/04/13 01:21*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*	*08/28/13 17:00*	*09/04/13 01:21*	*1*
Trifluorotoluene (Surr)	*100*		*65 - 140*	*08/28/13 17:00*	*09/04/13 01:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Benzo[a]anthracene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Chrysene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Benzo[b]fluoranthene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Benzo[k]fluoranthene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Benzo[a]pyrene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Indeno[1,2,3-cd]pyrene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1
Dibenz(a,h)anthracene	ND		6.1		ug/Kg	☼	09/11/13 09:37	09/12/13 09:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*42 - 151*	*09/11/13 09:37*	*09/12/13 09:58*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.5		mg/Kg	☼	09/06/13 11:16	09/06/13 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*110*		*50 - 150*	*09/06/13 11:16*	*09/06/13 18:36*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		16		mg/Kg	☼	09/04/13 11:48	09/04/13 13:52	1
RRO (nC25-nC36)	**37**		31		mg/Kg	☼	09/04/13 11:48	09/04/13 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*89*		*50 - 150*	*09/04/13 11:48*	*09/04/13 13:52*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.0**		0.22		mg/Kg	☼	09/03/13 10:20	09/03/13 16:36	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-5-11.5
Date Collected: 08/28/13 08:00
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-1
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			09/03/13 12:01	1
Percent Moisture	20		0.10		%			09/03/13 12:01	1

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: Trip Blank
Date Collected: 08/27/13 00:00
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-2
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Toluene	ND		2.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Ethylbenzene	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
m-Xylene & p-Xylene	ND		2.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
o-Xylene	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Methyl tert-butyl ether	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Hexane	ND		5.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Ethyl t-butyl ether	ND		10		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
Tert-amyl methyl ether	ND		10		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
1,2-Dichloroethane	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1
1,2-Dibromoethane	ND		1.0		ug/Kg		08/28/13 17:00	09/03/13 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 120*	*08/28/13 17:00*	*09/03/13 23:24*	*1*
Ethylbenzene-d10	*94*		*70 - 120*	*08/28/13 17:00*	*09/03/13 23:24*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*08/28/13 17:00*	*09/03/13 23:24*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*	*08/28/13 17:00*	*09/03/13 23:24*	*1*
Trifluorotoluene (Surr)	*105*		*65 - 140*	*08/28/13 17:00*	*09/03/13 23:24*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	24		4.0		mg/Kg		09/06/13 11:16	09/06/13 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*107*		*50 - 150*	*09/06/13 11:16*	*09/06/13 18:08*	*1*

Client Sample ID: SB-6-12
Date Collected: 08/28/13 08:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-3
Matrix: Solid
Percent Solids: 84.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
Toluene	ND		1.9		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
Ethylbenzene	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
m-Xylene & p-Xylene	ND		1.9		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
o-Xylene	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
Methyl tert-butyl ether	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
1,2-Dichloroethane	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1
1,2-Dibromoethane	ND		0.94		ug/Kg	☼	08/28/13 17:00	09/04/13 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 120*	*08/28/13 17:00*	*09/04/13 01:45*	*1*
Ethylbenzene-d10	*122*	*X*	*70 - 120*	*08/28/13 17:00*	*09/04/13 01:45*	*1*
Fluorobenzene (Surr)	*95*		*80 - 120*	*08/28/13 17:00*	*09/04/13 01:45*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*	*08/28/13 17:00*	*09/04/13 01:45*	*1*
Trifluorotoluene (Surr)	*83*		*65 - 140*	*08/28/13 17:00*	*09/04/13 01:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Benzo[a]anthracene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Chrysene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Benzo[b]fluoranthene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Benzo[k]fluoranthene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Benzo[a]pyrene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Indeno[1,2,3-cd]pyrene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1
Dibenz(a,h)anthracene	ND		5.8		ug/Kg	☼	09/11/13 09:37	09/12/13 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*82*		*42 - 151*	*09/11/13 09:37*	*09/12/13 11:05*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		4.6		mg/Kg	☼	09/06/13 11:16	09/06/13 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*111*		*50 - 150*	*09/06/13 11:16*	*09/06/13 19:04*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		15		mg/Kg	☼	09/04/13 11:48	09/04/13 14:10	1
RRO (nC25-nC36)	ND		30		mg/Kg	☼	09/04/13 11:48	09/04/13 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90*		*50 - 150*	*09/04/13 11:48*	*09/04/13 14:10*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.1**		0.22		mg/Kg	☼	09/03/13 10:20	09/03/13 16:48	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-6-12
Date Collected: 08/28/13 08:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-3
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10		%			09/03/13 12:01	1
Percent Moisture	15		0.10		%			09/03/13 12:01	1

Client Sample ID: SB-8a-12
Date Collected: 08/28/13 09:15
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-4
Matrix: Solid
Percent Solids: 81.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
Toluene	ND		2.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
Ethylbenzene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
m-Xylene & p-Xylene	ND		2.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
o-Xylene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
Methyl tert-butyl ether	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
1,2-Dichloroethane	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1
1,2-Dibromoethane	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*08/28/13 17:00*	*09/04/13 02:08*	*1*
Ethylbenzene-d10	*115*		*70 - 120*	*08/28/13 17:00*	*09/04/13 02:08*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:08*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:08*	*1*
Trifluorotoluene (Surr)	*95*		*65 - 140*	*08/28/13 17:00*	*09/04/13 02:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Benzo[a]anthracene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Chrysene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Benzo[b]fluoranthene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Benzo[k]fluoranthene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Benzo[a]pyrene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Indeno[1,2,3-cd]pyrene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1
Dibenz(a,h)anthracene	ND		6.0		ug/Kg	☼	09/11/13 09:37	09/12/13 11:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*42 - 151*	*09/11/13 09:37*	*09/12/13 11:27*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		4.9		mg/Kg	☼	09/06/13 11:16	09/06/13 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*109*		*50 - 150*	*09/06/13 11:16*	*09/06/13 19:32*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		15		mg/Kg	☼	09/04/13 11:48	09/04/13 14:10	1
RRO (nC25-nC36)	ND		30		mg/Kg	☼	09/04/13 11:48	09/04/13 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*94*		*50 - 150*	*09/04/13 11:48*	*09/04/13 14:10*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.4**		0.22		mg/Kg	☼	09/03/13 10:20	09/03/13 16:53	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-8a-12
Date Collected: 08/28/13 09:15
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-4
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		0.10		%			09/03/13 12:01	1
Percent Moisture	18		0.10		%			09/03/13 12:01	1

Client Sample ID: SB-7-12
Date Collected: 08/28/13 09:50
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-5
Matrix: Solid
Percent Solids: 76.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
Toluene	ND		2.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
Ethylbenzene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
m-Xylene & p-Xylene	ND		2.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
o-Xylene	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
Methyl tert-butyl ether	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
1,2-Dichloroethane	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1
1,2-Dibromoethane	ND		1.0		ug/Kg	☼	08/28/13 17:00	09/04/13 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 120*	*08/28/13 17:00*	*09/04/13 02:31*	*1*
Ethylbenzene-d10	*122*	*X*	*70 - 120*	*08/28/13 17:00*	*09/04/13 02:31*	*1*
Fluorobenzene (Surr)	*96*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:31*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:31*	*1*
Trifluorotoluene (Surr)	*99*		*65 - 140*	*08/28/13 17:00*	*09/04/13 02:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**10**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Benzo[a]anthracene	**150**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Chrysene	**150**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Benzo[b]fluoranthene	**150**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Benzo[k]fluoranthene	**57**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Benzo[a]pyrene	**180**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Indeno[1,2,3-cd]pyrene	**100**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1
Dibenz(a,h)anthracene	**24**		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*102*		*42 - 151*	*09/11/13 09:37*	*09/12/13 11:49*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		5.8		mg/Kg	☼	09/06/13 11:16	09/06/13 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*108*		*50 - 150*	*09/06/13 11:16*	*09/06/13 20:00*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		16		mg/Kg	☼	09/04/13 11:48	09/04/13 14:28	1
RRO (nC25-nC36)	ND		33		mg/Kg	☼	09/04/13 11:48	09/04/13 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*83*		*50 - 150*	*09/04/13 11:48*	*09/04/13 14:28*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.7**		0.22		mg/Kg	☼	09/03/13 10:20	09/03/13 16:57	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-7-12
Date Collected: 08/28/13 09:50
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-5
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	76		0.10		%			09/03/13 12:03	1
Percent Moisture	24		0.10		%			09/03/13 12:03	1

Client Sample ID: SB-1-6
Date Collected: 08/28/13 10:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-6
Matrix: Solid
Percent Solids: 73.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
Toluene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
Ethylbenzene	ND		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
m-Xylene & p-Xylene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
o-Xylene	**1.1**		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
Methyl tert-butyl ether	ND		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
1,2-Dichloroethane	ND		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1
1,2-Dibromoethane	ND		1.1		ug/Kg	☼	08/28/13 17:00	09/04/13 02:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*	*08/28/13 17:00*	*09/04/13 02:55*	*1*
Ethylbenzene-d10	*106*		*70 - 120*	*08/28/13 17:00*	*09/04/13 02:55*	*1*
Fluorobenzene (Surr)	*99*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:55*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*	*08/28/13 17:00*	*09/04/13 02:55*	*1*
Trifluorotoluene (Surr)	*82*		*65 - 140*	*08/28/13 17:00*	*09/04/13 02:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Benzo[a]anthracene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Chrysene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Benzo[b]fluoranthene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Benzo[k]fluoranthene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Benzo[a]pyrene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Indeno[1,2,3-cd]pyrene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1
Dibenz(a,h)anthracene	ND		6.4		ug/Kg	☼	09/11/13 09:37	09/12/13 12:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*102*		*42 - 151*	*09/11/13 09:37*	*09/12/13 12:11*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		6.0		mg/Kg	☼	09/06/13 11:16	09/06/13 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*110*		*50 - 150*	*09/06/13 11:16*	*09/06/13 20:28*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		17		mg/Kg	☼	09/04/13 11:48	09/04/13 14:46	1
RRO (nC25-nC36)	ND		34		mg/Kg	☼	09/04/13 11:48	09/04/13 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*87*		*50 - 150*	*09/04/13 11:48*	*09/04/13 14:46*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**1.2**		0.24		mg/Kg	☼	09/03/13 10:20	09/03/13 17:01	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-1-6
Date Collected: 08/28/13 10:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-6
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	74		0.10		%			09/03/13 12:03	1
Percent Moisture	26		0.10		%			09/03/13 12:03	1

Client Sample ID: SB-4-1.5
Date Collected: 08/27/13 12:15
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-7
Matrix: Solid
Percent Solids: 77.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
Toluene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
Ethylbenzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
m-Xylene & p-Xylene	ND		2.3		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
o-Xylene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
Methyl tert-butyl ether	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
1,2-Dichloroethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1
1,2-Dibromoethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 120*	*08/28/13 17:00*	*09/04/13 03:18*	*1*
Ethylbenzene-d10	*127*	*X*	*70 - 120*	*08/28/13 17:00*	*09/04/13 03:18*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*08/28/13 17:00*	*09/04/13 03:18*	*1*
Toluene-d8 (Surr)	*83*		*80 - 120*	*08/28/13 17:00*	*09/04/13 03:18*	*1*
Trifluorotoluene (Surr)	*86*		*65 - 140*	*08/28/13 17:00*	*09/04/13 03:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND	H	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Benzo[a]anthracene	**160**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Chrysene	**330**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Benzo[b]fluoranthene	**190**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Benzo[k]fluoranthene	**61**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Benzo[a]pyrene	**120**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Indeno[1,2,3-cd]pyrene	**64**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1
Dibenz(a,h)anthracene	**20**	**H**	6.2		ug/Kg	☼	09/11/13 09:37	09/12/13 12:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*42 - 151*	*09/11/13 09:37*	*09/12/13 12:34*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		6.3		mg/Kg	☼	09/06/13 11:16	09/06/13 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*109*		*50 - 150*	*09/06/13 11:16*	*09/06/13 20:56*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	**130**		16		mg/Kg	☼	09/04/13 11:48	09/04/13 15:05	1
RRO (nC25-nC36)	**310**		32		mg/Kg	☼	09/04/13 11:48	09/04/13 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*83*		*50 - 150*	*09/04/13 11:48*	*09/04/13 15:05*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**5.7**		0.25		mg/Kg	☼	09/03/13 10:20	09/03/13 17:05	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-4-1.5
Date Collected: 08/27/13 12:15
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-7
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	77		0.10		%			09/03/13 12:03	1
Percent Moisture	23		0.10		%			09/03/13 12:03	1

Client Sample ID: SB-2-8
Date Collected: 08/28/13 11:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-8
Matrix: Solid
Percent Solids: 68.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
Toluene	ND		2.5		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
Ethylbenzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
m-Xylene & p-Xylene	ND		2.5		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
o-Xylene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
Methyl tert-butyl ether	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
1,2-Dichloroethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1
1,2-Dibromoethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 03:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 120*	*08/28/13 17:00*	*09/04/13 03:41*	*1*
Ethylbenzene-d10	*107*		*70 - 120*	*08/28/13 17:00*	*09/04/13 03:41*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*08/28/13 17:00*	*09/04/13 03:41*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*	*08/28/13 17:00*	*09/04/13 03:41*	*1*
Trifluorotoluene (Surr)	*83*		*65 - 140*	*08/28/13 17:00*	*09/04/13 03:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Benzo[a]anthracene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Chrysene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Benzo[b]fluoranthene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Benzo[k]fluoranthene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Benzo[a]pyrene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Indeno[1,2,3-cd]pyrene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1
Dibenz(a,h)anthracene	ND		7.1		ug/Kg	☼	09/11/13 09:37	09/12/13 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*42 - 151*	*09/11/13 09:37*	*09/12/13 12:56*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		7.3		mg/Kg	☼	09/06/13 11:16	09/06/13 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*110*		*50 - 150*	*09/06/13 11:16*	*09/06/13 21:24*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		18		mg/Kg	☼	09/04/13 11:48	09/04/13 14:28	1
RRO (nC25-nC36)	ND		37		mg/Kg	☼	09/04/13 11:48	09/04/13 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*66*		*50 - 150*	*09/04/13 11:48*	*09/04/13 14:28*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6.8**		0.25		mg/Kg	☼	09/03/13 10:20	09/03/13 17:09	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-2-8
Date Collected: 08/28/13 11:45
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-8
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	68		0.10		%			09/03/13 12:03	1
Percent Moisture	32		0.10		%			09/03/13 12:03	1

Client Sample ID: SB-3-8
Date Collected: 08/28/13 12:30
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-9
Matrix: Solid
Percent Solids: 66.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
Toluene	ND		2.5		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
Ethylbenzene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
m-Xylene & p-Xylene	ND		2.5		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
o-Xylene	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
Methyl tert-butyl ether	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
1,2-Dichloroethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1
1,2-Dibromoethane	ND		1.2		ug/Kg	☼	08/28/13 17:00	09/04/13 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 120*	*08/28/13 17:00*	*09/04/13 04:05*	*1*
Ethylbenzene-d10	*109*		*70 - 120*	*08/28/13 17:00*	*09/04/13 04:05*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*08/28/13 17:00*	*09/04/13 04:05*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*	*08/28/13 17:00*	*09/04/13 04:05*	*1*
Trifluorotoluene (Surr)	*94*		*65 - 140*	*08/28/13 17:00*	*09/04/13 04:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Benzo[a]anthracene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Chrysene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Benzo[b]fluoranthene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Benzo[k]fluoranthene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Benzo[a]pyrene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Indeno[1,2,3-cd]pyrene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1
Dibenz(a,h)anthracene	ND		7.4		ug/Kg	☼	09/11/13 09:37	09/12/13 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*42 - 151*	*09/11/13 09:37*	*09/12/13 13:18*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		7.6		mg/Kg	☼	09/06/13 11:16	09/06/13 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*110*		*50 - 150*	*09/06/13 11:16*	*09/06/13 21:52*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		19		mg/Kg	☼	09/04/13 11:48	09/04/13 15:05	1
RRO (nC25-nC36)	ND		38		mg/Kg	☼	09/04/13 11:48	09/04/13 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90*		*50 - 150*	*09/04/13 11:48*	*09/04/13 15:05*	*1*

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**4.4**		0.26		mg/Kg	☼	09/03/13 10:20	09/03/13 17:13	10

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-3-8
Date Collected: 08/28/13 12:30
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-9
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	66		0.10		%			09/03/13 12:03	1
Percent Moisture	34		0.10		%			09/03/13 12:03	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-144097/1-A
Matrix: Solid
Analysis Batch: 144096

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144097

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Toluene	ND		2.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Ethylbenzene	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
m-Xylene & p-Xylene	ND		2.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
o-Xylene	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Methyl tert-butyl ether	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Hexane	ND		5.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Ethyl t-butyl ether	ND		10		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
Tert-amyl methyl ether	ND		10		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
1,2-Dichloroethane	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1
1,2-Dibromoethane	ND		1.0		ug/Kg		09/03/13 20:43	09/03/13 21:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 120*	*09/03/13 20:43*	*09/03/13 21:27*	*1*
Ethylbenzene-d10	*97*		*70 - 120*	*09/03/13 20:43*	*09/03/13 21:27*	*1*
Fluorobenzene (Surr)	*97*		*80 - 120*	*09/03/13 20:43*	*09/03/13 21:27*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*	*09/03/13 20:43*	*09/03/13 21:27*	*1*
Trifluorotoluene (Surr)	*108*		*65 - 140*	*09/03/13 20:43*	*09/03/13 21:27*	*1*

Lab Sample ID: LCS 580-144097/2-A
Matrix: Solid
Analysis Batch: 144096

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144097

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	30.0	29.7		ug/Kg		99	70 - 128
Toluene	30.0	31.3		ug/Kg		104	75 - 126
Ethylbenzene	30.0	31.9		ug/Kg		106	78 - 126
m-Xylene & p-Xylene	30.0	31.8		ug/Kg		106	78 - 126
o-Xylene	30.0	33.9		ug/Kg		113	77 - 127
Methyl tert-butyl ether	30.0	30.9		ug/Kg		103	65 - 125
Hexane	30.0	32.5		ug/Kg		108	66 - 183
Ethyl t-butyl ether	30.0	33.2		ug/Kg		111	75 - 122
Tert-amyl methyl ether	30.0	32.3		ug/Kg		108	65 - 118
1,2-Dichloroethane	30.0	27.3		ug/Kg		91	71 - 128
1,2-Dibromoethane	30.0	31.2		ug/Kg		104	69 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 120*
Ethylbenzene-d10	*106*		*70 - 120*
Fluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
Trifluorotoluene (Surr)	*107*		*65 - 140*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-144097/3-A
Matrix: Solid
Analysis Batch: 144096

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144097

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	30.0	26.1		ug/Kg		87	70 - 128	13	19
Toluene	30.0	27.9		ug/Kg		93	75 - 126	11	19
Ethylbenzene	30.0	28.4		ug/Kg		95	78 - 126	11	23
m-Xylene & p-Xylene	30.0	28.8		ug/Kg		96	78 - 126	10	23
o-Xylene	30.0	30.0		ug/Kg		100	77 - 127	12	22
Methyl tert-butyl ether	30.0	28.0		ug/Kg		93	65 - 125	10	30
Hexane	30.0	29.6		ug/Kg		99	66 - 183	9	30
Ethyl t-butyl ether	30.0	28.0		ug/Kg		93	75 - 122	17	30
Tert-amyl methyl ether	30.0	28.3		ug/Kg		94	65 - 118	13	30
1,2-Dichloroethane	30.0	24.2		ug/Kg		81	71 - 128	12	18
1,2-Dibromoethane	30.0	29.8		ug/Kg		99	69 - 126	5	21

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 120*
Ethylbenzene-d10	*107*		*70 - 120*
Fluorobenzene (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*106*		*80 - 120*
Trifluorotoluene (Surr)	*92*		*65 - 140*

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

Lab Sample ID: MB 580-144681/1-A
Matrix: Solid
Analysis Batch: 144760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144681

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Benzo[a]anthracene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Chrysene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Benzo[b]fluoranthene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Benzo[k]fluoranthene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Benzo[a]pyrene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Indeno[1,2,3-cd]pyrene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1
Dibenz(a,h)anthracene	ND		5.0		ug/Kg		09/11/13 09:37	09/12/13 08:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*108*		*42 - 151*	*09/11/13 09:37*	*09/12/13 08:51*	*1*

Lab Sample ID: LCS 580-144681/2-A
Matrix: Solid
Analysis Batch: 144760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144681

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	1010	937		ug/Kg		93	64 - 129
Benzo[a]anthracene	1000	972		ug/Kg		97	64 - 124
Chrysene	992	973		ug/Kg		98	71 - 126
Benzo[b]fluoranthene	1000	1150		ug/Kg		115	66 - 136

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

Lab Sample ID: LCS 580-144681/2-A
Matrix: Solid
Analysis Batch: 144760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144681

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzo[k]fluoranthene			1010	1040		ug/Kg		104	63 - 143		
Benzo[a]pyrene			1000	1020		ug/Kg		102	68 - 128		
Indeno[1,2,3-cd]pyrene			998	1080		ug/Kg		108	59 - 139		
Dibenz(a,h)anthracene			1000	1150		ug/Kg		115	57 - 142		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*109*		*42 - 151*

Lab Sample ID: LCSD 580-144681/3-A
Matrix: Solid
Analysis Batch: 144760

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144681

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene			1010	930		ug/Kg		92	64 - 129	1	26
Benzo[a]anthracene			1000	967		ug/Kg		97	64 - 124	1	27
Chrysene			992	958		ug/Kg		97	71 - 126	2	26
Benzo[b]fluoranthene			1000	1140		ug/Kg		113	66 - 136	1	31
Benzo[k]fluoranthene			1010	1030		ug/Kg		102	63 - 143	2	31
Benzo[a]pyrene			1000	1020		ug/Kg		102	68 - 128	0	30
Indeno[1,2,3-cd]pyrene			998	1080		ug/Kg		108	59 - 139	0	29
Dibenz(a,h)anthracene			1000	1140		ug/Kg		114	57 - 142	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*106*		*42 - 151*

Lab Sample ID: 580-40016-1 MS
Matrix: Solid
Analysis Batch: 144760

Client Sample ID: SB-5-11.5
Prep Type: Total/NA
Prep Batch: 144681

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Naphthalene	ND		1250	957		ug/Kg	☼	76	75 - 125		
Benzo[a]anthracene	ND		1240	1080		ug/Kg	☼	87	75 - 125		
Chrysene	ND		1230	993		ug/Kg	☼	81	75 - 125		
Benzo[b]fluoranthene	ND		1240	1060		ug/Kg	☼	85	75 - 125		
Benzo[k]fluoranthene	ND		1250	896	F	ug/Kg	☼	72	75 - 125		
Benzo[a]pyrene	ND		1240	1040		ug/Kg	☼	84	75 - 125		
Indeno[1,2,3-cd]pyrene	ND		1240	1150		ug/Kg	☼	93	75 - 125		
Dibenz(a,h)anthracene	ND		1240	1090		ug/Kg	☼	88	75 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*95*		*42 - 151*

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

Lab Sample ID: 580-40016-1 MSD — **Client Sample ID: SB-5-11.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 144760 — **Prep Batch: 144681**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		1210	931		ug/Kg	☼	77	75 - 125	3	26
Benzo[a]anthracene	ND		1200	1030		ug/Kg	☼	86	75 - 125	5	27
Chrysene	ND		1190	959		ug/Kg	☼	81	75 - 125	3	26
Benzo[b]fluoranthene	ND		1200	976		ug/Kg	☼	81	75 - 125	9	31
Benzo[k]fluoranthene	ND		1200	867	F	ug/Kg	☼	72	75 - 125	3	31
Benzo[a]pyrene	ND		1200	984		ug/Kg	☼	82	75 - 125	6	30
Indeno[1,2,3-cd]pyrene	ND		1190	1090		ug/Kg	☼	91	75 - 125	6	29
Dibenz(a,h)anthracene	ND		1200	1030		ug/Kg	☼	86	75 - 125	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*91*		*42 - 151*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-19876/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19902 — **Prep Batch: 19876**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons	ND		3.8		mg/Kg		09/06/13 11:16	09/06/13 13:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene (fid)	*103*		*50 - 150*	*09/06/13 11:16*	*09/06/13 13:27*	*1*

Lab Sample ID: LCS 250-19876/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19902 — **Prep Batch: 19876**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Hydrocarbons			24.4	24.5		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*107*		*50 - 150*

Lab Sample ID: 580-40016-6 MS — **Client Sample ID: SB-1-6**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19902 — **Prep Batch: 19876**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Hydrocarbons	ND		37.8	37.2		mg/Kg	☼	98	65 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*112*		*50 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: 580-40016-1 DU — **Client Sample ID: SB-5-11.5**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19902 — **Prep Batch: 19876**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Gasoline Range Hydrocarbons	ND		ND		mg/Kg	☼	NC	40

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
a,a,a-Trifluorotoluene (fid)	*108*		*50 - 150*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-19771/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19798 — **Prep Batch: 19771**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		12		mg/Kg		09/04/13 06:59	09/04/13 10:49	1
RRO (nC25-nC36)	ND		25		mg/Kg		09/04/13 06:59	09/04/13 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*90*		*50 - 150*	*09/04/13 06:59*	*09/04/13 10:49*	*1*

Lab Sample ID: LCS 250-19771/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19798 — **Prep Batch: 19771**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C25)	122	118		mg/Kg		96	50 - 150
RRO (nC25-nC36)	73.4	68.9		mg/Kg		94	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*87*		*50 - 150*

Lab Sample ID: 580-40016-3 DU — **Client Sample ID: SB-6-12**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 19797 — **Prep Batch: 19771**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
DRO (C10-C25)	ND		ND		mg/Kg	☼	13	40
RRO (nC25-nC36)	ND		ND		mg/Kg	☼	12	40

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1-Chlorooctadecane	*92*		*50 - 150*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-144047/22-A
Matrix: Solid
Analysis Batch: 144092

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144047

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.20		mg/Kg		09/03/13 10:20	09/03/13 15:08	10

Lab Sample ID: LCS 580-144047/23-A
Matrix: Solid
Analysis Batch: 144092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	50.0	48.3		mg/Kg		97	80 - 120

Lab Sample ID: LCSD 580-144047/24-A
Matrix: Solid
Analysis Batch: 144092

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144047

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	50.0	48.3		mg/Kg		97	80 - 120	0	20

Lab Sample ID: LCSSRM 580-144047/25-A
Matrix: Solid
Analysis Batch: 144092

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144047

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	103	102		mg/Kg		98.7	70.9 - 128.2

Lab Chronicle

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-5-11.5

Lab Sample ID: 580-40016-1

Date Collected: 08/28/13 08:00

Matrix: Solid

Date Received: 08/28/13 16:45

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 01:21	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 09:58	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 18:36	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19798	09/04/13 13:52	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 16:36	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:01	KJV	TAL SEA

Client Sample ID: Trip Blank

Lab Sample ID: 580-40016-2

Date Collected: 08/27/13 00:00

Matrix: Solid

Date Received: 08/28/13 16:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/03/13 23:24	JMB	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 18:08	BJ1	TAL PRT

Client Sample ID: SB-6-12

Lab Sample ID: 580-40016-3

Date Collected: 08/28/13 08:45

Matrix: Solid

Date Received: 08/28/13 16:45

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 01:45	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 11:05	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 19:04	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19797	09/04/13 14:10	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 16:48	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:01	KJV	TAL SEA

Client Sample ID: SB-8a-12

Lab Sample ID: 580-40016-4

Date Collected: 08/28/13 09:15
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 02:08	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 11:27	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 19:32	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19798	09/04/13 14:10	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 16:53	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:01	KJV	TAL SEA

Client Sample ID: SB-7-12

Lab Sample ID: 580-40016-5

Date Collected: 08/28/13 09:50
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 02:31	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 11:49	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 20:00	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19797	09/04/13 14:28	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 16:57	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:03	KJV	TAL SEA

Client Sample ID: SB-1-6

Lab Sample ID: 580-40016-6

Date Collected: 08/28/13 10:45
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 02:55	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 12:11	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 20:28	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19797	09/04/13 14:46	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA

Lab Chronicle

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-1-6

Lab Sample ID: 580-40016-6

Date Collected: 08/28/13 10:45
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		10	144092	09/03/13 17:01	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:03	KJV	TAL SEA

Client Sample ID: SB-4-1.5

Lab Sample ID: 580-40016-7

Date Collected: 08/27/13 12:15
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 03:18	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 12:34	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 20:56	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19797	09/04/13 15:05	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 17:05	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:03	KJV	TAL SEA

Client Sample ID: SB-2-8

Lab Sample ID: 580-40016-8

Date Collected: 08/28/13 11:45
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 68.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA
Total/NA	Analysis	8260B		1	144096	09/04/13 03:41	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 12:56	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 21:24	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19798	09/04/13 14:28	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 17:09	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:03	KJV	TAL SEA

Client Sample ID: SB-3-8

Lab Sample ID: 580-40016-9

Date Collected: 08/28/13 12:30
Matrix: Solid
Date Received: 08/28/13 16:45
Percent Solids: 66.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			144097	08/28/13 17:00	JMB	TAL SEA

Lab Chronicle

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Client Sample ID: SB-3-8
Date Collected: 08/28/13 12:30
Date Received: 08/28/13 16:45

Lab Sample ID: 580-40016-9
Matrix: Solid
Percent Solids: 66.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144096	09/04/13 04:05	JMB	TAL SEA
Total/NA	Prep	3550B			144681	09/11/13 09:37	RBL	TAL SEA
Total/NA	Analysis	8270C SIM		1	144760	09/12/13 13:18	EKK	TAL SEA
Total/NA	Prep	5035			19876	09/06/13 11:16	TDB	TAL PRT
Total/NA	Analysis	NWTPH-Gx		1	19902	09/06/13 21:52	BJ1	TAL PRT
Total/NA	Prep	3550B			19771	09/04/13 11:48	CAD	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19798	09/04/13 15:05	NMI	TAL PRT
Total/NA	Prep	3050B			144047	09/03/13 10:20	KJV	TAL SEA
Total/NA	Analysis	6020		10	144092	09/03/13 17:13	FCW	TAL SEA
Total/NA	Analysis	D 2216		1	144060	09/03/13 12:03	KJV	TAL SEA

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

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

Certification Summary

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	NFESC		N/A	05-24-08 *
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Laboratory: TestAmerica Portland

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13
California	State Program	9	2597	09-30-13
Oregon	NELAP	10	OR100021	01-09-14
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-14

* Expired certification is currently pending renewal and is considered valid.

Sample Summary

Client: ERM-West
Project/Site: CenterPoint Seattle

TestAmerica Job ID: 580-40016-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40016-1	SB-5-11.5	Solid	08/28/13 08:00	08/28/13 16:45
580-40016-2	Trip Blank	Solid	08/27/13 00:00	08/28/13 16:45
580-40016-3	SB-6-12	Solid	08/28/13 08:45	08/28/13 16:45
580-40016-4	SB-8a-12	Solid	08/28/13 09:15	08/28/13 16:45
580-40016-5	SB-7-12	Solid	08/28/13 09:50	08/28/13 16:45
580-40016-6	SB-1-6	Solid	08/28/13 10:45	08/28/13 16:45
580-40016-7	SB-4-1.5	Solid	08/27/13 12:15	08/28/13 16:45
580-40016-8	SB-2-8	Solid	08/28/13 11:45	08/28/13 16:45
580-40016-9	SB-3-8	Solid	08/28/13 12:30	08/28/13 16:45

Soil

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

Chain of Custody Record

Client	Client Contact	Date	Chain of Custody Number
ERM	Dave Edwards	8/28/13	20125
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page**
1218 3rd Ave Ste 1412	425 462 8591	40016	1 of 1
City / State / Zip Code	**Sampler / Lab Contact**		
Seattle / WA / 98101	MC / Kris Allen		
Project Name and Location (State)	**Billing Contact**		
CenterPoint Seattle	ERM Walnut Creek		
Contract/Purchase Order/Quote No.			
0203067.02			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)		Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MeOH	Analysis: TPH-G	TPH-D	BTEX 8021	EDB, EDC, MTBE 8260	Total Pb 6010B	cPAH, Naph. 8270-SIM	VPH Ecology	EPH Ecology	Special Instructions/ Conditions of Receipt
SB-5-11.5	1	8/28/13	0800				X	3						1	X	X	X	X	X				
Trip Blank	2	—	—		X			2						1	X		X	X					
SB-6-12	3	8/28/13	0845				X	3						1	X	X	X	X	X				
SB-8a-12	4	8/28/13	0915				X	3						1	X	X	X	X	X				
SB-7-12	5	8/28/13	0950				X	3						1	X	X	X	X	X				
SB-1-6	6	8/28/13	1045				X	4						2	X	X	X	X	X	Hold	Hold	Hold	
SB-4-1.5	7	8/27/13	1215				X	4						2	X	X	X	X	X	Hold	Hold	Hold	
SB-2-8	8	8/28/13	1145				X	4						2	X	X	X	X	X	Hold	Hold	Hold	Sample time = 1145
SB-3-8	9	8/28/13	1230				X	4						2	X	X	X	X	X	Hold	Hold	Hold	

MC 8/28/13

MC 8/28/13

Cooler	Possible Hazard Identification	Sample Disposal	
☐ Yes ☐ No Cooler Temp: _____	☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client	☐ Disposal By Lab ☐ Archive For _____ Months

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days)
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other 9-day

QC Requirements (Specify)

1. Relinquished By Sign/Print	Date	Time	1. Received By Sign/Print	Date	Time
Matt Crandell	8/28/13	1505	Francisco Luna, Jr	8/28/13	1505
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By	Date	Time	3. Received By		

Comments

580-40016 Chain of Custody

DISTRIBUTION: W. _____ ent with Report; PINK – Field Copy

Cooler/IB Dig/IR cor 0.2°C unc 0.2° Cooler/IB Dig/IR cor 1.2°C unc 1.2°C
Cooler Dsc Lg Blue/wht@ Lab 1645 Cooler Dsc Lg Blue/wht@ Lab 1645
Wet/Packs Packing Bubble Wet/Packs Packing Bubble
w/o Al w/o Al

9/13/2013

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40016-1

Login Number: 40016

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40016-1

Login Number: 40016
List Number: 1
Creator: Svabik-Seror, Philip M

List Source: TestAmerica Portland
List Creation: 09/04/13 11:42 AM

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40016-1

Login Number: 40016
List Number: 2
Creator: Svabik-Seror, Philip M

List Source: TestAmerica Portland
List Creation: 09/04/13 11:49 AM

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 580-40033-1
Client Project/Site: CenterPoint, Seattle, WA

For:
ERM-West
1218 3rd Ave
Suite 1412
Seattle, Washington 98101

Attn: Dave Edwards

Kristine D. Allen

Authorized for release by:
9/13/2013 9:51:42 AM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

Table of Contents

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Job ID: 580-40033-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative

Receipt
The samples were received on 8/29/2013 4:10 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

Except:

The labels on the ambers and metals polys of sample MW-2-082913 (580-40033-1) lacks the sampling time. Sample is lined up/logged in per requested analyses listed on the labels.

The COC lists 8270SIM but the job was quoted for full list 8270, logged in per the quote.

GC/MS Semi VOA - Method(s) 8270C
A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for four analytes to recover outside criteria for this method when a full list spike is utilized. The LCS and LCSD associated with prep batch 144057 both had one analyte outside control limits (low N-nitrosodiphenylamine); therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other analytical or quality issues were noted.

GC Semi VOA - Method(s) NWTPH-Dx
Detected hydrocarbons appear to be due to biogenic interference.MW-1-082913 (580-40033-2)

No other analytical or quality issues were noted.

Dioxin
No analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Dioxin Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 11:13
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:21	1
2-Chlorotoluene	ND		0.10		ug/L			09/06/13 23:21	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/06/13 23:21	1
Carbon tetrachloride	ND		0.10		ug/L			09/06/13 23:21	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 23:21	1
Chlorobenzene	ND		0.10		ug/L			09/06/13 23:21	1
Vinyl chloride	ND		0.020		ug/L			09/06/13 23:21	1
sec-Butylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
Dibromomethane	ND		0.10		ug/L			09/06/13 23:21	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/06/13 23:21	1
o-Xylene	ND		0.10		ug/L			09/06/13 23:21	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/06/13 23:21	1
Styrene	ND		0.10		ug/L			09/06/13 23:21	1
Chlorobromomethane	ND		0.10		ug/L			09/06/13 23:21	1
Dichlorobromomethane	ND		0.10		ug/L			09/06/13 23:21	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:21	1
Benzene	ND		0.10		ug/L			09/06/13 23:21	1
Chloroethane	ND		0.25		ug/L			09/06/13 23:21	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 23:21	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/06/13 23:21	1
N-Propylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
4-Isopropyltoluene	ND		0.20		ug/L			09/06/13 23:21	1
n-Butylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
1,1-Dichloropropene	ND		0.10		ug/L			09/06/13 23:21	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 23:21	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 23:21	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
Toluene	ND		0.10		ug/L			09/06/13 23:21	1
Naphthalene	ND		0.40		ug/L			09/06/13 23:21	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
1,3-Dichloropropane	ND		0.10		ug/L			09/06/13 23:21	1
Chloroform	**3.9**		0.10		ug/L			09/06/13 23:21	1
4-Chlorotoluene	ND		0.20		ug/L			09/06/13 23:21	1
Chlorodibromomethane	ND		0.10		ug/L			09/06/13 23:21	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/06/13 23:21	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/06/13 23:21	1
tert-Butylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
Chloromethane	ND		0.10		ug/L			09/06/13 23:21	1
Methylene Chloride	ND		0.50		ug/L			09/06/13 23:21	1
1,1-Dichloroethene	ND		0.10		ug/L			09/06/13 23:21	1
Isopropylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
1,2-Dichloroethane	ND		0.10		ug/L			09/06/13 23:21	1
Tetrachloroethene	ND		0.10		ug/L			09/06/13 23:21	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/06/13 23:21	1
2,2-Dichloropropane	ND		0.10		ug/L			09/06/13 23:21	1
1,2-Dibromoethane	ND		0.10		ug/L			09/06/13 23:21	1
Bromoform	ND		0.10		ug/L			09/06/13 23:21	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/06/13 23:21	1
Trichlorofluoromethane	ND		0.10		ug/L			09/06/13 23:21	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 11:13
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/06/13 23:21	1
Bromobenzene	ND		0.10		ug/L			09/06/13 23:21	1
1,2-Dichloropropane	ND		0.10		ug/L			09/06/13 23:21	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 23:21	1
Ethylbenzene	ND		0.10		ug/L			09/06/13 23:21	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 23:21	1
Hexachlorobutadiene	ND		0.20		ug/L			09/06/13 23:21	1
1,1-Dichloroethane	ND		0.10		ug/L			09/06/13 23:21	1
Bromomethane	ND		0.10		ug/L			09/06/13 23:21	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:21	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/06/13 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*75 - 120*		*09/06/13 23:21*	*1*
Ethylbenzene-d10	*89*		*75 - 125*		*09/06/13 23:21*	*1*
Fluorobenzene (Surr)	*92*		*70 - 130*		*09/06/13 23:21*	*1*
Trifluorotoluene (Surr)	*97*		*80 - 125*		*09/06/13 23:21*	*1*
Toluene-d8 (Surr)	*91*		*75 - 125*		*09/06/13 23:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
Bis(2-chloroethyl)ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Chlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
1,3-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
1,4-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzyl alcohol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
1,2-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Methylphenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
3 & 4 Methylphenol	ND		0.84		ug/L		09/03/13 11:49	09/12/13 04:33	1
N-Nitrosodi-n-propylamine	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Hexachloroethane	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
Nitrobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Isophorone	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Nitrophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4-Dimethylphenol	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzoic acid	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:33	1
Bis(2-chloroethoxy)methane	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4-Dichlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
1,2,4-Trichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Naphthalene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Chloroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Hexachlorobutadiene	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Chloro-3-methylphenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Methylnaphthalene	ND		0.21		ug/L		09/03/13 11:49	09/12/13 04:33	1
Hexachlorocyclopentadiene	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4,6-Trichlorophenol	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4,5-Trichlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Chloronaphthalene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
2-Nitroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 11:13
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Acenaphthylene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,6-Dinitrotoluene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
3-Nitroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Acenaphthene	ND		0.11		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4-Dinitrophenol	ND		5.3		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Nitrophenol	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:33	1
Dibenzofuran	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
2,4-Dinitrotoluene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Diethyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Chlorophenyl phenyl ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Fluorene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Nitroaniline	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
4,6-Dinitro-2-methylphenol	ND		4.2		ug/L		09/03/13 11:49	09/12/13 04:33	1
N-Nitrosodiphenylamine	ND	*	0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
4-Bromophenyl phenyl ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Hexachlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Pentachlorophenol	ND		0.74		ug/L		09/03/13 11:49	09/12/13 04:33	1
Phenanthrene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:33	1
Anthracene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:33	1
Di-n-butyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Fluoranthene	ND		0.053		ug/L		09/03/13 11:49	09/12/13 04:33	1
Pyrene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Butyl benzyl phthalate	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:33	1
3,3'-Dichlorobenzidine	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzo[a]anthracene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Chrysene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:33	1
Bis(2-ethylhexyl) phthalate	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:33	1
Di-n-octyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzo[a]pyrene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:33	1
Indeno[1,2,3-cd]pyrene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Dibenz(a,h)anthracene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzo[g,h,i]perylene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Carbazole	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1
1-Methylnaphthalene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzo[b]fluoranthene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:33	1
Benzo[k]fluoranthene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:33	1
bis (2-chloroisopropyl) ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*70*		*20 - 134*	*09/03/13 11:49*	*09/12/13 04:33*	*1*
Phenol-d5	*74*		*55 - 125*	*09/03/13 11:49*	*09/12/13 04:33*	*1*
Nitrobenzene-d5	*76*		*62 - 125*	*09/03/13 11:49*	*09/12/13 04:33*	*1*
2-Fluorobiphenyl	*72*		*66 - 140*	*09/03/13 11:49*	*09/12/13 04:33*	*1*
2,4,6-Tribromophenol	*78*		*44 - 125*	*09/03/13 11:49*	*09/12/13 04:33*	*1*
Terphenyl-d14	*98*		*20 - 150*	*09/03/13 11:49*	*09/12/13 04:33*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 20:17	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 11:13
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*		*09/04/13 20:17*	*1*
Trifluorotoluene (Surr)	*91*		*50 - 150*		*09/04/13 20:17*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		0.096		mg/L		09/05/13 11:26	09/05/13 14:13	1
RRO (nC25-nC36)	ND		0.24		mg/L		09/05/13 11:26	09/05/13 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*09/05/13 11:26*	*09/05/13 14:13*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		08/30/13 15:40	09/06/13 02:23	1
Calcium	**20**		1.1		mg/L		08/30/13 15:40	09/06/13 02:23	1
Magnesium	**3.8**		1.1		mg/L		08/30/13 15:40	09/06/13 02:23	1
Potassium	ND		3.3		mg/L		08/30/13 15:40	09/06/13 02:23	1
Sodium	**3.9**		2.0		mg/L		08/30/13 15:40	09/06/13 02:23	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		08/30/13 15:40	09/06/13 02:29	1
Calcium	**20**		1.1		mg/L		08/30/13 15:40	09/06/13 02:29	1
Magnesium	**3.6**		1.1		mg/L		08/30/13 15:40	09/06/13 02:29	1
Potassium	ND		3.3		mg/L		08/30/13 15:40	09/06/13 02:29	1
Sodium	**4.2**		2.0		mg/L		08/30/13 15:40	09/06/13 02:29	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Arsenic	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:37	5
Barium	**0.012**		0.0060		mg/L		08/30/13 15:40	09/03/13 13:37	5
Beryllium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Cadmium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Chromium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Cobalt	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Copper	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:37	5
Iron	ND		0.20		mg/L		08/30/13 15:40	09/03/13 13:37	5
Lead	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Manganese	**0.010**		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Nickel	ND		0.015		mg/L		08/30/13 15:40	09/03/13 13:37	5
Selenium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:37	5
Silver	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:37	5
Thallium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:37	5
Vanadium	ND		0.010		mg/L		08/30/13 15:40	09/03/13 13:37	5
Zinc	ND		0.0070		mg/L		08/30/13 15:40	09/03/13 13:37	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:42	5
Antimony	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 11:13
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.012**		0.0060		mg/L		08/30/13 15:40	09/03/13 13:42	5
Beryllium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Cadmium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Chromium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Cobalt	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Copper	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:42	5
Iron	ND		0.20		mg/L		08/30/13 15:40	09/03/13 13:42	5
Lead	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Manganese	**0.010**		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Nickel	ND		0.015		mg/L		08/30/13 15:40	09/03/13 13:42	5
Selenium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:42	5
Silver	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:42	5
Thallium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:42	5
Vanadium	ND		0.010		mg/L		08/30/13 15:40	09/03/13 13:42	5
Zinc	ND		0.0070		mg/L		08/30/13 15:40	09/03/13 13:42	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:51	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 14:23
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:45	1
2-Chlorotoluene	ND		0.10		ug/L			09/06/13 23:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/06/13 23:45	1
Carbon tetrachloride	ND		0.10		ug/L			09/06/13 23:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 23:45	1
Chlorobenzene	ND		0.10		ug/L			09/06/13 23:45	1
Vinyl chloride	ND		0.020		ug/L			09/06/13 23:45	1
sec-Butylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
Dibromomethane	ND		0.10		ug/L			09/06/13 23:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/06/13 23:45	1
o-Xylene	ND		0.10		ug/L			09/06/13 23:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/06/13 23:45	1
Styrene	ND		0.10		ug/L			09/06/13 23:45	1
Chlorobromomethane	ND		0.10		ug/L			09/06/13 23:45	1
Dichlorobromomethane	ND		0.10		ug/L			09/06/13 23:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:45	1
Benzene	ND		0.10		ug/L			09/06/13 23:45	1
Chloroethane	ND		0.25		ug/L			09/06/13 23:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 23:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/06/13 23:45	1
N-Propylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
4-Isopropyltoluene	ND		0.20		ug/L			09/06/13 23:45	1
n-Butylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
1,1-Dichloropropene	ND		0.10		ug/L			09/06/13 23:45	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 23:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 23:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
Toluene	ND		0.10		ug/L			09/06/13 23:45	1
Naphthalene	ND		0.40		ug/L			09/06/13 23:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
1,3-Dichloropropane	ND		0.10		ug/L			09/06/13 23:45	1
Chloroform	ND		0.10		ug/L			09/06/13 23:45	1
4-Chlorotoluene	ND		0.20		ug/L			09/06/13 23:45	1
Chlorodibromomethane	ND		0.10		ug/L			09/06/13 23:45	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/06/13 23:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/06/13 23:45	1
tert-Butylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
Chloromethane	ND		0.10		ug/L			09/06/13 23:45	1
Methylene Chloride	ND		0.50		ug/L			09/06/13 23:45	1
1,1-Dichloroethene	ND		0.10		ug/L			09/06/13 23:45	1
Isopropylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
1,2-Dichloroethane	ND		0.10		ug/L			09/06/13 23:45	1
Tetrachloroethene	ND		0.10		ug/L			09/06/13 23:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/06/13 23:45	1
2,2-Dichloropropane	ND		0.10		ug/L			09/06/13 23:45	1
1,2-Dibromoethane	ND		0.10		ug/L			09/06/13 23:45	1
Bromoform	ND		0.10		ug/L			09/06/13 23:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/06/13 23:45	1
Trichlorofluoromethane	ND		0.10		ug/L			09/06/13 23:45	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 14:23
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/06/13 23:45	1
Bromobenzene	ND		0.10		ug/L			09/06/13 23:45	1
1,2-Dichloropropane	ND		0.10		ug/L			09/06/13 23:45	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 23:45	1
Ethylbenzene	ND		0.10		ug/L			09/06/13 23:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 23:45	1
Hexachlorobutadiene	ND		0.20		ug/L			09/06/13 23:45	1
1,1-Dichloroethane	ND		0.10		ug/L			09/06/13 23:45	1
Bromomethane	ND		0.10		ug/L			09/06/13 23:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/06/13 23:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/06/13 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*75 - 120*		*09/06/13 23:45*	*1*
Ethylbenzene-d10	*84*		*75 - 125*		*09/06/13 23:45*	*1*
Fluorobenzene (Surr)	*98*		*70 - 130*		*09/06/13 23:45*	*1*
Trifluorotoluene (Surr)	*87*		*80 - 125*		*09/06/13 23:45*	*1*
Toluene-d8 (Surr)	*81*		*75 - 125*		*09/06/13 23:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
Bis(2-chloroethyl)ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Chlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
1,3-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
1,4-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzyl alcohol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
1,2-Dichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Methylphenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
3 & 4 Methylphenol	ND		0.84		ug/L		09/03/13 11:49	09/12/13 04:58	1
N-Nitrosodi-n-propylamine	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Hexachloroethane	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
Nitrobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Isophorone	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Nitrophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4-Dimethylphenol	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzoic acid	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:58	1
Bis(2-chloroethoxy)methane	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4-Dichlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
1,2,4-Trichlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Naphthalene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Chloroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Hexachlorobutadiene	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Chloro-3-methylphenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Methylnaphthalene	ND		0.21		ug/L		09/03/13 11:49	09/12/13 04:58	1
Hexachlorocyclopentadiene	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4,6-Trichlorophenol	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4,5-Trichlorophenol	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Chloronaphthalene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
2-Nitroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 14:23
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Acenaphthylene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,6-Dinitrotoluene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
3-Nitroaniline	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Acenaphthene	ND		0.11		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4-Dinitrophenol	ND		5.3		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Nitrophenol	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:58	1
Dibenzofuran	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
2,4-Dinitrotoluene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Diethyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Chlorophenyl phenyl ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Fluorene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Nitroaniline	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
4,6-Dinitro-2-methylphenol	ND		4.2		ug/L		09/03/13 11:49	09/12/13 04:58	1
N-Nitrosodiphenylamine	ND	*	0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
4-Bromophenyl phenyl ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Hexachlorobenzene	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Pentachlorophenol	ND		0.74		ug/L		09/03/13 11:49	09/12/13 04:58	1
Phenanthrene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:58	1
Anthracene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:58	1
Di-n-butyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Fluoranthene	ND		0.053		ug/L		09/03/13 11:49	09/12/13 04:58	1
Pyrene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Butyl benzyl phthalate	ND		0.63		ug/L		09/03/13 11:49	09/12/13 04:58	1
3,3'-Dichlorobenzidine	ND		2.1		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzo[a]anthracene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Chrysene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:58	1
Bis(2-ethylhexyl) phthalate	ND		3.2		ug/L		09/03/13 11:49	09/12/13 04:58	1
Di-n-octyl phthalate	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzo[a]pyrene	ND		0.042		ug/L		09/03/13 11:49	09/12/13 04:58	1
Indeno[1,2,3-cd]pyrene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Dibenz(a,h)anthracene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzo[g,h,i]perylene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Carbazole	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1
1-Methylnaphthalene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzo[b]fluoranthene	ND		0.084		ug/L		09/03/13 11:49	09/12/13 04:58	1
Benzo[k]fluoranthene	ND		0.063		ug/L		09/03/13 11:49	09/12/13 04:58	1
bis (2-chloroisopropyl) ether	ND		0.42		ug/L		09/03/13 11:49	09/12/13 04:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*73*		*20 - 134*	*09/03/13 11:49*	*09/12/13 04:58*	*1*
Phenol-d5	*82*		*55 - 125*	*09/03/13 11:49*	*09/12/13 04:58*	*1*
Nitrobenzene-d5	*82*		*62 - 125*	*09/03/13 11:49*	*09/12/13 04:58*	*1*
2-Fluorobiphenyl	*85*		*66 - 140*	*09/03/13 11:49*	*09/12/13 04:58*	*1*
2,4,6-Tribromophenol	*97*		*44 - 125*	*09/03/13 11:49*	*09/12/13 04:58*	*1*
Terphenyl-d14	*110*		*20 - 150*	*09/03/13 11:49*	*09/12/13 04:58*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 19:54	1

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 14:23
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*		*09/04/13 19:54*	*1*
Trifluorotoluene (Surr)	*91*		*50 - 150*		*09/04/13 19:54*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	**0.17**		0.11		mg/L		09/05/13 11:26	09/05/13 14:32	1
RRO (nC25-nC36)	ND		0.27		mg/L		09/05/13 11:26	09/05/13 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*09/05/13 11:26*	*09/05/13 14:32*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		08/30/13 15:40	09/06/13 02:26	1
Calcium	**24**		1.1		mg/L		08/30/13 15:40	09/06/13 02:26	1
Magnesium	**17**		1.1		mg/L		08/30/13 15:40	09/06/13 02:26	1
Potassium	**14**		3.3		mg/L		08/30/13 15:40	09/06/13 02:26	1
Sodium	**37**		2.0		mg/L		08/30/13 15:40	09/06/13 02:26	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		08/30/13 15:40	09/06/13 02:32	1
Calcium	**23**		1.1		mg/L		08/30/13 15:40	09/06/13 02:32	1
Magnesium	**17**		1.1		mg/L		08/30/13 15:40	09/06/13 02:32	1
Potassium	**14**		3.3		mg/L		08/30/13 15:40	09/06/13 02:32	1
Sodium	**43**		2.0		mg/L		08/30/13 15:40	09/06/13 02:32	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Arsenic	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:29	5
Barium	**0.017**		0.0060		mg/L		08/30/13 15:40	09/03/13 13:29	5
Beryllium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Cadmium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Chromium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Cobalt	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Copper	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:29	5
Iron	**2.1**		0.20		mg/L		08/30/13 15:40	09/03/13 13:29	5
Lead	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Manganese	**0.46**		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Nickel	ND		0.015		mg/L		08/30/13 15:40	09/03/13 13:29	5
Selenium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:29	5
Silver	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:29	5
Thallium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:29	5
Vanadium	**0.016**		0.010		mg/L		08/30/13 15:40	09/03/13 13:29	5
Zinc	**0.017**		0.0070		mg/L		08/30/13 15:40	09/03/13 13:29	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:46	5
Antimony	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 14:23
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.016**		0.0060		mg/L		08/30/13 15:40	09/03/13 13:46	5
Beryllium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Cadmium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Chromium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Cobalt	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Copper	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:46	5
Iron	**2.2**		0.20		mg/L		08/30/13 15:40	09/03/13 13:46	5
Lead	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Manganese	**0.45**		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Nickel	ND		0.015		mg/L		08/30/13 15:40	09/03/13 13:46	5
Selenium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:46	5
Silver	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 13:46	5
Thallium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 13:46	5
Vanadium	**0.018**		0.010		mg/L		08/30/13 15:40	09/03/13 13:46	5
Zinc	**0.017**		0.0070		mg/L		08/30/13 15:40	09/03/13 13:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:54	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: Trip Blank-GW1
Date Collected: 08/29/13 00:00
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/06/13 16:16	1
2-Chlorotoluene	ND		0.10		ug/L			09/06/13 16:16	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/06/13 16:16	1
Carbon tetrachloride	ND		0.10		ug/L			09/06/13 16:16	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 16:16	1
Chlorobenzene	ND		0.10		ug/L			09/06/13 16:16	1
Vinyl chloride	ND		0.020		ug/L			09/06/13 16:16	1
sec-Butylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
Dibromomethane	ND		0.10		ug/L			09/06/13 16:16	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/06/13 16:16	1
o-Xylene	ND		0.10		ug/L			09/06/13 16:16	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/06/13 16:16	1
Styrene	ND		0.10		ug/L			09/06/13 16:16	1
Chlorobromomethane	ND		0.10		ug/L			09/06/13 16:16	1
Dichlorobromomethane	ND		0.10		ug/L			09/06/13 16:16	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/06/13 16:16	1
Benzene	ND		0.10		ug/L			09/06/13 16:16	1
Chloroethane	ND		0.25		ug/L			09/06/13 16:16	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 16:16	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/06/13 16:16	1
N-Propylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
4-Isopropyltoluene	ND		0.20		ug/L			09/06/13 16:16	1
n-Butylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
1,1-Dichloropropene	ND		0.10		ug/L			09/06/13 16:16	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 16:16	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 16:16	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
Toluene	ND		0.10		ug/L			09/06/13 16:16	1
Naphthalene	ND		0.40		ug/L			09/06/13 16:16	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
1,3-Dichloropropane	ND		0.10		ug/L			09/06/13 16:16	1
Chloroform	ND		0.10		ug/L			09/06/13 16:16	1
4-Chlorotoluene	ND		0.20		ug/L			09/06/13 16:16	1
Chlorodibromomethane	ND		0.10		ug/L			09/06/13 16:16	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/06/13 16:16	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/06/13 16:16	1
tert-Butylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
Chloromethane	ND		0.10		ug/L			09/06/13 16:16	1
Methylene Chloride	ND		0.50		ug/L			09/06/13 16:16	1
1,1-Dichloroethene	ND		0.10		ug/L			09/06/13 16:16	1
Isopropylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
1,2-Dichloroethane	ND		0.10		ug/L			09/06/13 16:16	1
Tetrachloroethene	ND		0.10		ug/L			09/06/13 16:16	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/06/13 16:16	1
2,2-Dichloropropane	ND		0.10		ug/L			09/06/13 16:16	1
1,2-Dibromoethane	ND		0.10		ug/L			09/06/13 16:16	1
Bromoform	ND		0.10		ug/L			09/06/13 16:16	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/06/13 16:16	1
Trichlorofluoromethane	ND		0.10		ug/L			09/06/13 16:16	1

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: Trip Blank-GW1
Date Collected: 08/29/13 00:00
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/06/13 16:16	1
Bromobenzene	ND		0.10		ug/L			09/06/13 16:16	1
1,2-Dichloropropane	ND		0.10		ug/L			09/06/13 16:16	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 16:16	1
Ethylbenzene	ND		0.10		ug/L			09/06/13 16:16	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 16:16	1
Hexachlorobutadiene	ND		0.20		ug/L			09/06/13 16:16	1
1,1-Dichloroethane	ND		0.10		ug/L			09/06/13 16:16	1
Bromomethane	ND		0.10		ug/L			09/06/13 16:16	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/06/13 16:16	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/06/13 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*75 - 120*		*09/06/13 16:16*	*1*
Ethylbenzene-d10	*92*		*75 - 125*		*09/06/13 16:16*	*1*
Fluorobenzene (Surr)	*92*		*70 - 130*		*09/06/13 16:16*	*1*
Trifluorotoluene (Surr)	*99*		*80 - 125*		*09/06/13 16:16*	*1*
Toluene-d8 (Surr)	*98*		*75 - 125*		*09/06/13 16:16*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*		*09/04/13 19:32*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 19:32*	*1*

Client Sample ID: MW-2-082913
Date Collected: 08/29/13 09:29
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1221	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1232	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1242	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1248	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1254	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1
PCB-1260	ND		0.54		ug/L		09/03/13 12:34	09/05/13 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*60 - 150*	*09/03/13 12:34*	*09/05/13 18:17*	*1*
DCB Decachlorobiphenyl	*71*		*40 - 135*	*09/03/13 12:34*	*09/05/13 18:17*	*1*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11		pg/L		09/05/13 15:12	09/06/13 21:35	1
2,3,7,8-TCDF	ND		11		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,7,8-PeCDD	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,7,8-PeCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
2,3,4,7,8-PeCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,4,7,8-HxCDD	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,6,7,8-HxCDD	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,7,8,9-HxCDD	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,4,7,8-HxCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,6,7,8-HxCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
2,3,4,6,7,8-HxCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,7,8,9-HxCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,4,6,7,8-HpCDD	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,4,6,7,8-HpCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
1,2,3,4,7,8,9-HpCDF	ND		55		pg/L		09/05/13 15:12	09/06/13 21:35	1
OCDD	ND		110		pg/L		09/05/13 15:12	09/06/13 21:35	1
OCDF	ND		110		pg/L		09/05/13 15:12	09/06/13 21:35	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*82*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-2,3,7,8-TCDF	*83*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,7,8-PeCDD	*76*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,7,8-PeCDF	*78*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,6,7,8-HxCDD	*84*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,4,7,8-HxCDF	*86*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*81*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*82*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*
13C-OCDD	*76*		*40 - 135*	*09/05/13 15:12*	*09/06/13 21:35*	*1*

Client Sample ID: MW-1-082913
Date Collected: 08/29/13 12:20
Date Received: 08/29/13 16:10

Lab Sample ID: 580-40033-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1221	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1232	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1242	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1248	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1254	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1
PCB-1260	ND		0.56		ug/L		09/03/13 12:34	09/06/13 08:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*60 - 150*	*09/03/13 12:34*	*09/06/13 08:58*	*1*
DCB Decachlorobiphenyl	*67*		*40 - 135*	*09/03/13 12:34*	*09/06/13 08:58*	*1*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11		pg/L		09/05/13 15:12	09/06/13 22:17	1
2,3,7,8-TCDF	ND		11		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,7,8-PeCDD	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,7,8-PeCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
2,3,4,7,8-PeCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,4,7,8-HxCDD	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,6,7,8-HxCDD	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,7,8,9-HxCDD	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,4,7,8-HxCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,6,7,8-HxCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
2,3,4,6,7,8-HxCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,7,8,9-HxCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,4,6,7,8-HpCDD	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,4,6,7,8-HpCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
1,2,3,4,7,8,9-HpCDF	ND		54		pg/L		09/05/13 15:12	09/06/13 22:17	1
OCDD	ND		110		pg/L		09/05/13 15:12	09/06/13 22:17	1
OCDF	ND		110		pg/L		09/05/13 15:12	09/06/13 22:17	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*88*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,7,8-PeCDD	*85*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,7,8-PeCDF	*85*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,6,7,8-HxCDD	*91*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,4,7,8-HxCDF	*105*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*91*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*94*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*
13C-OCDD	*87*		*40 - 135*	*09/05/13 15:12*	*09/06/13 22:17*	*1*

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-144375/8
Matrix: Water
Analysis Batch: 144375

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/06/13 13:45	1
2-Chlorotoluene	ND		0.10		ug/L			09/06/13 13:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/06/13 13:45	1
Carbon tetrachloride	ND		0.10		ug/L			09/06/13 13:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 13:45	1
Chlorobenzene	ND		0.10		ug/L			09/06/13 13:45	1
Vinyl chloride	ND		0.020		ug/L			09/06/13 13:45	1
sec-Butylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
Dibromomethane	ND		0.10		ug/L			09/06/13 13:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/06/13 13:45	1
o-Xylene	ND		0.10		ug/L			09/06/13 13:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/06/13 13:45	1
Styrene	ND		0.10		ug/L			09/06/13 13:45	1
Chlorobromomethane	ND		0.10		ug/L			09/06/13 13:45	1
Dichlorobromomethane	ND		0.10		ug/L			09/06/13 13:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/06/13 13:45	1
Benzene	ND		0.10		ug/L			09/06/13 13:45	1
Chloroethane	ND		0.25		ug/L			09/06/13 13:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/06/13 13:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/06/13 13:45	1
N-Propylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
4-Isopropyltoluene	ND		0.20		ug/L			09/06/13 13:45	1
n-Butylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
1,1-Dichloropropene	ND		0.10		ug/L			09/06/13 13:45	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 13:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 13:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
Toluene	ND		0.10		ug/L			09/06/13 13:45	1
Naphthalene	ND		0.40		ug/L			09/06/13 13:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
1,3-Dichloropropane	ND		0.10		ug/L			09/06/13 13:45	1
Chloroform	ND		0.10		ug/L			09/06/13 13:45	1
4-Chlorotoluene	ND		0.20		ug/L			09/06/13 13:45	1
Chlorodibromomethane	ND		0.10		ug/L			09/06/13 13:45	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/06/13 13:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/06/13 13:45	1
tert-Butylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
Chloromethane	ND		0.10		ug/L			09/06/13 13:45	1
Methylene Chloride	ND		0.50		ug/L			09/06/13 13:45	1
1,1-Dichloroethene	ND		0.10		ug/L			09/06/13 13:45	1
Isopropylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
1,2-Dichloroethane	ND		0.10		ug/L			09/06/13 13:45	1
Tetrachloroethene	ND		0.10		ug/L			09/06/13 13:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/06/13 13:45	1
2,2-Dichloropropane	ND		0.10		ug/L			09/06/13 13:45	1
1,2-Dibromoethane	ND		0.10		ug/L			09/06/13 13:45	1
Bromoform	ND		0.10		ug/L			09/06/13 13:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/06/13 13:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-144375/8
Matrix: Water
Analysis Batch: 144375

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.10		ug/L			09/06/13 13:45	1
Trichloroethene	ND		0.10		ug/L			09/06/13 13:45	1
Bromobenzene	ND		0.10		ug/L			09/06/13 13:45	1
1,2-Dichloropropane	ND		0.10		ug/L			09/06/13 13:45	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/06/13 13:45	1
Ethylbenzene	ND		0.10		ug/L			09/06/13 13:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/06/13 13:45	1
Hexachlorobutadiene	ND		0.20		ug/L			09/06/13 13:45	1
1,1-Dichloroethane	ND		0.10		ug/L			09/06/13 13:45	1
Bromomethane	ND		0.10		ug/L			09/06/13 13:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/06/13 13:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/06/13 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*75 - 120*		*09/06/13 13:45*	*1*
Ethylbenzene-d10	*89*		*75 - 125*		*09/06/13 13:45*	*1*
Fluorobenzene (Surr)	*96*		*70 - 130*		*09/06/13 13:45*	*1*
Trifluorotoluene (Surr)	*105*		*80 - 125*		*09/06/13 13:45*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*09/06/13 13:45*	*1*

Lab Sample ID: LCS 580-144375/9
Matrix: Water
Analysis Batch: 144375

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	5.00	5.14		ug/L		103	80 - 130
2-Chlorotoluene	5.00	5.40		ug/L		108	75 - 130
1,2,3-Trichloropropane	5.00	5.25		ug/L		105	75 - 120
Carbon tetrachloride	5.00	5.25		ug/L		105	75 - 140
cis-1,3-Dichloropropene	5.00	4.69		ug/L		94	70 - 120
Chlorobenzene	5.00	5.07		ug/L		101	80 - 120
Vinyl chloride	5.00	6.15		ug/L		123	65 - 140
sec-Butylbenzene	5.00	5.78		ug/L		116	80 - 125
Dibromomethane	5.00	5.70		ug/L		114	80 - 130
m-Xylene & p-Xylene	5.00	5.44		ug/L		109	80 - 130
o-Xylene	5.00	5.46		ug/L		109	80 - 120
1,2,4-Trichlorobenzene	5.00	5.00		ug/L		100	60 - 125
Styrene	5.00	5.57		ug/L		111	75 - 130
Chlorobromomethane	5.00	5.02		ug/L		100	80 - 125
Dichlorobromomethane	5.00	5.52		ug/L		110	80 - 125
1,3-Dichlorobenzene	5.00	5.52		ug/L		110	80 - 120
Benzene	5.00	5.21		ug/L		104	80 - 120
Chloroethane	5.00	6.35		ug/L		127	75 - 140
trans-1,3-Dichloropropene	5.00	4.67		ug/L		93	60 - 140
1,2,3-Trichlorobenzene	5.00	5.06		ug/L		101	60 - 125
N-Propylbenzene	5.00	5.78		ug/L		116	80 - 120
4-Isopropyltoluene	5.00	5.18		ug/L		104	80 - 120
n-Butylbenzene	5.00	5.58		ug/L		112	75 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-144375/9
Matrix: Water
Analysis Batch: 144375

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	5.00	5.46		ug/L		109	80 - 130
cis-1,2-Dichloroethene	5.00	4.44		ug/L		89	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.99		ug/L		100	75 - 125
1,2,4-Trimethylbenzene	5.00	5.12		ug/L		102	80 - 125
Toluene	5.00	5.27		ug/L		105	80 - 120
Naphthalene	5.00	4.02		ug/L		80	45 - 130
1,3,5-Trimethylbenzene	5.00	5.70		ug/L		114	80 - 125
1,3-Dichloropropane	5.00	5.41		ug/L		108	80 - 130
Chloroform	5.00	5.19		ug/L		104	80 - 130
4-Chlorotoluene	5.00	5.46		ug/L		109	75 - 130
Chlorodibromomethane	5.00	5.94		ug/L		119	70 - 120
Dichlorodifluoromethane	5.00	4.51		ug/L		90	30 - 180
1,1,2-Trichloroethane	5.00	5.38		ug/L		108	80 - 130
tert-Butylbenzene	5.00	5.80		ug/L		116	80 - 130
Chloromethane	5.00	5.25		ug/L		105	50 - 140
Methylene Chloride	5.00	5.35		ug/L		107	60 - 145
1,1-Dichloroethene	5.00	6.10		ug/L		122	70 - 150
Isopropylbenzene	5.00	5.42		ug/L		108	75 - 120
1,2-Dichloroethane	5.00	5.76		ug/L		115	80 - 140
Tetrachloroethene	5.00	5.83		ug/L		117	40 - 180
1,1,1-Trichloroethane	5.00	5.31		ug/L		106	80 - 140
2,2-Dichloropropane	5.00	5.71		ug/L		114	60 - 150
1,2-Dibromoethane	5.00	5.31		ug/L		106	70 - 130
Bromoform	5.00	5.09		ug/L		102	65 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.89		ug/L		98	55 - 120
Trichlorofluoromethane	5.00	6.01		ug/L		120	30 - 180
Trichloroethene	5.00	5.38		ug/L		108	80 - 130
Bromobenzene	5.00	5.21		ug/L		104	80 - 130
1,2-Dichloropropane	5.00	5.18		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.17		ug/L		103	75 - 125
Ethylbenzene	5.00	5.14		ug/L		103	80 - 125
trans-1,2-Dichloroethene	5.00	5.34		ug/L		107	80 - 140
Hexachlorobutadiene	5.00	5.18		ug/L		104	75 - 135
1,1-Dichloroethane	5.00	4.37		ug/L		87	75 - 135
Bromomethane	5.00	5.33		ug/L		107	70 - 135
1,4-Dichlorobenzene	5.00	5.23		ug/L		105	80 - 120
Methyl tert-butyl ether	5.00	4.69		ug/L		94	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*75 - 120*
Ethylbenzene-d10	*92*		*75 - 125*
Fluorobenzene (Surr)	*98*		*70 - 130*
Trifluorotoluene (Surr)	*108*		*80 - 125*
Toluene-d8 (Surr)	*104*		*75 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-144375/10
Matrix: Water
Analysis Batch: 144375

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	5.00	5.05		ug/L		101	80 - 130	2	20
2-Chlorotoluene	5.00	5.27		ug/L		105	75 - 130	2	20
1,2,3-Trichloropropane	5.00	4.94		ug/L		99	75 - 120	6	20
Carbon tetrachloride	5.00	5.17		ug/L		103	75 - 140	1	20
cis-1,3-Dichloropropene	5.00	4.75		ug/L		95	70 - 120	1	20
Chlorobenzene	5.00	5.05		ug/L		101	80 - 120	0	20
Vinyl chloride	5.00	6.06		ug/L		121	65 - 140	1	20
sec-Butylbenzene	5.00	5.73		ug/L		115	80 - 125	1	20
Dibromomethane	5.00	5.35		ug/L		107	80 - 130	6	20
m-Xylene & p-Xylene	5.00	5.42		ug/L		108	80 - 130	0	20
o-Xylene	5.00	5.44		ug/L		109	80 - 120	0	20
1,2,4-Trichlorobenzene	5.00	4.81		ug/L		96	60 - 125	4	20
Styrene	5.00	5.56		ug/L		111	75 - 130	0	20
Chlorobromomethane	5.00	5.10		ug/L		102	80 - 125	1	20
Dichlorobromomethane	5.00	5.17		ug/L		103	80 - 125	7	20
1,3-Dichlorobenzene	5.00	5.31		ug/L		106	80 - 120	4	20
Benzene	5.00	4.99		ug/L		100	80 - 120	4	20
Chloroethane	5.00	5.28		ug/L		106	75 - 140	18	20
trans-1,3-Dichloropropene	5.00	4.63		ug/L		93	60 - 140	1	20
1,2,3-Trichlorobenzene	5.00	5.13		ug/L		103	60 - 125	1	20
N-Propylbenzene	5.00	5.75		ug/L		115	80 - 120	1	20
4-Isopropyltoluene	5.00	5.24		ug/L		105	80 - 120	1	20
n-Butylbenzene	5.00	5.51		ug/L		110	75 - 125	1	20
1,1-Dichloropropene	5.00	5.30		ug/L		106	80 - 130	3	20
cis-1,2-Dichloroethene	5.00	4.28		ug/L		86	80 - 130	4	20
1,1,2,2-Tetrachloroethane	5.00	4.93		ug/L		99	75 - 125	1	20
1,2,4-Trimethylbenzene	5.00	5.11		ug/L		102	80 - 125	0	20
Toluene	5.00	5.38		ug/L		108	80 - 120	2	20
Naphthalene	5.00	4.05		ug/L		81	45 - 130	1	20
1,3,5-Trimethylbenzene	5.00	5.76		ug/L		115	80 - 125	1	20
1,3-Dichloropropane	5.00	5.21		ug/L		104	80 - 130	4	20
Chloroform	5.00	5.01		ug/L		100	80 - 130	3	20
4-Chlorotoluene	5.00	5.52		ug/L		110	75 - 130	1	20
Chlorodibromomethane	5.00	5.60		ug/L		112	70 - 120	6	20
Dichlorodifluoromethane	5.00	4.85		ug/L		97	30 - 180	7	20
1,1,2-Trichloroethane	5.00	5.19		ug/L		104	80 - 130	4	20
tert-Butylbenzene	5.00	5.77		ug/L		115	80 - 130	1	20
Chloromethane	5.00	5.33		ug/L		107	50 - 140	2	20
Methylene Chloride	5.00	5.86		ug/L		117	60 - 145	9	20
1,1-Dichloroethene	5.00	5.91		ug/L		118	70 - 150	3	20
Isopropylbenzene	5.00	5.32		ug/L		106	75 - 120	2	20
1,2-Dichloroethane	5.00	5.40		ug/L		108	80 - 140	7	20
Tetrachloroethene	5.00	5.51		ug/L		110	40 - 180	6	20
1,1,1-Trichloroethane	5.00	5.05		ug/L		101	80 - 140	5	20
2,2-Dichloropropane	5.00	4.94		ug/L		99	60 - 150	15	20
1,2-Dibromoethane	5.00	5.10		ug/L		102	70 - 130	4	20
Bromoform	5.00	4.85		ug/L		97	65 - 130	5	20
1,2-Dibromo-3-Chloropropane	5.00	4.38		ug/L		88	55 - 120	11	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-144375/10
Matrix: Water
Analysis Batch: 144375

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane			5.00	5.90		ug/L		118	30 - 180	2	20
Trichloroethene			5.00	5.28		ug/L		106	80 - 130	2	20
Bromobenzene			5.00	5.06		ug/L		101	80 - 130	3	20
1,2-Dichloropropane			5.00	4.87		ug/L		97	80 - 120	6	20
1,1,1,2-Tetrachloroethane			5.00	5.18		ug/L		104	75 - 125	0	20
Ethylbenzene			5.00	5.07		ug/L		101	80 - 125	1	20
trans-1,2-Dichloroethene			5.00	5.97		ug/L		119	80 - 140	11	20
Hexachlorobutadiene			5.00	5.22		ug/L		104	75 - 135	1	20
1,1-Dichloroethane			5.00	4.75		ug/L		95	75 - 135	8	20
Bromomethane			5.00	5.81		ug/L		116	70 - 135	9	20
1,4-Dichlorobenzene			5.00	5.13		ug/L		103	80 - 120	2	20
Methyl tert-butyl ether			5.00	5.32		ug/L		106	75 - 120	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*75 - 120*
Ethylbenzene-d10	*94*		*75 - 125*
Fluorobenzene (Surr)	*98*		*70 - 130*
Trifluorotoluene (Surr)	*107*		*80 - 125*
Toluene-d8 (Surr)	*104*		*75 - 125*

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

Lab Sample ID: MB 580-144057/1-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
Bis(2-chloroethyl)ether	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Chlorophenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
1,3-Dichlorobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
1,4-Dichlorobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzyl alcohol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
1,2-Dichlorobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Methylphenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
3 & 4 Methylphenol	ND		0.80		ug/L		09/03/13 11:49	09/11/13 21:14	1
N-Nitrosodi-n-propylamine	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Hexachloroethane	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
Nitrobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Isophorone	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Nitrophenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4-Dimethylphenol	ND		2.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzoic acid	ND		3.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
Bis(2-chloroethoxy)methane	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4-Dichlorophenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
1,2,4-Trichlorobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Naphthalene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Chloroaniline	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1

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

Lab Sample ID: MB 580-144057/1-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Chloro-3-methylphenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Methylnaphthalene	ND		0.20		ug/L		09/03/13 11:49	09/11/13 21:14	1
Hexachlorocyclopentadiene	ND		2.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4,6-Trichlorophenol	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4,5-Trichlorophenol	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Chloronaphthalene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
2-Nitroaniline	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Dimethyl phthalate	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Acenaphthylene	ND		0.080		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,6-Dinitrotoluene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
3-Nitroaniline	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Acenaphthene	ND		0.10		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4-Dinitrophenol	ND		5.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Nitrophenol	ND		3.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
Dibenzofuran	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
2,4-Dinitrotoluene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Diethyl phthalate	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Chlorophenyl phenyl ether	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Fluorene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Nitroaniline	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
4,6-Dinitro-2-methylphenol	ND		4.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
N-Nitrosodiphenylamine	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
4-Bromophenyl phenyl ether	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Hexachlorobenzene	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Pentachlorophenol	ND		0.70		ug/L		09/03/13 11:49	09/11/13 21:14	1
Phenanthrene	ND		0.080		ug/L		09/03/13 11:49	09/11/13 21:14	1
Anthracene	ND		0.040		ug/L		09/03/13 11:49	09/11/13 21:14	1
Di-n-butyl phthalate	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Fluoranthene	ND		0.050		ug/L		09/03/13 11:49	09/11/13 21:14	1
Pyrene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Butyl benzyl phthalate	ND		0.60		ug/L		09/03/13 11:49	09/11/13 21:14	1
3,3'-Dichlorobenzidine	ND		2.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzo[a]anthracene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Chrysene	ND		0.040		ug/L		09/03/13 11:49	09/11/13 21:14	1
Bis(2-ethylhexyl) phthalate	ND		3.0		ug/L		09/03/13 11:49	09/11/13 21:14	1
Di-n-octyl phthalate	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzo[a]pyrene	ND		0.040		ug/L		09/03/13 11:49	09/11/13 21:14	1
Indeno[1,2,3-cd]pyrene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Dibenz(a,h)anthracene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzo[g,h,i]perylene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Carbazole	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1
1-Methylnaphthalene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzo[b]fluoranthene	ND		0.080		ug/L		09/03/13 11:49	09/11/13 21:14	1
Benzo[k]fluoranthene	ND		0.060		ug/L		09/03/13 11:49	09/11/13 21:14	1
bis (2-chloroisopropyl) ether	ND		0.40		ug/L		09/03/13 11:49	09/11/13 21:14	1

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

Lab Sample ID: MB 580-144057/1-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144057

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	57		20 - 134	09/03/13 11:49	09/11/13 21:14	1
Phenol-d5	61		55 - 125	09/03/13 11:49	09/11/13 21:14	1
Nitrobenzene-d5	71		62 - 125	09/03/13 11:49	09/11/13 21:14	1
2-Fluorobiphenyl	72		66 - 140	09/03/13 11:49	09/11/13 21:14	1
2,4,6-Tribromophenol	74		44 - 125	09/03/13 11:49	09/11/13 21:14	1
Terphenyl-d14	101		20 - 150	09/03/13 11:49	09/11/13 21:14	1

Lab Sample ID: LCS 580-144057/2-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	2.03	1.38		ug/L		68	65 - 130
Bis(2-chloroethyl)ether	2.00	1.67		ug/L		83	65 - 125
2-Chlorophenol	1.98	1.65		ug/L		83	60 - 130
1,3-Dichlorobenzene	2.00	1.57		ug/L		79	40 - 125
1,4-Dichlorobenzene	2.00	1.60		ug/L		80	40 - 125
Benzyl alcohol	1.99	1.57		ug/L		79	65 - 125
1,2-Dichlorobenzene	2.00	1.56		ug/L		78	45 - 125
2-Methylphenol	2.00	1.57		ug/L		79	70 - 130
3 & 4 Methylphenol	2.01	1.78		ug/L		89	65 - 130
N-Nitrosodi-n-propylamine	2.00	1.66		ug/L		83	70 - 130
Hexachloroethane	2.00	1.59		ug/L		79	30 - 125
Nitrobenzene	2.01	1.77		ug/L		88	70 - 125
Isophorone	2.00	1.82		ug/L		91	75 - 125
2-Nitrophenol	1.98	1.81		ug/L		91	55 - 140
2,4-Dimethylphenol	1.98	ND		ug/L		70	30 - 135
Benzoic acid	10.1	9.17		ug/L		91	20 - 140
Bis(2-chloroethoxy)methane	2.00	1.76		ug/L		88	75 - 125
2,4-Dichlorophenol	1.98	1.76		ug/L		89	50 - 140
1,2,4-Trichlorobenzene	2.00	1.66		ug/L		83	40 - 125
Naphthalene	2.01	1.68		ug/L		83	60 - 125
4-Chloroaniline	2.00	1.38		ug/L		69	35 - 175
Hexachlorobutadiene	2.00	1.58		ug/L		79	25 - 125
4-Chloro-3-methylphenol	2.04	1.64		ug/L		81	65 - 145
2-Methylnaphthalene	2.00	1.65		ug/L		82	60 - 125
Hexachlorocyclopentadiene	2.00	ND		ug/L		61	20 - 125
2,4,6-Trichlorophenol	1.99	2.14		ug/L		108	55 - 140
2,4,5-Trichlorophenol	2.00	2.14		ug/L		107	75 - 125
2-Chloronaphthalene	2.00	1.80		ug/L		90	60 - 125
2-Nitroaniline	2.01	1.83		ug/L		91	75 - 140
Dimethyl phthalate	2.00	2.17		ug/L		108	65 - 155
Acenaphthylene	2.00	1.82		ug/L		91	65 - 125
2,6-Dinitrotoluene	2.00	2.04		ug/L		102	75 - 125
3-Nitroaniline	2.00	1.73		ug/L		86	75 - 140
Acenaphthene	2.00	1.86		ug/L		93	65 - 125
2,4-Dinitrophenol	9.87	9.42		ug/L		95	50 - 130
4-Nitrophenol	10.1	8.13		ug/L		80	35 - 145

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

Lab Sample ID: LCS 580-144057/2-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144057

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	2.00	1.85		ug/L		93	60 - 125
2,4-Dinitrotoluene	2.00	2.25		ug/L		112	75 - 125
Diethyl phthalate	2.01	1.91		ug/L		95	60 - 150
4-Chlorophenyl phenyl ether	2.00	1.86		ug/L		93	70 - 125
Fluorene	2.02	1.93		ug/L		96	70 - 125
4-Nitroaniline	2.00	1.75		ug/L		87	70 - 125
4,6-Dinitro-2-methylphenol	9.95	10.1		ug/L		102	50 - 125
N-Nitrosodiphenylamine	2.00	ND	*	ug/L		6	40 - 135
4-Bromophenyl phenyl ether	2.00	2.07		ug/L		103	75 - 125
Hexachlorobenzene	2.00	2.03		ug/L		102	70 - 125
Pentachlorophenol	1.97	1.61		ug/L		82	20 - 145
Phenanthrene	2.01	2.02		ug/L		100	75 - 125
Anthracene	2.00	2.15		ug/L		108	50 - 125
Di-n-butyl phthalate	2.00	2.38		ug/L		119	55 - 155
Fluoranthene	2.00	2.43		ug/L		122	70 - 125
Pyrene	2.00	2.15		ug/L		107	70 - 125
Butyl benzyl phthalate	2.00	2.67		ug/L		133	60 - 150
3,3'-Dichlorobenzidine	3.97	3.28		ug/L		83	20 - 175
Benzo[a]anthracene	2.00	2.12		ug/L		106	65 - 125
Chrysene	1.93	2.01		ug/L		104	70 - 125
Bis(2-ethylhexyl) phthalate	1.99	ND		ug/L		139	20 - 175
Di-n-octyl phthalate	2.00	1.52		ug/L		76	55 - 150
Benzo[a]pyrene	2.00	2.05		ug/L		103	45 - 125
Indeno[1,2,3-cd]pyrene	2.01	2.11		ug/L		105	75 - 125
Dibenz(a,h)anthracene	2.00	1.95		ug/L		98	75 - 130
Benzo[g,h,i]perylene	2.00	2.15		ug/L		108	75 - 125
Carbazole	2.00	2.40		ug/L		120	75 - 125
1-Methylnaphthalene	2.01	1.81		ug/L		90	60 - 125
Benzo[b]fluoranthene	2.00	2.15		ug/L		108	70 - 125
Benzo[k]fluoranthene	2.00	2.18		ug/L		109	70 - 125
bis (2-chloroisopropyl) ether	2.00	1.43		ug/L		72	65 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*75*		*20 - 134*
Phenol-d5	*79*		*55 - 125*
Nitrobenzene-d5	*84*		*62 - 125*
2-Fluorobiphenyl	*89*		*66 - 140*
2,4,6-Tribromophenol	*93*		*44 - 125*
Terphenyl-d14	*120*		*20 - 150*

Lab Sample ID: LCSD 580-144057/3-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144057

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	2.03	1.46		ug/L		72	65 - 130	6	20
Bis(2-chloroethyl)ether	2.00	1.74		ug/L		87	65 - 125	4	20
2-Chlorophenol	1.98	1.86		ug/L		94	60 - 130	12	20

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

Lab Sample ID: LCSD 580-144057/3-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144057

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	2.00	1.69		ug/L		84	40 - 125	7	20
1,4-Dichlorobenzene	2.00	1.70		ug/L		85	40 - 125	6	20
Benzyl alcohol	1.99	1.70		ug/L		85	65 - 125	8	20
1,2-Dichlorobenzene	2.00	1.65		ug/L		83	45 - 125	6	20
2-Methylphenol	2.00	1.76		ug/L		88	70 - 130	11	20
3 & 4 Methylphenol	2.01	1.93		ug/L		96	65 - 130	8	20
N-Nitrosodi-n-propylamine	2.00	1.82		ug/L		91	70 - 130	9	20
Hexachloroethane	2.00	1.65		ug/L		83	30 - 125	4	20
Nitrobenzene	2.01	1.94		ug/L		97	70 - 125	9	20
Isophorone	2.00	1.96		ug/L		98	75 - 125	7	20
2-Nitrophenol	1.98	1.90		ug/L		96	55 - 140	5	20
2,4-Dimethylphenol	1.98	ND		ug/L		79	30 - 135	12	20
Benzoic acid	10.1	8.57		ug/L		85	20 - 140	7	20
Bis(2-chloroethoxy)methane	2.00	1.92		ug/L		96	75 - 125	9	20
2,4-Dichlorophenol	1.98	1.79		ug/L		91	50 - 140	2	20
1,2,4-Trichlorobenzene	2.00	1.67		ug/L		83	40 - 125	0	20
Naphthalene	2.01	1.73		ug/L		86	60 - 125	3	20
4-Chloroaniline	2.00	1.48		ug/L		74	35 - 175	7	20
Hexachlorobutadiene	2.00	1.57		ug/L		79	25 - 125	0	20
4-Chloro-3-methylphenol	2.04	1.93		ug/L		95	65 - 145	16	20
2-Methylnaphthalene	2.00	1.75		ug/L		87	60 - 125	6	20
Hexachlorocyclopentadiene	2.00	ND		ug/L		60	20 - 125	0	20
2,4,6-Trichlorophenol	1.99	2.13		ug/L		107	55 - 140	1	20
2,4,5-Trichlorophenol	2.00	2.09		ug/L		104	75 - 125	2	20
2-Chloronaphthalene	2.00	1.86		ug/L		93	60 - 125	3	20
2-Nitroaniline	2.01	1.74		ug/L		86	75 - 140	5	20
Dimethyl phthalate	2.00	2.24		ug/L		112	65 - 155	3	20
Acenaphthylene	2.00	1.86		ug/L		93	65 - 125	3	20
2,6-Dinitrotoluene	2.00	2.13		ug/L		106	75 - 125	4	20
3-Nitroaniline	2.00	1.76		ug/L		88	75 - 140	2	20
Acenaphthene	2.00	1.90		ug/L		95	65 - 125	2	20
2,4-Dinitrophenol	9.87	9.10		ug/L		92	50 - 130	3	20
4-Nitrophenol	10.1	7.66		ug/L		76	35 - 145	6	20
Dibenzofuran	2.00	1.95		ug/L		97	60 - 125	5	20
2,4-Dinitrotoluene	2.00	2.26		ug/L		113	75 - 125	1	20
Diethyl phthalate	2.01	2.00		ug/L		99	60 - 150	5	20
4-Chlorophenyl phenyl ether	2.00	1.93		ug/L		97	70 - 125	4	20
Fluorene	2.02	2.03		ug/L		100	70 - 125	5	20
4-Nitroaniline	2.00	2.01		ug/L		100	70 - 125	14	20
4,6-Dinitro-2-methylphenol	9.95	10.4		ug/L		104	50 - 125	2	20
N-Nitrosodiphenylamine	2.00	ND	*	ug/L		6	40 - 135	10	20
4-Bromophenyl phenyl ether	2.00	2.07		ug/L		103	75 - 125	0	20
Hexachlorobenzene	2.00	2.02		ug/L		101	70 - 125	0	20
Pentachlorophenol	1.97	1.66		ug/L		84	20 - 145	3	20
Phenanthrene	2.01	1.97		ug/L		98	75 - 125	3	20
Anthracene	2.00	2.08		ug/L		104	50 - 125	3	20
Di-n-butyl phthalate	2.00	2.38		ug/L		119	55 - 155	0	20
Fluoranthene	2.00	2.43		ug/L		121	70 - 125	0	20

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

Lab Sample ID: LCSD 580-144057/3-A
Matrix: Water
Analysis Batch: 144730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144057

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			2.00	2.17		ug/L		109	70 - 125	1	20
Butyl benzyl phthalate			2.00	2.73		ug/L		136	60 - 150	2	20
3,3'-Dichlorobenzidine			3.97	3.33		ug/L		84	20 - 175	2	20
Benzo[a]anthracene			2.00	2.16		ug/L		108	65 - 125	2	20
Chrysene			1.93	1.99		ug/L		103	70 - 125	1	20
Bis(2-ethylhexyl) phthalate			1.99	ND		ug/L		141	20 - 175	1	20
Di-n-octyl phthalate			2.00	1.60		ug/L		80	55 - 150	5	20
Benzo[a]pyrene			2.00	2.05		ug/L		102	45 - 125	0	20
Indeno[1,2,3-cd]pyrene			2.01	2.20		ug/L		109	75 - 125	5	20
Dibenz(a,h)anthracene			2.00	1.91		ug/L		95	75 - 130	2	20
Benzo[g,h,i]perylene			2.00	2.25		ug/L		113	75 - 125	5	20
Carbazole			2.00	2.45		ug/L		122	75 - 125	2	20
1-Methylnaphthalene			2.01	1.84		ug/L		92	60 - 125	1	20
Benzo[b]fluoranthene			2.00	2.30		ug/L		115	70 - 125	7	20
Benzo[k]fluoranthene			2.00	2.27		ug/L		114	70 - 125	4	20
bis (2-chloroisopropyl) ether			2.00	1.49		ug/L		75	65 - 125	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*77*		*20 - 134*
Phenol-d5	*81*		*55 - 125*
Nitrobenzene-d5	*80*		*62 - 125*
2-Fluorobiphenyl	*85*		*66 - 140*
2,4,6-Tribromophenol	*91*		*44 - 125*
Terphenyl-d14	*107*		*20 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-144148/5
Matrix: Water
Analysis Batch: 144148

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*50 - 150*		*09/04/13 12:48*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 12:48*	*1*

Lab Sample ID: LCS 580-144148/6
Matrix: Water
Analysis Batch: 144148

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline			1.00	0.846		mg/L		85	79 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*50 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-144148/6
Matrix: Water
Analysis Batch: 144148

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	*93*		*50 - 150*

Lab Sample ID: LCSD 580-144148/11
Matrix: Water
Analysis Batch: 144148

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			1.00	0.851		mg/L		85	79 - 110	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*
Trifluorotoluene (Surr)	*83*		*50 - 150*

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

Lab Sample ID: MB 580-144066/1-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1221	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1232	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1242	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1248	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1254	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1
PCB-1260	ND		0.50		ug/L		09/03/13 12:33	09/05/13 12:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*70*		*60 - 150*	*09/03/13 12:33*	*09/05/13 12:21*	*1*
DCB Decachlorobiphenyl	*52*		*40 - 135*	*09/03/13 12:33*	*09/05/13 12:21*	*1*

Lab Sample ID: LCS 580-144066/2-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144066

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			1.00	0.849		ug/L		85	25 - 145
PCB-1260			1.00	0.833		ug/L		83	30 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	*79*		*60 - 150*
DCB Decachlorobiphenyl	*71*		*40 - 135*

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

Lab Sample ID: LCSD 580-144066/3-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144066

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			1.00	0.936		ug/L		94	25 - 145	10	27
PCB-1260			1.00	0.979		ug/L		98	30 - 145	16	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*85*		*60 - 150*
DCB Decachlorobiphenyl	*64*		*40 - 135*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-19826/1-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		0.10		mg/L		09/05/13 11:26	09/05/13 13:54	1
RRO (nC25-nC36)	ND		0.25		mg/L		09/05/13 11:26	09/05/13 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*09/05/13 11:26*	*09/05/13 13:54*	*1*

Lab Sample ID: LCS 250-19826/2-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19826

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C25)			2.50	2.59		mg/L		104	50 - 150
RRO (nC25-nC36)			1.50	1.54		mg/L		103	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*95*		*50 - 150*

Lab Sample ID: LCSD 250-19826/3-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19826

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C25)			2.50	2.55		mg/L		102	50 - 150	2	20
RRO (nC25-nC36)			1.50	1.53		mg/L		102	50 - 150	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane	*95*		*50 - 150*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-24546/1-A
Matrix: Water
Analysis Batch: 24661

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24546

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10		pg/L		09/05/13 15:12	09/06/13 15:19	1
2,3,7,8-TCDF	ND		10		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,7,8-PeCDD	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,7,8-PeCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
2,3,4,7,8-PeCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,4,7,8-HxCDD	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,6,7,8-HxCDD	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,7,8,9-HxCDD	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,4,7,8-HxCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,6,7,8-HxCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
2,3,4,6,7,8-HxCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,7,8,9-HxCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,4,6,7,8-HpCDD	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,4,6,7,8-HpCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
1,2,3,4,7,8,9-HpCDF	ND		50		pg/L		09/05/13 15:12	09/06/13 15:19	1
OCDD	ND		100		pg/L		09/05/13 15:12	09/06/13 15:19	1
OCDF	ND		100		pg/L		09/05/13 15:12	09/06/13 15:19	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*83*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-2,3,7,8-TCDF	*86*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,7,8-PeCDD	*82*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,4,7,8-HxCDF	*93*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*86*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*86*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*
13C-OCDD	*82*		*40 - 135*	*09/05/13 15:12*	*09/06/13 15:19*	*1*

Lab Sample ID: LCS 320-24546/2-A
Matrix: Water
Analysis Batch: 24661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	192		pg/L		96	72 - 144
2,3,7,8-TCDF	200	184		pg/L		92	73 - 150
1,2,3,7,8-PeCDD	1000	992		pg/L		99	79 - 125
1,2,3,7,8-PeCDF	1000	964		pg/L		96	79 - 137
2,3,4,7,8-PeCDF	1000	904		pg/L		90	76 - 137
1,2,3,4,7,8-HxCDD	1000	1140		pg/L		114	65 - 144
1,2,3,6,7,8-HxCDD	1000	1030		pg/L		103	78 - 137
1,2,3,7,8,9-HxCDD	1000	1030		pg/L		103	74 - 142
1,2,3,4,7,8-HxCDF	1000	994		pg/L		99	86 - 126
1,2,3,6,7,8-HxCDF	1000	926		pg/L		93	79 - 137
2,3,4,6,7,8-HxCDF	1000	956		pg/L		96	80 - 138
1,2,3,7,8,9-HxCDF	1000	926		pg/L		93	72 - 145
1,2,3,4,6,7,8-HpCDD	1000	1030		pg/L		103	81 - 132
1,2,3,4,6,7,8-HpCDF	1000	998		pg/L		100	81 - 135

Method: 8290 - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-24546/2-A
Matrix: Water
Analysis Batch: 24661

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24546

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2,3,4,7,8,9-HpCDF			1000	937		pg/L		94	72 - 140		
OCDD			2000	2110		pg/L		105	80 - 129		
OCDF			2000	2030		pg/L		101	65 - 145		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*85*		*40 - 135*
13C-2,3,7,8-TCDF	*88*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*81*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*84*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*84*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*93*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*82*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*87*		*40 - 135*
13C-OCDD	*81*		*40 - 135*

Lab Sample ID: LCSD 320-24546/3-A
Matrix: Water
Analysis Batch: 24661

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 24546

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,3,7,8-TCDD			200	202		pg/L		101	72 - 144	5	20
2,3,7,8-TCDF			200	185		pg/L		93	73 - 150	0	20
1,2,3,7,8-PeCDD			1000	948		pg/L		95	79 - 125	5	20
1,2,3,7,8-PeCDF			1000	947		pg/L		95	79 - 137	2	20
2,3,4,7,8-PeCDF			1000	915		pg/L		91	76 - 137	1	20
1,2,3,4,7,8-HxCDD			1000	1090		pg/L		109	65 - 144	5	20
1,2,3,6,7,8-HxCDD			1000	975		pg/L		98	78 - 137	5	20
1,2,3,7,8,9-HxCDD			1000	980		pg/L		98	74 - 142	5	20
1,2,3,4,7,8-HxCDF			1000	964		pg/L		96	86 - 126	3	20
1,2,3,6,7,8-HxCDF			1000	902		pg/L		90	79 - 137	3	20
2,3,4,6,7,8-HxCDF			1000	939		pg/L		94	80 - 138	2	20
1,2,3,7,8,9-HxCDF			1000	918		pg/L		92	72 - 145	1	20
1,2,3,4,6,7,8-HpCDD			1000	986		pg/L		99	81 - 132	4	20
1,2,3,4,6,7,8-HpCDF			1000	958		pg/L		96	81 - 135	4	20
1,2,3,4,7,8,9-HpCDF			1000	932		pg/L		93	72 - 140	0	20
OCDD			2000	2000		pg/L		100	80 - 129	5	20
OCDF			2000	1930		pg/L		96	65 - 145	5	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*83*		*40 - 135*
13C-2,3,7,8-TCDF	*85*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*82*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*88*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*96*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*92*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*92*		*40 - 135*
13C-OCDD	*86*		*40 - 135*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 580-143911/14-A
Matrix: Water
Analysis Batch: 144352

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		08/30/13 15:40	09/06/13 01:50	1
Calcium	ND		1.1		mg/L		08/30/13 15:40	09/06/13 01:50	1
Magnesium	ND		1.1		mg/L		08/30/13 15:40	09/06/13 01:50	1
Potassium	ND		3.3		mg/L		08/30/13 15:40	09/06/13 01:50	1
Sodium	ND		2.0		mg/L		08/30/13 15:40	09/06/13 01:50	1

Lab Sample ID: LCS 580-143911/15-A
Matrix: Water
Analysis Batch: 144352

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	4.00	4.04		mg/L		101	80 - 120
Calcium	20.0	19.9		mg/L		100	80 - 120
Magnesium	20.0	20.2		mg/L		101	80 - 120
Potassium	20.0	19.0		mg/L		95	80 - 120
Sodium	20.0	20.0		mg/L		100	80 - 120

Lab Sample ID: LCSD 580-143911/16-A
Matrix: Water
Analysis Batch: 144352

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	4.00	4.55		mg/L		114	80 - 120	12	20
Calcium	20.0	20.2		mg/L		101	80 - 120	1	20
Magnesium	20.0	20.8		mg/L		104	80 - 120	3	20
Potassium	20.0	19.5		mg/L		98	80 - 120	3	20
Sodium	20.0	20.8		mg/L		104	80 - 120	4	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-143911/14-A
Matrix: Water
Analysis Batch: 144075

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Arsenic	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 12:34	5
Barium	ND		0.0060		mg/L		08/30/13 15:40	09/03/13 12:34	5
Beryllium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Cadmium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Chromium	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Cobalt	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Copper	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 12:34	5
Iron	ND		0.20		mg/L		08/30/13 15:40	09/03/13 12:34	5
Lead	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Manganese	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Nickel	ND		0.015		mg/L		08/30/13 15:40	09/03/13 12:34	5
Selenium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 12:34	5

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-143911/14-A
Matrix: Water
Analysis Batch: 144075

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.0020		mg/L		08/30/13 15:40	09/03/13 12:34	5
Thallium	ND		0.0050		mg/L		08/30/13 15:40	09/03/13 12:34	5
Vanadium	ND		0.010		mg/L		08/30/13 15:40	09/03/13 12:34	5
Zinc	ND		0.0070		mg/L		08/30/13 15:40	09/03/13 12:34	5

Lab Sample ID: LCS 580-143911/15-A
Matrix: Water
Analysis Batch: 144075

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.92		mg/L		97	80 - 120
Arsenic	4.00	3.97		mg/L		99	80 - 120
Barium	4.00	3.84		mg/L		96	80 - 120
Beryllium	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.100	0.0952		mg/L		95	80 - 120
Chromium	0.400	0.397		mg/L		99	80 - 120
Cobalt	1.00	1.02		mg/L		102	80 - 120
Copper	0.500	0.523		mg/L		105	80 - 120
Iron	22.0	21.9		mg/L		100	80 - 120
Lead	1.00	0.962		mg/L		96	80 - 120
Manganese	1.00	0.983		mg/L		98	80 - 120
Nickel	1.00	1.05		mg/L		105	80 - 120
Selenium	4.00	3.97		mg/L		99	80 - 120
Silver	0.600	0.606		mg/L		101	80 - 120
Thallium	4.00	3.84		mg/L		96	80 - 120
Vanadium	1.00	1.02		mg/L		102	80 - 120
Zinc	1.00	0.994		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-143911/16-A
Matrix: Water
Analysis Batch: 144075

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 143911

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.93		mg/L		98	80 - 120	1	20
Arsenic	4.00	4.00		mg/L		100	80 - 120	1	20
Barium	4.00	3.85		mg/L		96	80 - 120	0	20
Beryllium	0.100	0.102		mg/L		102	80 - 120	1	20
Cadmium	0.100	0.0917		mg/L		92	80 - 120	4	20
Chromium	0.400	0.402		mg/L		100	80 - 120	1	20
Cobalt	1.00	1.03		mg/L		103	80 - 120	1	20
Copper	0.500	0.531		mg/L		106	80 - 120	2	20
Iron	22.0	22.4		mg/L		102	80 - 120	2	20
Lead	1.00	0.965		mg/L		96	80 - 120	0	20
Manganese	1.00	0.985		mg/L		99	80 - 120	0	20
Nickel	1.00	1.07		mg/L		107	80 - 120	2	20
Selenium	4.00	3.96		mg/L		99	80 - 120	0	20
Silver	0.600	0.611		mg/L		102	80 - 120	1	20
Thallium	4.00	3.85		mg/L		96	80 - 120	0	20
Vanadium	1.00	1.02		mg/L		102	80 - 120	0	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-143911/16-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 144075 — **Prep Batch: 143911**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc			1.00	1.02		mg/L		102	80 - 120	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-144261/24-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144293 — **Prep Batch: 144261**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:03	1

Lab Sample ID: LCS 580-144261/25-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144293 — **Prep Batch: 144261**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00200	0.00181		mg/L		90	80 - 120		

Lab Sample ID: LCSD 580-144261/26-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144293 — **Prep Batch: 144261**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			0.00200	0.00176		mg/L		88	80 - 120	3	20

Lab Sample ID: LCSSRM 580-144261/27-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144293 — **Prep Batch: 144261**

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			0.00200	0.00178		mg/L		89	75 - 125		

Client Sample ID: MW-2-082913

Lab Sample ID: 580-40033-1

Date Collected: 08/29/13 11:13

Matrix: Water

Date Received: 08/29/13 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144375	09/06/13 23:21	JMB	TAL SEA
Total/NA	Prep	3520C			144057	09/03/13 11:49	ALC	TAL SEA
Total/NA	Analysis	8270C		1	144730	09/12/13 04:33	ERB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 20:17	MMH	TAL SEA
Total/NA	Prep	3510C			19826	09/05/13 11:26	ELP	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19845	09/05/13 14:13	NMI	TAL PRT
Total Recoverable	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Total Recoverable	Analysis	6020		5	144075	09/03/13 13:37	FCW	TAL SEA
Dissolved	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Dissolved	Analysis	6020		5	144075	09/03/13 13:42	FCW	TAL SEA
Total/NA	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Total/NA	Analysis	7470A		1	144293	09/05/13 14:46	FCW	TAL SEA
Dissolved	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Dissolved	Analysis	7470A		1	144293	09/05/13 14:51	FCW	TAL SEA
Total Recoverable	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Total Recoverable	Analysis	6010B		1	144352	09/06/13 02:23	HJM	TAL SEA
Dissolved	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Dissolved	Analysis	6010B		1	144352	09/06/13 02:29	HJM	TAL SEA

Client Sample ID: MW-1-082913

Lab Sample ID: 580-40033-2

Date Collected: 08/29/13 14:23

Matrix: Water

Date Received: 08/29/13 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144375	09/06/13 23:45	JMB	TAL SEA
Total/NA	Prep	3520C			144057	09/03/13 11:49	ALC	TAL SEA
Total/NA	Analysis	8270C		1	144730	09/12/13 04:58	ERB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 19:54	MMH	TAL SEA
Total/NA	Prep	3510C			19826	09/05/13 11:26	ELP	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19845	09/05/13 14:32	NMI	TAL PRT
Total Recoverable	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Total Recoverable	Analysis	6020		5	144075	09/03/13 13:29	FCW	TAL SEA
Dissolved	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Dissolved	Analysis	6020		5	144075	09/03/13 13:46	FCW	TAL SEA
Total/NA	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Total/NA	Analysis	7470A		1	144293	09/05/13 14:49	FCW	TAL SEA
Dissolved	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Dissolved	Analysis	7470A		1	144293	09/05/13 14:54	FCW	TAL SEA
Total Recoverable	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Total Recoverable	Analysis	6010B		1	144352	09/06/13 02:26	HJM	TAL SEA
Dissolved	Prep	3005A			143911	08/30/13 15:40	KJV	TAL SEA
Dissolved	Analysis	6010B		1	144352	09/06/13 02:32	HJM	TAL SEA

Lab Chronicle

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Client Sample ID: Trip Blank-GW1

Lab Sample ID: 580-40033-3

Date Collected: 08/29/13 00:00
Matrix: Water
Date Received: 08/29/13 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144375	09/06/13 16:16	JMB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 19:32	MMH	TAL SEA

Client Sample ID: MW-2-082913

Lab Sample ID: 580-40033-4

Date Collected: 08/29/13 09:29
Matrix: Water
Date Received: 08/29/13 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144066	09/03/13 12:34	RES	TAL SEA
Total/NA	Analysis	8082		1	144257	09/05/13 18:17	SGH	TAL SEA
Total/NA	Prep	8290			24546	09/05/13 15:12	CCC	TAL SAC
Total/NA	Analysis	8290		1	24661	09/06/13 21:35	SMA	TAL SAC

Client Sample ID: MW-1-082913

Lab Sample ID: 580-40033-5

Date Collected: 08/29/13 12:20
Matrix: Water
Date Received: 08/29/13 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144066	09/03/13 12:34	RES	TAL SEA
Total/NA	Analysis	8082		1	144320	09/06/13 08:58	SGH	TAL SEA
Total/NA	Prep	8290			24546	09/05/13 15:12	CCC	TAL SAC
Total/NA	Analysis	8290		1	24661	09/06/13 22:17	SMA	TAL SAC

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

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

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

Certification Summary

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	NFESC		N/A	05-24-08 *
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Laboratory: TestAmerica Portland

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13
California	State Program	9	2597	09-30-13
Oregon	NELAP	10	OR100021	01-09-14
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-14

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NE-OS-22-13	01-31-14
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-14
Arkansas DEQ	State Program	6	88-0691	06-17-14
California	NELAP	9	1119CA	01-31-14
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-14
Guam	State Program	9	N/A	08-31-13 *
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Louisiana	NELAP	6	30612	06-30-14
Michigan	State Program	5	9947	01-31-14
Nebraska	State Program	7	NE-OS-22-13	01-31-14
Nevada	State Program	9	CA44	07-31-14
New Jersey	NELAP	2	CA005	06-30-14
New York	NELAP	2	11666	04-01-14
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14
Pennsylvania	NELAP	3	68-01272	03-31-14
South Carolina	State Program	4	87014	06-30-14
Texas	NELAP	6	T104704399-08-TX	05-31-14
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Laboratory: TestAmerica Sacramento (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Washington	State Program	10	C581	05-05-14
West Virginia	State Program	3	9930C	12-31-13
Wyoming	State Program	8	8TMS-Q	01-31-14

Sample Summary

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40033-1	MW-2-082913	Water	08/29/13 11:13	08/29/13 16:10
580-40033-2	MW-1-082913	Water	08/29/13 14:23	08/29/13 16:10
580-40033-3	Trip Blank-GW1	Water	08/29/13 00:00	08/29/13 16:10
580-40033-4	MW-2-082913	Water	08/29/13 09:29	08/29/13 16:10
580-40033-5	MW-1-082913	Water	08/29/13 12:20	08/29/13 16:10

GW TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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Tacoma, WA 98424
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Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

Chain of Custody Record

Client: ERM	Client Contact: Dave Edwards	Date: 8/29/13	Chain of Custody Number: 20242
Address: 1218 3rd Ave Ste 1412	Telephone Number (Area Code)/Fax Number: 425 462 8591	Lab Number: 40033	Page 1 of 2
City: Seattle; State: WA; Zip Code: 98101	Sampler: MC/CG; Lab Contact: Kris Allen		
Project Name and Location (State): Center Point Seattle	Billing Contact: ERM Walnut Creek		
Contract/Purchase Order/Quote No.: 0203067.02			

Analysis (Attach list if more space is needed): TPH-G; TPH-D; TCL VOC 8260; TCL SVOC 8270 SIM; Dissolved TAL Metals; Total TAL metals; ~~PCBs 8082~~ MC; ~~Phenols/Furans 8290~~; EDB

#	Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Na2S2O3	TPH-G	TPH-D	TCL VOC 8260	TCL SVOC 8270 SIM	Dissolved TAL Metals	Total TAL metals	PCBs 8082	Phenols/Furans 8290	EDB
1	MW-2-082913	8/29/13	1113		X			2		2	8			2	X	X	X	X	X	X	MC		Hold
2	MW-1-082913	8/29/13	1423		X			2		2	8			2	X	X	X	X	X	X	MC		Hold
3	Trip Blank-GW1	8/29/13	—		X						2				X		X						

Special Instructions/ Conditions of Receipt

Cooler/TB Dig/IR cor 2.9 unc 2.8
Cooler Dsc Foam blue @ Lab 17110
Wet/Packs w/o Packing bubble

MC 8/29

580-40033 Chain of Custody

Cooler ☐ Yes ☐ No Cooler Temp: ____

Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days) ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other 9 day

QC Requirements (Specify)

1. Relinquished By Sign/Print: Matt Crandell	Date: 8/29/13	Time: 1610	1. Received By Sign/Print: Francisco Luna, Jr.	Date: 8/29/13	Time: 1610
2. Relinquished By Sign/Print	Date	Time	2. Received By Sign/Print	Date	Time
3. Relinquished By Sign/Print	Date	Time	3. Received By Sign/Print	Date	Time

Comments: TAL metals by USEPA 6010 / 200.8

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

GW

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☐ Rush
☐ Short Hold

Chain of Custody Record

Client: ERM	Client Contact: Dave Edwards	Date: 8/29/2013	Chain of Custody Number: 20126
Address: 1218 3rd Ave Ste 1412	Telephone Number (Area Code)/Fax Number: 425 462 8591	Lab Number: 40033	Page 2 of 2
City: Seattle; State: WA; Zip Code: 98101	Sampler: MC/CG; Lab Contact: Kris Allen		
Project Name and Location (State): CenterPoint, Seattle, WA	Billing Contact: ERM Walnut Creek		
Contract/Purchase Order/Quote No.: 0203067.02			

	Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	mc	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	① Dioxin Furan	PCBs 8082	Special Instructions/ Conditions of Receipt
4	MW-2-082913	8/29/13	0929		X			M	3						X	X	3 bottles in sample
5	MW-1-082913	8/29/13	1220		X			M	3						X	X	3 bottles in sample

Cooler/TB Dig/IR cor 5.1 unc 5.0
Cooler Dsc lg red wh @ Lab 17:10
Wet/Packs w/o Packing bubble

MC

Cooler: ☐ Yes ☐ No Cooler Temp: ____

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other 9 day

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By Sign/Print: Matt Crandall	8/29/13	1610	1. Received By Sign/Print: Francisco Lung Jr.	8/29/13	1610
2. Relinquished By Sign/Print:			2. Received By Sign/Print:		
3. Relinquished By Sign/Print:			3. Received By Sign/Print:		

Comments: ① 8290

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40033-1

Login Number: 40033

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40033-1

Login Number: 40033
List Number: 1
Creator: Svabik-Seror, Philip M

List Source: TestAmerica Portland
List Creation: 09/04/13 11:48 AM

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40033-1

Login Number: 40033
List Number: 2
Creator: Svabik-Seror, Philip M

List Source: TestAmerica Portland
List Creation: 09/04/13 11:49 AM

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40033-1

Login Number: 40033
List Number: 1
Creator: Cortes, Cesar C

List Source: TestAmerica Sacramento
List Creation: 09/04/13 01:16 PM

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

Isotope Dilution Summary

Client: ERM-West
Project/Site: CenterPoint, Seattle, WA

TestAmerica Job ID: 580-40033-1

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		TCDD	TCDF	PeCDD	PeCDF1	HxCDD2	HxCDF1	HpCDD	HpCDF1
Lab Sample ID	Client Sample ID	(40-135)	(40-135)	(40-135)	(40-135)	(40-135)	(40-135)	(40-135)	(40-135)
580-40033-4	MW-2-082913	82	83	76	78	84	86	81	82
580-40033-5	MW-1-082913	88	89	85	85	91	105	91	94
LCS 320-24546/2-A	Lab Control Sample	85	88	81	84	84	93	82	87
LCSD 320-24546/3-A	Lab Control Sample Dup	83	85	83	82	88	96	92	92
MB 320-24546/1-A	Method Blank	83	86	82	79	88	93	86	86

		Percent Isotope Dilution Recovery (Acceptance Limits)
		OCDD
Lab Sample ID	Client Sample ID	(40-135)
580-40033-4	MW-2-082913	76
580-40033-5	MW-1-082913	87
LCS 320-24546/2-A	Lab Control Sample	81
LCSD 320-24546/3-A	Lab Control Sample Dup	86
MB 320-24546/1-A	Method Blank	82

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF1 = 13C-1,2,3,7,8-PeCDF
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 580-40060-1
Client Project/Site: Center Point, Seattle

For:
ERM-West
1218 3rd Ave
Suite 1412
Seattle, Washington 98101

Attn: Dave Edwards

Kristine D. Allen

Authorized for release by:
9/18/2013 2:57:14 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

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

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

Table of Contents

Case Narrative

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Job ID: 580-40060-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 8/30/2013 2:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.6º C, 0.7º C and 1.2º C.

Except:

The container label for the following sample MW-3-083013 (580-40060-4) did not match the information listed on the Chain-of-Custody (COC). For the metal containers: The container label lists sample ID of MW-4-082913. The COC lists sample ID of MW-3-083013. Lined up according to date and time listed on container label. Logged in per COC.

GC/MS VOA - Method(s) 8260B
The RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for analytical batch 144777 recovered outside control limits for the following analytes: Tetrachloroethene. However both LCS/LCSD individual recoveries fell withing recovery limits.

No other analytical or quality issues were noted.

GC/MS Semi VOA - Method(s) 8270C
A full list spike was utilized for this method. Due to the large number of spiked analytes, there is a high probability that one or more analytes will recover outside acceptance limits. The laboratory's SOP allows for four analytes to recover outside criteria for this method when a full list spike is utilized. The LCS passed recovery criteria for all analytes, but the LCSD failed high for bis(2-ethylhexyl)phthalate. This failure is within marginal exceedances and does not warrant re-extraction and re-analysis. Additionally, there were four compounds failed for LCS/LCSD recovery precision, results have been qualified and reported.

No other analytical or quality issues were noted.

GC Semi VOA Method(s) NWTPH-Dx
Detected hydrocarbons appear to be due to biogenic interference.MW-3-083013 (580-40060-4), MW-5-082913 (580-40060-2).

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Dioxin Prep
No analytical or quality issues were noted.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 17:11
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:14	1
2-Chlorotoluene	ND		0.10		ug/L			09/12/13 12:14	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/12/13 12:14	1
Carbon tetrachloride	ND		0.10		ug/L			09/12/13 12:14	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 12:14	1
Chlorobenzene	ND		0.10		ug/L			09/12/13 12:14	1
Vinyl chloride	ND		0.020		ug/L			09/12/13 12:14	1
sec-Butylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
Dibromomethane	ND		0.10		ug/L			09/12/13 12:14	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/12/13 12:14	1
o-Xylene	ND		0.10		ug/L			09/12/13 12:14	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/12/13 12:14	1
Styrene	ND		0.10		ug/L			09/12/13 12:14	1
Chlorobromomethane	ND		0.10		ug/L			09/12/13 12:14	1
Dichlorobromomethane	ND		0.10		ug/L			09/12/13 12:14	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:14	1
Benzene	ND		0.10		ug/L			09/12/13 12:14	1
Chloroethane	ND		0.25		ug/L			09/12/13 12:14	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 12:14	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/12/13 12:14	1
N-Propylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
4-Isopropyltoluene	ND		0.20		ug/L			09/12/13 12:14	1
n-Butylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
1,1-Dichloropropene	ND		0.10		ug/L			09/12/13 12:14	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 12:14	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 12:14	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
Toluene	ND		0.10		ug/L			09/12/13 12:14	1
Naphthalene	ND		0.40		ug/L			09/12/13 12:14	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
1,3-Dichloropropane	ND		0.10		ug/L			09/12/13 12:14	1
Chloroform	ND		0.10		ug/L			09/12/13 12:14	1
4-Chlorotoluene	ND		0.20		ug/L			09/12/13 12:14	1
Chlorodibromomethane	ND		0.10		ug/L			09/12/13 12:14	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/12/13 12:14	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/12/13 12:14	1
tert-Butylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
Chloromethane	ND		0.10		ug/L			09/12/13 12:14	1
Methylene Chloride	ND		0.50		ug/L			09/12/13 12:14	1
1,1-Dichloroethene	ND		0.10		ug/L			09/12/13 12:14	1
Isopropylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
1,2-Dichloroethane	ND		0.10		ug/L			09/12/13 12:14	1
Tetrachloroethene	ND	*	0.10		ug/L			09/12/13 12:14	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/12/13 12:14	1
2,2-Dichloropropane	ND		0.10		ug/L			09/12/13 12:14	1
1,2-Dibromoethane	ND		0.10		ug/L			09/12/13 12:14	1
Bromoform	ND		0.10		ug/L			09/12/13 12:14	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/12/13 12:14	1
Trichlorofluoromethane	ND		0.10		ug/L			09/12/13 12:14	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 17:11
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/12/13 12:14	1
Bromobenzene	ND		0.10		ug/L			09/12/13 12:14	1
1,2-Dichloropropane	ND		0.10		ug/L			09/12/13 12:14	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 12:14	1
Ethylbenzene	ND		0.10		ug/L			09/12/13 12:14	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 12:14	1
Hexachlorobutadiene	ND		0.20		ug/L			09/12/13 12:14	1
1,1-Dichloroethane	ND		0.10		ug/L			09/12/13 12:14	1
Bromomethane	ND		0.10		ug/L			09/12/13 12:14	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:14	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/12/13 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*75 - 120*		*09/12/13 12:14*	*1*
Ethylbenzene-d10	*96*		*75 - 125*		*09/12/13 12:14*	*1*
Fluorobenzene (Surr)	*107*		*70 - 130*		*09/12/13 12:14*	*1*
Trifluorotoluene (Surr)	*96*		*80 - 125*		*09/12/13 12:14*	*1*
Toluene-d8 (Surr)	*94*		*75 - 125*		*09/12/13 12:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
Bis(2-chloroethyl)ether	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Chlorophenol	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
1,3-Dichlorobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
1,4-Dichlorobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzyl alcohol	**1.1**		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
1,2-Dichlorobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Methylphenol	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
3 & 4 Methylphenol	ND		0.84		ug/L		09/04/13 16:38	09/11/13 21:34	1
N-Nitrosodi-n-propylamine	**1.2**		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Hexachloroethane	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
Nitrobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Isophorone	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Nitrophenol	ND	*	0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4-Dimethylphenol	ND		2.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzoic acid	ND	*	3.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
Bis(2-chloroethoxy)methane	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4-Dichlorophenol	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
1,2,4-Trichlorobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Naphthalene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Chloroaniline	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Hexachlorobutadiene	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Chloro-3-methylphenol	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Methylnaphthalene	ND		0.21		ug/L		09/04/13 16:38	09/11/13 21:34	1
Hexachlorocyclopentadiene	ND		2.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4,6-Trichlorophenol	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4,5-Trichlorophenol	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Chloronaphthalene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
2-Nitroaniline	ND	*	0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 17:11
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Acenaphthylene	ND		0.084		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,6-Dinitrotoluene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
3-Nitroaniline	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Acenaphthene	ND		0.10		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4-Dinitrophenol	ND		5.2		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Nitrophenol	ND		3.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
Dibenzofuran	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
2,4-Dinitrotoluene	ND	*	0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Diethyl phthalate	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Chlorophenyl phenyl ether	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Fluorene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Nitroaniline	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
4,6-Dinitro-2-methylphenol	ND		4.2		ug/L		09/04/13 16:38	09/11/13 21:34	1
N-Nitrosodiphenylamine	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
4-Bromophenyl phenyl ether	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Hexachlorobenzene	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Pentachlorophenol	ND		0.73		ug/L		09/04/13 16:38	09/11/13 21:34	1
Phenanthrene	ND		0.084		ug/L		09/04/13 16:38	09/11/13 21:34	1
Anthracene	ND		0.042		ug/L		09/04/13 16:38	09/11/13 21:34	1
Di-n-butyl phthalate	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Fluoranthene	ND		0.052		ug/L		09/04/13 16:38	09/11/13 21:34	1
Pyrene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Butyl benzyl phthalate	ND		0.63		ug/L		09/04/13 16:38	09/11/13 21:34	1
3,3'-Dichlorobenzidine	ND		2.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzo[a]anthracene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Chrysene	ND		0.042		ug/L		09/04/13 16:38	09/11/13 21:34	1
Bis(2-ethylhexyl) phthalate	ND	*	3.1		ug/L		09/04/13 16:38	09/11/13 21:34	1
Di-n-octyl phthalate	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzo[a]pyrene	ND		0.042		ug/L		09/04/13 16:38	09/11/13 21:34	1
Indeno[1,2,3-cd]pyrene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Dibenz(a,h)anthracene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzo[g,h,i]perylene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Carbazole	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1
1-Methylnaphthalene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzo[b]fluoranthene	ND		0.084		ug/L		09/04/13 16:38	09/11/13 21:34	1
Benzo[k]fluoranthene	ND		0.063		ug/L		09/04/13 16:38	09/11/13 21:34	1
bis (2-chloroisopropyl) ether	ND		0.42		ug/L		09/04/13 16:38	09/11/13 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*20 - 134*	*09/04/13 16:38*	*09/11/13 21:34*	*1*
Phenol-d5	*72*		*55 - 125*	*09/04/13 16:38*	*09/11/13 21:34*	*1*
Nitrobenzene-d5	*85*		*62 - 125*	*09/04/13 16:38*	*09/11/13 21:34*	*1*
2-Fluorobiphenyl	*75*		*66 - 140*	*09/04/13 16:38*	*09/11/13 21:34*	*1*
2,4,6-Tribromophenol	*99*		*44 - 125*	*09/04/13 16:38*	*09/11/13 21:34*	*1*
Terphenyl-d14	*115*		*20 - 150*	*09/04/13 16:38*	*09/11/13 21:34*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 21:46	1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 17:11
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*50 - 150*		*09/04/13 21:46*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 21:46*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		0.11		mg/L		09/05/13 11:26	09/05/13 15:28	1
RRO (nC25-nC36)	ND		0.26		mg/L		09/05/13 11:26	09/05/13 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*100*		*50 - 150*	*09/05/13 11:26*	*09/05/13 15:28*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 10:54	1
Calcium	**170**		1.1		mg/L		09/17/13 16:54	09/18/13 10:54	1
Magnesium	**430**		11		mg/L		09/17/13 16:54	09/18/13 12:46	10
Potassium	**150**		3.3		mg/L		09/17/13 16:54	09/18/13 10:54	1
Sodium	**2700**		20		mg/L		09/17/13 16:54	09/18/13 12:46	10

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 10:57	1
Calcium	**160**		1.1		mg/L		09/17/13 16:54	09/18/13 10:57	1
Magnesium	**440**		11		mg/L		09/17/13 16:54	09/18/13 12:50	10
Potassium	**140**		3.3		mg/L		09/17/13 16:54	09/18/13 10:57	1
Sodium	**2700**		20		mg/L		09/17/13 16:54	09/18/13 12:50	10

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Arsenic	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:26	5
Barium	**0.16**		0.0060		mg/L		09/05/13 09:09	09/05/13 15:26	5
Beryllium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Cadmium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Chromium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Cobalt	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Copper	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:26	5
Iron	**4.6**		0.20		mg/L		09/05/13 09:09	09/05/13 15:26	5
Lead	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Manganese	**0.21**		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Nickel	ND		0.015		mg/L		09/05/13 09:09	09/05/13 15:26	5
Selenium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:26	5
Silver	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:26	5
Thallium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:26	5
Vanadium	ND		0.010		mg/L		09/05/13 09:09	09/05/13 15:26	5
Zinc	**0.027**		0.0070		mg/L		09/05/13 09:09	09/05/13 15:26	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:10	5
Antimony	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 17:11
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.16**		0.0060		mg/L		09/16/13 15:28	09/17/13 08:10	5
Beryllium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Cadmium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Chromium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Cobalt	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Copper	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:10	5
Iron	**4.6**		0.20		mg/L		09/16/13 15:28	09/17/13 08:10	5
Lead	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Manganese	**0.19**		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Nickel	ND		0.015		mg/L		09/16/13 15:28	09/17/13 08:10	5
Selenium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:10	5
Silver	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:10	5
Thallium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:10	5
Vanadium	ND		0.010		mg/L		09/16/13 15:28	09/17/13 08:10	5
Zinc	**0.015**		0.0070		mg/L		09/16/13 15:28	09/17/13 08:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 15:06	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-5-082913
Date Collected: 08/30/13 10:57
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:39	1
2-Chlorotoluene	ND		0.10		ug/L			09/12/13 12:39	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/12/13 12:39	1
Carbon tetrachloride	ND		0.10		ug/L			09/12/13 12:39	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 12:39	1
Chlorobenzene	ND		0.10		ug/L			09/12/13 12:39	1
Vinyl chloride	ND		0.020		ug/L			09/12/13 12:39	1
sec-Butylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
Dibromomethane	ND		0.10		ug/L			09/12/13 12:39	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/12/13 12:39	1
o-Xylene	ND		0.10		ug/L			09/12/13 12:39	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/12/13 12:39	1
Styrene	ND		0.10		ug/L			09/12/13 12:39	1
Chlorobromomethane	ND		0.10		ug/L			09/12/13 12:39	1
Dichlorobromomethane	ND		0.10		ug/L			09/12/13 12:39	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:39	1
Benzene	ND		0.10		ug/L			09/12/13 12:39	1
Chloroethane	ND		0.25		ug/L			09/12/13 12:39	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 12:39	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/12/13 12:39	1
N-Propylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
4-Isopropyltoluene	ND		0.20		ug/L			09/12/13 12:39	1
n-Butylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
1,1-Dichloropropene	ND		0.10		ug/L			09/12/13 12:39	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 12:39	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 12:39	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
Toluene	ND		0.10		ug/L			09/12/13 12:39	1
Naphthalene	ND		0.40		ug/L			09/12/13 12:39	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
1,3-Dichloropropane	ND		0.10		ug/L			09/12/13 12:39	1
Chloroform	ND		0.10		ug/L			09/12/13 12:39	1
4-Chlorotoluene	ND		0.20		ug/L			09/12/13 12:39	1
Chlorodibromomethane	ND		0.10		ug/L			09/12/13 12:39	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/12/13 12:39	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/12/13 12:39	1
tert-Butylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
Chloromethane	ND		0.10		ug/L			09/12/13 12:39	1
Methylene Chloride	ND		0.50		ug/L			09/12/13 12:39	1
1,1-Dichloroethene	ND		0.10		ug/L			09/12/13 12:39	1
Isopropylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
1,2-Dichloroethane	ND		0.10		ug/L			09/12/13 12:39	1
Tetrachloroethene	ND	*	0.10		ug/L			09/12/13 12:39	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/12/13 12:39	1
2,2-Dichloropropane	ND		0.10		ug/L			09/12/13 12:39	1
1,2-Dibromoethane	ND		0.10		ug/L			09/12/13 12:39	1
Bromoform	ND		0.10		ug/L			09/12/13 12:39	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/12/13 12:39	1
Trichlorofluoromethane	ND		0.10		ug/L			09/12/13 12:39	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-5-082913
Date Collected: 08/30/13 10:57
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/12/13 12:39	1
Bromobenzene	ND		0.10		ug/L			09/12/13 12:39	1
1,2-Dichloropropane	ND		0.10		ug/L			09/12/13 12:39	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 12:39	1
Ethylbenzene	ND		0.10		ug/L			09/12/13 12:39	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 12:39	1
Hexachlorobutadiene	ND		0.20		ug/L			09/12/13 12:39	1
1,1-Dichloroethane	ND		0.10		ug/L			09/12/13 12:39	1
Bromomethane	ND		0.10		ug/L			09/12/13 12:39	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/12/13 12:39	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/12/13 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*75 - 120*		*09/12/13 12:39*	*1*
Ethylbenzene-d10	*93*		*75 - 125*		*09/12/13 12:39*	*1*
Fluorobenzene (Surr)	*107*		*70 - 130*		*09/12/13 12:39*	*1*
Trifluorotoluene (Surr)	*96*		*80 - 125*		*09/12/13 12:39*	*1*
Toluene-d8 (Surr)	*97*		*75 - 125*		*09/12/13 12:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
Bis(2-chloroethyl)ether	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Chlorophenol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
1,3-Dichlorobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
1,4-Dichlorobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzyl alcohol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
1,2-Dichlorobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Methylphenol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
3 & 4 Methylphenol	ND		0.82		ug/L		09/04/13 16:38	09/11/13 22:01	1
N-Nitrosodi-n-propylamine	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Hexachloroethane	ND		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
Nitrobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Isophorone	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Nitrophenol	ND	*	0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4-Dimethylphenol	ND		2.0		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzoic acid	ND	*	3.1		ug/L		09/04/13 16:38	09/11/13 22:01	1
Bis(2-chloroethoxy)methane	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4-Dichlorophenol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
1,2,4-Trichlorobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Naphthalene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Chloroaniline	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Hexachlorobutadiene	ND		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Chloro-3-methylphenol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Methylnaphthalene	ND		0.20		ug/L		09/04/13 16:38	09/11/13 22:01	1
Hexachlorocyclopentadiene	ND		2.0		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4,6-Trichlorophenol	ND		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4,5-Trichlorophenol	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Chloronaphthalene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
2-Nitroaniline	ND	*	0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1

Client Sample ID: MW-5-082913
Date Collected: 08/30/13 10:57
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Acenaphthylene	ND		0.082		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,6-Dinitrotoluene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
3-Nitroaniline	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Acenaphthene	ND		0.10		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4-Dinitrophenol	ND		5.1		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Nitrophenol	ND		3.1		ug/L		09/04/13 16:38	09/11/13 22:01	1
Dibenzofuran	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
2,4-Dinitrotoluene	ND	*	0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Diethyl phthalate	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Chlorophenyl phenyl ether	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Fluorene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Nitroaniline	ND		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
4,6-Dinitro-2-methylphenol	ND		4.1		ug/L		09/04/13 16:38	09/11/13 22:01	1
N-Nitrosodiphenylamine	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
4-Bromophenyl phenyl ether	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Hexachlorobenzene	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Pentachlorophenol	ND		0.71		ug/L		09/04/13 16:38	09/11/13 22:01	1
Phenanthrene	ND		0.082		ug/L		09/04/13 16:38	09/11/13 22:01	1
Anthracene	ND		0.041		ug/L		09/04/13 16:38	09/11/13 22:01	1
Di-n-butyl phthalate	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Fluoranthene	ND		0.051		ug/L		09/04/13 16:38	09/11/13 22:01	1
Pyrene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Butyl benzyl phthalate	**0.86**		0.61		ug/L		09/04/13 16:38	09/11/13 22:01	1
3,3'-Dichlorobenzidine	ND		2.0		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzo[a]anthracene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Chrysene	ND		0.041		ug/L		09/04/13 16:38	09/11/13 22:01	1
Bis(2-ethylhexyl) phthalate	**4.2**	*	3.1		ug/L		09/04/13 16:38	09/11/13 22:01	1
Di-n-octyl phthalate	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzo[a]pyrene	ND		0.041		ug/L		09/04/13 16:38	09/11/13 22:01	1
Indeno[1,2,3-cd]pyrene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Dibenz(a,h)anthracene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzo[g,h,i]perylene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Carbazole	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1
1-Methylnaphthalene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzo[b]fluoranthene	ND		0.082		ug/L		09/04/13 16:38	09/11/13 22:01	1
Benzo[k]fluoranthene	ND		0.061		ug/L		09/04/13 16:38	09/11/13 22:01	1
bis (2-chloroisopropyl) ether	ND		0.41		ug/L		09/04/13 16:38	09/11/13 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*70*		*20 - 134*	*09/04/13 16:38*	*09/11/13 22:01*	*1*
Phenol-d5	*75*		*55 - 125*	*09/04/13 16:38*	*09/11/13 22:01*	*1*
Nitrobenzene-d5	*98*		*62 - 125*	*09/04/13 16:38*	*09/11/13 22:01*	*1*
2-Fluorobiphenyl	*89*		*66 - 140*	*09/04/13 16:38*	*09/11/13 22:01*	*1*
2,4,6-Tribromophenol	*112*		*44 - 125*	*09/04/13 16:38*	*09/11/13 22:01*	*1*
Terphenyl-d14	*117*		*20 - 150*	*09/04/13 16:38*	*09/11/13 22:01*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 21:23	1

Client Sample ID: MW-5-082913
Date Collected: 08/30/13 10:57
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-2
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*		*09/04/13 21:23*	*1*
Trifluorotoluene (Surr)	*91*		*50 - 150*		*09/04/13 21:23*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	**0.19**		0.10		mg/L		09/05/13 11:26	09/05/13 15:46	1
RRO (nC25-nC36)	ND		0.26		mg/L		09/05/13 11:26	09/05/13 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*94*		*50 - 150*	*09/05/13 11:26*	*09/05/13 15:46*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 11:00	1
Calcium	**50**		1.1		mg/L		09/17/13 16:54	09/18/13 11:00	1
Magnesium	**16**		1.1		mg/L		09/17/13 16:54	09/18/13 11:00	1
Potassium	**9.2**		3.3		mg/L		09/17/13 16:54	09/18/13 11:00	1
Sodium	**33**		2.0		mg/L		09/17/13 16:54	09/18/13 11:00	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 11:03	1
Calcium	**52**		1.1		mg/L		09/17/13 16:54	09/18/13 11:03	1
Magnesium	**17**		1.1		mg/L		09/17/13 16:54	09/18/13 11:03	1
Potassium	**9.2**		3.3		mg/L		09/17/13 16:54	09/18/13 11:03	1
Sodium	**33**		2.0		mg/L		09/17/13 16:54	09/18/13 11:03	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Arsenic	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:47	5
Barium	**0.021**		0.0060		mg/L		09/05/13 09:09	09/05/13 15:47	5
Beryllium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Cadmium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Chromium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Cobalt	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Copper	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:47	5
Iron	**1.6**		0.20		mg/L		09/05/13 09:09	09/05/13 15:47	5
Lead	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Manganese	**0.44**		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Nickel	ND		0.015		mg/L		09/05/13 09:09	09/05/13 15:47	5
Selenium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:47	5
Silver	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:47	5
Thallium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:47	5
Vanadium	ND		0.010		mg/L		09/05/13 09:09	09/05/13 15:47	5
Zinc	ND		0.0070		mg/L		09/05/13 09:09	09/05/13 15:47	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:14	5
Antimony	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-5-082913
Date Collected: 08/30/13 10:57
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.018**		0.0060		mg/L		09/16/13 15:28	09/17/13 08:14	5
Beryllium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Cadmium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Chromium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Cobalt	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Copper	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:14	5
Iron	**1.5**		0.20		mg/L		09/16/13 15:28	09/17/13 08:14	5
Lead	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Manganese	**0.41**		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Nickel	ND		0.015		mg/L		09/16/13 15:28	09/17/13 08:14	5
Selenium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:14	5
Silver	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:14	5
Thallium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:14	5
Vanadium	ND		0.010		mg/L		09/16/13 15:28	09/17/13 08:14	5
Zinc	ND		0.0070		mg/L		09/16/13 15:28	09/17/13 08:14	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 15:08	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: Trip Blank-GW2
Date Collected: 08/30/13 00:00
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/12/13 11:49	1
2-Chlorotoluene	ND		0.10		ug/L			09/12/13 11:49	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/12/13 11:49	1
Carbon tetrachloride	ND		0.10		ug/L			09/12/13 11:49	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 11:49	1
Chlorobenzene	ND		0.10		ug/L			09/12/13 11:49	1
Vinyl chloride	ND		0.020		ug/L			09/12/13 11:49	1
sec-Butylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
Dibromomethane	ND		0.10		ug/L			09/12/13 11:49	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/12/13 11:49	1
o-Xylene	ND		0.10		ug/L			09/12/13 11:49	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/12/13 11:49	1
Styrene	ND		0.10		ug/L			09/12/13 11:49	1
Chlorobromomethane	ND		0.10		ug/L			09/12/13 11:49	1
Dichlorobromomethane	ND		0.10		ug/L			09/12/13 11:49	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/12/13 11:49	1
Benzene	ND		0.10		ug/L			09/12/13 11:49	1
Chloroethane	ND		0.25		ug/L			09/12/13 11:49	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 11:49	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/12/13 11:49	1
N-Propylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
4-Isopropyltoluene	ND		0.20		ug/L			09/12/13 11:49	1
n-Butylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
1,1-Dichloropropene	ND		0.10		ug/L			09/12/13 11:49	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 11:49	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 11:49	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
Toluene	ND		0.10		ug/L			09/12/13 11:49	1
Naphthalene	ND		0.40		ug/L			09/12/13 11:49	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
1,3-Dichloropropane	ND		0.10		ug/L			09/12/13 11:49	1
Chloroform	ND		0.10		ug/L			09/12/13 11:49	1
4-Chlorotoluene	ND		0.20		ug/L			09/12/13 11:49	1
Chlorodibromomethane	ND		0.10		ug/L			09/12/13 11:49	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/12/13 11:49	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/12/13 11:49	1
tert-Butylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
Chloromethane	ND		0.10		ug/L			09/12/13 11:49	1
Methylene Chloride	ND		0.50		ug/L			09/12/13 11:49	1
1,1-Dichloroethene	ND		0.10		ug/L			09/12/13 11:49	1
Isopropylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
1,2-Dichloroethane	ND		0.10		ug/L			09/12/13 11:49	1
Tetrachloroethene	ND	*	0.10		ug/L			09/12/13 11:49	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/12/13 11:49	1
2,2-Dichloropropane	ND		0.10		ug/L			09/12/13 11:49	1
1,2-Dibromoethane	ND		0.10		ug/L			09/12/13 11:49	1
Bromoform	ND		0.10		ug/L			09/12/13 11:49	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/12/13 11:49	1
Trichlorofluoromethane	ND		0.10		ug/L			09/12/13 11:49	1

Client Sample ID: Trip Blank-GW2
Date Collected: 08/30/13 00:00
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/12/13 11:49	1
Bromobenzene	ND		0.10		ug/L			09/12/13 11:49	1
1,2-Dichloropropane	ND		0.10		ug/L			09/12/13 11:49	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 11:49	1
Ethylbenzene	ND		0.10		ug/L			09/12/13 11:49	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 11:49	1
Hexachlorobutadiene	ND		0.20		ug/L			09/12/13 11:49	1
1,1-Dichloroethane	ND		0.10		ug/L			09/12/13 11:49	1
Bromomethane	ND		0.10		ug/L			09/12/13 11:49	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/12/13 11:49	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/12/13 11:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*09/12/13 11:49*	*1*
Ethylbenzene-d10	*95*		*75 - 125*		*09/12/13 11:49*	*1*
Fluorobenzene (Surr)	*94*		*70 - 130*		*09/12/13 11:49*	*1*
Trifluorotoluene (Surr)	*96*		*80 - 125*		*09/12/13 11:49*	*1*
Toluene-d8 (Surr)	*93*		*75 - 125*		*09/12/13 11:49*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*50 - 150*		*09/04/13 21:01*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 21:01*	*1*

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 13:34
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/12/13 13:04	1
2-Chlorotoluene	ND		0.10		ug/L			09/12/13 13:04	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/12/13 13:04	1
Carbon tetrachloride	ND		0.10		ug/L			09/12/13 13:04	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 13:04	1
Chlorobenzene	ND		0.10		ug/L			09/12/13 13:04	1
Vinyl chloride	ND		0.020		ug/L			09/12/13 13:04	1
sec-Butylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
Dibromomethane	ND		0.10		ug/L			09/12/13 13:04	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/12/13 13:04	1
o-Xylene	ND		0.10		ug/L			09/12/13 13:04	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/12/13 13:04	1
Styrene	ND		0.10		ug/L			09/12/13 13:04	1
Chlorobromomethane	ND		0.10		ug/L			09/12/13 13:04	1
Dichlorobromomethane	ND		0.10		ug/L			09/12/13 13:04	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/12/13 13:04	1
Benzene	ND		0.10		ug/L			09/12/13 13:04	1
Chloroethane	ND		0.25		ug/L			09/12/13 13:04	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 13:04	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/12/13 13:04	1
N-Propylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
4-Isopropyltoluene	ND		0.20		ug/L			09/12/13 13:04	1
n-Butylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
1,1-Dichloropropene	ND		0.10		ug/L			09/12/13 13:04	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 13:04	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 13:04	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
Toluene	ND		0.10		ug/L			09/12/13 13:04	1
Naphthalene	ND		0.40		ug/L			09/12/13 13:04	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
1,3-Dichloropropane	ND		0.10		ug/L			09/12/13 13:04	1
Chloroform	ND		0.10		ug/L			09/12/13 13:04	1
4-Chlorotoluene	ND		0.20		ug/L			09/12/13 13:04	1
Chlorodibromomethane	ND		0.10		ug/L			09/12/13 13:04	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/12/13 13:04	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/12/13 13:04	1
tert-Butylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
Chloromethane	ND		0.10		ug/L			09/12/13 13:04	1
Methylene Chloride	ND		0.50		ug/L			09/12/13 13:04	1
1,1-Dichloroethene	ND		0.10		ug/L			09/12/13 13:04	1
Isopropylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
1,2-Dichloroethane	ND		0.10		ug/L			09/12/13 13:04	1
Tetrachloroethene	ND	*	0.10		ug/L			09/12/13 13:04	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/12/13 13:04	1
2,2-Dichloropropane	ND		0.10		ug/L			09/12/13 13:04	1
1,2-Dibromoethane	ND		0.10		ug/L			09/12/13 13:04	1
Bromoform	ND		0.10		ug/L			09/12/13 13:04	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/12/13 13:04	1
Trichlorofluoromethane	ND		0.10		ug/L			09/12/13 13:04	1

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 13:34
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		0.10		ug/L			09/12/13 13:04	1
Bromobenzene	ND		0.10		ug/L			09/12/13 13:04	1
1,2-Dichloropropane	ND		0.10		ug/L			09/12/13 13:04	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 13:04	1
Ethylbenzene	ND		0.10		ug/L			09/12/13 13:04	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 13:04	1
Hexachlorobutadiene	ND		0.20		ug/L			09/12/13 13:04	1
1,1-Dichloroethane	ND		0.10		ug/L			09/12/13 13:04	1
Bromomethane	ND		0.10		ug/L			09/12/13 13:04	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/12/13 13:04	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/12/13 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*75 - 120*		*09/12/13 13:04*	*1*
Ethylbenzene-d10	*92*		*75 - 125*		*09/12/13 13:04*	*1*
Fluorobenzene (Surr)	*106*		*70 - 130*		*09/12/13 13:04*	*1*
Trifluorotoluene (Surr)	*93*		*80 - 125*		*09/12/13 13:04*	*1*
Toluene-d8 (Surr)	*95*		*75 - 125*		*09/12/13 13:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
Bis(2-chloroethyl)ether	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Chlorophenol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
1,3-Dichlorobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
1,4-Dichlorobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzyl alcohol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
1,2-Dichlorobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Methylphenol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
3 & 4 Methylphenol	ND		0.85		ug/L		09/04/13 16:38	09/11/13 22:27	1
N-Nitrosodi-n-propylamine	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Hexachloroethane	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
Nitrobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Isophorone	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Nitrophenol	ND	*	0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4-Dimethylphenol	ND		2.1		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzoic acid	ND	*	3.2		ug/L		09/04/13 16:38	09/11/13 22:27	1
Bis(2-chloroethoxy)methane	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4-Dichlorophenol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
1,2,4-Trichlorobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Naphthalene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Chloroaniline	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Hexachlorobutadiene	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Chloro-3-methylphenol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Methylnaphthalene	ND		0.21		ug/L		09/04/13 16:38	09/11/13 22:27	1
Hexachlorocyclopentadiene	ND		2.1		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4,6-Trichlorophenol	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4,5-Trichlorophenol	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Chloronaphthalene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
2-Nitroaniline	ND	*	0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 13:34
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Acenaphthylene	ND		0.085		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,6-Dinitrotoluene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
3-Nitroaniline	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Acenaphthene	**0.16**		0.11		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4-Dinitrophenol	ND		5.3		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Nitrophenol	ND		3.2		ug/L		09/04/13 16:38	09/11/13 22:27	1
Dibenzofuran	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
2,4-Dinitrotoluene	ND	*	0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Diethyl phthalate	**0.55**		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Chlorophenyl phenyl ether	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Fluorene	**0.17**		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Nitroaniline	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
4,6-Dinitro-2-methylphenol	ND		4.3		ug/L		09/04/13 16:38	09/11/13 22:27	1
N-Nitrosodiphenylamine	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
4-Bromophenyl phenyl ether	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Hexachlorobenzene	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Pentachlorophenol	ND		0.75		ug/L		09/04/13 16:38	09/11/13 22:27	1
Phenanthrene	**0.78**		0.085		ug/L		09/04/13 16:38	09/11/13 22:27	1
Anthracene	**0.13**		0.043		ug/L		09/04/13 16:38	09/11/13 22:27	1
Di-n-butyl phthalate	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Fluoranthene	**0.22**		0.053		ug/L		09/04/13 16:38	09/11/13 22:27	1
Pyrene	**0.21**		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Butyl benzyl phthalate	ND		0.64		ug/L		09/04/13 16:38	09/11/13 22:27	1
3,3'-Dichlorobenzidine	ND		2.1		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzo[a]anthracene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Chrysene	ND		0.043		ug/L		09/04/13 16:38	09/11/13 22:27	1
Bis(2-ethylhexyl) phthalate	**5.0**	*	3.2		ug/L		09/04/13 16:38	09/11/13 22:27	1
Di-n-octyl phthalate	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzo[a]pyrene	ND		0.043		ug/L		09/04/13 16:38	09/11/13 22:27	1
Indeno[1,2,3-cd]pyrene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Dibenz(a,h)anthracene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzo[g,h,i]perylene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Carbazole	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1
1-Methylnaphthalene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzo[b]fluoranthene	ND		0.085		ug/L		09/04/13 16:38	09/11/13 22:27	1
Benzo[k]fluoranthene	ND		0.064		ug/L		09/04/13 16:38	09/11/13 22:27	1
bis (2-chloroisopropyl) ether	ND		0.43		ug/L		09/04/13 16:38	09/11/13 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*74*		*20 - 134*	*09/04/13 16:38*	*09/11/13 22:27*	*1*
Phenol-d5	*70*		*55 - 125*	*09/04/13 16:38*	*09/11/13 22:27*	*1*
Nitrobenzene-d5	*84*		*62 - 125*	*09/04/13 16:38*	*09/11/13 22:27*	*1*
2-Fluorobiphenyl	*83*		*66 - 140*	*09/04/13 16:38*	*09/11/13 22:27*	*1*
2,4,6-Tribromophenol	*100*		*44 - 125*	*09/04/13 16:38*	*09/11/13 22:27*	*1*
Terphenyl-d14	*105*		*20 - 150*	*09/04/13 16:38*	*09/11/13 22:27*	*1*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 20:39	1

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 13:34
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*50 - 150*		*09/04/13 20:39*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 20:39*	*1*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	**0.38**		0.10		mg/L		09/05/13 11:26	09/05/13 16:05	1
RRO (nC25-nC36)	ND		0.26		mg/L		09/05/13 11:26	09/05/13 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*91*		*50 - 150*	*09/05/13 11:26*	*09/05/13 16:05*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 11:06	1
Calcium	**17**		1.1		mg/L		09/17/13 16:54	09/18/13 11:06	1
Magnesium	**47**		1.1		mg/L		09/17/13 16:54	09/18/13 11:06	1
Potassium	**43**		3.3		mg/L		09/17/13 16:54	09/18/13 11:06	1
Sodium	**290**		2.0		mg/L		09/17/13 16:54	09/18/13 11:06	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 11:09	1
Calcium	**16**		1.1		mg/L		09/17/13 16:54	09/18/13 11:09	1
Magnesium	**46**		1.1		mg/L		09/17/13 16:54	09/18/13 11:09	1
Potassium	**43**		3.3		mg/L		09/17/13 16:54	09/18/13 11:09	1
Sodium	**290**		2.0		mg/L		09/17/13 16:54	09/18/13 11:09	1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Arsenic	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:51	5
Barium	**0.017**		0.0060		mg/L		09/05/13 09:09	09/05/13 15:51	5
Beryllium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Cadmium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Chromium	**0.0049**		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Cobalt	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Copper	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:51	5
Iron	**9.0**		0.20		mg/L		09/05/13 09:09	09/05/13 15:51	5
Lead	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Manganese	**0.36**		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Nickel	ND		0.015		mg/L		09/05/13 09:09	09/05/13 15:51	5
Selenium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:51	5
Silver	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 15:51	5
Thallium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 15:51	5
Vanadium	**0.033**		0.010		mg/L		09/05/13 09:09	09/05/13 15:51	5
Zinc	**0.0088**		0.0070		mg/L		09/05/13 09:09	09/05/13 15:51	5

Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:19	5
Antimony	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 13:34
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.012**		0.0060		mg/L		09/16/13 15:28	09/17/13 08:19	5
Beryllium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Cadmium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Chromium	**0.0028**		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Cobalt	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Copper	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:19	5
Iron	**7.7**		0.20		mg/L		09/16/13 15:28	09/17/13 08:19	5
Lead	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Manganese	**0.30**		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Nickel	ND		0.015		mg/L		09/16/13 15:28	09/17/13 08:19	5
Selenium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:19	5
Silver	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 08:19	5
Thallium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 08:19	5
Vanadium	**0.024**		0.010		mg/L		09/16/13 15:28	09/17/13 08:19	5
Zinc	ND		0.0070		mg/L		09/16/13 15:28	09/17/13 08:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 15:11	1

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913
Date Collected: 08/29/13 16:15
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1221	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1232	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1242	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1248	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1254	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1
PCB-1260	ND		0.53		ug/L		09/05/13 12:06	09/05/13 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*60 - 150*	*09/05/13 12:06*	*09/05/13 19:30*	*1*
DCB Decachlorobiphenyl	*71*		*40 - 135*	*09/05/13 12:06*	*09/05/13 19:30*	*1*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10		pg/L		09/04/13 14:45	09/07/13 07:39	1
2,3,7,8-TCDF	ND		10		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,7,8-PeCDD	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,7,8-PeCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
2,3,4,7,8-PeCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,4,7,8-HxCDD	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,6,7,8-HxCDD	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,7,8,9-HxCDD	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,4,7,8-HxCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,6,7,8-HxCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
2,3,4,6,7,8-HxCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,7,8,9-HxCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,4,6,7,8-HpCDD	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,4,6,7,8-HpCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
1,2,3,4,7,8,9-HpCDF	ND		51		pg/L		09/04/13 14:45	09/07/13 07:39	1
OCDD	**130**		100		pg/L		09/04/13 14:45	09/07/13 07:39	1
OCDF	ND		100		pg/L		09/04/13 14:45	09/07/13 07:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*85*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-2,3,7,8-TCDF	*85*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,7,8-PeCDD	*79*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,7,8-PeCDF	*82*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,6,7,8-HxCDD	*93*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,4,7,8-HxCDF	*96*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*93*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*96*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*
13C-OCDD	*91*		*40 - 135*	*09/04/13 14:45*	*09/07/13 07:39*	*1*

Client Sample ID: MW-5-083013
Date Collected: 08/30/13 08:04
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1221	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1232	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1242	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1248	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1254	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1
PCB-1260	ND		0.47		ug/L		09/05/13 12:06	09/05/13 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*60 - 150*	*09/05/13 12:06*	*09/05/13 19:45*	*1*
DCB Decachlorobiphenyl	*58*		*40 - 135*	*09/05/13 12:06*	*09/05/13 19:45*	*1*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		11		pg/L		09/04/13 14:45	09/07/13 08:21	1
2,3,7,8-TCDF	ND		11		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,7,8-PeCDD	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,7,8-PeCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
2,3,4,7,8-PeCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,4,7,8-HxCDD	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,6,7,8-HxCDD	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,7,8,9-HxCDD	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,4,7,8-HxCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,6,7,8-HxCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
2,3,4,6,7,8-HxCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,7,8,9-HxCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,4,6,7,8-HpCDD	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,4,6,7,8-HpCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
1,2,3,4,7,8,9-HpCDF	ND		54		pg/L		09/04/13 14:45	09/07/13 08:21	1
OCDD	ND		110		pg/L		09/04/13 14:45	09/07/13 08:21	1
OCDF	ND		110		pg/L		09/04/13 14:45	09/07/13 08:21	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*74*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-2,3,7,8-TCDF	*75*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,7,8-PeCDD	*71*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,7,8-PeCDF	*70*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,6,7,8-HxCDD	*74*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,4,7,8-HxCDF	*78*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*79*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*80*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*
13C-OCDD	*71*		*40 - 135*	*09/04/13 14:45*	*09/07/13 08:21*	*1*

Client Sample ID: MW-3-083013
Date Collected: 08/30/13 12:08
Date Received: 08/30/13 14:05

Lab Sample ID: 580-40060-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1221	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1232	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1242	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1248	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1254	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1
PCB-1260	ND		0.54		ug/L		09/05/13 12:06	09/05/13 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*60 - 150*	*09/05/13 12:06*	*09/05/13 19:59*	*1*
DCB Decachlorobiphenyl	*59*		*40 - 135*	*09/05/13 12:06*	*09/05/13 19:59*	*1*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Analyte	Result	Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10		pg/L		09/04/13 14:45	09/07/13 09:02	1
2,3,7,8-TCDF	ND		10		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,7,8-PeCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,7,8-PeCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
2,3,4,7,8-PeCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,4,7,8-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,6,7,8-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,7,8,9-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,4,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,6,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
2,3,4,6,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,7,8,9-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,4,6,7,8-HpCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,4,6,7,8-HpCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
1,2,3,4,7,8,9-HpCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 09:02	1
OCDD	ND		100		pg/L		09/04/13 14:45	09/07/13 09:02	1
OCDF	ND		100		pg/L		09/04/13 14:45	09/07/13 09:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*82*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-2,3,7,8-TCDF	*84*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,7,8-PeCDD	*78*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,6,7,8-HxCDD	*82*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,4,7,8-HxCDF	*89*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*85*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*
13C-OCDD	*77*		*40 - 135*	*09/04/13 14:45*	*09/07/13 09:02*	*1*

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 580-144777/6
Matrix: Water
Analysis Batch: 144777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.20		ug/L			09/12/13 09:45	1
2-Chlorotoluene	ND		0.10		ug/L			09/12/13 09:45	1
1,2,3-Trichloropropane	ND		0.20		ug/L			09/12/13 09:45	1
Carbon tetrachloride	ND		0.10		ug/L			09/12/13 09:45	1
cis-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 09:45	1
Chlorobenzene	ND		0.10		ug/L			09/12/13 09:45	1
Vinyl chloride	ND		0.020		ug/L			09/12/13 09:45	1
sec-Butylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
Dibromomethane	ND		0.10		ug/L			09/12/13 09:45	1
m-Xylene & p-Xylene	ND		0.20		ug/L			09/12/13 09:45	1
o-Xylene	ND		0.10		ug/L			09/12/13 09:45	1
1,2,4-Trichlorobenzene	ND		0.20		ug/L			09/12/13 09:45	1
Styrene	ND		0.10		ug/L			09/12/13 09:45	1
Chlorobromomethane	ND		0.10		ug/L			09/12/13 09:45	1
Dichlorobromomethane	ND		0.10		ug/L			09/12/13 09:45	1
1,3-Dichlorobenzene	ND		0.20		ug/L			09/12/13 09:45	1
Benzene	ND		0.10		ug/L			09/12/13 09:45	1
Chloroethane	ND		0.25		ug/L			09/12/13 09:45	1
trans-1,3-Dichloropropene	ND		0.10		ug/L			09/12/13 09:45	1
1,2,3-Trichlorobenzene	ND		0.40		ug/L			09/12/13 09:45	1
N-Propylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
4-Isopropyltoluene	ND		0.20		ug/L			09/12/13 09:45	1
n-Butylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
1,1-Dichloropropene	ND		0.10		ug/L			09/12/13 09:45	1
cis-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 09:45	1
1,1,2,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 09:45	1
1,2,4-Trimethylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
Toluene	ND		0.10		ug/L			09/12/13 09:45	1
Naphthalene	ND		0.40		ug/L			09/12/13 09:45	1
1,3,5-Trimethylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
1,3-Dichloropropane	ND		0.10		ug/L			09/12/13 09:45	1
Chloroform	ND		0.10		ug/L			09/12/13 09:45	1
4-Chlorotoluene	ND		0.20		ug/L			09/12/13 09:45	1
Chlorodibromomethane	ND		0.10		ug/L			09/12/13 09:45	1
Dichlorodifluoromethane	ND		0.40		ug/L			09/12/13 09:45	1
1,1,2-Trichloroethane	ND		0.10		ug/L			09/12/13 09:45	1
tert-Butylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
Chloromethane	ND		0.10		ug/L			09/12/13 09:45	1
Methylene Chloride	ND		0.50		ug/L			09/12/13 09:45	1
1,1-Dichloroethene	ND		0.10		ug/L			09/12/13 09:45	1
Isopropylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
1,2-Dichloroethane	ND		0.10		ug/L			09/12/13 09:45	1
Tetrachloroethene	ND		0.10		ug/L			09/12/13 09:45	1
1,1,1-Trichloroethane	ND		0.10		ug/L			09/12/13 09:45	1
2,2-Dichloropropane	ND		0.10		ug/L			09/12/13 09:45	1
1,2-Dibromoethane	ND		0.10		ug/L			09/12/13 09:45	1
Bromoform	ND		0.10		ug/L			09/12/13 09:45	1
1,2-Dibromo-3-Chloropropane	ND		0.40		ug/L			09/12/13 09:45	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 580-144777/6
Matrix: Water
Analysis Batch: 144777

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.10		ug/L			09/12/13 09:45	1
Trichloroethene	ND		0.10		ug/L			09/12/13 09:45	1
Bromobenzene	ND		0.10		ug/L			09/12/13 09:45	1
1,2-Dichloropropane	ND		0.10		ug/L			09/12/13 09:45	1
1,1,1,2-Tetrachloroethane	ND		0.10		ug/L			09/12/13 09:45	1
Ethylbenzene	ND		0.10		ug/L			09/12/13 09:45	1
trans-1,2-Dichloroethene	ND		0.10		ug/L			09/12/13 09:45	1
Hexachlorobutadiene	ND		0.20		ug/L			09/12/13 09:45	1
1,1-Dichloroethane	ND		0.10		ug/L			09/12/13 09:45	1
Bromomethane	ND		0.10		ug/L			09/12/13 09:45	1
1,4-Dichlorobenzene	ND		0.20		ug/L			09/12/13 09:45	1
Methyl tert-butyl ether	ND		0.10		ug/L			09/12/13 09:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*09/12/13 09:45*	*1*
Ethylbenzene-d10	*98*		*75 - 125*		*09/12/13 09:45*	*1*
Fluorobenzene (Surr)	*96*		*70 - 130*		*09/12/13 09:45*	*1*
Trifluorotoluene (Surr)	*100*		*80 - 125*		*09/12/13 09:45*	*1*
Toluene-d8 (Surr)	*90*		*75 - 125*		*09/12/13 09:45*	*1*

Lab Sample ID: LCS 580-144777/7
Matrix: Water
Analysis Batch: 144777

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 130
2-Chlorotoluene	5.00	5.06		ug/L		101	75 - 130
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	75 - 120
Carbon tetrachloride	5.00	5.34		ug/L		107	75 - 140
cis-1,3-Dichloropropene	5.00	4.06		ug/L		81	70 - 120
Chlorobenzene	5.00	4.85		ug/L		97	80 - 120
Vinyl chloride	5.00	4.80		ug/L		96	65 - 140
sec-Butylbenzene	5.00	5.61		ug/L		112	80 - 125
Dibromomethane	5.00	4.68		ug/L		94	80 - 130
m-Xylene & p-Xylene	5.00	5.20		ug/L		104	80 - 130
o-Xylene	5.00	5.24		ug/L		105	80 - 120
1,2,4-Trichlorobenzene	5.00	4.78		ug/L		96	60 - 125
Styrene	5.00	5.43		ug/L		109	75 - 130
Chlorobromomethane	5.00	5.56		ug/L		111	80 - 125
Dichlorobromomethane	5.00	4.42		ug/L		88	80 - 125
1,3-Dichlorobenzene	5.00	5.35		ug/L		107	80 - 120
Benzene	5.00	5.22		ug/L		104	80 - 120
Chloroethane	5.00	4.76		ug/L		95	75 - 140
trans-1,3-Dichloropropene	5.00	4.02		ug/L		80	60 - 140
1,2,3-Trichlorobenzene	5.00	5.03		ug/L		101	60 - 125
N-Propylbenzene	5.00	5.43		ug/L		109	80 - 120
4-Isopropyltoluene	5.00	5.05		ug/L		101	80 - 120
n-Butylbenzene	5.00	5.38		ug/L		108	75 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 580-144777/7
Matrix: Water
Analysis Batch: 144777

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	5.00	5.53		ug/L		111	80 - 130
cis-1,2-Dichloroethene	5.00	5.14		ug/L		103	80 - 130
1,1,2,2-Tetrachloroethane	5.00	4.92		ug/L		98	75 - 125
1,2,4-Trimethylbenzene	5.00	5.03		ug/L		101	80 - 125
Toluene	5.00	4.56		ug/L		91	80 - 120
Naphthalene	5.00	3.85		ug/L		77	45 - 130
1,3,5-Trimethylbenzene	5.00	5.42		ug/L		108	80 - 125
1,3-Dichloropropane	5.00	4.67		ug/L		93	80 - 130
Chloroform	5.00	5.57		ug/L		111	80 - 130
4-Chlorotoluene	5.00	5.34		ug/L		107	75 - 130
Chlorodibromomethane	5.00	4.88		ug/L		98	70 - 120
Dichlorodifluoromethane	5.00	3.23		ug/L		65	30 - 180
1,1,2-Trichloroethane	5.00	4.48		ug/L		90	80 - 130
tert-Butylbenzene	5.00	5.23		ug/L		105	80 - 130
Chloromethane	5.00	4.10		ug/L		82	50 - 140
Methylene Chloride	5.00	4.88		ug/L		98	60 - 145
1,1-Dichloroethene	5.00	5.10		ug/L		102	70 - 150
Isopropylbenzene	5.00	5.31		ug/L		106	75 - 120
1,2-Dichloroethane	5.00	5.52		ug/L		110	80 - 140
Tetrachloroethene	5.00	4.59		ug/L		92	40 - 180
1,1,1-Trichloroethane	5.00	5.46		ug/L		109	80 - 140
2,2-Dichloropropane	5.00	6.68		ug/L		134	60 - 150
1,2-Dibromoethane	5.00	4.50		ug/L		90	70 - 130
Bromoform	5.00	4.99		ug/L		100	65 - 130
1,2-Dibromo-3-Chloropropane	5.00	4.41		ug/L		88	55 - 120
Trichlorofluoromethane	5.00	5.25		ug/L		105	30 - 180
Trichloroethene	5.00	4.96		ug/L		99	80 - 130
Bromobenzene	5.00	5.02		ug/L		100	80 - 130
1,2-Dichloropropane	5.00	4.48		ug/L		90	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.98		ug/L		100	75 - 125
Ethylbenzene	5.00	4.89		ug/L		98	80 - 125
trans-1,2-Dichloroethene	5.00	5.22		ug/L		104	80 - 140
Hexachlorobutadiene	5.00	5.09		ug/L		102	75 - 135
1,1-Dichloroethane	5.00	5.10		ug/L		102	75 - 135
Bromomethane	5.00	4.78		ug/L		96	70 - 135
1,4-Dichlorobenzene	5.00	4.96		ug/L		99	80 - 120
Methyl tert-butyl ether	5.00	4.77		ug/L		95	75 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*75 - 120*
Ethylbenzene-d10	*92*		*75 - 125*
Fluorobenzene (Surr)	*105*		*70 - 130*
Trifluorotoluene (Surr)	*94*		*80 - 125*
Toluene-d8 (Surr)	*94*		*75 - 125*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-144777/8
Matrix: Water
Analysis Batch: 144777

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 130	1	20
2-Chlorotoluene	5.00	4.84		ug/L		97	75 - 130	4	20
1,2,3-Trichloropropane	5.00	5.12		ug/L		102	75 - 120	1	20
Carbon tetrachloride	5.00	5.12		ug/L		102	75 - 140	4	20
cis-1,3-Dichloropropene	5.00	4.68		ug/L		94	70 - 120	14	20
Chlorobenzene	5.00	4.77		ug/L		95	80 - 120	2	20
Vinyl chloride	5.00	4.98		ug/L		100	65 - 140	4	20
sec-Butylbenzene	5.00	5.50		ug/L		110	80 - 125	2	20
Dibromomethane	5.00	5.49		ug/L		110	80 - 130	16	20
m-Xylene & p-Xylene	5.00	5.05		ug/L		101	80 - 130	3	20
o-Xylene	5.00	5.21		ug/L		104	80 - 120	1	20
1,2,4-Trichlorobenzene	5.00	4.73		ug/L		95	60 - 125	1	20
Styrene	5.00	5.20		ug/L		104	75 - 130	4	20
Chlorobromomethane	5.00	6.01		ug/L		120	80 - 125	8	20
Dichlorobromomethane	5.00	5.21		ug/L		104	80 - 125	17	20
1,3-Dichlorobenzene	5.00	5.22		ug/L		104	80 - 120	3	20
Benzene	5.00	5.07		ug/L		101	80 - 120	3	20
Chloroethane	5.00	5.59		ug/L		112	75 - 140	16	20
trans-1,3-Dichloropropene	5.00	4.58		ug/L		92	60 - 140	13	20
1,2,3-Trichlorobenzene	5.00	4.94		ug/L		99	60 - 125	2	20
N-Propylbenzene	5.00	5.41		ug/L		108	80 - 120	0	20
4-Isopropyltoluene	5.00	4.96		ug/L		99	80 - 120	2	20
n-Butylbenzene	5.00	5.46		ug/L		109	75 - 125	2	20
1,1-Dichloropropene	5.00	5.30		ug/L		106	80 - 130	4	20
cis-1,2-Dichloroethene	5.00	5.48		ug/L		110	80 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	4.86		ug/L		97	75 - 125	1	20
1,2,4-Trimethylbenzene	5.00	4.95		ug/L		99	80 - 125	1	20
Toluene	5.00	5.18		ug/L		104	80 - 120	13	20
Naphthalene	5.00	4.05		ug/L		81	45 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.44		ug/L		109	80 - 125	0	20
1,3-Dichloropropane	5.00	5.22		ug/L		104	80 - 130	11	20
Chloroform	5.00	4.83		ug/L		97	80 - 130	14	20
4-Chlorotoluene	5.00	5.09		ug/L		102	75 - 130	5	20
Chlorodibromomethane	5.00	5.59		ug/L		112	70 - 120	14	20
Dichlorodifluoromethane	5.00	3.40		ug/L		68	30 - 180	5	20
1,1,2-Trichloroethane	5.00	5.09		ug/L		102	80 - 130	13	20
tert-Butylbenzene	5.00	5.60		ug/L		112	80 - 130	7	20
Chloromethane	5.00	4.36		ug/L		87	50 - 140	6	20
Methylene Chloride	5.00	5.79		ug/L		116	60 - 145	17	20
1,1-Dichloroethene	5.00	5.88		ug/L		118	70 - 150	14	20
Isopropylbenzene	5.00	5.02		ug/L		100	75 - 120	6	20
1,2-Dichloroethane	5.00	5.42		ug/L		108	80 - 140	2	20
Tetrachloroethene	5.00	5.69	*	ug/L		114	40 - 180	21	20
1,1,1-Trichloroethane	5.00	5.13		ug/L		103	80 - 140	6	20
2,2-Dichloropropane	5.00	7.20		ug/L		144	60 - 150	8	20
1,2-Dibromoethane	5.00	5.09		ug/L		102	70 - 130	12	20
Bromoform	5.00	4.83		ug/L		97	65 - 130	3	20
1,2-Dibromo-3-Chloropropane	5.00	4.88		ug/L		98	55 - 120	10	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 580-144777/8
Matrix: Water
Analysis Batch: 144777

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichlorofluoromethane			5.00	5.88		ug/L		118	30 - 180	11	20
Trichloroethene			5.00	5.10		ug/L		102	80 - 130	3	20
Bromobenzene			5.00	4.93		ug/L		99	80 - 130	2	20
1,2-Dichloropropane			5.00	4.90		ug/L		98	80 - 120	9	20
1,1,1,2-Tetrachloroethane			5.00	5.01		ug/L		100	75 - 125	1	20
Ethylbenzene			5.00	4.94		ug/L		99	80 - 125	1	20
trans-1,2-Dichloroethene			5.00	5.83		ug/L		117	80 - 140	11	20
Hexachlorobutadiene			5.00	4.85		ug/L		97	75 - 135	5	20
1,1-Dichloroethane			5.00	5.79		ug/L		116	75 - 135	13	20
Bromomethane			5.00	4.94		ug/L		99	70 - 135	3	20
1,4-Dichlorobenzene			5.00	5.01		ug/L		100	80 - 120	1	20
Methyl tert-butyl ether			5.00	5.39		ug/L		108	75 - 120	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*
Ethylbenzene-d10	*93*		*75 - 125*
Fluorobenzene (Surr)	*100*		*70 - 130*
Trifluorotoluene (Surr)	*104*		*80 - 125*
Toluene-d8 (Surr)	*106*		*75 - 125*

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

Lab Sample ID: MB 580-144201/1-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
Bis(2-chloroethyl)ether	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Chlorophenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
1,3-Dichlorobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
1,4-Dichlorobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzyl alcohol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
1,2-Dichlorobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Methylphenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
3 & 4 Methylphenol	ND		0.80		ug/L		09/04/13 16:38	09/11/13 17:37	1
N-Nitrosodi-n-propylamine	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Hexachloroethane	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
Nitrobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Isophorone	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Nitrophenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4-Dimethylphenol	ND		2.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzoic acid	ND		3.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
Bis(2-chloroethoxy)methane	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4-Dichlorophenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
1,2,4-Trichlorobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Naphthalene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Chloroaniline	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1

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

Lab Sample ID: MB 580-144201/1-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144201

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Chloro-3-methylphenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Methylnaphthalene	ND		0.20		ug/L		09/04/13 16:38	09/11/13 17:37	1
Hexachlorocyclopentadiene	ND		2.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4,6-Trichlorophenol	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4,5-Trichlorophenol	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Chloronaphthalene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
2-Nitroaniline	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Dimethyl phthalate	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Acenaphthylene	ND		0.080		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,6-Dinitrotoluene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
3-Nitroaniline	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Acenaphthene	ND		0.10		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4-Dinitrophenol	ND		5.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Nitrophenol	ND		3.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
Dibenzofuran	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
2,4-Dinitrotoluene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Diethyl phthalate	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Chlorophenyl phenyl ether	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Fluorene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Nitroaniline	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
4,6-Dinitro-2-methylphenol	ND		4.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
N-Nitrosodiphenylamine	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
4-Bromophenyl phenyl ether	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Hexachlorobenzene	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Pentachlorophenol	ND		0.70		ug/L		09/04/13 16:38	09/11/13 17:37	1
Phenanthrene	ND		0.080		ug/L		09/04/13 16:38	09/11/13 17:37	1
Anthracene	ND		0.040		ug/L		09/04/13 16:38	09/11/13 17:37	1
Di-n-butyl phthalate	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Fluoranthene	ND		0.050		ug/L		09/04/13 16:38	09/11/13 17:37	1
Pyrene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Butyl benzyl phthalate	ND		0.60		ug/L		09/04/13 16:38	09/11/13 17:37	1
3,3'-Dichlorobenzidine	ND		2.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzo[a]anthracene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Chrysene	ND		0.040		ug/L		09/04/13 16:38	09/11/13 17:37	1
Bis(2-ethylhexyl) phthalate	ND		3.0		ug/L		09/04/13 16:38	09/11/13 17:37	1
Di-n-octyl phthalate	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzo[a]pyrene	ND		0.040		ug/L		09/04/13 16:38	09/11/13 17:37	1
Indeno[1,2,3-cd]pyrene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Dibenz(a,h)anthracene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzo[g,h,i]perylene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Carbazole	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1
1-Methylnaphthalene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzo[b]fluoranthene	ND		0.080		ug/L		09/04/13 16:38	09/11/13 17:37	1
Benzo[k]fluoranthene	ND		0.060		ug/L		09/04/13 16:38	09/11/13 17:37	1
bis (2-chloroisopropyl) ether	ND		0.40		ug/L		09/04/13 16:38	09/11/13 17:37	1

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

Lab Sample ID: MB 580-144201/1-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144201

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	64		20 - 134	09/04/13 16:38	09/11/13 17:37	1
Phenol-d5	65		55 - 125	09/04/13 16:38	09/11/13 17:37	1
Nitrobenzene-d5	92		62 - 125	09/04/13 16:38	09/11/13 17:37	1
2-Fluorobiphenyl	86		66 - 140	09/04/13 16:38	09/11/13 17:37	1
2,4,6-Tribromophenol	67		44 - 125	09/04/13 16:38	09/11/13 17:37	1
Terphenyl-d14	105		20 - 150	09/04/13 16:38	09/11/13 17:37	1

Lab Sample ID: LCS 580-144201/2-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	2.03	1.73		ug/L		85	65 - 130
Bis(2-chloroethyl)ether	2.00	1.64		ug/L		82	65 - 125
2-Chlorophenol	1.98	1.85		ug/L		93	60 - 130
1,3-Dichlorobenzene	2.00	1.63		ug/L		82	40 - 125
1,4-Dichlorobenzene	2.00	1.62		ug/L		81	40 - 125
Benzyl alcohol	1.99	2.25		ug/L		113	65 - 125
1,2-Dichlorobenzene	2.00	1.68		ug/L		84	45 - 125
2-Methylphenol	2.00	1.58		ug/L		79	70 - 130
3 & 4 Methylphenol	2.01	1.80		ug/L		90	65 - 130
N-Nitrosodi-n-propylamine	2.00	1.73		ug/L		87	70 - 130
Hexachloroethane	2.00	1.48		ug/L		74	30 - 125
Nitrobenzene	2.01	2.04		ug/L		102	70 - 125
Isophorone	2.00	2.01		ug/L		100	75 - 125
2-Nitrophenol	1.98	1.87		ug/L		95	55 - 140
2,4-Dimethylphenol	1.98	ND		ug/L		97	30 - 135
Benzoic acid	10.1	8.32		ug/L		83	20 - 140
Bis(2-chloroethoxy)methane	2.00	1.91		ug/L		95	75 - 125
2,4-Dichlorophenol	1.98	1.88		ug/L		95	50 - 140
1,2,4-Trichlorobenzene	2.00	1.71		ug/L		85	40 - 125
Naphthalene	2.01	1.86		ug/L		92	60 - 125
4-Chloroaniline	2.00	1.96		ug/L		98	35 - 175
Hexachlorobutadiene	2.00	1.56		ug/L		78	25 - 125
4-Chloro-3-methylphenol	2.04	1.90		ug/L		93	65 - 145
2-Methylnaphthalene	2.00	1.82		ug/L		91	60 - 125
Hexachlorocyclopentadiene	2.00	ND		ug/L		55	20 - 125
2,4,6-Trichlorophenol	1.99	1.95		ug/L		98	55 - 140
2,4,5-Trichlorophenol	2.00	2.00		ug/L		100	75 - 125
2-Chloronaphthalene	2.00	1.76		ug/L		88	60 - 125
2-Nitroaniline	2.01	2.23		ug/L		111	75 - 140
Dimethyl phthalate	2.00	2.32		ug/L		116	65 - 155
Acenaphthylene	2.00	2.05		ug/L		103	65 - 125
2,6-Dinitrotoluene	2.00	2.03		ug/L		101	75 - 125
3-Nitroaniline	2.00	1.88		ug/L		94	75 - 140
Acenaphthene	2.00	1.96		ug/L		98	65 - 125
2,4-Dinitrophenol	9.87	7.53		ug/L		76	50 - 130
4-Nitrophenol	10.1	10.3		ug/L		102	35 - 145

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

Lab Sample ID: LCS 580-144201/2-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144201

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	2.00	1.96		ug/L		98	60 - 125
2,4-Dinitrotoluene	2.00	2.37		ug/L		118	75 - 125
Diethyl phthalate	2.01	2.32		ug/L		115	60 - 150
4-Chlorophenyl phenyl ether	2.00	2.07		ug/L		104	70 - 125
Fluorene	2.02	2.16		ug/L		107	70 - 125
4-Nitroaniline	2.00	2.04		ug/L		102	70 - 125
4,6-Dinitro-2-methylphenol	9.95	9.38		ug/L		94	50 - 125
N-Nitrosodiphenylamine	2.00	2.35		ug/L		118	40 - 135
4-Bromophenyl phenyl ether	2.00	2.20		ug/L		110	75 - 125
Hexachlorobenzene	2.00	1.83		ug/L		92	70 - 125
Pentachlorophenol	1.97	1.54		ug/L		78	20 - 145
Phenanthrene	2.01	2.08		ug/L		103	75 - 125
Anthracene	2.00	1.94		ug/L		97	50 - 125
Di-n-butyl phthalate	2.00	2.47		ug/L		123	55 - 155
Fluoranthene	2.00	2.18		ug/L		109	70 - 125
Pyrene	2.00	2.17		ug/L		109	70 - 125
Butyl benzyl phthalate	2.00	2.48		ug/L		124	60 - 150
3,3'-Dichlorobenzidine	3.97	3.52		ug/L		89	20 - 175
Benzo[a]anthracene	2.00	2.13		ug/L		106	65 - 125
Chrysene	1.93	2.09		ug/L		108	70 - 125
Bis(2-ethylhexyl) phthalate	1.99	ND		ug/L		146	20 - 175
Di-n-octyl phthalate	2.00	2.08		ug/L		104	55 - 150
Benzo[a]pyrene	2.00	1.95		ug/L		98	45 - 125
Indeno[1,2,3-cd]pyrene	2.01	2.07		ug/L		103	75 - 125
Dibenz(a,h)anthracene	2.00	1.96		ug/L		98	75 - 130
Benzo[g,h,i]perylene	2.00	2.09		ug/L		105	75 - 125
Carbazole	2.00	2.24		ug/L		112	75 - 125
1-Methylnaphthalene	2.01	1.88		ug/L		94	60 - 125
Benzo[b]fluoranthene	2.00	2.33		ug/L		116	70 - 125
Benzo[k]fluoranthene	2.00	2.26		ug/L		113	70 - 125
bis (2-chloroisopropyl) ether	2.00	1.77		ug/L		89	65 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol	*79*		*20 - 134*
Phenol-d5	*81*		*55 - 125*
Nitrobenzene-d5	*96*		*62 - 125*
2-Fluorobiphenyl	*88*		*66 - 140*
2,4,6-Tribromophenol	*99*		*44 - 125*
Terphenyl-d14	*104*		*20 - 150*

Lab Sample ID: LCSD 580-144201/3-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	2.03	2.09		ug/L		103	65 - 130	19	20
Bis(2-chloroethyl)ether	2.00	1.62		ug/L		81	65 - 125	1	20
2-Chlorophenol	1.98	1.69		ug/L		85	60 - 130	9	20

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

Lab Sample ID: LCSD 580-144201/3-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144201

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,3-Dichlorobenzene	2.00	1.56		ug/L		78	40 - 125	5	20
1,4-Dichlorobenzene	2.00	1.56		ug/L		78	40 - 125	4	20
Benzyl alcohol	1.99	1.92		ug/L		97	65 - 125	16	20
1,2-Dichlorobenzene	2.00	1.55		ug/L		77	45 - 125	8	20
2-Methylphenol	2.00	1.56		ug/L		78	70 - 130	1	20
3 & 4 Methylphenol	2.01	1.53		ug/L		76	65 - 130	16	20
N-Nitrosodi-n-propylamine	2.00	1.68		ug/L		84	70 - 130	3	20
Hexachloroethane	2.00	1.39		ug/L		69	30 - 125	6	20
Nitrobenzene	2.01	1.67		ug/L		83	70 - 125	20	20
Isophorone	2.00	1.92		ug/L		96	75 - 125	4	20
2-Nitrophenol	1.98	1.46	*	ug/L		74	55 - 140	25	20
2,4-Dimethylphenol	1.98	ND		ug/L		83	30 - 135	16	20
Benzoic acid	10.1	6.13	*	ug/L		61	20 - 140	30	20
Bis(2-chloroethoxy)methane	2.00	1.78		ug/L		89	75 - 125	7	20
2,4-Dichlorophenol	1.98	1.92		ug/L		97	50 - 140	2	20
1,2,4-Trichlorobenzene	2.00	1.58		ug/L		79	40 - 125	8	20
Naphthalene	2.01	1.63		ug/L		81	60 - 125	13	20
4-Chloroaniline	2.00	1.68		ug/L		84	35 - 175	15	20
Hexachlorobutadiene	2.00	1.44		ug/L		72	25 - 125	8	20
4-Chloro-3-methylphenol	2.04	1.72		ug/L		85	65 - 145	10	20
2-Methylnaphthalene	2.00	1.69		ug/L		84	60 - 125	8	20
Hexachlorocyclopentadiene	2.00	ND		ug/L		52	20 - 125	6	20
2,4,6-Trichlorophenol	1.99	2.22		ug/L		112	55 - 140	13	20
2,4,5-Trichlorophenol	2.00	1.84		ug/L		92	75 - 125	8	20
2-Chloronaphthalene	2.00	1.67		ug/L		84	60 - 125	5	20
2-Nitroaniline	2.01	1.81	*	ug/L		90	75 - 140	21	20
Dimethyl phthalate	2.00	2.26		ug/L		113	65 - 155	3	20
Acenaphthylene	2.00	1.90		ug/L		95	65 - 125	8	20
2,6-Dinitrotoluene	2.00	1.97		ug/L		98	75 - 125	3	20
3-Nitroaniline	2.00	1.72		ug/L		86	75 - 140	9	20
Acenaphthene	2.00	1.91		ug/L		96	65 - 125	2	20
2,4-Dinitrophenol	9.87	6.73		ug/L		68	50 - 130	11	20
4-Nitrophenol	10.1	8.86		ug/L		88	35 - 145	15	20
Dibenzofuran	2.00	1.91		ug/L		95	60 - 125	3	20
2,4-Dinitrotoluene	2.00	1.92	*	ug/L		96	75 - 125	21	20
Diethyl phthalate	2.01	2.15		ug/L		107	60 - 150	8	20
4-Chlorophenyl phenyl ether	2.00	1.79		ug/L		90	70 - 125	14	20
Fluorene	2.02	2.01		ug/L		100	70 - 125	7	20
4-Nitroaniline	2.00	1.87		ug/L		93	70 - 125	9	20
4,6-Dinitro-2-methylphenol	9.95	9.11		ug/L		92	50 - 125	3	20
N-Nitrosodiphenylamine	2.00	2.28		ug/L		114	40 - 135	3	20
4-Bromophenyl phenyl ether	2.00	1.99		ug/L		99	75 - 125	10	20
Hexachlorobenzene	2.00	1.87		ug/L		93	70 - 125	2	20
Pentachlorophenol	1.97	1.38		ug/L		70	20 - 145	10	20
Phenanthrene	2.01	1.99		ug/L		99	75 - 125	4	20
Anthracene	2.00	1.91		ug/L		96	50 - 125	1	20
Di-n-butyl phthalate	2.00	2.38		ug/L		119	55 - 155	4	20
Fluoranthene	2.00	2.16		ug/L		108	70 - 125	1	20

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

Lab Sample ID: LCSD 580-144201/3-A
Matrix: Water
Analysis Batch: 144718

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144201

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene			2.00	2.09		ug/L		104	70 - 125	4	20
Butyl benzyl phthalate			2.00	2.09		ug/L		104	60 - 150	17	20
3,3'-Dichlorobenzidine			3.97	2.87		ug/L		72	20 - 175	20	20
Benzo[a]anthracene			2.00	2.05		ug/L		102	65 - 125	3	20
Chrysene			1.93	1.98		ug/L		103	70 - 125	5	20
Bis(2-ethylhexyl) phthalate			1.99	3.67	*	ug/L		184	20 - 175	23	20
Di-n-octyl phthalate			2.00	2.07		ug/L		104	55 - 150	1	20
Benzo[a]pyrene			2.00	1.85		ug/L		92	45 - 125	5	20
Indeno[1,2,3-cd]pyrene			2.01	1.85		ug/L		92	75 - 125	11	20
Dibenz(a,h)anthracene			2.00	2.08		ug/L		104	75 - 130	6	20
Benzo[g,h,i]perylene			2.00	2.03		ug/L		102	75 - 125	3	20
Carbazole			2.00	2.25		ug/L		112	75 - 125	0	20
1-Methylnaphthalene			2.01	1.75		ug/L		87	60 - 125	7	20
Benzo[b]fluoranthene			2.00	2.20		ug/L		110	70 - 125	6	20
Benzo[k]fluoranthene			2.00	2.31		ug/L		116	70 - 125	2	20
bis (2-chloroisopropyl) ether			2.00	1.70		ug/L		85	65 - 125	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorophenol	*71*		*20 - 134*
Phenol-d5	*74*		*55 - 125*
Nitrobenzene-d5	*94*		*62 - 125*
2-Fluorobiphenyl	*80*		*66 - 140*
2,4,6-Tribromophenol	*90*		*44 - 125*
Terphenyl-d14	*102*		*20 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC)

Lab Sample ID: MB 580-144148/5
Matrix: Water
Analysis Batch: 144148

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			09/04/13 12:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*50 - 150*		*09/04/13 12:48*	*1*
Trifluorotoluene (Surr)	*90*		*50 - 150*		*09/04/13 12:48*	*1*

Lab Sample ID: LCS 580-144148/6
Matrix: Water
Analysis Batch: 144148

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline			1.00	0.846		mg/L		85	79 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*50 - 150*

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC) (Continued)

Lab Sample ID: LCS 580-144148/6
Matrix: Water
Analysis Batch: 144148

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	*93*		*50 - 150*

Lab Sample ID: LCSD 580-144148/11
Matrix: Water
Analysis Batch: 144148

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline			1.00	0.851		mg/L		85	79 - 110	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	*100*		*50 - 150*
Trifluorotoluene (Surr)	*83*		*50 - 150*

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

Lab Sample ID: MB 580-144265/1-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1221	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1232	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1242	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1248	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1254	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1
PCB-1260	ND		0.50		ug/L		09/05/13 12:06	09/05/13 18:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*93*		*60 - 150*	*09/05/13 12:06*	*09/05/13 18:47*	*1*
DCB Decachlorobiphenyl	*96*		*40 - 135*	*09/05/13 12:06*	*09/05/13 18:47*	*1*

Lab Sample ID: LCS 580-144265/2-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144265

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016			1.00	0.859		ug/L		86	25 - 145
PCB-1260			1.00	0.858		ug/L		86	30 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	*78*		*60 - 150*
DCB Decachlorobiphenyl	*49*		*40 - 135*

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

Lab Sample ID: LCSD 580-144265/3-A
Matrix: Water
Analysis Batch: 144257

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144265

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016			1.00	0.849		ug/L		85	25 - 145	1	27
PCB-1260			1.00	0.862		ug/L		86	30 - 145	0	22

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*60 - 150*
DCB Decachlorobiphenyl	*68*		*40 - 135*

Method: NWTPH-Dx - Northwest - Semi-Volatile Petroleum Products (GC)

Lab Sample ID: MB 250-19826/1-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 19826

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C25)	ND		0.10		mg/L		09/05/13 11:26	09/05/13 13:54	1
RRO (nC25-nC36)	ND		0.25		mg/L		09/05/13 11:26	09/05/13 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctadecane	*102*		*50 - 150*	*09/05/13 11:26*	*09/05/13 13:54*	*1*

Lab Sample ID: LCS 250-19826/2-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 19826

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (C10-C25)			2.50	2.59		mg/L		104	50 - 150
RRO (nC25-nC36)			1.50	1.54		mg/L		103	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctadecane	*95*		*50 - 150*

Lab Sample ID: LCSD 250-19826/3-A
Matrix: Water
Analysis Batch: 19843

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 19826

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (C10-C25)			2.50	2.55		mg/L		102	50 - 150	2	20
RRO (nC25-nC36)			1.50	1.53		mg/L		102	50 - 150	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctadecane	*95*		*50 - 150*

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Lab Sample ID: MB 320-24432/1-A
Matrix: Water
Analysis Batch: 24662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 24432

Analyte	MB Result	MB Qualifier	RL	EDL	Unit	D	Prepared	Analyzed	Dil Fac
2,3,7,8-TCDD	ND		10		pg/L		09/04/13 14:45	09/07/13 02:05	1
2,3,7,8-TCDF	ND		10		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,7,8-PeCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,7,8-PeCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
2,3,4,7,8-PeCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,4,7,8-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,6,7,8-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,7,8,9-HxCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,4,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,6,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
2,3,4,6,7,8-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,7,8,9-HxCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,4,6,7,8-HpCDD	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,4,6,7,8-HpCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
1,2,3,4,7,8,9-HpCDF	ND		50		pg/L		09/04/13 14:45	09/07/13 02:05	1
OCDD	ND		100		pg/L		09/04/13 14:45	09/07/13 02:05	1
OCDF	ND		100		pg/L		09/04/13 14:45	09/07/13 02:05	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C-2,3,7,8-TCDD	*87*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-2,3,7,8-TCDF	*89*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,7,8-PeCDD	*83*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,7,8-PeCDF	*84*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,6,7,8-HxCDD	*92*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,4,7,8-HxCDF	*100*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,4,6,7,8-HpCDD	*92*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-1,2,3,4,6,7,8-HpCDF	*95*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*
13C-OCDD	*83*		*40 - 135*	*09/04/13 14:45*	*09/07/13 02:05*	*1*

Lab Sample ID: LCS 320-24432/2-A
Matrix: Water
Analysis Batch: 24662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,3,7,8-TCDD	200	196		pg/L		98	72 - 144
2,3,7,8-TCDF	200	184		pg/L		92	73 - 150
1,2,3,7,8-PeCDD	1000	959		pg/L		96	79 - 125
1,2,3,7,8-PeCDF	1000	954		pg/L		95	79 - 137
2,3,4,7,8-PeCDF	1000	882		pg/L		88	76 - 137
1,2,3,4,7,8-HxCDD	1000	1070		pg/L		107	65 - 144
1,2,3,6,7,8-HxCDD	1000	985		pg/L		98	78 - 137
1,2,3,7,8,9-HxCDD	1000	961		pg/L		96	74 - 142
1,2,3,4,7,8-HxCDF	1000	978		pg/L		98	86 - 126
1,2,3,6,7,8-HxCDF	1000	944		pg/L		94	79 - 137
2,3,4,6,7,8-HxCDF	1000	960		pg/L		96	80 - 138
1,2,3,7,8,9-HxCDF	1000	943		pg/L		94	72 - 145
1,2,3,4,6,7,8-HpCDD	1000	984		pg/L		98	81 - 132
1,2,3,4,6,7,8-HpCDF	1000	959		pg/L		96	81 - 135

Method: 8290 - Dioxins and Furans (HRGC/HRMS) (Continued)

Lab Sample ID: LCS 320-24432/2-A
Matrix: Water
Analysis Batch: 24662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 24432

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3,4,7,8,9-HpCDF	1000	905		pg/L		91	72 - 140
OCDD	2000	2100		pg/L		105	80 - 129
OCDF	2000	1960		pg/L		98	65 - 145

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C-2,3,7,8-TCDD	*79*		*40 - 135*
13C-2,3,7,8-TCDF	*81*		*40 - 135*
13C-1,2,3,7,8-PeCDD	*77*		*40 - 135*
13C-1,2,3,7,8-PeCDF	*79*		*40 - 135*
13C-1,2,3,6,7,8-HxCDD	*83*		*40 - 135*
13C-1,2,3,4,7,8-HxCDF	*88*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDD	*85*		*40 - 135*
13C-1,2,3,4,6,7,8-HpCDF	*89*		*40 - 135*
13C-OCDD	*78*		*40 - 135*

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 580-145169/17-A
Matrix: Water
Analysis Batch: 145237

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	4.00	4.20		mg/L		105	80 - 120
Calcium	20.0	19.5		mg/L		97	80 - 120
Magnesium	20.0	21.8		mg/L		109	80 - 120
Potassium	20.0	21.2		mg/L		106	80 - 120
Sodium	20.0	21.3		mg/L		107	80 - 120

Lab Sample ID: LCSD 580-145169/18-A
Matrix: Water
Analysis Batch: 145237

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 145169

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	4.00	4.18		mg/L		105	80 - 120	0	20
Calcium	20.0	19.9		mg/L		99	80 - 120	2	20
Magnesium	20.0	22.0		mg/L		110	80 - 120	1	20
Potassium	20.0	21.4		mg/L		107	80 - 120	1	20
Sodium	20.0	21.6		mg/L		108	80 - 120	1	20

Lab Sample ID: LCSSRM 580-145169/19-A
Matrix: Water
Analysis Batch: 145237

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145169

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	4.00	4.30		mg/L		107	80 - 120
Calcium	20.0	19.6		mg/L		98	80 - 120
Magnesium	20.0	20.8		mg/L		104	80 - 120
Potassium	20.0	20.9		mg/L		105	80 - 120
Sodium	20.0	20.8		mg/L		104	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 580-144900/2-D
Matrix: Water
Analysis Batch: 145237

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 145169

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		1.5		mg/L		09/17/13 16:54	09/18/13 10:15	1
Calcium	ND		1.1		mg/L		09/17/13 16:54	09/18/13 10:15	1
Magnesium	ND		1.1		mg/L		09/17/13 16:54	09/18/13 10:15	1
Potassium	ND		3.3		mg/L		09/17/13 16:54	09/18/13 10:15	1
Sodium	ND		2.0		mg/L		09/17/13 16:54	09/18/13 10:15	1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 580-144243/22-A
Matrix: Water
Analysis Batch: 144315

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 144243

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Arsenic	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 14:56	5
Barium	ND		0.0060		mg/L		09/05/13 09:09	09/05/13 14:56	5
Beryllium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Cadmium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Chromium	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Cobalt	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Copper	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 14:56	5
Iron	ND		0.20		mg/L		09/05/13 09:09	09/05/13 14:56	5
Lead	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Manganese	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Nickel	ND		0.015		mg/L		09/05/13 09:09	09/05/13 14:56	5
Selenium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 14:56	5
Silver	ND		0.0020		mg/L		09/05/13 09:09	09/05/13 14:56	5
Thallium	ND		0.0050		mg/L		09/05/13 09:09	09/05/13 14:56	5
Vanadium	ND		0.010		mg/L		09/05/13 09:09	09/05/13 14:56	5
Zinc	ND		0.0070		mg/L		09/05/13 09:09	09/05/13 14:56	5

Lab Sample ID: LCS 580-144243/23-A
Matrix: Water
Analysis Batch: 144315

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 144243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.94		mg/L		98	80 - 120
Arsenic	4.00	4.00		mg/L		100	80 - 120
Barium	4.00	3.95		mg/L		99	80 - 120
Beryllium	0.100	0.105		mg/L		105	80 - 120
Cadmium	0.100	0.0942		mg/L		94	80 - 120
Chromium	0.400	0.406		mg/L		101	80 - 120
Cobalt	1.00	1.00		mg/L		100	80 - 120
Copper	0.500	0.510		mg/L		102	80 - 120
Iron	22.0	22.6		mg/L		103	80 - 120
Lead	1.00	0.962		mg/L		96	80 - 120
Manganese	1.00	1.01		mg/L		101	80 - 120
Nickel	1.00	1.00		mg/L		100	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 580-144243/23-A
Matrix: Water
Analysis Batch: 144315

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 144243

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	4.00	4.01		mg/L		100	80 - 120
Silver	0.600	0.622		mg/L		104	80 - 120
Thallium	4.00	3.84		mg/L		96	80 - 120
Vanadium	1.00	0.971		mg/L		97	80 - 120
Zinc	1.00	1.02		mg/L		102	80 - 120

Lab Sample ID: LCSD 580-144243/24-A
Matrix: Water
Analysis Batch: 144315

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 144243

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.93		mg/L		98	80 - 120	0	20
Arsenic	4.00	3.97		mg/L		99	80 - 120	1	20
Barium	4.00	3.94		mg/L		99	80 - 120	0	20
Beryllium	0.100	0.0980		mg/L		98	80 - 120	6	20
Cadmium	0.100	0.0939		mg/L		94	80 - 120	0	20
Chromium	0.400	0.400		mg/L		100	80 - 120	1	20
Cobalt	1.00	1.00		mg/L		100	80 - 120	0	20
Copper	0.500	0.508		mg/L		102	80 - 120	0	20
Iron	22.0	22.4		mg/L		102	80 - 120	1	20
Lead	1.00	0.950		mg/L		95	80 - 120	1	20
Manganese	1.00	0.990		mg/L		99	80 - 120	2	20
Nickel	1.00	1.00		mg/L		100	80 - 120	0	20
Selenium	4.00	4.04		mg/L		101	80 - 120	1	20
Silver	0.600	0.618		mg/L		103	80 - 120	1	20
Thallium	4.00	3.81		mg/L		95	80 - 120	1	20
Vanadium	1.00	0.969		mg/L		97	80 - 120	0	20
Zinc	1.00	1.00		mg/L		100	80 - 120	2	20

Lab Sample ID: 580-40060-1 MS
Matrix: Water
Analysis Batch: 144315

Client Sample ID: MW-4-082913
Prep Type: Total Recoverable
Prep Batch: 144243

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		3.00	3.22		mg/L		107	80 - 120
Arsenic	ND		4.00	4.34		mg/L		108	80 - 120
Barium	0.16		4.00	4.38		mg/L		105	80 - 120
Beryllium	ND		0.100	0.110		mg/L		110	80 - 120
Cadmium	ND		0.100	0.103		mg/L		102	80 - 120
Chromium	ND		0.400	0.432		mg/L		108	80 - 120
Cobalt	ND		1.00	1.07		mg/L		106	80 - 120
Copper	ND		0.500	0.534		mg/L		106	80 - 120
Iron	4.6		22.0	28.2		mg/L		107	80 - 120
Lead	ND		1.00	1.03		mg/L		102	80 - 120
Manganese	0.21		1.00	1.24		mg/L		103	80 - 120
Nickel	ND		1.00	1.07		mg/L		106	80 - 120
Selenium	ND		4.00	4.24		mg/L		106	80 - 120
Silver	ND		0.600	0.636		mg/L		106	80 - 120
Thallium	ND		4.00	4.13		mg/L		103	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 580-40060-1 MS — **Client Sample ID: MW-4-082913**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 144315 — **Prep Batch: 144243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	ND		1.00	1.10		mg/L		109	80 - 120
Zinc	0.027		1.00	1.06		mg/L		103	80 - 120

Lab Sample ID: 580-40060-1 MSD — **Client Sample ID: MW-4-082913**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 144315 — **Prep Batch: 144243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		3.00	3.49		mg/L		116	80 - 120	8	20
Arsenic	ND		4.00	4.60		mg/L		115	80 - 120	6	20
Barium	0.16		4.00	4.75		mg/L		115	80 - 120	8	20
Beryllium	ND		0.100	0.115		mg/L		115	80 - 120	4	20
Cadmium	ND		0.100	0.109		mg/L		109	80 - 120	6	20
Chromium	ND		0.400	0.455		mg/L		113	80 - 120	5	20
Cobalt	ND		1.00	1.12		mg/L		112	80 - 120	5	20
Copper	ND		0.500	0.567		mg/L		113	80 - 120	6	20
Iron	4.6		22.0	30.0		mg/L		116	80 - 120	6	20
Lead	ND		1.00	1.10		mg/L		110	80 - 120	7	20
Manganese	0.21		1.00	1.32		mg/L		111	80 - 120	6	20
Nickel	ND		1.00	1.13		mg/L		112	80 - 120	5	20
Selenium	ND		4.00	4.50		mg/L		113	80 - 120	6	20
Silver	ND		0.600	0.678		mg/L		113	80 - 120	6	20
Thallium	ND		4.00	4.39		mg/L		110	80 - 120	6	20
Vanadium	ND		1.00	1.17		mg/L		116	80 - 120	6	20
Zinc	0.027		1.00	1.12		mg/L		109	80 - 120	5	20

Lab Sample ID: 580-40060-1 DU — **Client Sample ID: MW-4-082913**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 144315 — **Prep Batch: 144243**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		mg/L		NC	20
Arsenic	ND		ND		mg/L		NC	20
Barium	0.16		0.165		mg/L		2	20
Beryllium	ND		ND		mg/L		NC	20
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Cobalt	ND		ND		mg/L		NC	20
Copper	ND		ND		mg/L		NC	20
Iron	4.6		4.71		mg/L		3	20
Lead	ND		ND		mg/L		NC	20
Manganese	0.21		0.217		mg/L		2	20
Nickel	ND		ND		mg/L		NC	20
Selenium	ND		ND		mg/L		NC	20
Silver	ND		ND		mg/L		NC	20
Thallium	ND		ND		mg/L		NC	20
Vanadium	ND		0.0100		mg/L		NC	20
Zinc	0.027		0.0268		mg/L		0.9	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 580-145072/13-A
Matrix: Water
Analysis Batch: 145122

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 145072

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Arsenic	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 07:04	5
Barium	ND		0.0060		mg/L		09/16/13 15:28	09/17/13 07:04	5
Beryllium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Cadmium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Chromium	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Cobalt	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Copper	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 07:04	5
Iron	ND		0.20		mg/L		09/16/13 15:28	09/17/13 07:04	5
Lead	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Manganese	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Nickel	ND		0.015		mg/L		09/16/13 15:28	09/17/13 07:04	5
Selenium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 07:04	5
Silver	ND		0.0020		mg/L		09/16/13 15:28	09/17/13 07:04	5
Thallium	ND		0.0050		mg/L		09/16/13 15:28	09/17/13 07:04	5
Vanadium	ND		0.010		mg/L		09/16/13 15:28	09/17/13 07:04	5
Zinc	ND		0.0070		mg/L		09/16/13 15:28	09/17/13 07:04	5

Lab Sample ID: LCS 580-145072/14-A
Matrix: Water
Analysis Batch: 145122

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145072

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.85		mg/L		95	80 - 120
Arsenic	4.00	3.95		mg/L		99	80 - 120
Barium	4.00	3.85		mg/L		96	80 - 120
Beryllium	0.100	0.107		mg/L		107	80 - 120
Cadmium	0.100	0.0878		mg/L		88	80 - 120
Chromium	0.400	0.379		mg/L		95	80 - 120
Cobalt	1.00	0.946		mg/L		95	80 - 120
Copper	0.500	0.491		mg/L		98	80 - 120
Iron	22.0	21.9		mg/L		100	80 - 120
Lead	1.00	0.950		mg/L		95	80 - 120
Manganese	1.00	0.971		mg/L		97	80 - 120
Nickel	1.00	0.998		mg/L		100	80 - 120
Selenium	4.00	3.93		mg/L		98	80 - 120
Silver	0.600	0.588		mg/L		98	80 - 120
Thallium	4.00	3.76		mg/L		94	80 - 120
Vanadium	1.00	0.948		mg/L		95	80 - 120
Zinc	1.00	1.05		mg/L		105	80 - 120

Lab Sample ID: LCSD 580-145072/15-A
Matrix: Water
Analysis Batch: 145122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 145072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.00	2.86		mg/L		95	80 - 120	0	20
Arsenic	4.00	3.99		mg/L		100	80 - 120	1	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 580-145072/15-A
Matrix: Water
Analysis Batch: 145122

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 145072

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	4.00	3.87		mg/L		97	80 - 120	1	20
Beryllium	0.100	0.100		mg/L		100	80 - 120	6	20
Cadmium	0.100	0.0888		mg/L		89	80 - 120	1	20
Chromium	0.400	0.383		mg/L		96	80 - 120	1	20
Cobalt	1.00	0.952		mg/L		95	80 - 120	1	20
Copper	0.500	0.492		mg/L		98	80 - 120	0	20
Iron	22.0	22.3		mg/L		101	80 - 120	2	20
Lead	1.00	0.951		mg/L		95	80 - 120	0	20
Manganese	1.00	0.977		mg/L		98	80 - 120	1	20
Nickel	1.00	1.00		mg/L		100	80 - 120	0	20
Selenium	4.00	4.00		mg/L		100	80 - 120	2	20
Silver	0.600	0.594		mg/L		99	80 - 120	1	20
Thallium	4.00	3.80		mg/L		95	80 - 120	1	20
Vanadium	1.00	0.951		mg/L		95	80 - 120	0	20
Zinc	1.00	1.12		mg/L		112	80 - 120	7	20

Lab Sample ID: LCSSRM 580-145072/16-A
Matrix: Water
Analysis Batch: 145122

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 145072

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.00	2.86		mg/L		95	80 - 120
Arsenic	4.00	3.94		mg/L		99	80 - 120
Barium	4.00	3.86		mg/L		97	80 - 120
Beryllium	0.100	0.100		mg/L		100	80 - 120
Cadmium	0.100	0.0934		mg/L		93	80 - 120
Chromium	0.400	0.378		mg/L		94	80 - 120
Cobalt	1.00	0.948		mg/L		95	80 - 120
Copper	0.500	0.486		mg/L		97	80 - 120
Iron	22.0	21.9		mg/L		100	80 - 120
Lead	1.00	0.955		mg/L		96	80 - 120
Manganese	1.00	0.964		mg/L		96	80 - 120
Nickel	1.00	0.988		mg/L		99	80 - 120
Selenium	4.00	3.94		mg/L		99	80 - 120
Silver	0.600	0.592		mg/L		99	80 - 120
Thallium	4.00	3.81		mg/L		95	80 - 120
Vanadium	1.00	0.944		mg/L		94	80 - 120
Zinc	1.00	1.01		mg/L		101	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-144261/24-A
Matrix: Water
Analysis Batch: 144293

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/05/13 11:21	09/05/13 14:03	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 580-144261/25-A
Matrix: Water
Analysis Batch: 144293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00181		mg/L		90	80 - 120

Lab Sample ID: LCSD 580-144261/26-A
Matrix: Water
Analysis Batch: 144293

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 144261

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00176		mg/L		88	80 - 120	3	20

Lab Sample ID: LCSSRM 580-144261/27-A
Matrix: Water
Analysis Batch: 144293

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144261

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00178		mg/L		89	75 - 125

Lab Chronicle

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-4-082913

Lab Sample ID: 580-40060-1

Date Collected: 08/29/13 17:11

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144777	09/12/13 12:14	JMB	TAL SEA
Total/NA	Prep	3520C			144201	09/04/13 16:38	ALC	TAL SEA
Total/NA	Analysis	8270C		1	144718	09/11/13 21:34	ERB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 21:46	MMH	TAL SEA
Total/NA	Prep	3510C			19826	09/05/13 11:26	ELP	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19843	09/05/13 15:28	NMI	TAL PRT
Total/NA	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Total/NA	Analysis	7470A		1	144293	09/05/13 15:06	FCW	TAL SEA
Total Recoverable	Prep	3005A			144243	09/05/13 09:09	KJV	TAL SEA
Total Recoverable	Analysis	6020		5	144315	09/05/13 15:26	FCW	TAL SEA
Dissolved	Prep	3005A			145072	09/16/13 15:28	PAB	TAL SEA
Dissolved	Analysis	6020		5	145122	09/17/13 08:10	FCW	TAL SEA
Total Recoverable	Analysis	6010B		1	145237	09/18/13 10:54	HJM	TAL SEA
Dissolved	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Dissolved	Analysis	6010B		1	145237	09/18/13 10:57	HJM	TAL SEA
Total Recoverable	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		10	145253	09/18/13 12:46	HJM	TAL SEA
Dissolved	Analysis	6010B		10	145253	09/18/13 12:50	HJM	TAL SEA

Client Sample ID: MW-5-082913

Lab Sample ID: 580-40060-2

Date Collected: 08/30/13 10:57

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144777	09/12/13 12:39	JMB	TAL SEA
Total/NA	Prep	3520C			144201	09/04/13 16:38	ALC	TAL SEA
Total/NA	Analysis	8270C		1	144718	09/11/13 22:01	ERB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 21:23	MMH	TAL SEA
Total/NA	Prep	3510C			19826	09/05/13 11:26	ELP	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19843	09/05/13 15:46	NMI	TAL PRT
Total/NA	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Total/NA	Analysis	7470A		1	144293	09/05/13 15:08	FCW	TAL SEA
Total Recoverable	Prep	3005A			144243	09/05/13 09:09	KJV	TAL SEA
Total Recoverable	Analysis	6020		5	144315	09/05/13 15:47	FCW	TAL SEA
Dissolved	Prep	3005A			145072	09/16/13 15:28	PAB	TAL SEA
Dissolved	Analysis	6020		5	145122	09/17/13 08:14	FCW	TAL SEA
Total Recoverable	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	145237	09/18/13 11:00	HJM	TAL SEA
Dissolved	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Dissolved	Analysis	6010B		1	145237	09/18/13 11:03	HJM	TAL SEA

Client Sample ID: Trip Blank-GW2

Lab Sample ID: 580-40060-3

Date Collected: 08/30/13 00:00

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144777	09/12/13 11:49	JMB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 21:01	MMH	TAL SEA

Client Sample ID: MW-3-083013

Lab Sample ID: 580-40060-4

Date Collected: 08/30/13 13:34

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	144777	09/12/13 13:04	JMB	TAL SEA
Total/NA	Prep	3520C			144201	09/04/13 16:38	ALC	TAL SEA
Total/NA	Analysis	8270C		1	144718	09/11/13 22:27	ERB	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	144148	09/04/13 20:39	MMH	TAL SEA
Total/NA	Prep	3510C			19826	09/05/13 11:26	ELP	TAL PRT
Total/NA	Analysis	NWTPH-Dx		1	19843	09/05/13 16:05	NMI	TAL PRT
Total/NA	Prep	7470A			144261	09/05/13 11:21	PAB	TAL SEA
Total/NA	Analysis	7470A		1	144293	09/05/13 15:11	FCW	TAL SEA
Total Recoverable	Prep	3005A			144243	09/05/13 09:09	KJV	TAL SEA
Total Recoverable	Analysis	6020		5	144315	09/05/13 15:51	FCW	TAL SEA
Dissolved	Prep	3005A			145072	09/16/13 15:28	PAB	TAL SEA
Dissolved	Analysis	6020		5	145122	09/17/13 08:19	FCW	TAL SEA
Total Recoverable	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Total Recoverable	Analysis	6010B		1	145237	09/18/13 11:06	HJM	TAL SEA
Dissolved	Prep	3005A			145169	09/17/13 16:54	PAB	TAL SEA
Dissolved	Analysis	6010B		1	145237	09/18/13 11:09	HJM	TAL SEA

Client Sample ID: MW-4-082913

Lab Sample ID: 580-40060-5

Date Collected: 08/29/13 16:15

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144265	09/05/13 12:06	RBL	TAL SEA
Total/NA	Analysis	8082		1	144257	09/05/13 19:30	SGH	TAL SEA
Total/NA	Prep	8290			24432	09/04/13 14:45	CCC	TAL SAC
Total/NA	Analysis	8290		1	24662	09/07/13 07:39	SMA	TAL SAC

Client Sample ID: MW-5-083013

Lab Sample ID: 580-40060-6

Date Collected: 08/30/13 08:04

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144265	09/05/13 12:06	RBL	TAL SEA
Total/NA	Analysis	8082		1	144257	09/05/13 19:45	SGH	TAL SEA
Total/NA	Prep	8290			24432	09/04/13 14:45	CCC	TAL SAC

Lab Chronicle

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Client Sample ID: MW-5-083013

Lab Sample ID: 580-40060-6

Date Collected: 08/30/13 08:04

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8290		1	24662	09/07/13 08:21	SMA	TAL SAC

Client Sample ID: MW-3-083013

Lab Sample ID: 580-40060-7

Date Collected: 08/30/13 12:08

Matrix: Water

Date Received: 08/30/13 14:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144265	09/05/13 12:06	RBL	TAL SEA
Total/NA	Analysis	8082		1	144257	09/05/13 19:59	SGH	TAL SEA
Total/NA	Prep	8290			24432	09/04/13 14:45	CCC	TAL SAC
Total/NA	Analysis	8290		1	24662	09/07/13 09:02	SMA	TAL SAC

Laboratory References:

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

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

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

Certification Summary

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

Laboratory: TestAmerica Portland

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-13
California	State Program	9	2597	09-30-13
Oregon	NELAP	10	OR100021	01-09-14
USDA	Federal		P330-11-00092	02-17-14
Washington	State Program	10	C586	06-23-14

Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	A2LA		NE-OS-22-13	01-31-14
A2LA	DoD ELAP		2928-01	01-31-14
Alaska (UST)	State Program	10	UST-055	12-18-13
Arizona	State Program	9	AZ0708	08-11-14
Arkansas DEQ	State Program	6	88-0691	06-17-14
California	NELAP	9	1119CA	01-31-14
Connecticut	State Program	1	PH-0691	06-30-15
Florida	NELAP	4	E87570	06-30-14
Guam	State Program	9	N/A	08-31-14
Hawaii	State Program	9	N/A	01-31-14
Illinois	NELAP	5	200060	03-17-14
Kansas	NELAP	7	E-10375	10-31-13
Louisiana	NELAP	6	30612	06-30-14
Michigan	State Program	5	9947	01-31-14
Nebraska	State Program	7	NE-OS-22-13	01-31-14
Nevada	State Program	9	CA44	07-31-14
New Jersey	NELAP	2	CA005	06-30-14
New York	NELAP	2	11666	04-01-14
Northern Mariana Islands	State Program	9	MP0007	02-01-14
Oregon	NELAP	10	CA200005	03-28-14
Pennsylvania	NELAP	3	68-01272	03-31-14
South Carolina	State Program	4	87014	06-30-14
Texas	NELAP	6	T104704399-08-TX	05-31-14
US Fish & Wildlife	Federal		LE148388-0	12-31-13
USDA	Federal		P330-11-00436	12-30-14
USEPA UCMR	Federal	1	CA00044	11-06-14
Utah	NELAP	8	QUAN1	01-31-14
Washington	State Program	10	C581	05-05-14

Laboratory: TestAmerica Sacramento (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
West Virginia	State Program	3	9930C	12-31-13
Wyoming	State Program	8	8TMS-Q	01-31-14

Sample Summary

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-40060-1	MW-4-082913	Water	08/29/13 17:11	08/30/13 14:05
580-40060-2	MW-5-082913	Water	08/30/13 10:57	08/30/13 14:05
580-40060-3	Trip Blank-GW2	Water	08/30/13 00:00	08/30/13 14:05
580-40060-4	MW-3-083013	Water	08/30/13 13:34	08/30/13 14:05
580-40060-5	MW-4-082913	Water	08/29/13 16:15	08/30/13 14:05
580-40060-6	MW-5-083013	Water	08/30/13 08:04	08/30/13 14:05
580-40060-7	MW-3-083013	Water	08/30/13 12:08	08/30/13 14:05

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

Chain of Custody Record

9/18/2013

Client	Client Contact	Date	Chain of Custody Number
ERM	Dave Edwards	8/30/13	20128
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page ____ of ____**
1218 3rd Ave Ste 1412	425 462 8591	40060	
City / **State** / **Zip Code**	**Sampler**	**Lab Contact**	
Seattle / WA / 98101	MC	Kris Allen	
Project Name and Location (State)	**Billing Contact**		
Center Point, Seattle	ERM Walnut Creek		
Contract/Purchase Order/Quote No.			
0203067.02			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TPH-G	TPH-D	TCL VOCs 8260	TCL SVOCs 8270-SIM	TAL metals (6010/6020) & Hg (7470/7471)	EDB
1- MW-4-082913	8/29/13	1711		X			2		2	8			X	X	X	X	X	Hold
2- MW-5-083013	8/30/13	1057		X			2		2	8			X	X	X	X	X	Hold
3- Trip Blank GW2	8/30/13	—		X						2			X		X			
4- MW-3-083013	8/30/13	1334		X			2		2	8			X	X	X	X	X	Hold

Special Instructions/ Conditions of Receipt

MC 8/30/13

580-40060 Chain of Custody

Cooler	Possible Hazard Identification	Sample Disposal	
☐ Yes ☐ No Cooler Temp: ____	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days)
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other 5 day

QC Requirements (Specify)

	Relinquished By Sign/Print	Date	Time	Received By Sign/Print	Date	Time
1.	Matt Crandell	8/30/13	1405	Francisco Luna, Jr	8/30/13	~~1505~~ 1405
2.						
3.						

Comments

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Seattle
5755 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.testamericainc.com

☐ Rush
☐ Short Hold

Chain of Custody Record

9/18/2013

Client	Client Contact	Date	Chain of Custody Number
ERM	Dave Edwards	8/30/13	20127
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 2 **of** 2
1218 3rd Ave Ste 1412	425 462 8591	40060	
City / **State** / **Zip Code**	**Sampler**	**Lab Contact**	
Seattle / WA / 98101	MC	Kris Allen	
Project Name and Location (State)	**Billing Contact**		
Center Point, Seattle	ERM Walnut Creek		
Contract/Purchase Order/Quote No.			
020306702			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): (1) D/Fs PCBs 8082	Special Instructions/ Conditions of Receipt
5- MW-4-082913	8/29/13	1615		X			3						X X	
6- MW-5-083013	8/30/13	0804		X			3						X X	
7- MW-3-083013	8/30/13	1208		X			3						X X	

Cooler/(CB) Dig/IR cor 0.7°C unc 0.7°C
Cooler Dsc Lg Blue/Yellow @ Lab 1530
Wet/Packs Packing Bubble
w/d AI

Cooler/(CB) Dig/IR cor 0.6°C unc 0.6°C
Cooler Dsc Lg Green/Blue @ Lab 1530
Wet/Packs Packing Bubble
w/o AI

Cooler/(CB) Dig/IR cor 1.2°C unc 1.2°C
Cooler Dsc Lg Blue/White @ Lab 1530
Wet/Packs Packing Bubble
w/o AI

8/30/13

Cooler	Possible Hazard Identification	Sample Disposal	
☐ Yes ☐ No Cooler Temp: _____	☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required (business days)
☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☑ Other 1 day

QC Requirements (Specify)

	Relinquished By Sign/Print	Date	Time	Received By Sign/Print	Date	Time
1.	Matt Crandell	8/30/13	1405	Francisco Luna, Jr.	8/30/13	1405
2.						
3.						

Comments
(1) Dioxins, Furans by 8290

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

TAL-8274-580 (0210)

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40060-1

Login Number: 40060

List Source: TestAmerica Seattle

List Number: 1

Creator: Gamble, Cathy L

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40060-1

Login Number: 40060
List Number: 1
Creator: Svabik-Seror, Philip M

List Source: TestAmerica Portland
List Creation: 09/04/13 11:30 AM

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

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-40060-1

Login Number: 40060
List Number: 1
Creator: Nelson, Kym D

List Source: TestAmerica Sacramento
List Creation: 09/04/13 10:50 AM

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

Isotope Dilution Summary

Client: ERM-West
Project/Site: Center Point, Seattle

TestAmerica Job ID: 580-40060-1

Method: 8290 - Dioxins and Furans (HRGC/HRMS)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TCDD (40-135)	TCDF (40-135)	PeCDD (40-135)	PeCDF1 (40-135)	HxCDD2 (40-135)	HxCDF1 (40-135)	HpCDD (40-135)	HpCDF1 (40-135)
580-40060-5	MW-4-082913	85	85	79	82	93	96	93	96
580-40060-6	MW-5-083013	74	75	71	70	74	78	79	80
580-40060-7	MW-3-083013	82	84	78	79	82	89	85	85
LCS 320-24432/2-A	Lab Control Sample	79	81	77	79	83	88	85	89
MB 320-24432/1-A	Method Blank	87	89	83	84	92	100	92	95

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OCDD (40-135)
580-40060-5	MW-4-082913	91
580-40060-6	MW-5-083013	71
580-40060-7	MW-3-083013	77
LCS 320-24432/2-A	Lab Control Sample	78
MB 320-24432/1-A	Method Blank	83

Surrogate Legend

TCDD = 13C-2,3,7,8-TCDD
TCDF = 13C-2,3,7,8-TCDF
PeCDD = 13C-1,2,3,7,8-PeCDD
PeCDF1 = 13C-1,2,3,7,8-PeCDF
HxCDD2 = 13C-1,2,3,6,7,8-HxCDD
HxCDF1 = 13C-1,2,3,4,7,8-HxCDF
HpCDD = 13C-1,2,3,4,6,7,8-HpCDD
HpCDF1 = 13C-1,2,3,4,6,7,8-HpCDF
OCDD = 13C-OCDD