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ENVIRONMENTAL

Mr. Steve Teel
State of Washington Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, Washington 98504-7775

RE: First Quarter 2011 Groundwater Monitoring Report, former ARCO Olympia Bulk Terminal, Industrial Petroleum Distributors Site (Ecology ID No. 1436; Agreed Order No. DE 00TCPSR-1628), 1117 West Bay Drive, Olympia, Washington

Date:
August 24, 2011

Contact:
Alexander Lopez III

Phone:
(503) 220-8201 x1122

Email:
alex.lopez.iii
@arcadis-us.com

Our ref:
GP09BPNA.WA60.N0000

Dear Mr. Teel,

On behalf of BP West Coast Products, LLC (BP), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit this *First Quarter 2011 Groundwater Monitoring Report* for the former ARCO Olympia Bulk Terminal, Industrial Petroleum Distributors Site located at 1117 West Bay Drive in Olympia, Washington (the Site). The Site is currently a vacant lot. A Site location map is presented in **Figure 1**. A Site aerial photo is presented in **Figure 2**.

On March 17, 2011, ARCADIS conducted quarterly groundwater monitoring activities at the Site. During the first quarter 2011 monitoring event, monitoring wells MW-6R, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12 were gauged and low flow purged and sampled using a peristaltic pump with dedicated disposable polyethylene tubing and a Horiba U-22 meter with a flow through cell. Field parameters, including pH, temperature, electrical conductivity, dissolved oxygen and oxidation reduction potential, were collected during the purging process. Gauging data was collected at approximately 15:00 hours, which was approximately one hour prior to the recorded time of high tide (16:16 hours) for March 17, 2011. Field data sheets are included in **Attachment A**. Groundwater samples were analyzed for total petroleum hydrocarbons - gasoline range organics (GRO) according to Northwest Method NWTPH-Gx, total petroleum hydrocarbons – diesel range organics (DRO) and total petroleum hydrocarbons – heavy oil range organics (HO) according to Northwest Method NWTPH-Dx, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B, polyaromatic hydrocarbons (PAHs) by USEPA Method 8270C, and total and dissolved Resource Conservation and Recovery Act metals by USEPA Methods 6020 and 7470A. Samples were collected in laboratory provided bottles and placed in a cooler with ice. Samples were submitted to TestAmerica Laboratories in Tacoma, Washington under standard chain-of-custody procedures. Groundwater gauging data and select analytical results are summarized in **Table 1** and **Table 2**. The laboratory analytical report and chain-of-custody documentation are included in

Attachment B. Approximately 6-gallons of investigation derived waste were generated during this monitoring event. Waste was containerized on-site pending characterization and transportation to an appropriate off-site disposal facility.

During the first quarter 2011 monitoring event performed on March 17, 2011, groundwater conditions at the Site remained consistent with previous events. The depth to groundwater during the most recent sampling event ranged from 1.80 feet (ft) to 2.92 ft below top of casing (btoc). The inferred direction of groundwater flow is to the southeast at a calculated gradient ranging from 0.0075 to 0.0104 ft/ft. Current groundwater elevation contours and a summary of analytical results are presented on **Figure 3**.

On April 19, 2011, ARCADIS conducted an additional event to collect gauging data at low tide at the request of Ecology. Monitoring wells MW-6R, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12 were gauged at approximately 13:25 hours, which corresponds to the recorded low tide (13:25 hours) for April 19, 2011. Field data sheets are included in **Attachment A**. Depth to groundwater ranged from 1.86 ft to 4.05 ft btoc.

Groundwater monitoring at the Site is conducted on a quarterly basis. The next groundwater monitoring event at the Site is scheduled for second quarter 2011. Should you have any questions or if ARCADIS can be of further assistance, please contact Alex Lopez at (503) 220-8201 x1122 or by email at alex.lopez.iii@arcadis-us.com.

Sincerely,

ARCADIS U.S., Inc.

Alex Lopez, L.G.
Project Geologist

Melissa Blanchette, L.G.
Senior Geologist

State of Washington
2615
Licensed Geologist
Melissa Lee Blanchette

cc: Mr. Bob May, Disclaimer Trust of John J. O'Connell
Ms. Clarita Mattox, Port of Olympia
Mr. Tom Morrill, City of Olympia
Mr. Steve Wise, City of Olympia Public Works Department
Mr. Bruce A. Sheppard, BNSF Railway Company

Attachments:

Figure 1	Site Location Map
Figure 2	Site Aerial Photo
Figure 3	Groundwater Elevation Contour and Analytical Summary Map
Table 1	Groundwater Gauging Data and Select Analytical Results
Table 2	Groundwater Analytical Results for RCRA 8 Metals and PAHs
Attachment A	Groundwater Monitoring Field Data Sheets
Attachment B	Laboratory Report and Chain-of-Custody Documentation

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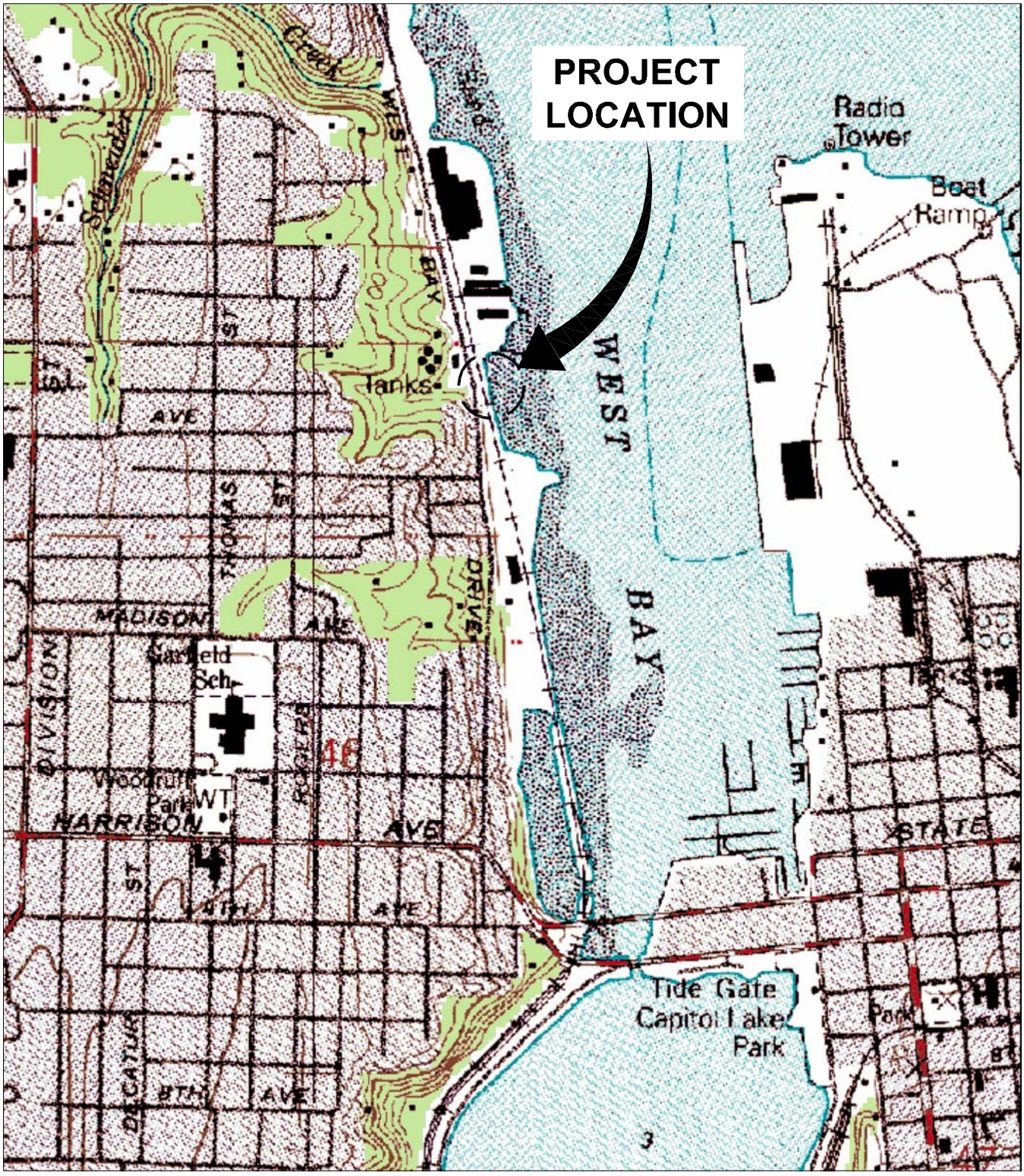
Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., TUMWATER, WASHINGTON, 1959, PHOTOREVISED 1994.

0 1000' 2000'

Approximate Scale: 1 in. = 1000 ft.

BP WEST COAST PRODUCTS LLC
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
BULK TERMINAL, 1117 WEST BAY DRIVE, OLYMPIA, WA
FIRST QUARTER 2011 GROUNDWATER MONITORING REPORT

SITE LOCATION MAP

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FIGURE 1

SOURCE: GOOGLE EARTH

0 1000' 2000'

Approximate Scale: 1 in. = 1000 ft.

BP WEST COAST PRODUCTS LLC
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
BULK TERMINAL, 1117 WEST BAY DRIVE, OLYMPIA, WA
FIRST QUARTER 2011 GROUNDWATER MONITORING REPORT

SITE AERIAL PHOTO

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FIGURE
2

MW-12	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	<2.0
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

MW-6R	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	6.3
As-D	<2.0
Pb - T	5.4
Pb - D	<2.0

PIPING ELBOWS EMERGING FROM UNDERGROUND

GATE

MW-12 (14.04)

MW-6R (12.54)

MW-6 *

MW-7 (12.30)

MW-11 (14.01)

MW-10 (12.11)

MW-9 (12.34)

MW-8 (11.79)

TOP OF BANK

ABANDONED PIER

WEST BAY DRIVE

RAIL ROAD

14

13.5

13

12.5

12

14.5

MW-11	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	<2.0
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

MW-10	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	<2.0
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

MW-9	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	2.7
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

MW-8	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	11
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

MW-7	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	<2.0
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

LEGEND

SUBJECT PROPERTY LINE BOUNDARY

MW-7 — GROUND WATER MONITORING WELL LOCATION

13.5 — GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MEAN SEA LEVEL), DASHED WHERE INFERRED

(12.54) — GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)

GROUNDWATER FLOW DIRECTION WITH CALCULATED HYDRAULIC GRADIENT RANGE OF 0.0075 to 0.0104 F/FT

MW-7	
3/17/2011	
GRO	<50
DRO	<120
HO	<240
B	<1.0
T	<1.0
E	<1.0
X	<2.0
N	<1.9
As-T	<2.0
As-D	<2.0
Pb - T	<2.0
Pb - D	<2.0

Well Identification
Sampling Date
Total Petroleum Hydrocarbons - Gas Range Organics (µg/L)
Total Petroleum Hydrocarbons - Diesel Range Organics (µg/L)
Total Petroleum Hydrocarbons - Heavy Oil Range Organics (µg/L)
Benzene (µg/L)
Toluene (µg/L)
Ethyl Benzene (µg/L)
Xylenes (µg/L)
Naphthalene (µg/L)
Total Arsenic (µg/L)
Dissolved Arsenic (µg/L)
Total Lead (µg/L)
Dissolved Lead (µg/L)

NOTES:

ALL CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)

*MW-6 WAS REPLACED BY MW-6R

0 40' 80'

Approximate Scale: 1 in. = 40 ft.

THIS MAP PREPARED FROM A FIELD SURVEY BY OTAK ON OCTOBER 7, 2010

BP WEST COAST PRODUCTS LLC
FORMER INDUSTRIAL PETROLEUM DISTRIBUTORS
BULK TERMINAL, 1117 WEST BAY DRIVE, OLYMPIA, WA
FIRST QUARTER 2011 GROUNDWATER MONITORING REPORT

GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP MARCH 17, 2011

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FIGURE 3

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Tables

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-OLYMP
1117 West Bay Drive, Olympia, WA

Well	Date	Notes	TOC	DTW	NAPL	GWE	GRO	DRO	HO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Total Lead	Dissolved Lead
Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs)							**800/1,000**	**500**	**500**	**5**	**1,000**	**700**	**1,000**	**20**	**0.01**	**5**	**15**	**--**
MW-6R	10/1/2010	(LFP)	14.34	2.42	--	11.92	<50	<120	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-6R	12/29/2010	(LFP)	14.34	2	--	12.34		--	--	--	--	--	--	--	--	--	--	--
MW-6R	12/30/2010	(Dup)	--	--	--	--	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-6R	12/30/2010		--	--	--	--	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-6R	3/17/2011	(LFP)	14.34	1.8	--	12.54	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	5.4	<2.0
MW-7	10/1/2010	(LFP)	14.54	4.8	--	9.74	<50	150(Y)	<250	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-7	12/29/2010	(LFP)	14.54	2.21	--	12.33	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-7	3/17/2011	(LFP)	14.54	2.24	--	12.3	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-8	10/1/2010	(LFP)	13.98	3.93	--	10.05	<50	200(Y)	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-8	12/29/2010	(LFP)	13.98	2.25	--	11.73	<50.0	--	<380	0.21	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-8	3/17/2011	(LFP)	13.98	2.19	--	11.79	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-8	3/17/2011	(Dup)(LFP)	13.98	2.19	--	11.79	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-9	10/1/2010	(LFP)	14.62	3.21	--	11.41	110	160(Y)	<250	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-9	12/29/2010	(LFP)	14.62	2.5	--	12.12	56.5	--	<380	0.21	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-9	3/17/2011	(LFP)	14.62	2.28	--	12.34	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-10	10/1/2010	(LFP)	15.03	3.56	--	11.47	<50	<120	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-10	10/1/2010	(Dup)(LFP)	15.03	3.56	--	11.47	<50	<120	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-10	12/29/2010	(LFP)	15.03	2.7	--	12.33	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-10	3/17/2011	(LFP)	15.03	2.92	--	12.11	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-11	10/1/2010	(LFP)	15.75	2.75	--	13	<50	<120	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-11	12/29/2010	(LFP)	15.75	2.1	--	13.65		--	--	--	--	--	--	--	--	--	--	--
MW-11	12/30/2010		--	--	--	--	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-11	3/17/2011	(LFP)	15.75	1.74	--	14.01	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0
MW-12	10/1/2010	(LFP)	15.6	2.63	--	12.97	<50	<120	<240	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0(^)	<2.0(^)
MW-12	12/29/2010	(LFP)	15.6	1.95	--	13.65		--	--	--	--	--	--	--	--	--	--	--
MW-12	12/30/2010		--	--	--	--	<50.0	--	<380	<0.20	<1.0	<1.0	<3.0	--	--	--	<10.0	<10.0
MW-12	3/17/2011	(LFP)	15.6	1.56	--	14.04	<50	<120	<240(^)	<1.0	<1.0	<1.0	<2.0	--	--	--	<2.0	<2.0

TOC = Top of casing
Wells were surveyed by OTAK on May 5, 2010.
DTW = Depth to water below TOC
NAPL = Non-aqueous phase liquid
GWE = Groundwater elevation. GWE corrected if NAPL present. Corrected GWE = TOC - DTW + (NAPL thickness x 0.80)
TOC/DTW/NAPL/GWE measurements are in feet (ft)
ND = Not detected at or above the laboratory reporting limit
-- = Not analyzed/not applicable
Dup = Duplicate sample
LFP = Low flow purge
P = Purge sampling
NP = No purge sampling
GRO = Total petroleum hydrocarbons - gasoline range organics analyzed by NWTPH-Gx
DRO = Total petroleum hydrocarbons - diesel range organics analyzed by NWTPH-Dx
HO = Total petroleum hydrocarbons - heavy oil range organics analyzed by NWTPH-Dx
EDB = Ethylene dibromide
1,2-DCA = 1,2-Dichloroethane
MTBE = Methyl tertiary butyl ether
BTEX = Benzene, toluene, ethylbenzene and total xylenes
BTEX, MTBE and EDB analyzed by EPA 8021B and confirmed with 8260B , total and dissolved lead by EPA 6000/7000 Series, 1,2-DCA by EPA 8011
800/1,000 = MTCA Cleanup Level for GRO with benzene present is 800 mg/L, and without benzene is 1,000 mg/L
Data collected prior to 2010 have been provided by previous consultants and are included as historical reference only
BOLD constituent detected above MTCA Cleanup Levels

Table 2
Groundwater Analytical Results for RCRA 8 Metals and PAHs
WA-OLYMP
1117 West Bay Drive, Olympia, WA

Well	Date	Notes	Arsenic	Barium	Cadmium	Chromium	Lead (Total)	Lead (Dissolved)	Mercury	Selenium	Silver	Napthalene	1-Methylnapthalene	2-Methylnapthalene	Napthalenes
Model Toxics Control Act (MTCA) Method A Cleanup Levels (CULs) in µg/L			5	NE	5	50	15	NE	2	NE	NE	(a)	(a)	(a)	160
MW-6R	10/2/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.010**	<0.0097	<0.013	*0.0210*
MW-6R	12/30/2010	(LFP)	**0.74**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.095	<0.095	<0.095	*0.285*
MW-6R	12/30/2010	(Dup)(LFP)	**0.71**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.095	<0.095	<0.095	*0.285*
MW-6R	3/17/2011	(LFP)	**6.3**	<6.0	<2.0	<2.0	**5.4**	<2.0	<0.00020	<2.0	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-7	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.086**	**0.23**	**0.16**	*0.48*
MW-7	12/29/2010	(LFP)	**4.4**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.096	<0.096	<0.096	*0.288*
MW-7	3/17/2011	(LFP)	<2.0	<6.0	<2.0	<2.0	<2.0	<2.0	<0.00020	**2.3**	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-8	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.085**	**0.11**	**0.038**	*0.23*
MW-8	12/29/2010	(LFP)	**8.3**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.096	<0.096	<0.096	*0.288*
MW-8	3/17/2011	(LFP)	**11**	**72**	<2.0	<2.0	<2.0	<2.0	<0.00020	**5.1**	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-8	3/17/2011	(Dup)(LFP)	**13**	**110**	<2.0	<2.0	<2.0	<2.0	<0.00020	**5.9**	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-9	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.400**	**0.019**	**0.013**	*0.43*
MW-9	12/29/2010	(LFP)	-	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	0.59	<0.095	<0.095	*0.285*
MW-9	3/17/2011	(LFP)	**2.7**	**12**	<2.0	<2.0	<2.0	<2.0	<0.00020	<2.0	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-10	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	<0.0094	<0.0094	<0.012	*0.015*
MW-10	12/29/2010	(LFP)	**0.85**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.096	<0.096	<0.096	*0.288*
MW-10	3/17/2011	(LFP)	<2.0	**12**	<2.0	**5.1**	<2.0	<2.0	<0.00020	<2.0	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-11	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.012**	<0.0098	<0.013	*0.023*
MW-11	12/30/2010	(LFP)	**0.62**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.095	<0.095	<0.095	*0.285*
MW-11	3/17/2011	(LFP)	<2.0	<6.0	<2.0	<2.0	<2.0	<2.0	<0.00020	<2.0	<2.0	<1.9	<0.38	<0.94	*3.22*
MW-12	10/1/2010	(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.019**	<0.0097	<0.013	*0.31*
MW-12	10/1/2010	(Dup)(LFP)	-	-	-	-	<2.0	<2.0	-	-	-	**0.020**	<0.0096	<0.012	*0.031*
MW-12	12/30/2010	(LFP)	**0.61**	<100	<5.0	<10.0	<10.0	<10.0	<0.2	<10.0	<10.0	<0.096	<0.096	<0.096	*0.288*
MW-12	3/17/2011	(LFP)	<2.0	<6.0	<2.0	<2.0	<2.0	<2.0	<0.00020	<2.0	<2.0	<1.9	<0.38	<0.94	*3.22*

All analytical results are presented in micrograms per liter (µg/L)
-- = Not analyzed/not applicable
Dup = Duplicate sample
LFP = Low flow purge
PAH = Polycyclic Aromatic Hydrocarbons
RCRA = Resource Conservation and Recovery Act
^ = Laboratory qualifier: ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard indicates instrument related QC exceeds the control limits.
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
NE = Cleanup level not evaluated under MTCA
BOLD constituent detected above MTCA Cleanup Levels

Table 2
Groundwater Analytical Results for RCRA 8 Metals and PAHs
WA-OLYMP
1117 West Bay Drive, Olympia, WA

Well	Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (g,h,i) perylene	Benzo (k) fluoranthene	Chrysene	Dibenzo (a,h) anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Phenanthrene	Pyrene	cPAH B(a)P Equivalents
		NE	NE	NE	(b)	0.1	(b)	NE	(b)	(b)	(b)	NE	NE	(b)	NE	NE	0.1
MW-6R	10/2/2010	<0.0097	<0.0097	<0.0097	<0.0097	**0.019**	**0.017**	**0.013**	<0.0097	**0.011**	<0.0097	**0.013**	<0.0097	**0.011**	<0.0097	**0.017**	*0.0234*
MW-6R	12/30/2010	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	*0.0205*
MW-6R	12/30/2010	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	*0.0205*
MW-6R	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-7	10/1/2010	**0.051**	<0.0097	**0.011**	**0.017**	0.019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	**0.010**	**0.063**	<0.0097	**0.048**	<0.0097	*0.0132*
MW-7	12/29/2010	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	*0.0207*
MW-7	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-8	10/1/2010	**0.033**	<0.0097	**0.018**	<0.0097	<0.019	<0.0097	<0.0097	<0.0097	**0.053**	<0.0097	**0.011**	**0.029**	<0.0097	**0.028**	**0.010**	*0.0125*
MW-8	12/29/2010	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	*0.0207*
MW-8	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-8	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-9	10/1/2010	<0.0094	<0.0094	<0.0094	<0.0094	<0.019	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	**0.011**	<0.0094	*0.0119*
MW-9	12/29/2010	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	*0.0205*
MW-9	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-10	10/1/2010	<0.0094	<0.0094	<0.0094	<0.0094	<0.019	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	*0.0119*
MW-10	12/29/2010	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	*0.0207*
MW-10	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-11	10/1/2010	<0.0098	<0.0098	<0.0098	<0.0098	<0.020	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	*0.0125*
MW-11	12/30/2010	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	*0.0205*
MW-11	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*
MW-12	10/1/2010	<0.0097	<0.0097	<0.0097	<0.0097	<0.019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	*0.0120*
MW-12	10/1/2010	<0.0096	<0.0096	<0.0096	<0.0096	<0.019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	*0.0119*
MW-12	12/30/2010	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	*0.0207*
MW-12	3/17/2011	<0.47	<0.38	<0.19	<0.28	<0.19	<0.38	<0.28	<0.28	<0.19	<0.28	<0.24	<0.28	<0.28	<0.38	<0.28	*0.0488*

All analytical results are presented in micrograms per liter (µg/L)
-- = Not analyzed/not applicable
Dup = Duplicate sample
LFP = Low flow purge
PAH = Polycyclic Aromatic Hydrocarbons
RCRA = Resource Conservation and Recovery Act
^ = Laboratory qualifier: ICV, CCV, ICB, CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard indicates instrument related QC exceeds the control limits.
(a) = See MTCA cleanup level for naphthalenes. This is a total value for naphthalene, 1-methylnaphthalene and 2-methylnaphthalene
(b) = See MTCA cleanup level for B(a)P. Total concentration of cPAHs calculated using the toxicity equivalency method in WAC 173-340-708(8)
NE = Cleanup level not evaluated under MTCA
BOLD constituent detected above MTCA Cleanup Levels

ARCADIS

Attachment A

Groundwater Monitoring
Field Data Sheets

ARCADIS

Groundwater Monitoring Well Gauging Form

Site ID: WA-BP OLY Project #: GP09BPNA.WA60.N0000

Site Address: 1117 West Bay Dr., Olympia, WA Date: 3/17/11

Well ID	Time	Sheen/ Odor	LNAPL Depth	LNAPL Thinkness	DTW	TD	Notes	PID
MW-6R	1520	—	—	—	1.80		3 of 3 good Not Flooded	0.0
MW-7	1450	—	—	—	2.21		3 of 3 good Not Flooded	0.0
MW-8	1455	—	—	—	2.19		3 of 3 good Not Flooded	0.0
MW-9	1500	—	—	—	2.28		3 of 3 good Not Flooded	0.0
MW-10	1505	—	—	—	2.92		3 of 3 good Not Flooded	0.0
MW-11	1510	—	—	—	1.74		3 of 3 good Not Flooded	0.0
MW-12	1515	—	—	—	1.56		3 of 3 good Not Flooded	0.0

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW-6R Date 3/17/2011

Project Name/Location WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather Overcast

Measuring Pt. Description black Mark Screen Setting (ft-bmp) — Casing Diameter (in.) 2 Well Material ✓ PVC ___ SS

Static Water Level (ft-btoc) 1.80 Total Depth (ft-btoc) — Water Column/ Gallons in Well — Initial PID Reading (ppm) 0.0

TOC Elevation — Pump Intake (ft-btoc) — Purge Method: LF Centrifugal ___ Submersible ___ Other Peri Sample Method grab

Pump On/Off — Volumes Purged —

Sample Time: Label 1940 Start ___ End ___ Replicate/ Code No. — Sampled by SM

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged (ml)	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1917	0	200	1.80	0	7.31	0.189	—	2.10	9.57	108.1	Clear	X
1920	3	200	1.80	600	7.30	0.189	—	1.06	9.63	106.3	↓	↓
1923	6	200	1.80	1200	7.25	0.189	—	1.01	9.73	107.8	↓	↓
1926	9	200	1.80	1800	7.22	0.189	—	1.01	9.78	109.5	↓	↓

Constituents Sampled	Container	Number	Preservative
GRO	40 ml VOA	3	HCL
BTEX/MTBE	↓	3	↓
DRO	1 L Amber	↓	↓
PAH	↓	↓	↓
Tot RCRA 8 Metals	500 ml Poly	↓	HNO3
Diss RCRA 8 Metals	↓	↓	↓

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: ___ Well Locked at Arrival: Yes / No

Condition of Well: 3 of 3 good Well Locked at Departure: Yes / No

Well Completion: Flush Mount / Stick Up Key Number To Well: ___

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW-12 Date 3/17/2011

Project Name/Locatior WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather Overcast

Measuring Pt. Description blue mark Screen Setting (ft-bmp) Casing Diameter (in.) 2 Well Material X PVC ___ SS

Static Water Level (ft-btoc) 1.56 Total Depth (ft-btoc) Water Column/ Gallons in Well / Initial PID Reading (ppm) 0.0

TOC Elevation Pump Intake (ft-btoc) Purge Method: LF Centrifugal Submersible Other Peri Sample Method grab

Pump On/Off Volumes Purged

Sample Time: Label 1915 Start End Replicate/ Code No. —

Sampled by SM

ml

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	~~Gallons~~ Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1850	0	200	1.67	0	7.06	0.276	—	3.03	9.20	109.6	clear	X
1853	3	200	1.68	600	7.05	0.280	—	2.89	9.25	110.1		
1856	6	200	1.69	1200	7.01	0.279	—	2.79	9.28	112.3		
1859	9	200	1.69	1800	7.01	0.278	—	2.79	9.28	113.9		

Constituents Sampled	Container	Number	Preservative
GRO	40 ml VOA	3	HCL
BTEX/MTBE	↓	3	↓
DRO	1 L Amber	1	↓
PAH	↓	↓	0
Tot RCRA 8 Metal	500 ml Poly	↓	HNO3
Diss RCRA 8 Metal	↓	↓	0

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: NW corner of site Well Locked at Arrival: Yes / No

Condition of Well: 3 of 3 good Well Locked at Departure: Yes / No

Well Completion: Flush Mount Stick Up Key Number To Well:

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW-7 Date 3/17/2011

Project Name/Location WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather overcast

Measuring Pt. Description black mark Screen Setting (ft-bmp) — Casing Diameter (in.) 2 Well Material X PVC ___ SS

Static Water Level (ft-btoc) 2.24 Total Depth (ft-btoc) ~~5~~ Water Column/ Gallons in Well — Initial PID Reading (ppm) 0.0

TOC Elevation 14.51 Pump Intake (ft-btoc) — Purge Method: LF Centrifugal ___ Submersible ___ Other Peri Sample Method grab

Pump On/Off 1535 Volumes Purged ___

Sample Time: Label 1550 Start ___ End ___ Replicate/ Code No. NO DUP Sampled by McGuire

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged (mL)	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1535	0	200	2.55	0	6.06	0.368	—	5.76	8.22	148.5	~~clear~~ Rusty	X
1538	3	200	2.58	3	6.27	0.356	—	2.90	8.34	134.2	Rusty	X
1541	6	200	2.62	6	6.36	0.355	—	2.17	8.39	123.6	clear	X
1544	9	200	2.64	9	6.35	0.354	—	2.08	8.40	116.0	clear	X

Constituents Sampled	Container	Number	Preservative
GRO	40 mL VOA	3	HCL
BTEX / MTBE	↓	3	↓
DRO	1 L Amber	~~HCL~~ 1	HCL
PAH	↓	~~??~~ 1	~~?~~
Diss. RCRA 8 Metals		1	
Tot RCRA 8 Metals		1	

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: Next to abandoned Rear Well Locked at Arrival: Yes / (No)

Condition of Well: Box 3 good / Seal good Well Locked at Departure: Yes / (No)

Well Completion: Flush Mount / Stick Up Key Number To Well:

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW-9 Date 3/17/2011

Project Name/Location WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather Overcast

Measuring Pt. Description Black Plum | Screen Setting (ft-bmp) | Casing Diameter (in.) 2 | Well Material X PVC ___ SS

Static Water Level (ft-btoc) 2.28 | Total Depth (ft-btoc) | Water Column/ Gallons in Well | Initial PID Reading (ppm) 0.0

TOC Elevation | Pump Intake (ft-btoc) | Purge Method: LF Centrifugal Submersible Other Pev. | Sample Method grab

Pump On/Off 1618 | Volumes Purged —

Sample Time: Label 1710 Start End | Replicate/ Code No. NO DUP | Sampled by SM

Time	Minutes Elapsed	Rate (gpm) ~~(mL/min)~~	Depth to Water (ft)	~~Gallons~~ mL Purged	pH	Cond. (µMhos) ~~(mS/cm)~~	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. ~~(°C)~~ (°F)	Redox (mV)	Appearance	
											Color	Odor
1618	0	200	2.98	0	6.36	0.796	—	2.93	7.86	36.9	clear	X
1631	3	200	3.20	600	6.32	0.798	—	1.05	7.91	31.0	"	"
1654	6	200	3.39	1200	6.32	0.798	—	0.88	7.96	28.1	"	"
1657	9	200	3.51	1800	6.31	0.796	—	0.81	7.99	29.3	"	"

Constituents Sampled	Container	Number	Preservative
GRO	40 mL VOA	3	HCL
BTEX/MTBE	↓	3	↓
DRO	1 L Amber	1	↓
PAH	↓	1	↓
Tot RCRA 8 Metal	500 mL Poly	1	HNO_3
Diss. RCRA 8 metal	↓	1	↓

Well Casing Volumes

Gallons/Foot 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47

Well Information

Well Location: Sump Control Border | Well Locked at Arrival: Yes / (No)

Condition of Well: 3 of 3 good | Well Locked at Departure: Yes / (No)

Well Completion: Flush Mount / Stick Up | Key Number To Well:

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW-11 Date 3/17/2011

Project Name/Locatior WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather Overcast

Measuring Pt. Description black mark | Screen Setting (ft-bmp) ✓ | Casing Diameter (in.) 2 | Well Material X PVC ___ SS

Static Water Level (ft-btoc) 1.74 | Total Depth (ft-btoc) ✓ | Water Column/ Gallons in Well | Initial PID Reading (ppm) 0.0

TOC Elevation ✓ | Pump Intake (ft-btoc) ✓ | Purge Method: LF Centrifugal ___ Submersible ___ Other Peri | Sample Method grab

Pump On/Off ✓ | Volumes Purged ✓

Sample Time: Label ___ Start ___ End ___ | Replicate/ Code No. ✓ | Sampled by SM

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged (mL)	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1826	0	200	1.84	0	6.94	0.310	—	2.47	9.18	86.4	clear	X
1829	3	200	1.87	600	6.94	0.310	—	2.27	9.25	88.0	"	"
1832	6	200	1.89	1200	6.93	0.313	—	2.29	9.27	92.0	"	"
1835	9	200	1.89	1800	6.92	0.313	—	2.23	9.29	93.5	"	"

Constituents Sampled	Container	Number	Preservative
GRO	40 mL VOA	3	HCL
BTEX/MTBE	↓	3	↓
DRO	1 L Amber	1	↓
PAH	↓	1	ice
Tot RCRA 8 Metals	500 mL Poly	1	HNO3
Diss RCRA 8 Metals	↓	1	ice

Well Casing Volumes

Gallons/Foot 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | (2" = 0.16) | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47

Well Information

Well Location: SW corner of site

Condition of Well: 3 of 3 good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / (No)

Well Locked at Departure: Yes / (No)

Key Number To Well:

ARCADIS Groundwater Sampling Form

Page 1 of 1

Project No. GP09BPNA.WA60.N0000 Well ID MW-10 Date 3/17/2011

Project Name/Location WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather overcast

Measuring Pt. Description BLACK MARK Screen Setting (ft-bmp) — Casing Diameter (in.) 2" Well Material X PVC ___ SS

Static Water Level (ft-btoc) 2.92 Total Depth (ft-btoc) ___ Water Column/ Gallons in Well ___ Initial PID Reading (ppm) 0.0

TOC Elevation ___ Pump Intake (ft-btoc) ___ Purge Method: LF Centrifugal ___ Submersible ___ Other Peri Sample Method grab

Pump On/Off ___ Volumes Purged ___

Sample Time: Label 1825 Start ~~1812~~ 1808 End ___ Replicate/ Code No. ___ Sampled by SM

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged (mL)	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1802	0	200	3.39	0	7.26	0.270	—	2.10	9.09	7.8	C	N
1803	3	200	3.65	600	7.12	0.251	—	1.49	9.11	~~37.0~~		
1806	6	200	3.67	1200	7.08	0.252	—	1.70	9.07	~~49.0~~		
1809	9	200	3.72	1800	7.05	0.276	—	1.70	9.01	50.6		

Constituents Sampled	Container	Number	Preservative
GRO	40 ml VOA	3	HCL
BTEX/MTBE	↓	3	↓
DRO	1L Amber	1	~~NONE~~ HCL
PAH	↓	1	~~HCL~~ 0
total RCRA 8 Metals	500 ml poly	1	HNO_3
Diss RCRA 8 Metals	↓	1	None

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: SW corner of Sit

Condition of Well: Box 3 / Seal Good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / (No)

Well Locked at Departure: Yes / (No)

Key Number To Well: ___

ARCADIS Groundwater Sampling Form

Project No. GP09BPNA.WA60.N0000 Well ID MW 8 Date 3/17/2011

Project Name/Location WA- BP OLY 1117 West Bay Drive, Olympia, WA Weather Overcast

Measuring Pt. Description black MARK Screen Setting (ft-bmp) — Casing Diameter (in.) 2 Well Material X PVC ___ SS

Static Water Level (ft-btoc) 2.19 Total Depth (ft-btoc) — Water Column/ Gallons in Well — Initial PID Reading (ppm) 0.0

TOC Elevation ___ Pump Intake (ft-btoc) — Purge Method: LF Centrifugal ___ Submersible ___ Other Peri Sample Method grab

Pump On/Off 1717 Volumes Purged ___

Sample Time: Label 1735 Start ___ End ___ Replicate/ Code No. Dup-1 Sampled by SM

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	~~Gallons~~ mL Purged	pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1717	0	200	2.75	0	6.69	3.339	—	2.62	9.39	-26.3	clear	X
1720	3	200	2.94	600	6.66	3.295	—	0.77	9.38	-25.3	↓	↓
1723	6	200	3.15	1200	6.63	3.151	—	0.69	9.36	-23.2	↓	↓
1726	9	200	3.34	1800	6.62	3.079	—	0.51	9.33	-21.1	↓	↓
1729	12	200	3.~~45~~ 5	2400	6.61	3.069	—	0.36	9.28	-20.7	↓	↓
1732	15	200	~~3.45~~ 3.54	3000	6.60	3.051	—	0.28	9.29	-19.1	↓	↓

Constituents Sampled	Container	Number	Preservative
GRO	40 mL	3	HCL
BTEX / MTBE	↓	3	↓
DRO	1L Amber	1	↓
PAH	↓	1	↓
Total RCRA 8 Metals	500 mL Poly	1	HNO3
Diss. RCRA 8 Metals	↓	1	↓

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Well Information

Well Location: AT END OF PIER

Condition of Well: 3 of 3 good

Well Completion: (Flush Mount) / Stick Up

Well Locked at Arrival: Yes / (No)

Well Locked at Departure: Yes / (No)

Key Number To Well: ___

ARCADIS

Attachment B

Laboratory Analytical Report and
Chain-of-Custody Documentation

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: 580-25114-1

Client Project/Site: BP Olympia Bulk Plant and Terminal

For:

ARCADIS U.S., Inc.
2300 Eastlake Avenue East
Suite 200
Seattle, Washington 98102

Attn: Alex Lopez

Authorized for release by:
04/01/2011 12:27:55 PM

Melissa Armstrong
Project Manager I
melissa.armstrong@testamericainc.com

Table of Contents

Client: ARCADIS U.S., Inc.
Project/Site: BP Olympia Bulk Plant and Terminal

TestAmerica Job ID: 580-25114-1

Job ID: 580-25114-1

Laboratory: TestAmerica Seattle

Narrative

Job Narrative
580-25114-1

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

GC/MS VOA
No analytical or quality issues were noted.

GC/MS Semi VOA
No analytical or quality issues were noted.

GC Semi VOA - Method NWTPH-Dx
The continuing calibration verification (CCV) for motor oil recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been properly qualified and reported.

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.

Client: ARCADIS U.S., Inc. TestAmerica Job ID: 580-25114-1
Project/Site: BP Olympia Bulk Plant and Terminal

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC 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.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

Client Sample ID: MW-6R
Date Collected: 03/17/11 19:40
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-1
Matrix: Water

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 02:48	1
Toluene	ND		1.0		ug/L			03/23/11 02:48	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 02:48	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 02:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*97*		*80 - 120*		*03/23/11 02:48*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 02:48*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/23/11 02:48*	*1*
Trifluorotoluene (Surr)	*110*		*80 - 120*		*03/23/11 02:48*	*1*
4-Bromofluorobenzene (Surr)	*116*		*75 - 120*		*03/23/11 02:48*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/24/11 17:01	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/24/11 17:01	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:01	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:01	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/24/11 17:01	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:01	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:01	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/24/11 17:01	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:01	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:01	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:01	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:01	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*62 - 125*	*03/21/11 15:54*	*03/24/11 17:01*	*1*
2-Fluorobiphenyl	*95*		*66 - 140*	*03/21/11 15:54*	*03/24/11 17:01*	*1*
Terphenyl-d14	*85*		*20 - 150*	*03/21/11 15:54*	*03/24/11 17:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 02:48	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 02:48*	*1*
Trifluorotoluene (Surr)	*100*		*50 - 150*		*03/23/11 02:48*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 18:24	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 18:24	1

Client Sample ID: MW-6R
Date Collected: 03/17/11 19:40
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-1
Matrix: Water

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*50 - 150*	*03/24/11 15:15*	*03/28/11 18:24*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.3**		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Barium	ND		6.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Lead	**5.4**		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:10	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 12:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 10:47	1

Client Sample ID: MW-12

Date Collected: 03/17/11 19:15
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-2

Matrix: Water

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 03:11	1
Toluene	ND		1.0		ug/L			03/23/11 03:11	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 03:11	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 03:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 03:11*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 03:11*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/23/11 03:11*	*1*
Trifluorotoluene (Surr)	*110*		*80 - 120*		*03/23/11 03:11*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/23/11 03:11*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/24/11 17:22	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/24/11 17:22	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:22	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:22	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/24/11 17:22	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:22	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:22	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/24/11 17:22	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:22	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:22	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:22	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:22	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*62 - 125*	*03/21/11 15:54*	*03/24/11 17:22*	*1*
2-Fluorobiphenyl	*88*		*66 - 140*	*03/21/11 15:54*	*03/24/11 17:22*	*1*
Terphenyl-d14	*83*		*20 - 150*	*03/21/11 15:54*	*03/24/11 17:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 03:11	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 03:11*	*1*
Trifluorotoluene (Surr)	*101*		*50 - 150*		*03/23/11 03:11*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 18:46	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 18:46	1

Client Sample ID: MW-12

Date Collected: 03/17/11 19:15
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-2

Matrix: Water

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*92*		*50 - 150*	*03/24/11 15:15*	*03/28/11 18:46*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Barium	ND		6.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:15	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 12:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 10:55	1

Client Sample ID: MW-11
Date Collected: 03/17/11 18:45
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-3
Matrix: Water

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 03:33	1
Toluene	ND		1.0		ug/L			03/23/11 03:33	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 03:33	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 03:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 03:33*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 03:33*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/23/11 03:33*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*03/23/11 03:33*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 120*		*03/23/11 03:33*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/24/11 17:43	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/24/11 17:43	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:43	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:43	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/24/11 17:43	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:43	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:43	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/24/11 17:43	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:43	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/24/11 17:43	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/24/11 17:43	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/24/11 17:43	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*62 - 125*	*03/21/11 15:54*	*03/24/11 17:43*	*1*
2-Fluorobiphenyl	*95*		*66 - 140*	*03/21/11 15:54*	*03/24/11 17:43*	*1*
Terphenyl-d14	*87*		*20 - 150*	*03/21/11 15:54*	*03/24/11 17:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 03:33	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 03:33*	*1*
Trifluorotoluene (Surr)	*99*		*50 - 150*		*03/23/11 03:33*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 19:09	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 19:09	1

Client Sample ID: MW-11

Lab Sample ID: 580-25114-3

Date Collected: 03/17/11 18:45

Matrix: Water

Date Received: 03/18/11 15:00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	94		50 - 150	03/24/11 15:15	03/28/11 19:09	1

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Barium	ND		6.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:19	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 12:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 10:57	1

Client Sample ID: MW-10

Date Collected: 03/17/11 18:25
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-4
Matrix: Water

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 03:55	1
Toluene	ND		1.0		ug/L			03/23/11 03:55	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 03:55	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 03:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 03:55*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 03:55*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/23/11 03:55*	*1*
Trifluorotoluene (Surr)	*107*		*80 - 120*		*03/23/11 03:55*	*1*
4-Bromofluorobenzene (Surr)	*116*		*75 - 120*		*03/23/11 03:55*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/25/11 15:13	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/25/11 15:13	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:13	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:13	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/25/11 15:13	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:13	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:13	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/25/11 15:13	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:13	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:13	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:13	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:13	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*96*		*62 - 125*	*03/21/11 15:54*	*03/25/11 15:13*	*1*
2-Fluorobiphenyl	*87*		*66 - 140*	*03/21/11 15:54*	*03/25/11 15:13*	*1*
Terphenyl-d14	*81*		*20 - 150*	*03/21/11 15:54*	*03/25/11 15:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 03:55	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 03:55*	*1*
Trifluorotoluene (Surr)	*98*		*50 - 150*		*03/23/11 03:55*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 19:32	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 19:32	1

Client Sample ID: MW-10

Lab Sample ID: 580-25114-4

Date Collected: 03/17/11 18:25

Matrix: Water

Date Received: 03/18/11 15:00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*94*		*50 - 150*	*03/24/11 15:15*	*03/28/11 19:32*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Barium	**12**		6.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Chromium	**5.1**		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:23	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:27	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 12:58	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 11:00	1

Client Sample ID: MW-8

Lab Sample ID: 580-25114-5

Date Collected: 03/17/11 17:35

Matrix: Water

Date Received: 03/18/11 15:00

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 04:18	1
Toluene	ND		1.0		ug/L			03/23/11 04:18	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 04:18	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 04:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 04:18*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 04:18*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/23/11 04:18*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*03/23/11 04:18*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/23/11 04:18*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/25/11 15:34	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/25/11 15:34	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:34	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:34	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/25/11 15:34	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:34	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:34	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/25/11 15:34	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:34	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:34	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:34	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:34	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*62 - 125*	*03/21/11 15:54*	*03/25/11 15:34*	*1*
2-Fluorobiphenyl	*86*		*66 - 140*	*03/21/11 15:54*	*03/25/11 15:34*	*1*
Terphenyl-d14	*65*		*20 - 150*	*03/21/11 15:54*	*03/25/11 15:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 04:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 04:18*	*1*
Trifluorotoluene (Surr)	*98*		*50 - 150*		*03/23/11 04:18*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 19:54	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 19:54	1

Client Sample ID: MW-8

Lab Sample ID: 580-25114-5

Date Collected: 03/17/11 17:35

Matrix: Water

Date Received: 03/18/11 15:00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*94*		*50 - 150*	*03/24/11 15:15*	*03/28/11 19:54*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**11**		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Barium	**72**		6.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Selenium	**5.1**		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:27	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Barium	**39**		6.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:31	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 13:01	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 11:03	1

Client Sample ID: MW-7

Lab Sample ID: 580-25114-6

Date Collected: 03/17/11 15:50

Matrix: Water

Date Received: 03/18/11 15:00

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 04:40	1
Toluene	ND		1.0		ug/L			03/23/11 04:40	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 04:40	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 04:40	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 04:40*	*1*
Toluene-d8 (Surr)	*103*		*85 - 120*		*03/23/11 04:40*	*1*
Ethylbenzene-d10	*109*		*80 - 120*		*03/23/11 04:40*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*03/23/11 04:40*	*1*
4-Bromofluorobenzene (Surr)	*114*		*75 - 120*		*03/23/11 04:40*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/25/11 15:57	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/25/11 15:57	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:57	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:57	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/25/11 15:57	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:57	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:57	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/25/11 15:57	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:57	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 15:57	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 15:57	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*62 - 125*	*03/21/11 15:54*	*03/25/11 15:57*	*1*
2-Fluorobiphenyl	*89*		*66 - 140*	*03/21/11 15:54*	*03/25/11 15:57*	*1*
Terphenyl-d14	*86*		*20 - 150*	*03/21/11 15:54*	*03/25/11 15:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 04:40	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 04:40*	*1*
Trifluorotoluene (Surr)	*99*		*50 - 150*		*03/23/11 04:40*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 20:17	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 20:17	1

Client Sample ID: MW-7

Lab Sample ID: 580-25114-6

Date Collected: 03/17/11 15:50

Matrix: Water

Date Received: 03/18/11 15:00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*97*		*50 - 150*	*03/24/11 15:15*	*03/28/11 20:17*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Barium	ND		6.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Selenium	**2.3**		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:31	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 13:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 11:05	1

Client Sample ID: MW-9
Date Collected: 03/17/11 17:10
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-7
Matrix: Water

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 05:03	1
Toluene	ND		1.0		ug/L			03/23/11 05:03	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 05:03	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 05:03	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 05:03*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/23/11 05:03*	*1*
Ethylbenzene-d10	*109*		*80 - 120*		*03/23/11 05:03*	*1*
Trifluorotoluene (Surr)	*106*		*80 - 120*		*03/23/11 05:03*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/23/11 05:03*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/25/11 16:18	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/25/11 16:18	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:18	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:18	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/25/11 16:18	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:18	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:18	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/25/11 16:18	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:18	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:18	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:18	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:18	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*98*		*62 - 125*	*03/21/11 15:54*	*03/25/11 16:18*	*1*
2-Fluorobiphenyl	*90*		*66 - 140*	*03/21/11 15:54*	*03/25/11 16:18*	*1*
Terphenyl-d14	*82*		*20 - 150*	*03/21/11 15:54*	*03/25/11 16:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 05:03	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*		*03/23/11 05:03*	*1*
Trifluorotoluene (Surr)	*98*		*50 - 150*		*03/23/11 05:03*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 20:39	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 20:39	1

Client Sample ID: MW-9

Date Collected: 03/17/11 17:10
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-7

Matrix: Water

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*99*		*50 - 150*	*03/24/11 15:15*	*03/28/11 20:39*	*1*

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.7**		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Barium	**12**		6.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:35	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Barium	**6.5**		6.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:39	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 13:06	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 11:08	1

Client Sample ID: DUP-1

Lab Sample ID: 580-25114-8

Date Collected: 03/17/11 00:00

Matrix: Water

Date Received: 03/18/11 15:00

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/23/11 05:25	1
Toluene	ND		1.0		ug/L			03/23/11 05:25	1
Ethylbenzene	ND		1.0		ug/L			03/23/11 05:25	1
Xylenes, Total	ND		2.0		ug/L			03/23/11 05:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/23/11 05:25*	*1*
Toluene-d8 (Surr)	*103*		*85 - 120*		*03/23/11 05:25*	*1*
Ethylbenzene-d10	*109*		*80 - 120*		*03/23/11 05:25*	*1*
Trifluorotoluene (Surr)	*104*		*80 - 120*		*03/23/11 05:25*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/23/11 05:25*	*1*

Method: 8270C - PAH by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.9		ug/L		03/21/11 15:54	03/25/11 16:39	1
2-Methylnaphthalene	ND		0.94		ug/L		03/21/11 15:54	03/25/11 16:39	1
1-Methylnaphthalene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:39	1
Acenaphthylene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:39	1
Acenaphthene	ND		0.47		ug/L		03/21/11 15:54	03/25/11 16:39	1
Fluorene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Phenanthrene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:39	1
Anthracene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:39	1
Fluoranthene	ND		0.24		ug/L		03/21/11 15:54	03/25/11 16:39	1
Pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Benzo[a]anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Chrysene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:39	1
Benzo[b]fluoranthene	ND		0.38		ug/L		03/21/11 15:54	03/25/11 16:39	1
Benzo[k]fluoranthene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Benzo[a]pyrene	ND		0.19		ug/L		03/21/11 15:54	03/25/11 16:39	1
Indeno[1,2,3-cd]pyrene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Dibenz(a,h)anthracene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1
Benzo[g,h,i]perylene	ND		0.28		ug/L		03/21/11 15:54	03/25/11 16:39	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*93*		*62 - 125*	*03/21/11 15:54*	*03/25/11 16:39*	*1*
2-Fluorobiphenyl	*90*		*66 - 140*	*03/21/11 15:54*	*03/25/11 16:39*	*1*
Terphenyl-d14	*75*		*20 - 150*	*03/21/11 15:54*	*03/25/11 16:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/23/11 05:25	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*50 - 150*		*03/23/11 05:25*	*1*
Trifluorotoluene (Surr)	*96*		*50 - 150*		*03/23/11 05:25*	*1*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 21:47	1
Motor Oil (>C24-C36)	ND	^	240		ug/L		03/24/11 15:15	03/28/11 21:47	1

Client Sample ID: DUP-1

Lab Sample ID: 580-25114-8

Date Collected: 03/17/11 00:00

Matrix: Water

Date Received: 03/18/11 15:00

Surrogate	% Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	96		50 - 150	03/24/11 15:15	03/28/11 21:47	1

Method: 6020 - RCRA Metals - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**13**		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Barium	**110**		6.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Selenium	**5.9**		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 12:39	5

Method: 6020 - RCRA Metals - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Barium	**38**		6.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 14:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 13:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 11:10	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 580-25114-9

Date Collected: 03/17/11 00:00

Matrix: Water

Date Received: 03/18/11 15:00

Method: 8260B - BTEX

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/22/11 20:04	1
Toluene	ND		1.0		ug/L			03/22/11 20:04	1
Ethylbenzene	ND		1.0		ug/L			03/22/11 20:04	1
Xylenes, Total	ND		2.0		ug/L			03/22/11 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/22/11 20:04*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/22/11 20:04*	*1*
Ethylbenzene-d10	*109*		*80 - 120*		*03/22/11 20:04*	*1*
Trifluorotoluene (Surr)	*112*		*80 - 120*		*03/22/11 20:04*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/22/11 20:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/22/11 20:04	1

Surrogate	*% Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*50 - 150*		*03/22/11 20:04*	*1*
Trifluorotoluene (Surr)	*102*		*50 - 150*		*03/22/11 20:04*	*1*

Method: 8260B - BTEX

Lab Sample ID: MB 580-82750/6
Matrix: Water
Analysis Batch: 82750

Client Sample ID: MB 580-82750/6
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			03/22/11 18:11	1
Toluene	ND		1.0		ug/L			03/22/11 18:11	1
Ethylbenzene	ND		1.0		ug/L			03/22/11 18:11	1
m-Xylene & p-Xylene	ND		2.0		ug/L			03/22/11 18:11	1
o-Xylene	ND		1.0		ug/L			03/22/11 18:11	1
Xylenes, Total	ND		2.0		ug/L			03/22/11 18:11	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Fluorobenzene (Surr)	*96*		*80 - 120*		*03/22/11 18:11*	*1*
Toluene-d8 (Surr)	*104*		*85 - 120*		*03/22/11 18:11*	*1*
Ethylbenzene-d10	*110*		*80 - 120*		*03/22/11 18:11*	*1*
Trifluorotoluene (Surr)	*113*		*80 - 120*		*03/22/11 18:11*	*1*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*		*03/22/11 18:11*	*1*

Lab Sample ID: LCS 580-82750/9
Matrix: Water
Analysis Batch: 82750

Client Sample ID: LCS 580-82750/9
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Benzene	25.0	28.0		ug/L		112	80 - 120
Toluene	25.0	27.4		ug/L		110	75 - 120
Ethylbenzene	25.0	27.0		ug/L		108	75 - 125
m-Xylene & p-Xylene	50.0	55.1		ug/L		110	75 - 130
o-Xylene	25.0	28.2		ug/L		113	80 - 120

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Fluorobenzene (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*104*		*85 - 120*
Ethylbenzene-d10	*109*		*80 - 120*
Trifluorotoluene (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*115*		*75 - 120*

Lab Sample ID: LCSD 580-82750/10
Matrix: Water
Analysis Batch: 82750

Client Sample ID: LCSD 580-82750/10
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Benzene	25.0	28.5		ug/L		114	80 - 120	1	30
Toluene	25.0	27.4		ug/L		110	75 - 120	0	30
Ethylbenzene	25.0	27.2		ug/L		109	75 - 125	1	30
m-Xylene & p-Xylene	50.0	55.2		ug/L		110	75 - 130	0	30
o-Xylene	25.0	28.0		ug/L		112	80 - 120	1	30

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
Fluorobenzene (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*103*		*85 - 120*
Ethylbenzene-d10	*109*		*80 - 120*
Trifluorotoluene (Surr)	*101*		*80 - 120*

Method: 8260B - BTEX (Continued)

Lab Sample ID: LCSD 580-82750/10
Matrix: Water
Analysis Batch: 82750

Client Sample ID: LCSD 580-82750/10
Prep Type: Total/NA

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		75 - 120

Method: 8270C - PAH by GC/MS

Lab Sample ID: MB 580-82726/1-A
Matrix: Water
Analysis Batch: 82880

Client Sample ID: MB 580-82726/1-A
Prep Type: Total/NA
Prep Batch: 82726

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2.0		ug/L		03/21/11 15:53	03/24/11 15:57	1
2-Methylnaphthalene	ND		1.0		ug/L		03/21/11 15:53	03/24/11 15:57	1
1-Methylnaphthalene	ND		0.40		ug/L		03/21/11 15:53	03/24/11 15:57	1
Acenaphthylene	ND		0.40		ug/L		03/21/11 15:53	03/24/11 15:57	1
Acenaphthene	ND		0.50		ug/L		03/21/11 15:53	03/24/11 15:57	1
Fluorene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Phenanthrene	ND		0.40		ug/L		03/21/11 15:53	03/24/11 15:57	1
Anthracene	ND		0.20		ug/L		03/21/11 15:53	03/24/11 15:57	1
Fluoranthene	ND		0.25		ug/L		03/21/11 15:53	03/24/11 15:57	1
Pyrene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Benzo[a]anthracene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Chrysene	ND		0.20		ug/L		03/21/11 15:53	03/24/11 15:57	1
Benzo[b]fluoranthene	ND		0.40		ug/L		03/21/11 15:53	03/24/11 15:57	1
Benzo[k]fluoranthene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Benzo[a]pyrene	ND		0.20		ug/L		03/21/11 15:53	03/24/11 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Dibenz(a,h)anthracene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1
Benzo[g,h,i]perylene	ND		0.30		ug/L		03/21/11 15:53	03/24/11 15:57	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	97		62 - 125	03/21/11 15:53	03/24/11 15:57	1
2-Fluorobiphenyl	87		66 - 140	03/21/11 15:53	03/24/11 15:57	1
Terphenyl-d14	86		20 - 150	03/21/11 15:53	03/24/11 15:57	1

Lab Sample ID: LCS 580-82726/2-A
Matrix: Water
Analysis Batch: 82880

Client Sample ID: LCS 580-82726/2-A
Prep Type: Total/NA
Prep Batch: 82726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Naphthalene	9.87	8.78		ug/L		89	50 - 125
2-Methylnaphthalene	10.1	9.63		ug/L		95	60 - 130
1-Methylnaphthalene	9.94	9.40		ug/L		94	50 - 125
Acenaphthylene	9.90	9.89		ug/L		100	60 - 140
Acenaphthene	9.88	8.96		ug/L		91	60 - 125
Fluorene	9.96	9.79		ug/L		98	65 - 125
Phenanthrene	9.97	9.18		ug/L		92	60 - 125
Anthracene	9.94	8.56		ug/L		86	60 - 130
Fluoranthene	9.96	10.5		ug/L		105	70 - 140
Pyrene	10.0	9.91		ug/L		99	65 - 130
Benzo[a]anthracene	9.91	9.21		ug/L		93	65 - 125

Method: 8270C - PAH by GC/MS (Continued)

Lab Sample ID: LCS 580-82726/2-A
Matrix: Water
Analysis Batch: 82880

Client Sample ID: LCS 580-82726/2-A
Prep Type: Total/NA
Prep Batch: 82726

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Chrysene	9.91	9.33		ug/L		94	65 - 125
Benzo[b]fluoranthene	9.89	8.98		ug/L		91	65 - 130
Benzo[k]fluoranthene	9.88	9.62		ug/L		97	65 - 130
Benzo[a]pyrene	9.90	8.06		ug/L		81	65 - 130
Indeno[1,2,3-cd]pyrene	9.97	10.6		ug/L		106	55 - 140
Dibenz(a,h)anthracene	9.99	10.5		ug/L		105	55 - 135
Benzo[g,h,i]perylene	9.92	10.2		ug/L		103	55 - 130

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*103*		*62 - 125*
2-Fluorobiphenyl	*92*		*66 - 140*
Terphenyl-d14	*89*		*20 - 150*

Lab Sample ID: LCSD 580-82726/3-A
Matrix: Water
Analysis Batch: 82880

Client Sample ID: LCSD 580-82726/3-A
Prep Type: Total/NA
Prep Batch: 82726

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Naphthalene	9.87	8.94		ug/L		91	50 - 125	2	20
2-Methylnaphthalene	10.1	9.58		ug/L		95	60 - 130	0	20
1-Methylnaphthalene	9.94	8.97		ug/L		90	50 - 125	5	20
Acenaphthylene	9.90	9.92		ug/L		100	60 - 140	0	20
Acenaphthene	9.88	8.92		ug/L		90	60 - 125	1	20
Fluorene	9.96	9.83		ug/L		99	65 - 125	0	20
Phenanthrene	9.97	9.56		ug/L		96	60 - 125	4	20
Anthracene	9.94	8.97		ug/L		90	60 - 130	5	20
Fluoranthene	9.96	10.9		ug/L		110	70 - 140	4	20
Pyrene	10.0	10.5		ug/L		105	65 - 130	6	20
Benzo[a]anthracene	9.91	9.37		ug/L		95	65 - 125	2	20
Chrysene	9.91	9.52		ug/L		96	65 - 125	2	20
Benzo[b]fluoranthene	9.89	9.19		ug/L		93	65 - 130	2	20
Benzo[k]fluoranthene	9.88	9.76		ug/L		99	65 - 130	1	20
Benzo[a]pyrene	9.90	8.42		ug/L		85	65 - 130	4	20
Indeno[1,2,3-cd]pyrene	9.97	10.1		ug/L		102	55 - 140	4	20
Dibenz(a,h)anthracene	9.99	10.1		ug/L		101	55 - 135	4	20
Benzo[g,h,i]perylene	9.92	9.60		ug/L		97	55 - 130	6	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*98*		*62 - 125*
2-Fluorobiphenyl	*93*		*66 - 140*
Terphenyl-d14	*90*		*20 - 150*

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

Lab Sample ID: MB 580-82751/6
Matrix: Water
Analysis Batch: 82751

Client Sample ID: MB 580-82751/6
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50		ug/L			03/22/11 18:11	1

Surrogate	*MB % Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*50 - 150*		*03/22/11 18:11*	*1*
Trifluorotoluene (Surr)	*102*		*50 - 150*		*03/22/11 18:11*	*1*

Lab Sample ID: LCS 580-82751/7
Matrix: Water
Analysis Batch: 82751

Client Sample ID: LCS 580-82751/7
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline			1000	954		ug/L		95	79 - 110		

Surrogate	*LCS % Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*50 - 150*
Trifluorotoluene (Surr)	*86*		*50 - 150*

Lab Sample ID: LCSD 580-82751/8
Matrix: Water
Analysis Batch: 82751

Client Sample ID: LCSD 580-82751/8
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline			1000	954		ug/L		95	79 - 110	0	20

Surrogate	*LCSD % Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*50 - 150*
Trifluorotoluene (Surr)	*87*		*50 - 150*

Lab Sample ID: 580-25114-8 MS
Matrix: Water
Analysis Batch: 82751

Client Sample ID: DUP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec	% Rec. Limits		
Gasoline	ND		802	757		ug/L		92	50 - 150		

Surrogate	*MS % Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*50 - 150*
Trifluorotoluene (Surr)	*96*		*50 - 150*

Lab Sample ID: 580-25114-8 MSD
Matrix: Water
Analysis Batch: 82751

Client Sample ID: DUP-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Gasoline	ND		802	760		ug/L		92	50 - 150	0	35

Surrogate	*MSD % Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*50 - 150*

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

Lab Sample ID: 580-25114-8 MSD
Matrix: Water
Analysis Batch: 82751

Client Sample ID: DUP-1
Prep Type: Total/NA

Surrogate	MSD % Recovery	MSD Qualifier	Limits
Trifluorotoluene (Surr)	*95*		*50 - 150*

Method: NWTPH-Dx - Semi-Volatile Petroleum Products by NWTPH with Silica Gel Cleanup

Lab Sample ID: MB 580-82886/1-B
Matrix: Water
Analysis Batch: 82960

Client Sample ID: MB 580-82886/1-B
Prep Type: Total/NA
Prep Batch: 82886

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		120		ug/L		03/24/11 15:15	03/28/11 17:16	1
Motor Oil (>C24-C36)	ND	^	250		ug/L		03/24/11 15:15	03/28/11 17:16	1

Surrogate	MB % Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*65*		*50 - 150*	*03/24/11 15:15*	*03/28/11 17:16*	*1*

Lab Sample ID: LCS 580-82886/2-B
Matrix: Water
Analysis Batch: 82960

Client Sample ID: LCS 580-82886/2-B
Prep Type: Total/NA
Prep Batch: 82886

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
#2 Diesel (C10-C24)	5000	4320		ug/L		86	70 - 130
Motor Oil (>C24-C36)	5000	4550	^	ug/L		91	70 - 130

Surrogate	LCS % Recovery	LCS Qualifier	Limits
o-Terphenyl	*93*		*50 - 150*

Lab Sample ID: LCSD 580-82886/3-B
Matrix: Water
Analysis Batch: 82960

Client Sample ID: LCSD 580-82886/3-B
Prep Type: Total/NA
Prep Batch: 82886

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	5000	4390		ug/L		88	70 - 130	2	30
Motor Oil (>C24-C36)	5000	4720	^	ug/L		94	70 - 130	4	30

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
o-Terphenyl	*91*		*50 - 150*

Method: 6020 - RCRA Metals

Lab Sample ID: MB 580-83048/23-A
Matrix: Water
Analysis Batch: 83146

Client Sample ID: MB 580-83048/23-A
Prep Type: Total Recoverable
Prep Batch: 83048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5
Barium	ND		6.0		ug/L		03/29/11 10:14	03/30/11 11:25	5
Cadmium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5
Chromium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5

Method: 6020 - RCRA Metals (Continued)

Lab Sample ID: MB 580-83048/23-A
Matrix: Water
Analysis Batch: 83146

Client Sample ID: MB 580-83048/23-A
Prep Type: Total Recoverable
Prep Batch: 83048

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5
Selenium	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5
Silver	ND		2.0		ug/L		03/29/11 10:14	03/30/11 11:25	5

Lab Sample ID: LCS 580-83048/24-A
Matrix: Water
Analysis Batch: 83146

Client Sample ID: LCS 580-83048/24-A
Prep Type: Total Recoverable
Prep Batch: 83048

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Arsenic	4000	4030		ug/L		101	80 - 120
Barium	4000	3680		ug/L		92	80 - 120
Cadmium	100	92.2		ug/L		92	80 - 120
Chromium	400	411		ug/L		103	80 - 120
Lead	1000	1050		ug/L		105	80 - 120
Selenium	4000	4000		ug/L		100	80 - 120
Silver	600	570		ug/L		95	80 - 120

Lab Sample ID: LCSD 580-83048/25-A
Matrix: Water
Analysis Batch: 83146

Client Sample ID: LCSD 580-83048/25-A
Prep Type: Total Recoverable
Prep Batch: 83048

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Arsenic	4000	4010		ug/L		100	80 - 120	0	20
Barium	4000	3720		ug/L		93	80 - 120	1	20
Cadmium	100	93.4		ug/L		93	80 - 120	1	20
Chromium	400	417		ug/L		104	80 - 120	2	20
Lead	1000	1050		ug/L		105	80 - 120	0	20
Selenium	4000	4000		ug/L		100	80 - 120	0	20
Silver	600	573		ug/L		95	80 - 120	1	20

Lab Sample ID: LCS 580-83135/23-A
Matrix: Water
Analysis Batch: 83214

Client Sample ID: LCS 580-83135/23-A
Prep Type: Total Recoverable
Prep Batch: 83135

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Arsenic	4000	3940		ug/L		98	80 - 120
Barium	4000	3700		ug/L		92	80 - 120
Cadmium	100	89.0		ug/L		89	80 - 120
Chromium	400	409		ug/L		102	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Selenium	4000	3900		ug/L		97	80 - 120
Silver	600	580		ug/L		97	80 - 120

Lab Sample ID: LCSD 580-83135/24-A
Matrix: Water
Analysis Batch: 83214

Client Sample ID: LCSD 580-83135/24-A
Prep Type: Total Recoverable
Prep Batch: 83135

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Arsenic	4000	3970		ug/L		99	80 - 120	1	20
Barium	4000	3670		ug/L		92	80 - 120	1	20
Cadmium	100	87.0		ug/L		87	80 - 120	2	20

Method: 6020 - RCRA Metals (Continued)

Lab Sample ID: LCSD 580-83135/24-A
Matrix: Water
Analysis Batch: 83214

Client Sample ID: LCSD 580-83135/24-A
Prep Type: Total Recoverable
Prep Batch: 83135

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Chromium	400	409		ug/L		102	80 - 120	0	20
Lead	1000	1040		ug/L		104	80 - 120	0	20
Selenium	4000	3890		ug/L		97	80 - 120	0	20
Silver	600	570		ug/L		95	80 - 120	2	20

Lab Sample ID: MB 580-83044/17-B
Matrix: Water
Analysis Batch: 83214

Client Sample ID: MB 580-83044/17-B
Prep Type: Dissolved
Prep Batch: 83135

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Barium	ND		6.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Cadmium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Chromium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Lead	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Selenium	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5
Silver	ND		2.0		ug/L		03/30/11 12:14	03/31/11 13:29	5

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 580-82923/23-A
Matrix: Water
Analysis Batch: 82967

Client Sample ID: MB 580-82923/23-A
Prep Type: Total/NA
Prep Batch: 82923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/11 10:09	03/25/11 12:16	1

Lab Sample ID: LCS 580-82923/24-A
Matrix: Water
Analysis Batch: 82967

Client Sample ID: LCS 580-82923/24-A
Prep Type: Total/NA
Prep Batch: 82923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Mercury	0.00200	0.00198		mg/L		99	80 - 120

Lab Sample ID: LCSD 580-82923/25-A
Matrix: Water
Analysis Batch: 82967

Client Sample ID: LCSD 580-82923/25-A
Prep Type: Total/NA
Prep Batch: 82923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00205		mg/L		102	80 - 120	3	20

Lab Sample ID: LCSSRM 580-82923/26-A
Matrix: Water
Analysis Batch: 82967

Client Sample ID: LCSSRM 580-82923/26-A
Prep Type: Total/NA
Prep Batch: 82923

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	% Rec	% Rec. Limits
Mercury	0.00200	0.00194		mg/L		97	75 - 125

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 580-83101/23-A
Matrix: Water
Analysis Batch: 83134

Client Sample ID: MB 580-83101/23-A
Prep Type: Total/NA
Prep Batch: 83101

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/30/11 06:00	03/30/11 10:24	1

Lab Sample ID: LCS 580-83101/24-A
Matrix: Water
Analysis Batch: 83134

Client Sample ID: LCS 580-83101/24-A
Prep Type: Total/NA
Prep Batch: 83101

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec. Limits
Mercury	0.00200	0.00199		mg/L		100	80 - 120

Lab Sample ID: LCSD 580-83101/25-A
Matrix: Water
Analysis Batch: 83134

Client Sample ID: LCSD 580-83101/25-A
Prep Type: Total/NA
Prep Batch: 83101

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00197		mg/L		98	80 - 120	1	20

Lab Sample ID: LCSSRM 580-83101/26-A
Matrix: Water
Analysis Batch: 83134

Client Sample ID: LCSSRM 580-83101/26-A
Prep Type: Total/NA
Prep Batch: 83101

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	% Rec	% Rec. Limits
Mercury	0.00200	0.00198		mg/L		99	75 - 125

Client Sample ID: MW-6R

Date Collected: 03/17/11 19:40
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 02:48	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82880	03/24/11 17:01	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 02:48	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 18:24	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 12:50	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 10:47	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:10	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:15	FCW	TestAmerica Seattle

Client Sample ID: MW-12

Date Collected: 03/17/11 19:15
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 03:11	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82880	03/24/11 17:22	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 03:11	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 18:46	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 12:53	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 10:55	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:15	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:19	FCW	TestAmerica Seattle

Client Sample ID: MW-11

Date Collected: 03/17/11 18:45
Date Received: 03/18/11 15:00

Lab Sample ID: 580-25114-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 03:33	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82880	03/24/11 17:43	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 03:33	SK	TestAmerica Seattle

Client Sample ID: MW-11

Lab Sample ID: 580-25114-3

Date Collected: 03/17/11 18:45

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 19:09	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 12:55	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 10:57	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:19	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:23	FCW	TestAmerica Seattle

Client Sample ID: MW-10

Lab Sample ID: 580-25114-4

Date Collected: 03/17/11 18:25

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 03:55	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82921	03/25/11 15:13	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 03:55	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 19:32	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 12:58	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 11:00	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:23	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:27	FCW	TestAmerica Seattle

Client Sample ID: MW-8

Lab Sample ID: 580-25114-5

Date Collected: 03/17/11 17:35

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 04:18	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82921	03/25/11 15:34	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 04:18	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 19:54	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 13:01	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle

Client Sample ID: MW-8

Lab Sample ID: 580-25114-5

Date Collected: 03/17/11 17:35

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	83134	03/30/11 11:03	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:27	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:31	FCW	TestAmerica Seattle

Client Sample ID: MW-7

Lab Sample ID: 580-25114-6

Date Collected: 03/17/11 15:50

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 04:40	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82921	03/25/11 15:57	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 04:40	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 20:17	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 13:03	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 11:05	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:31	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:35	FCW	TestAmerica Seattle

Client Sample ID: MW-9

Lab Sample ID: 580-25114-7

Date Collected: 03/17/11 17:10

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 05:03	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82921	03/25/11 16:18	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 05:03	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 20:39	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 13:06	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 11:08	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:35	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:39	FCW	TestAmerica Seattle

Client Sample ID: DUP-1

Lab Sample ID: 580-25114-8

Date Collected: 03/17/11 00:00

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/23/11 05:25	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82726	03/21/11 15:54	SP	TestAmerica Seattle
Total/NA	Analysis	8270C		1	82921	03/25/11 16:39	AP	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/23/11 05:25	SK	TestAmerica Seattle
Total/NA	Prep	3520C			82886	03/24/11 15:15	MT	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Dx		1	82960	03/28/11 21:47	EK	TestAmerica Seattle
Total/NA	Prep	7470A			82923	03/25/11 10:09	PAB	TestAmerica Seattle
Total/NA	Analysis	7470A		1	82967	03/25/11 13:08	FCW	TestAmerica Seattle
Dissolved	Prep	7470A			83101	03/30/11 06:00	PAB	TestAmerica Seattle
Dissolved	Analysis	7470A		1	83134	03/30/11 11:10	FCW	TestAmerica Seattle
Total Recoverable	Prep	3005A			83048	03/29/11 10:14	PAB	TestAmerica Seattle
Total Recoverable	Analysis	6020		5	83146	03/30/11 12:39	FCW	TestAmerica Seattle
Dissolved	Prep	3005A			83135	03/30/11 12:14	PAB	TestAmerica Seattle
Dissolved	Analysis	6020		5	83214	03/31/11 14:43	FCW	TestAmerica Seattle

Client Sample ID: TRIP BLANK

Lab Sample ID: 580-25114-9

Date Collected: 03/17/11 00:00

Matrix: Water

Date Received: 03/18/11 15:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared Or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82750	03/22/11 20:04	SK	TestAmerica Seattle
Total/NA	Analysis	NWTPH-Gx		1	82751	03/22/11 20:04	SK	TestAmerica Seattle

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP Olympia Bulk Plant and Terminal

TestAmerica Job ID: 580-25114-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Seattle		USDA		P330-08-00099
TestAmerica Seattle	Alaska	Alaska UST	10	UST-022
TestAmerica Seattle	California	NELAC Secondary AB	9	1115CA
TestAmerica Seattle	Florida	NELAC Secondary AB	4	E871074
TestAmerica Seattle	L-A-B	DoD ELAP	0	L2236
TestAmerica Seattle	L-A-B	ISO/IEC 17025	0	L2236
TestAmerica Seattle	Louisiana	NELAC Secondary AB	6	05016
TestAmerica Seattle	Montana	MT DEQ UST	8	
TestAmerica Seattle	Oregon	NELAC Primary AB	10	WA100007
TestAmerica Seattle	Washington	State Program	10	C553

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: BP Olympia Bulk Plant and Terminal

TestAmerica Job ID: 580-25114-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-25114-1	MW-6R	Water	03/17/11 19:40	03/18/11 15:00
580-25114-2	MW-12	Water	03/17/11 19:15	03/18/11 15:00
580-25114-3	MW-11	Water	03/17/11 18:45	03/18/11 15:00
580-25114-4	MW-10	Water	03/17/11 18:25	03/18/11 15:00
580-25114-5	MW-8	Water	03/17/11 17:35	03/18/11 15:00
580-25114-6	MW-7	Water	03/17/11 15:50	03/18/11 15:00
580-25114-7	MW-9	Water	03/17/11 17:10	03/18/11 15:00
580-25114-8	DUP-1	Water	03/17/11 00:00	03/18/11 15:00
580-25114-9	TRIP BLANK	Water	03/17/11 00:00	03/18/11 15:00

Chain of Custody Record

Temperature on Receipt 25.7/4

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Arcadis	Alex Lopez	3/17/2011	143834
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 1
2300 Eastlake Ave E.			
City	**State**	**Zip Code**	**Site Contact** / **Lab Contact**
Seattle	WA	98102	
Project Name and Location (State)	**Carrier/Waybill Number**		
BP Olympia Bulk Plant and Terminal			
Contract/Purchase Order/Quote No.			
6R09 BPNA.WA 60			

Sample I.D. No. and 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: NWTPH-Gx	NWTPH-Dx (DRO)	PAH (8270)	BTEX (8260B)	TOT. RCRA 8	DISS. RCRA 8
MW-6R	3/17/11	1940		X			2		1	7			X	X	X	X	X	X
MW-12		1915		X			2		1	7			X	X	X	X	X	X
MW-11		1845		X			2		1	7			X	X	X	X	X	X
MW-10		1825		X			2		1	7			X	X	X	X	X	X
MW-8		1735		X			2		1	7			X	X	X	X	X	X
MW-7		1550		X			2		1	7			X	X	X	X	X	X
MW-9		1710		X			2		1	7			X	X	X	X	X	X
DUP-1				X			2		1	7			X	X	X	X	X	X
Trip Blank				X						4			X			X		

Special Instructions/ Conditions of Receipt: Silica gel cleanup for all NWTPH-Dx samples

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
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Eric Epple	03/18/11	1335		3/18/11	1333
2.						
3.						

Comments
Sampler = Seamas McGuire (Arcadis)

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 580-25114-1

Login Number: 25114

List Source: TestAmerica Seattle

List Number: 1

Creator: Luna, Francisco

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	