

Sonia Fernandez
Washington State Department of Ecology
NW Regional Office
3190 160th Ave SE
Bellevue, WA 98008

Arcadis U.S., Inc.
1100 Olive Way
Suite 800
Seattle
Washington 98101
Tel 206 325 5254
Fax 206 325 8218
www.arcadis.com

Subject:

ARCO Facility No. 00217 (NW2434) - 2017 Annual Site Status Report

ENVIRONMENT

Site Address: 13131 Bothell Everett Hwy, Everett, WA 98208

On behalf of BP West Coast Products, LLC, Arcadis U.S., Inc. is pleased to submit this annual summary of site activities conducted at the Atlantic Richfield Company (ARCO) Facility No. 00217 (site) in 2017. Results and findings from work completed at the site are summarized below and in the attached data tables and figures.

Date:

November 17, 2017

Contact:

Christopher Dotson

Current Site Use: Active Station

Phone:

503-785-9383

2017 Groundwater Monitoring Summary

Groundwater Monitoring Schedule: Annual

Email:

Christopher.Dotson
@arcadis.com

Sample Methodology:

First Quarter: Low Flow Purge and Sample

Our ref:

GP09BPNA.WA01

Non-aqueous Phase Liquid Present at Site: No

**Site Constituents of Concern above Model Toxics Control Act Method A
Cleanup Levels during reporting period:**

- Total Petroleum Hydrocarbons as gasoline range organics: First Quarter (Q1) – MW-11
- Benzene: Q1 – MW-11
- Lead: Q1 – MW-12

WA-00217
November 17, 2017

Observed Depth to Water per Event:

First Quarter: 2.60 (IW-1) to 5.91 (MW-9) feet below top of casing (btoc) –
3/24/2017

Groundwater Elevations and Flow Direction:

<u>Event</u>	<u>Elevation Range</u>	<u>Interpreted Groundwater Flow Direction</u>
First Quarter:	453.49 (MW-9) to 461.28 (MW-4) feet above North American Vertical Datum 1988 (NAVD 88)	West Southwest

2017 Additional Site Activities

No additional activities were conducted at the site in 2017.

If you have any questions, please contact Christopher Dotson at 503-785-9383 or
Christopher.Dotson@arcadis.com.

Sincerely,

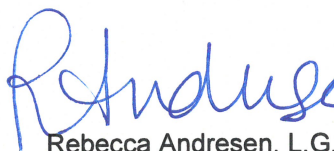
Arcadis U.S., Inc.



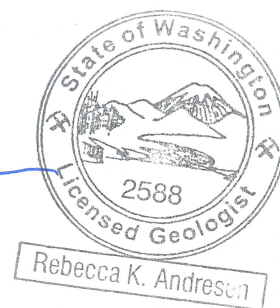
Christopher Dotson
Project Manager

Copies:

Wade Melton, BP West Coast Products LLC



Rebecca Andresen, L.G.
Vice President



Enclosures:

Table

Table 1	Groundwater Gauging Data and Select Analytical Results
---------	--

Figures

Figure 1	Site Location Map
Figure 2	Groundwater Elevation Contour and Analytical Summary Map March 24, 2017
Figure 3	Historical Groundwater Gradient Direction Rose Diagram

Attachments

Attachment A	Groundwater Monitoring Field Data Sheets
Attachment B	Laboratory Report and Chain-of-Custody Documentation

TABLE



Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
IW-1	12/12/2012		462.52	4.31	0.0	458.21	885	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
IW-1	3/26/2013	(NS)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IW-1	6/13/2013	(LF)	462.52	5.11	0.0	457.41	1,840	--	--	<1.0	<1.0	30.6	18.2	<1.0	--	--	<10.0	--
IW-1	9/25/2013	(LF)	462.52	7.71	0.0	454.81	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	0.12	--
IW-1	12/17/2013	(LF)	462.52	6.71	0.0	455.81	990	--	--	<0.50	<0.70	5.4	25	<0.50	--	--	<4.70	<4.70
IW-1	12/17/2013	(Dup)(LF)	462.52	6.71	0.0	455.81	990	--	--	<0.50	<0.70	5.8	25	<0.50	--	--	<4.70	<4.70
IW-1	3/5/2014	(LF)	462.52	4.25	0.0	458.27	75(J)	--	--	<0.50	<0.70	<0.80	0.81(J)	--	--	--	<4.7	<4.7
IW-1	7/31/2014	(LF)	462.52	6.55	0.0	455.97	2,200	--	--	0.74(J)	0.52(J)	63	54	--	--	--	<4.7	<4.7
IW-1	7/31/2014	(Dup)(LF)	462.52	6.55	0.0	455.97	2,100	--	--	0.63(J)	<0.50	63	52	--	--	--	<4.7	<4.7
IW-1	3/19/2015	(LFP)	462.52	3.49	0.0	459.03	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
IW-1	6/3/2015	(LFP)	462.52	5.43	0.0	457.09	690	--	--	<0.50	<0.50	11	4.6	--	--	--	<4.7	--
IW-1	2/2/2016	(LFP)	462.52	3.21	0.0	459.31	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
IW-1	5/25/2016	(LFP)	462.52	4.79	0.0	457.73	58(J)	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
IW-1	8/23/2016	(LFP)	462.52	7.47	0.0	455.05	500	--	--	0.54(J)	<0.50	<0.50	<0.50	--	--	--	<6.2	--
IW-1	11/30/2016	(LFP)	462.52	3.40	0.0	459.12	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<6.2	--
IW-1	3/24/2017	(LFP)	462.52	2.60	0.0	459.92	<31.6	--	--	<0.331	<0.412	<0.384	<1.06	--	--	--	<1.90	--
IW-2	3/19/2015	(NS)	462.80	4.58	0.0	458.22	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	6/3/2015	(NS)	462.80	5.91	0.0	456.89	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	2/2/2016	(NS)	462.80	3.38	0.0	459.42	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	5/25/2016	(NS)	462.80	6.16	0.0	456.64	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	8/23/2016	(NS)	462.80	8.87	0.0	453.93	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	11/30/2016	(NS)	462.80	4.52	0.0	458.28	--	--	--	--	--	--	--	--	--	--	--	--
IW-2	3/24/2017	(NS)	462.80	4.00	0.0	458.80	--	--	--	--	--	--	--	--	--	--	--	--
IW-3	12/12/2012		462.53	4.70	0.0	457.83	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
IW-3	3/26/2013	(NS)	462.53	3.29	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--
IW-3	3/27/2013	(LF)	462.53	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
IW-3	6/13/2013	(LF)	462.53	5.60	0.0	456.93	998	--	--	<1.0	<1.0	3.1	<3.0	<1.0	--	--	<10.0	--
IW-3	9/25/2013	(LF)	462.53	8.21	0.0	454.32	595	--	--	<1.0	<1.0	128	<3.0	<1.0	--	--	0.65	--
IW-3	12/17/2013	(LF)	462.53	7.12	0.0	455.41	930	--	--	<0.50	<0.70	130	35	<0.50	--	--	<4.70	<4.70
IW-3	3/5/2014	(LF)	462.53	4.55	0.0	457.98	<50	--	--	<0.50	<0.70	<0.80	<0.80	--	--	--	<4.7	<4.7
IW-3	3/5/2014	(Dup)(LF)	462.53	4.55	0.0	457.98	63(J)	--	--	<0.50	<0.70	<0.80	<0.80	--	--	--	<4.7	<4.7
IW-3	7/31/2014	(LF)	462.53	6.81	0.0	455.72	2,300	--	--	0.58(J)	0.62(J)	150	110	--	--	--	<4.7	<4.7
IW-3	3/19/2015	(LFP)	462.53	3.55	0.0	458.98	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
IW-3	6/3/2015	(LFP)	462.53	5.91	0.0	456.62	57(J)	--	--	<0.50	<0.50	1.1	2.5	--	--	--	<4.7	--
IW-3	2/2/2016	(LFP)	462.53	3.32	0.0	459.21	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
IW-3	5/25/2016	(LFP)	462.53	5.36	0.0	457.17	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
IW-3	8/23/2016	(LFP)	462.53	8.05	0.0	454.48	1,100	--	--	<0.50	<0.50	73	28	--	--	--	<6.2	--
IW-3	11/30/2016	(LFP)	462.53	3.78	0.0	458.75	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<6.2	--
IW-3	3/24/2017	(LFP)	462.53	3.08	0.0	459.45	<31.6	--	--	<0.331	<0.412	<0.384	<1.06	--	--	--	<1.90	--
MW-1	7/2/2004	(P)	101.93	6.50	--	95.43	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<2.00	<0.010	<1.00	22.3	<1.00
MW-1	9/27/2004	(P)	101.93	6.60	--	95.33	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	--	--	<1.00	<1.00
MW-1	11/10/2004	(P)	101.93	6.11	--	95.82	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	11.9	<1.00
MW-1	2/22/2005	(P)	101.93	5.15	--	96.78	<80.0	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
MW-1	5/18/2005	(P)	101.93	4.76	--	97.17	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	<1.00
MW-1	8/16/2005	(P)	101.93	6.36	--	95.57	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	--
MW-1	11/10/2005	(P)	101.93	5.98	--	95.95	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	--	--	<1.00	<1.00
MW-1	1/12/2006	(NP)	101.93	4.06	--	97.87	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<1.00	<1.00	--
MW-1	4/13/2006	(NS)	101.93	5.32	--	96.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	7/7/2006	(NS)	101.93	6.79	--	95.14	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	7/2/2007	(NS)	101.93	6.52	--	95.41	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	7/9/2008	(NP)	101.93	5.49	--	96.44	<50.0	--	--	<0.500	<0.500	<0.500	<3.00	--	--	--	--	--
MW-1	8/13/2009	(NP)	101.93	9.15	--	92.78	<50.0	--	--	<1.00	<1.00	<1.00	<2.00	--	--	--	2.1	<2.00
MW-1	6/23/2010	(P)	464.68	4.35	--	460.33	<50	--	--	<1.0	<1.0	<1.0	<3	--	--	--	--	--
MW-1	6/23/2010	(Dup)(P)	464.68	4.35	--	460.33	<50	--	--	<1.0	<1.0	<1.0	<3	--	--	--	--	--
MW-1	8/24/2010		--	--	--	--	<50.0	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	<10.0
MW-1	12/7/2010	(LF)	464.68	5.31	--	459.37	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	3.9	--
MW-1	12/7/2010	(Dup)(LF)	464.68	5.31	--	459.37	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-1	3/29/2011	(LF)	464.68	4.25	0.0	460.43	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-1	5/10/2011	(LF)	464.68	3.90	0.0	460.78	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	1.70	--
MW-1	12/2/2011	(NS)	464.68	7.23	0.0	457.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	12/5/2011	(LF)	464.68	--	--	--	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	--	--
MW-1	3/9/2012	(LF)	464.68	4.31	0.0	460.37	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-1	11/26/2012	(LF)	464.68	5.84	0.0	458.84	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
MW-1	3/26/2013	(NS)	464.68	3.97	0.0	460.71	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/27/2013	(LF)	464.68	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-1	6/13/2013	(LF)	464.68	5.70	0.0	458.98	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-1	9/25/2013	(LF)	464.68	8.51	0.0	456.17	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	0.58	--
MW-1	12/17/2013	(NS)	464.68	7.32	0.0	457.36	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/5/2014	(NS)	464.68	5.55	0.0	459.13	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	7/31/2014	(NS)	464.68	7.21	0.0	457.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/19/2015	(NS)	464.68	4.31	0.0	460.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	6/3/2015	(LFP)	464.68	6.02	0.0	458.66	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-1	2/2/2016	(NS)	464.68	4.18	0.0	460.50	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-1	5/25/2016	(NS)	464.68	5.29	0.0	459.39	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	8/23/2016	(NS)	464.68	8.14	0.0	456.54	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	11/30/2016	(NS)	464.68	4.07	0.0	460.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/24/2017	(NS)	464.68	3.71	0.0	460.97	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	7/2/2004	(P)	99.57	7.57	--	92.00	20,300	--	--	70.2	15.9	1,900	4,060	<2.00	<0.010	<1.00	2.18	<1.00
MW-2	9/27/2004	(P)	99.57	7.35	--	92.22	3,310	--	--	32.3	2.79	412	309	<5.00	--	--	<1.00	<1.00
MW-2	11/10/2004	(P)	99.57	6.68	--	92.89	10,700	--	--	96.5	11.9	1,430	3,370	<20.0	--	--	<1.00	<1.00
MW-2	2/22/2005	(P)	99.57	5.60	--	93.97	16,400	--	--	55.4	42.8	1,630	3,580	--	--	--	--	--
MW-2	5/18/2005	(NS)	99.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	8/16/2005	(P)	99.57	7.08	--	92.49	9,100	--	--	16.4	13.3	1,200	2,490	<20.0	--	--	<1.00	--
MW-2	11/10/2005	(P)	99.57	5.45	--	94.12	14,400	--	--	15.7	466	1,020	3,370	<10.0	--	--	<1.00	<1.00
MW-2	1/12/2006	(NP)	99.57	4.10	--	95.47	10,200	--	--	17.9	134	1,140	2,530	2.35	<0.010	<1.00	<1.00	--
MW-2	4/13/2006	(P)	99.57	5.01	--	94.56	1,330	--	--	0.6	0.93	128	124	<1.00	<0.010	<1.00	<1.00	<1.00
MW-2	7/7/2006	(P)	99.57	6.85	--	92.72	8,330	--	--	<5.00	9.1	946	1,080	<10.0	<0.010	<10.0	<1.00	--
MW-2	7/2/2007	(P)	99.57	7.35	--	92.22	3,430	--	--	2.77	7.41	952	638	--	--	--	--	--
MW-2	7/9/2008	(NP)	99.57	6.60	--	92.97	2,730	--	--	5.8	1.44	612	572	--	--	--	--	--
MW-2	8/13/2009	(NP)	99.57	9.54	--	90.03	6,000	--	--	2.1	3.4	1,600	320	--	--	--	<2.00	<2.00
MW-2	6/23/2010	(P)	462.35	5.01	--	457.34	4,100	--	--	2.4	1.3	560	98.5	--	--	--	--	--
MW-2	8/24/2010		--	--	--	--	2,720	--	--	2.7	1.5	567	67.5	<1.0	--	--	<10.0	<10.0
MW-2	12/7/2010	(LF)	462.35	5.96	--	456.39	1,500	--	--	1.7	<1.0	95	2.9	<1.0	--	--	<2.0	--
MW-2	3/29/2011	(LF)	462.35	4.54	0.0	457.81	1,400	--	--	2.3	<1.0	140	21	<1.0	--	--	<2.0	--
MW-2	5/10/2011	(LF)	462.35	4.41	0.0	457.94	938	--	--	1.66	<1.00	74.6	97.9	<1.00	--	--	<0.40	--
MW-2	5/10/2011	(Dup)(LF)	462.35	4.41	0.0	457.94	835	--	--	2.02	<1.00	89.3	116.5	<1.00	--	--	--	--
MW-2	12/2/2011	(LF)	462.35	6.38	0.0	455.97	4,120	--	--	0.82	1.9	348	412	<1.0	--	--	--	--
MW-2	3/9/2012	(LF)	462.35	4.94	0.0	457.41	195	--	--	<0.20	<1.0	23.8	10.7	<1.0	--	--	<10.0	--
MW-2	11/26/2012	(LF)	462.35	5.28	0.0	457.07	330	--	--	<1.0	<1.0	33.4	9.6	<1.0	--	--	<3.0	<3.0
MW-2	3/26/2013	(NS)	462.35	4.37	0.0	457.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	3/27/2013	(LF)	462.35	--	--	--	838	--	--	1.1	<1.0	118	5.3	<1.0	--	--	<3.0	<10.0
MW-2	3/27/2013	(Dup)(LF)	462.35	--	--	--	855	--	--	<1.0	<1.0	88.3	4.0	<1.0	--	--	--	--
MW-2	6/13/2013	(LF)	462.35	6.11	0.0	456.24	136	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-2	6/13/2013	(Dup)(LF)	462.35	6.11	0.0	456.24	147	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-2	9/25/2013	(LF)	462.35	8.76	0.0	453.59	522	--	--	1.5	<1.0	3.3	<3.0	<1.0	--	--	0.24	--
MW-2	12/17/2013	(LF)	462.35	7.70	0.0	454.65	1,200	--	--	1.8(J)	0.87(J)	13	72	<0.50	--	--	<4.70	<4.70
MW-2	3/5/2014	(LF)	462.35	4.51	0.0	457.84	360	--	--	<0.50	<0.70	16	19	--	--	--	<4.7	<4.7
MW-2	7/31/2014	(LF)	462.35	7.48	0.0	454.87	400	--	--	1.1	<0.50	<0.50	<0.50	--	--	--	5.3(J)	<4.7
MW-2	3/19/2015	(LFP)	462.35	4.60	0.0	457.75	190(J)	--	--	0.97(J)	<0.50	3.4	<0.50	--	--	--	<4.7	--
MW-2	3/19/2015	(Dup)(LFP)	462.35	4.60	0.0	457.75	200(J)	--	--	0.91(J)	<0.50	3.2	<0.50	--	--	--	4.9(J)	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-2	6/3/2015	(LFP)	462.35	6.07	0.0	456.28	230(J)	--	--	0.76(J)	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-2	6/3/2015	(Dup)(LFP)	462.35	6.07	0.0	456.28	170(J)	--	--	0.77(J)	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-2	2/2/2016	(LFP)	462.35	4.49	0.0	457.86	220(J)	--	--	0.69(J)	<0.50	1.1	0.53(J)	--	--	--	<5.1	--
MW-2	5/25/2016	(LFP)	462.35	5.94	0.0	456.41	590	--	--	1.2	<0.50	12	1.6	--	--	--	<5.1	--
MW-2	8/23/2016	(LFP)	462.35	8.63	0.0	453.72	990	--	--	1.8	<0.50	0.66(J)	<0.50	--	--	--	<6.2	--
MW-2	11/30/2016	(LFP)	462.35	4.42	0.0	457.93	260	--	--	<0.50	<0.50	3.5	<0.50	--	--	--	<6.2	--
MW-2	3/24/2017	(LFP)	462.35	4.09	0.0	458.26	647	--	--	1.07	<0.412	0.402(J)	<1.06	--	--	--	<1.90	--
MW-3	7/2/2004	(P)	101.18	8.88	--	92.30	2,100	--	--	<0.500	<0.500	<0.500	7.71	24.2	<0.010	<1.00	<1.00	<1.00
MW-3	9/27/2004	(P)	101.18	8.08	--	93.10	593	--	--	<0.500	<0.500	0.892	1.92	<1.00	--	--	<1.00	<1.00
MW-3	11/10/2004	(P)	101.18	11.11	--	90.07	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	<1.00
MW-3	1/7/2005	(ABANDONED)	101.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/2/2004	(P)	103.99	8.41	--	95.58	<50.0	--	--	<0.500	<0.500	1.17	2.36	<2.00	<0.010	<1.00	1.93	<1.00
MW-4	9/27/2004	(P)	103.99	8.60	--	95.39	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	--	--	<1.00	--
MW-4	11/10/2004	(P)	103.99	7.62	--	96.37	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	<1.00
MW-4	2/22/2005	(P)	103.99	7.02	--	96.97	<80.0	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--
MW-4	5/18/2005	(P)	103.99	6.04	--	97.95	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	<1.00
MW-4	8/16/2005	(P)	103.99	7.66	--	96.33	<80.0	--	--	<0.200	<0.500	<0.500	<1.00	<2.00	--	--	<1.00	--
MW-4	11/10/2005	(P)	103.99	7.42	--	96.57	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	--	--	<1.00	<1.00
MW-4	1/12/2006	(NP)	103.99	5.28	--	98.71	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	<0.010	<1.00	1.29	--
MW-4	4/13/2006	(NS)	103.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/7/2006	(NS)	103.99	7.59	--	96.40	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/2/2007	(NS)	103.99	8.50	--	95.49	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/9/2008	(NP)	103.99	7.59	--	96.40	<50.0	--	--	<0.500	<0.500	<0.500	<3.00	--	--	--	--	--
MW-4	8/13/2009	(NP)	103.99	10.15	--	93.84	<50.0	--	--	<1.00	<1.00	<1.00	<2.00	--	--	--	4.4	<2.00
MW-4	6/23/2010	(P)	466.74	6.86	--	459.88	<50	--	--	<1.0	<1.0	<1.0	<3	--	--	--	--	--
MW-4	12/7/2010	(LF)	466.74	7.53	--	459.21	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-4	3/29/2011	(LF)	466.74	5.71	0.0	461.03	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-4	5/10/2011	(LF)	466.74	5.23	0.0	461.51	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	<0.40	--
MW-4	12/2/2011	(NS)	466.74	8.79	0.0	457.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/9/2012	(LF)	466.74	6.53	0.0	460.21	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-4	11/26/2012	(LF)	466.74	7.52	0.0	459.22	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
MW-4	3/26/2013	(NS)	466.74	5.25	0.0	461.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/27/2013	(LF)	466.74	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-4	6/13/2013	(LF)	466.74	7.21	0.0	459.53	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-4	9/25/2013	(LF)	466.74	9.76	0.0	456.98	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	0.20	--
MW-4	12/17/2013	(NS)	466.74	9.41	0.0	457.33	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/5/2014	(NS)	466.74	6.12	0.0	460.62	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-4	7/31/2014	(NS)	466.74	8.41	0.0	458.33	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/19/2015	(NS)	466.74	5.37	0.0	461.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/3/2015	(LFP)	466.74	7.43	0.0	459.31	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-4	2/2/2016	(NS)	466.74	4.96	0.0	461.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	5/25/2016	(NS)	466.74	7.44	0.0	459.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	8/23/2016	(NS)	466.74	10.15	0.0	456.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	11/30/2016	(NS)	466.74	6.49	0.0	460.25	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/24/2017	(NS)	466.74	5.46	0.0	461.28	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	12/7/2010	(LF)	--	4.88	--	--	25,000	--	--	1.9	3.7	900	3,200	<1.0	--	--	<2.0	--
MW-5	3/29/2011	(LF)	462.55	3.17	0.0	459.38	1,900	--	--	<1.0	<1.0	62	140	<1.0	--	--	<2.0	--
MW-5	5/10/2011	(LF)	462.55	3.23	0.0	459.32	8,170	--	--	<2.00	<10.0	281	1,194	<10.0	--	--	2.40	--
MW-5	12/2/2011	(LF)	462.55	6.47	0.0	456.08	11,000	--	--	0.87	1.3	448	845	<1.0	--	--	--	--
MW-5	3/9/2012	(LF)	462.55	3.79	0.0	458.76	14,000	--	--	0.62	2.9	514	1,610	<1.0	--	--	<10.0	--
MW-5	11/26/2012	(LF, a)	462.55	4.89	0.0	457.66	4,720	--	--	<10.0	<10.0	1,040	940	<10.0	--	--	<3.0	<3.0
MW-5	3/26/2013	(NS)	462.55	3.90	0.0	458.65	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	3/27/2013	(LF)	462.55	--	--	--	2,660	--	--	<1.0	<1.0	278	480	<1.0	--	--	<3.0	<10.0
MW-5	6/13/2013	(ABANDONED)	462.55	5.15	0.0	457.40	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	12/7/2010	(LF)	--	6.01	--	--	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-6	3/29/2011	(LF)	462.29	4.70	0.0	457.59	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-6	3/29/2011	(Dup)(LF)	462.29	4.70	0.0	457.59	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	<2.0	--
MW-6	5/10/2011	(LF)	462.29	4.51	0.0	457.78	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	5.60	--
MW-6	12/2/2011	(NS)	462.29	6.53	0.0	455.76	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	12/5/2011	(LF)	462.29	--	--	--	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	--	--
MW-6	3/9/2012	(LF)	462.29	4.98	0.0	457.31	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-6	11/26/2012	(LF)	462.29	5.27	0.0	457.02	814	--	--	<1.0	<1.0	79.3	66.4	<1.0	--	--	<3.0	<3.0
MW-6	3/26/2013	(NS)	462.29	4.49	0.0	457.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	3/27/2013	(LF)	462.29	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-6	6/13/2013	(LF)	462.29	6.18	0.0	456.11	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-6	9/25/2013	(LF)	462.29	8.67	0.0	453.62	<100	--	--	<1.0	<1.0	6.2	<3.0	<1.0	--	--	0.24	--
MW-6	12/17/2013	(LF)	462.29	7.73	0.0	454.56	<50	--	--	<0.50	<0.70	<0.80	<0.80	<0.50	--	--	12.60(J)	<4.70
MW-6	3/5/2014	(LF)	462.29	4.68	0.0	457.61	<50	--	--	<0.50	<0.70	<0.80	<0.80	--	--	--	<4.7	<4.7
MW-6	7/31/2014	(LF)	462.29	7.45	0.0	454.84	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	<4.7
MW-6	3/19/2015	(LFP)	462.29	4.71	0.0	457.58	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-6	6/3/2015	(LFP)	462.29	6.28	0.0	456.01	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-6	2/2/2016	(LFP)	462.29	4.43	0.0	457.86	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
MW-6	5/25/2016	(LFP)	462.29	5.96	0.0	456.33	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
MW-6	8/23/2016	(LFP)	462.29	8.67	0.0	453.62	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<6.2	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-6	11/30/2016	(LFP)	462.29	4.41	0.0	457.88	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<6.2	--
MW-6	3/24/2017	(LFP)	462.29	4.21	0.0	458.08	<31.6	--	--	<0.331	<0.412	<0.384	<1.06	--	--	--	<1.90	--
MW-7	12/7/2010	(LF)	--	7.01	--	--	67	--	--	<1.0	<1.0	<1.0	<2.0	5.1	--	--	<2.0	--
MW-7	3/29/2011	(LF)	463.37	4.62	0.0	458.75	<50	--	--	<1.0	<1.0	<1.0	<2.0	1.1	--	--	<2.0	--
MW-7	5/10/2011	(LF)	463.37	5.10	0.0	458.27	<100	--	--	<0.200	<1.00	<1.00	<3	1.36	--	--	5.20	--
MW-7	12/2/2011	(NS)	463.37	7.37	0.0	456.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	3/9/2012	(LF)	463.37	5.88	0.0	457.49	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-7	11/26/2012	(LF)	463.37	6.19	0.0	457.18	<100	--	--	<1.0	<1.0	<1.0	<3.0	3.1	--	--	7.4	<3.0
MW-7	3/26/2013	(NS)	463.37	4.92	0.0	458.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	3/27/2013	(LF)	463.37	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	1.1	--	--	3.5	<10.0
MW-7	6/13/2013	(NS)	463.37	6.99	0.0	456.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	6/14/2013	(LF)	463.37	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	1.4	--	--	<10.0	--
MW-7	9/25/2013	(LF)	463.37	9.41	0.0	453.96	<100	--	--	<1.0	<1.0	3.1	<3.0	<1.0	--	--	21.4	--
MW-7	12/17/2013	(NS)	463.37	8.41	0.0	454.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	3/5/2014	(NS)	463.37	4.81	0.0	458.56	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/31/2014	(NS)	463.37	8.34	0.0	455.03	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	3/19/2015	(LFP)	463.37	5.12	0.0	458.25	83(J)	--	--	<0.50	<0.50	<0.50	0.88(J)	--	--	--	6.5(J)	--
MW-7	6/3/2015	(LFP)	463.37	7.57	0.0	455.80	150(J)	--	--	<0.50	<0.50	<0.50	1.3	--	--	--	<4.7	--
MW-7	2/2/2016	(LFP)	463.37	5.48	0.0	457.89	83(J)	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
MW-7	5/25/2016	(LFP)	463.37	6.91	0.0	456.46	170(J)	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<5.1	--
MW-7	8/23/2016	(P)	463.37	9.80	0.0	453.57	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	--	--
MW-7	11/30/2016	(LFP)	463.37	5.34	0.0	458.03	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<6.2	--
MW-7	3/24/2017	(LFP)	463.37	5.10	0.0	458.27	<31.6	--	--	<0.331	<0.412	<0.384	<1.06	--	--	--	2.00(J)	--
MW-8	12/7/2010	(LF)	--	6.79	--	--	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	13	--
MW-8	3/29/2011	(LF)	457.91	5.38	0.0	452.53	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	9.5	--
MW-8	5/10/2011	(LF)	457.91	5.12	0.0	452.79	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	14	--
MW-8	12/2/2011	(NS)	457.91	6.49	0.0	451.42	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/9/2012	(LF)	457.91	5.15	0.0	452.76	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-8	11/26/2012	(LF)	457.91	4.96	0.0	452.95	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
MW-8	3/26/2013	(NS)	457.91	4.93	0.0	452.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/27/2013	(LF)	457.91	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-8	6/13/2013	(NS)	457.91	6.08	0.0	451.83	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/14/2013	(LF)	457.91	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-8	9/25/2013	(LF)	457.91	7.98	0.0	449.93	<100	--	--	<1.0	<1.0	2.1	<3.0	<1.0	--	--	10	--
MW-8	12/17/2013	(NS)	457.91	6.83	0.0	451.08	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/5/2014	(NS)	457.91	5.12	0.0	452.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	7/31/2014	(NS)	457.91	8.02	0.0	449.89	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-8	3/19/2015	(NS)	457.91	5.01	0.0	452.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/3/2015	(LFP)	457.91	5.02	0.0	452.89	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-8	2/2/2016	(NS)	457.91	4.80	0.0	453.11	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/25/2016	(NS)	457.91	7.24	0.0	450.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	8/23/2016	(NS)	457.91	9.71	0.0	448.20	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	11/30/2016	(NS)	457.91	4.19	0.0	453.72	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	3/24/2017	(NS)	457.91	4.35	0.0	453.56	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	12/7/2010	(LF)	--	7.67	--	--	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	8.3	--
MW-9	3/29/2011	(LF)	459.40	6.60	0.0	452.80	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	2.6	--
MW-9	5/10/2011	(LF)	459.40	6.67	0.0	452.73	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	1.30	--
MW-9	12/2/2011	(NS)	459.40	7.38	0.0	452.02	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	12/5/2011	(LF)	459.40	--	--	--	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	--	--
MW-9	3/9/2012	(LF)	459.40	6.84	0.0	452.56	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-9	11/26/2012	(LF)	459.40	6.85	0.0	452.55	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	3.4	<3.0
MW-9	3/26/2013	(NS)	459.40	6.58	0.0	452.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/27/2013	(LF)	459.40	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-9	6/13/2013	(NS)	459.40	8.25	0.0	451.15	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	6/14/2013	(LF)	459.40	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-9	9/25/2013	(LF)	459.40	8.81	0.0	450.59	<100	--	--	<1.0	<1.0	1.8	<3.0	<1.0	--	--	27.4	--
MW-9	12/17/2013	(NS)	459.40	7.74	0.0	451.66	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/5/2014	(NS)	459.40	7.29	0.0	452.11	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	7/31/2014	(NS)	459.40	9.13	0.0	450.27	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/19/2015	(NS)	459.40	6.78	0.0	452.62	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	6/3/2015	(LFP)	459.40	7.44	0.0	451.96	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	11.6(J)	--
MW-9	2/2/2016	(NS)	459.40	6.31	0.0	453.09	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	5/25/2016	(NS)	459.40	7.97	0.0	451.43	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	8/23/2016	(NS)	459.40	9.97	0.0	449.43	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	11/30/2016	(NS)	459.40	5.02	0.0	454.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	3/24/2017	(NS)	459.40	5.91	0.0	453.49	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	12/7/2010	(LF)	--	7.42	--	--	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	8.6	--
MW-10	3/29/2011	(LF)	459.28	6.28	0.0	453.00	<50	--	--	<1.0	<1.0	<1.0	<2.0	<1.0	--	--	3.1	--
MW-10	5/10/2011	(LF)	459.28	6.44	0.0	452.84	<100	--	--	<0.200	<1.00	<1.00	<3	<1.00	--	--	14	--
MW-10	12/2/2011	(NS)	459.28	7.00	0.0	452.28	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	12/5/2011	(LF)	459.28	--	--	--	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	--	--
MW-10	3/9/2012	(LF)	459.28	6.54	0.0	452.74	<50.0	--	--	<0.20	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-10	11/26/2012	(LF)	459.28	6.45	0.0	452.83	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<3.0
MW-10	3/26/2013	(NS)	459.28	6.31	0.0	452.97	--	--	--	--	--	--	--	--	--	--	--	--

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

All analytical results are presented in micrograms per liter (µg/L)

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) in µg/L							800/1,000	500	500	5	1,000	700	1,000	20	0.01	5	15	15
MW-10	3/27/2013	(LF)	459.28	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<3.0	<10.0
MW-10	6/13/2013	(NS)	459.28	8.01	0.0	451.27	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	6/14/2013	(LF)	459.28	--	--	--	<100	--	--	<1.0	<1.0	<1.0	<3.0	<1.0	--	--	<10.0	--
MW-10	9/25/2013	(LF)	459.28	8.40	0.0	450.88	<100	--	--	<1.0	<1.0	1.8	<3.0	<1.0	--	--	26.6	--
MW-10	12/17/2013	(NS)	459.28	7.48	0.0	451.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	3/5/2014	(NS)	459.28	5.42	0.0	453.86	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	7/31/2014	(NS)	459.28	8.78	0.0	450.50	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	3/19/2015	(NS)	459.28	6.48	0.0	452.80	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	6/3/2015	(LFP)	459.28	5.49	0.0	453.79	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	<4.7	--
MW-10	2/2/2016	(NS)	459.28	4.77	0.0	454.51	--	--	--	--	--	--	--	--	--	--	--	--
MW-10	3/24/2017	(NS)	459.28	5.73	0.0	453.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-11	7/31/2014	(LF)	463.80	8.71	0.0	455.09	4,200	--	--	460	5.6	100	21	--	--	--	<4.7	<4.7
MW-11	3/19/2015	(LFP)	463.80	5.46	0.0	458.34	4,400	--	--	450	21	360	390	--	--	--	6.4(J)	--
MW-11	6/3/2015	(LFP)	463.80	7.63	0.0	456.17	5,100	--	--	400	6.9	230	220	--	--	--	<4.7	--
MW-11	2/2/2016	(LFP)	463.80	5.60	0.0	458.20	2,900	--	--	70	1.9	22	4.3	--	--	--	<25.5	--
MW-11	2/2/2016	(Dup)(LFP)	463.80	5.60	0.0	458.20	3,200	--	--	69	1.9	21	4.2	--	--	--	<5.1	--
MW-11	5/25/2016	(LFP)	463.80	7.20	0.0	456.60	4,300	--	--	58	7.2	32	22	--	--	--	<5.1	--
MW-11	5/25/2016	(Dup)(LFP)	463.80	7.20	0.0	456.60	4,200	--	--	62	7.1	33	22	--	--	--	--	--
MW-11	8/23/2016	(LFP)	463.80	9.98	0.0	453.82	5,000	--	--	140	3.9	23	9.2	--	--	--	<6.2	--
MW-11	8/23/2016	(Dup)(LFP)	463.80	9.98	0.0	453.82	5,000	--	--	140	3.8	23	9.3	--	--	--	--	--
MW-11	11/30/2016	(LFP)	463.80	5.61	0.0	458.19	3,800	--	--	130	2.4	66	12	--	--	--	<6.2	--
MW-11	11/30/2016	(Dup)(LFP)	463.80	5.61	0.0	458.19	3,800	--	--	130	2.5	68	12	--	--	--	--	--
MW-11	3/24/2017	(LFP)	463.80	5.13	0.0	458.67	1,340	--	--	7.44	0.870(J)	1.75	2.80(J)	--	--	--	<1.90	--
MW-11	3/24/2017	(Dup)(LFP)	463.80	5.13	0.0	458.67	2,650	--	--	7.16	0.832(J)	1.79	2.89(J)	--	--	--	--	--
MW-12	5/25/2016	(LFP)	462.93	6.69	0.0	456.24	190(J)	--	--	0.62(J)	<0.50	1.4	0.68(J)	--	--	--	38.7	<5.1
MW-12	8/23/2016	(P)	462.93	9.59	0.0	453.34	180(J)	--	--	1.5	<0.50	1.9	1.4	--	--	--	8.4(J)	--
MW-12	11/30/2016	(LFP)	462.93	5.25	0.0	457.68	<50	--	--	<0.50	<0.50	<0.50	<0.50	--	--	--	9.3(J)	--
MW-12	3/24/2017	(LFP)	462.93	4.82	0.0	458.11	<31.6	--	--	<0.331	<0.412	<0.384	<1.06	--	--	--	32.5	--

TOC = Top of casing in feet North American Vertical Datum of 1988 (NAVD 88)

DTW = Depth to water in feet below TOC

NAPL = Non-aqueous phase liquid thickness in feet

GWE = Groundwater elevation in feet NAVD 88

GRO = Total petroleum hydrocarbons - gasoline range organics

DRO = Total petroleum hydrocarbons - diesel range organics

HO = Total petroleum hydrocarbons - heavy oil range organics

MTBE = Methyl tertiary butyl ether

EDB = Ethylene dibromide

Table 1
Groundwater Gauging Data and Select Analytical Results
WA-00217 (05377)

13131 Bothell Everett Hwy, Everett, WA 98208

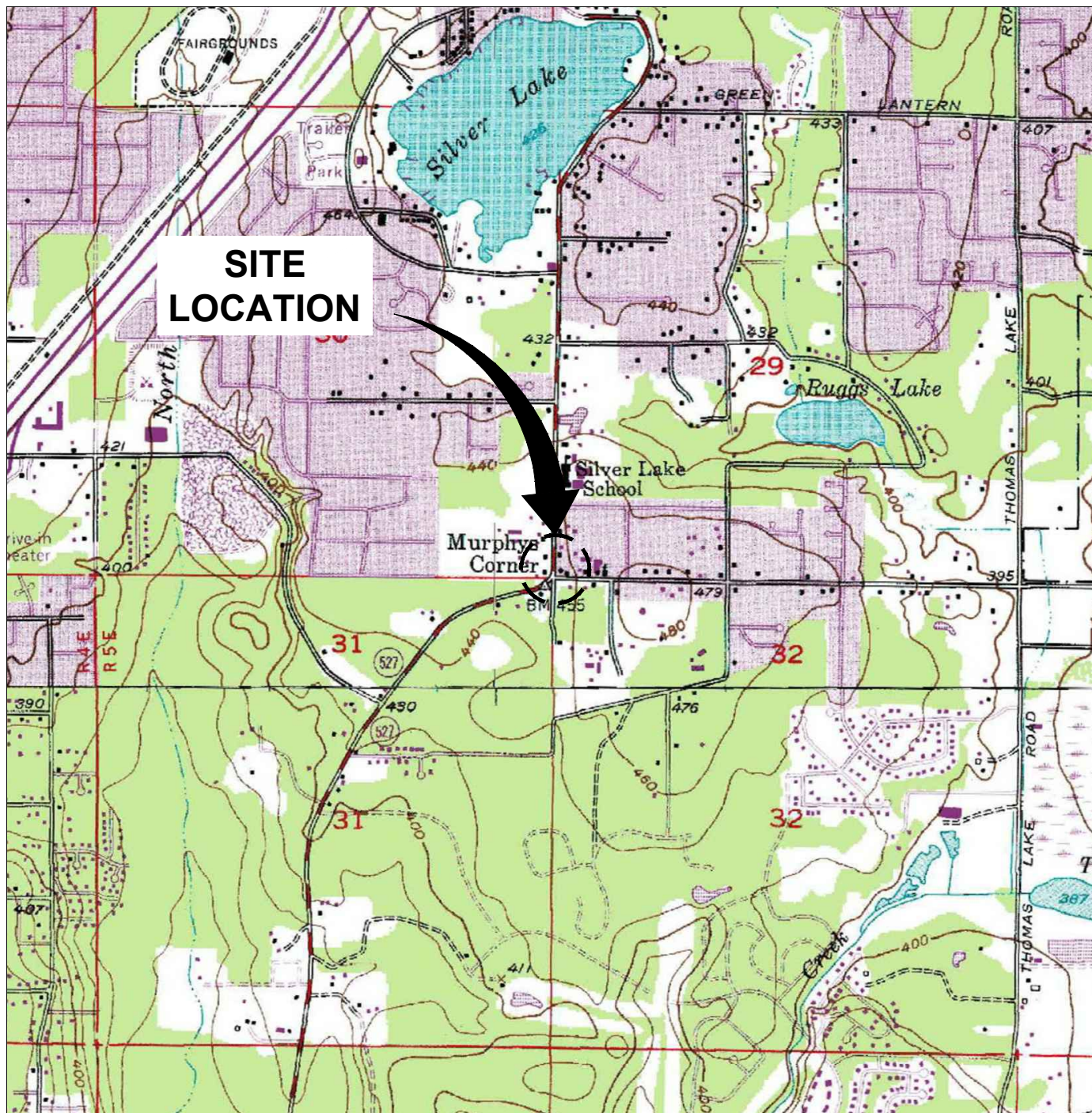
All analytical results are presented in micrograms per liter (µg/L)

EDC = 1,2-Dichloroethane
800/1,000 = GRO MTCA Method A CUL with benzene present is 800 µg/L and without is 1,000 µg/L
-- = Not analyzed/not applicable
< = Analytical result is less than reporting limit shown
NS = Not sampled
LF/LFP = Low flow (purge) sample
DUP = Duplicate sample
J = estimated value – The result is greater than or equal to the Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ)
P = Purge sample
NP = No purge sample
a = Drawdown greater than 3 feet observed during sampling.
Wells were resurveyed in 2010 and are referenced to vertical datum NAVD 88 and horizontal datum NAD 83/98
If NAPL is present, the GWE is corrected according to the following formula (TOC elevation - depth to water) + (0.8 x NAPL thickness)
Data collected prior to 2010 have been provided by previous consultants and are included as historical reference only
GRO, DRO, HO analyzed by Ecology Northwest Methods; Benzene, toluene, ethylbenzene, and total xylenes (BTEX), MTBE, and EDB by 8260B; Lead by U.S. Environmental Protection Agency (EPA) 6000/7000 Series; EDC by EPA 8011

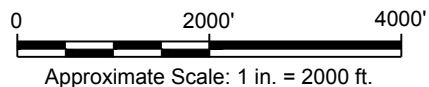
BOLD constituent detected above MTCA Cleanup Levels

FIGURES





REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., EVERETT AND BOTHELL, WA, 1991.



BP WEST COAST PRODUCTS, LLC.
ARCO STATION NO. 00217 (5377)
13131 BOTHELL EVERETT HIGHWAY, EVERETT, WASHINGTON
2017 ANNUAL SITE STATUS REPORT

SITE LOCATION MAP

CITY (Read) DIV/GROUP (Read) DB (Read) LD (Opt) PIC (Opt) PM (Read) TM (Opt) LTR (Opt) ON (Opt) OFF (Ref) E:\US Environment\10101024 BP-Wa 00217\FE-Drawing\2017\FIGURE-2_2017.dwg LAYOUT: 3 SAVED: 4/27/2017 3:47 PM ACADVER: 20.1S (LMS TECH) PAGES: 20 PLOTTED: 4/27/2017 4:36 PM BY: SHRINGA KARAGURU SHANKAR

MW-6	
Date	3/24/2017
GRO	ND<31.6
B	ND<0.331
T	ND<0.412
E	ND<0.384
X	ND<1.06
Pb-T	ND<1.90

MW-2	
Date	3/24/2017
GRO	647
B	1.07
T	ND<0.412
E	0.402 (J)
X	ND<1.06
Pb-T	ND<1.90

IW-1	
Date	3/24/2017
GRO	ND<31.6
B	ND<0.331
T	ND<0.412
E	ND<0.384
X	ND<1.06
Pb-T	ND<1.90

IW-3	
Date	3/24/2017
GRO	ND<31.6
B	ND<0.331
T	ND<0.412
E	ND<0.384
X	ND<1.06
Pb-T	ND<1.90

LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- MW-2 GROUNDWATER MONITORING WELL LOCATION
- MW-3 ABANDONED GROUNDWATER MONITORING WELL LOCATION
- IW-1 INJECTION WELL LOCATION
- NAVD 88 NORTH AMERICAN VERTICAL DATUM 1988
- 460 GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE NAVD 88)
- NS NOT SAMPLED
- NA NOT ANALYZED
- ND< NOT DETECTED, VALUE SHOWN IS THE METHOD DETECTION LIMIT
- (461.28) GROUNDWATER ELEVATION (FEET ABOVE NAVD 88)
- µg/L MICROGRAMS PER LITER
- (J) ESTIMATED VALUE, THE RESULT IS GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT AND LESS THAN THE LIMIT OF QUANTITATION
- s SUBMERGED SCREEN FOR THIS EVENT
- BOLD** CONSTITUENT DETECTED ABOVE MODEL TOXICS CONTROL ACT METHOD A CLEANUP LEVELS

SAMPLE ID	
Date	Sample Collection Date
GRO	Total Petroleum Hydrocarbons - Gasoline Range Organics (µg/L) / [Duplicate (µg/L)]
B	Benzene (µg/L) / [Duplicate (µg/L)]
T	Toluene (µg/L) / [Duplicate (µg/L)]
E	Ethylbenzene (µg/L) / [Duplicate (µg/L)]
X	Total Xylenes (µg/L) / [Duplicate (µg/L)]
Pb-T	Total Lead (µg/L) / [Duplicate (µg/L)]

NOTE:
1. THIS MAP WAS PREPARED FROM A FIELD SURVEY PERFORMED BY OTAK IN 2010 AND UPDATED IN 2014 AND 2016.

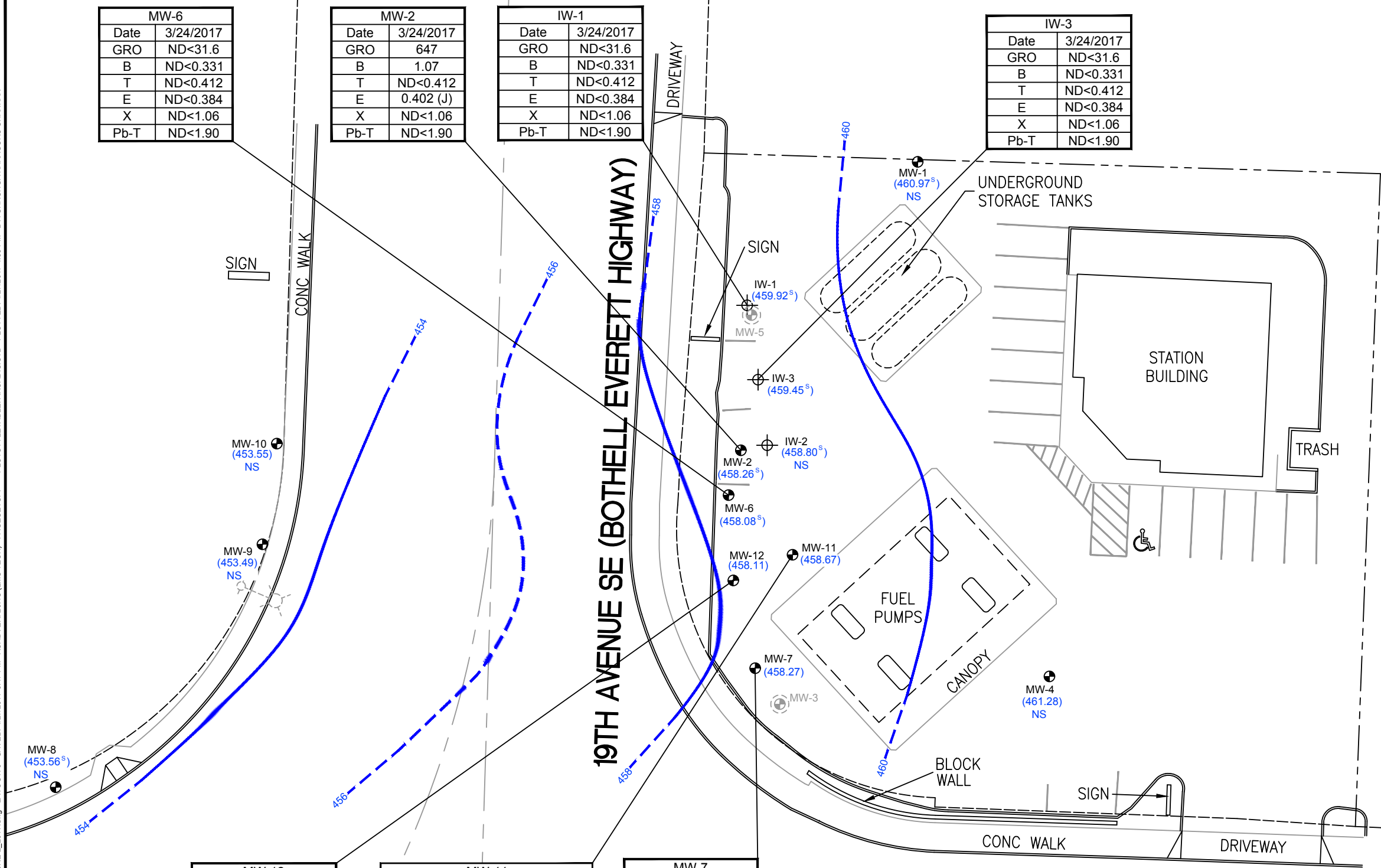
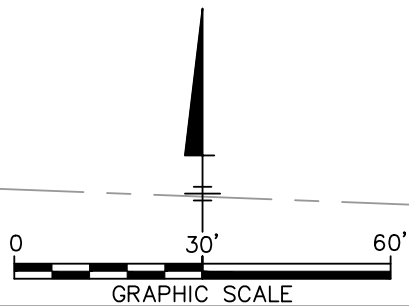
BP WEST COAST PRODUCTS LLC.
ARCO STATION NO. 00217 (5377)
13131 BOTHELL EVERETT HIGHWAY, EVERETT, WASHINGTON
2017 ANNUAL SITE STATUS REPORT

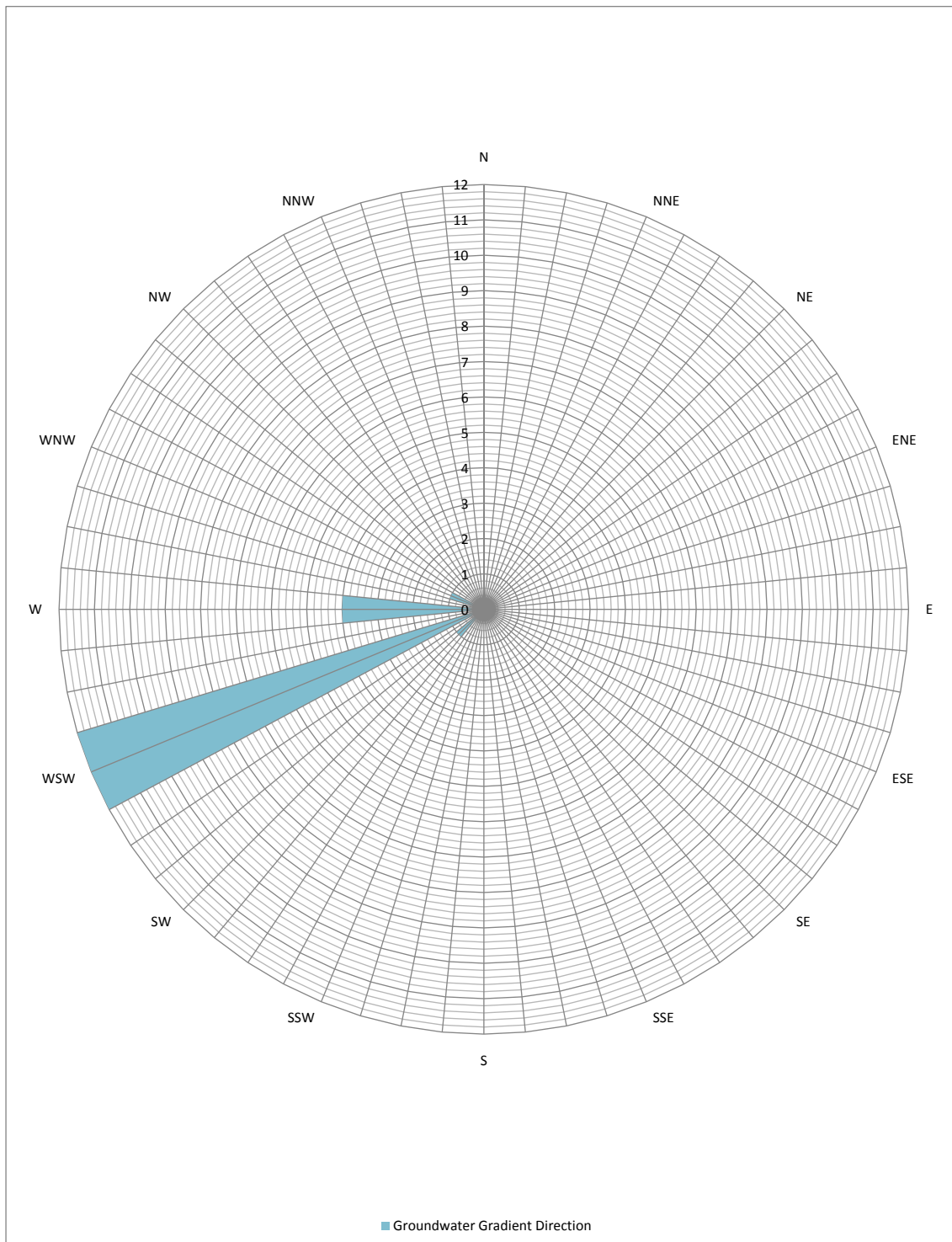
**GROUNDWATER ELEVATION CONTOUR
AND ANALYTICAL SUMMARY MAP
MARCH 24, 2017**



FIGURE

2





Legend

N=North
 NNE= North Northeast
 NE= Northeast
 ENE= East Northeast
 E= East
 ESE= East Southeast
 SE=Southeast
 SSE= South Southeast
 S= South
 SW= Southwest
 SSW= South Southwest
 WSW= West South West
 W= West
 WNW= West Northwest
 NW=Northwest
 NNW= North Northwest

Note

Rose diagram based on gradient direction from groundwater monitoring events conducted by ARCADIS since top of casing survey in June 2010.

Number of Events Observed = 18

ATLANTIC RICHFIELD COMPANY
 ARCO FACILITY NO. 00217 (5377)
 13131 BOTHELL-EVERETT HIGHWAY, EVERETT, WASHINGTON
2017 ANNUAL SITE STATUS REPORT

HISTORICAL GROUNDWATER GRADIENT DIRECTION ROSE DIAGRAM



FIGURE
3

ATTACHMENT A

Groundwater Monitoring Field Data Sheets



Gauging Data

Date 03/24/2017
Sampler Alexander Pink

Well	Date/Time	Depth To Water (ft)	Well Depth (ft)	Depth to LNAPL (ft)	PID (ppmv)	Remarks
IW-1	03/24/2017 07:35	2.60	14.54		3.1	LFP
IW-2	03/24/2017 07:51	4.00	14.64		4.5	NS
IW-3	03/24/2017 07:42	3.08	14.50		4.1	LFP
MW-1	03/24/2017 07:24	3.71	18.03		2.1	NS
MW-2	03/24/2017 08:02	4.09	19.76		10.3	LFP
MW-4	03/24/2017 08:44	5.46	23.38		6.3	NS
MW-6	03/24/2017 08:16	4.21	11.41		6.1	LFP
MW-7	03/24/2017 08:37	5.10	14.17		6.0	LFP
MW-8	03/24/2017 09:01	4.35	13.83		7.2	NS
MW-9	03/24/2017 09:13	5.91	14.10		7.5	NS
MW-10	03/24/2017 09:22	5.73	14.10		7.5	NS
MW-11	03/24/2017 08:23	5.13	13.91		33.2	LFP
MW-12	03/24/2017 08:31	4.82	13.02		8.2	LFP

Alex Pink

Sampler: Alex Pink

IW-1

Date	03/24/2017	Weather Conditions	Rain	Depth to Water (ft bmp)	2.60
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	14.54
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	11.94
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	4	Gallons in Well	7.79
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	10	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
13:50	800	10.0	6.14	216.0	131.1	5.35		2.80	
13:51	1000	10.0	6.13	215.6	134.1	5.28		2.83	
13:52	1200	10.0	6.12	215.6	136.3	5.27		2.86	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	14:00	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	IW-1-Q117	COC	
Duplicate Sample ID		Bottles	Gx 3x 40 ml - HCL,BTEX 3x of 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

IW-3

Date	03/24/2017	Weather Conditions	Cloudy	Depth to Water (ft bmp)	3.08
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	14.50
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	11.42
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	4	Gallons in Well	7.45
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	10	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments					

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
13:16	800	10.5	6.43	378.6	70.9	2.60		3.14	
13:17	1000	10.5	6.43	378.4	73.3	2.56		3.14	
13:18	1200	10.5	6.42	378.2	75.7	2.53		3.17	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	13:25	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	IW-3-Q117	COC	
Duplicate Sample ID		Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

MW-2

Date	03/24/2017	Weather Conditions	Cloudy	Depth to Water (ft bmp)	4.09
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth	19.76
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	(ft bmp)	
		Casing Diameter (in)	2	Water Column in Well	15.67
Purge Method	Low Flow - Peristaltic Pump	Pump Intake Depth (ft bmp)	10	Gallons in Well	2.56
Purge Volume Units	ml	Casing Volume to Remove		Total Volume to Remove	0.0
Sampling Type	Low Flow				
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
12:43	1200	11.0	6.79	446.4	-75.2	0.70		4.11	
12:46	1400	10.9	6.78	446.9	-76.8	0.54		4.12	
12:47	1600	10.9	6.79	447.0	-78.6	0.43		4.12	
12:48	1800	10.9	6.79	448.4	-79.7	0.38		4.12	
12:49	2000	10.9	6.79	449.4	-80.8	0.34		4.12	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	12:55	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	MW-2-Q117	COC	
Duplicate Sample ID		Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box	X			
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

MW-6

Date	03/24/2017	Weather Conditions	Cloudy	Depth to Water (ft bmp)	4.21
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	11.41
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	7.2
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	1	Gallons in Well	0.29
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	7	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
11:21	750	10.7	6.22	396.6	66.2	0.44		4.38	
11:23	1050	10.7	6.21	395.0	69.9	0.40		4.39	
11:24	1350	10.7	6.21	394.2	72.5	0.36		4.40	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	11:30	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	MW-6-Q117	COC	
Duplicate Sample ID		Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box	X			
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

MW-7

Date	03/24/2017	Weather Conditions	Cloudy	Depth to Water (ft bmp)	5.10
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	14.17
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	9.07
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	1	Gallons in Well	0.37
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	10	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
10:49	800	10.5	6.74	851	-85.1	0.60		6.40	
10:50	1200	10.5	6.73	833	-90.1	0.49		6.54	
10:51	1400	10.5	6.72	821	-92.8	0.48		6.65	
10:51	1600	10.5	6.70	813	-95.3	0.47		6.74	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	10:55	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	MW-7-Q117	COC	
Duplicate Sample ID		Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box	X			
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

MW-11

Date	03/24/2017	Weather Conditions	Rain	Depth to Water (ft bmp)	5.13
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	13.91
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	8.78
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	2	Gallons in Well	1.43
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	10	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
10:00	800	10.4	6.40	562.2	-49.4	0.50		5.39	
10:03	1200	10.4	6.41	562.1	-58.9	0.43		5.42	
10:04	1400	10.3	6.40	561.2	-66.0	0.39		5.44	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	10:10	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	MW-11-Q117	COC	
Duplicate Sample ID	DUP-1	Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time	10:10	Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No
Remarks				LFP

MW-12

Date	03/24/2017	Weather Conditions	Cloudy	Depth to Water (ft bmp)	4.82
Project Number	GP09BPNA.WA01	Water Quality Meter	YSI	Measured Well Depth (ft bmp)	13.02
Address	13131 Bothell Everett Hwy, Everett, WA98208	Casing Material	PVC	Water Column in Well	8.2
Purge Method	Low Flow - Peristaltic Pump	Casing Diameter (in)	2	Gallons in Well	1.34
Purge Volume Units	ml	Pump Intake Depth (ft bmp)	8	Total Volume to Remove	0.0
Sampling Type	Low Flow	Casing Volume to Remove			
Comments	LFP				

Field Parameters

Time	Cuml Vol Purged	Temp °C	pH	Conductivity (uS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	DTW (ft)	Remarks
11:54	800	10.2	6.59	1030	-69.0	0.70		5.56	
11:55	1000	10.1	6.60	1032	-75.1	0.50		5.56	
11:57	1400	10.1	6.60	1031	-77.3	0.40		5.54	
11:58	1600	10.1	6.60	1031	-79.0	0.35		5.53	

Sampling Summary

Sample Date	03/24/2017	Odor	No
Sample Time	12:05	Analysis	SW8260B,SW6010B,NWTPH-Gx
Sample ID	MW-12-Q117	COC	
Duplicate Sample ID		Bottles	BTEX 3x of 40 ml - HCL,Gx 3x 40 ml - HCL,Lead 1x 250 ml poly HNO3
Dup Sample Time		Remarks	LFP

Sampler: Alex Pink



Well Integrity Checklist

Item	Yes	No	NA	Notes
Type of well head				Round 12"
Well Secured on initial inspection	X			
Is Well ID Visible?	X			
Water in the well box		X		
Sleeve around the well box in good condition	X			
Any cleanup performed (explain)		X		No
Any repairs/replacement (explain)		X		No

ATTACHMENT B

Laboratory Report and Chain of Custody Documents



Arcadis - Seattle, WA

Sample Delivery Group: L898339
Samples Received: 03/25/2017
Project Number: GP09BPNA.WA01
Description: WA-217
Site: 13131 BOTHELL EVERETT HIGHWAY
Report To: Ross LaGrandeur
1100 Olive Way
Suite 800
Seattle, WA 98101

Entire Report Reviewed By:



Daphne Richards
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹ Cp: Cover Page	1
² Tc: Table of Contents	2
³ Ss: Sample Summary	3
⁴ Cn: Case Narrative	5
⁵ Sr: Sample Results	6
MW-2 L898339-01	6
MW-6 L898339-02	7
MW-7 L898339-03	8
MW-11 L898339-04	9
MW-12 L898339-05	10
IW-1 L898339-06	11
IW-3 L898339-07	12
DUP-1 L898339-08	13
TRIP BLANK L898339-09	14
⁶ Qc: Quality Control Summary	15
Metals (ICP) by Method 6010C	15
Volatile Organic Compounds (GC) by Method NWTPHGX	16
Volatile Organic Compounds (GC/MS) by Method 8260C	17
⁷ Gl: Glossary of Terms	19
⁸ Al: Accreditations & Locations	20
⁹ Sc: Chain of Custody	21



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-2 L898339-01 GW

Collected by
Alex Pink

Collected date/time
03/24/17 12:55

Received date/time
03/25/17 09:00

¹ Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:17	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 03:58	04/03/17 03:58	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 15:33	04/01/17 15:33	ACG

² Tc

³ Ss

MW-6 L898339-02 GW

Collected by
Alex Pink

Collected date/time
03/24/17 11:30

Received date/time
03/25/17 09:00

⁴ Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:20	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 04:19	04/03/17 04:19	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 15:51	04/01/17 15:51	ACG

⁵ Sr

⁶ Qc

MW-7 L898339-03 GW

Collected by
Alex Pink

Collected date/time
03/24/17 10:55

Received date/time
03/25/17 09:00

⁷ Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:22	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 04:40	04/03/17 04:40	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 16:10	04/01/17 16:10	ACG

⁸ Al

⁹ Sc

MW-11 L898339-04 GW

Collected by
Alex Pink

Collected date/time
03/24/17 10:10

Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:31	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 05:01	04/03/17 05:01	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 16:29	04/01/17 16:29	ACG

MW-12 L898339-05 GW

Collected by
Alex Pink

Collected date/time
03/24/17 12:05

Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:34	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 05:22	04/03/17 05:22	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 16:48	04/01/17 16:48	ACG

IW-1 L898339-06 GW

Collected by
Alex Pink

Collected date/time
03/24/17 14:00

Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:37	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 05:43	04/03/17 05:43	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964669	1	03/31/17 17:09	03/31/17 17:09	JHH

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



IW-3 L898339-07 GW

Collected by
Alex PinkCollected date/time
03/24/17 13:25Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010C	WG965510	1	04/01/17 08:34	04/03/17 13:40	LTB
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 06:04	04/03/17 06:04	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 17:07	04/01/17 17:07	ACG

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

DUP-1 L898339-08 GW

Collected by
Alex PinkCollected date/time
03/24/17 00:00Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG964352	1	04/03/17 06:25	04/03/17 06:25	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/04/17 04:50	04/04/17 04:50	LRL

TRIP BLANK L898339-09 GW

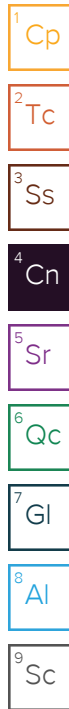
Collected by
Alex PinkCollected date/time
03/24/17 00:00Received date/time
03/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964663	1	04/01/17 12:06	04/01/17 12:06	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Daphne Richards
Technical Service Representative





Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		1.90	5.00	1	04/03/2017 13:17	WG965510

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	647		31.6	100	1	04/03/2017 03:58	WG964352
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-122		04/03/2017 03:58	WG964352

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	1.07		0.331	1.00	1	04/01/2017 15:33	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 15:33	WG964663
Ethylbenzene	0.402	J	0.384	1.00	1	04/01/2017 15:33	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 15:33	WG964663
(S) Toluene-d8	102			80.0-120		04/01/2017 15:33	WG964663
(S) Dibromofluoromethane	87.3			76.0-123		04/01/2017 15:33	WG964663
(S) a,a,a-Trifluorotoluene	113			80.0-120		04/01/2017 15:33	WG964663
(S) 4-Bromofluorobenzene	105			80.0-120		04/01/2017 15:33	WG964663



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		1.90	5.00	1	04/03/2017 13:20	WG965510

1
Cp2
Tc3
Ss4
Cn5
Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2017 04:19	WG964352
(S) a,a,a-Trifluorotoluene(FID) 102				77.0-122		04/03/2017 04:19	WG964352

6
Qc7
Gl8
Al9
Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	04/01/2017 15:51	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 15:51	WG964663
Ethylbenzene	U		0.384	1.00	1	04/01/2017 15:51	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 15:51	WG964663
(S) Toluene-d8	101			80.0-120		04/01/2017 15:51	WG964663
(S) Dibromofluoromethane	87.1			76.0-123		04/01/2017 15:51	WG964663
(S) a,a,a-Trifluorotoluene	112			80.0-120		04/01/2017 15:51	WG964663
(S) 4-Bromofluorobenzene	102			80.0-120		04/01/2017 15:51	WG964663



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	2.00	J	1.90	5.00	1	04/03/2017 13:22	WG965510

1
Cp2
Tc3
Ss4
Cn5
Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2017 04:40	WG964352
(S) a,a,a-Trifluorotoluene(FID) 101				77.0-122		04/03/2017 04:40	WG964352

6
Qc7
Gl8
Al9
Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	04/01/2017 16:10	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 16:10	WG964663
Ethylbenzene	U		0.384	1.00	1	04/01/2017 16:10	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 16:10	WG964663
(S) Toluene-d8	102			80.0-120		04/01/2017 16:10	WG964663
(S) Dibromofluoromethane	85.9			76.0-123		04/01/2017 16:10	WG964663
(S) a,a,a-Trifluorotoluene	111			80.0-120		04/01/2017 16:10	WG964663
(S) 4-Bromofluorobenzene	105			80.0-120		04/01/2017 16:10	WG964663



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		1.90	5.00	1	04/03/2017 13:31	WG965510

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	1340		31.6	100	1	04/03/2017 05:01	WG964352
(S) a,a,a-Trifluorotoluene(FID)	67.6	<u>J2</u>		77.0-122		04/03/2017 05:01	WG964352

Sample Narrative:

NWTPHGX L898339-04 WG964352: Surrogate failure due to matrix interference.

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	7.44		0.331	1.00	1	04/01/2017 16:29	WG964663
Toluene	0.870	<u>J</u>	0.412	1.00	1	04/01/2017 16:29	WG964663
Ethylbenzene	1.75		0.384	1.00	1	04/01/2017 16:29	WG964663
Total Xylenes	2.80	<u>J</u>	1.06	3.00	1	04/01/2017 16:29	WG964663
(S) Toluene-d8	102			80.0-120		04/01/2017 16:29	WG964663
(S) Dibromofluoromethane	87.5			76.0-123		04/01/2017 16:29	WG964663
(S) a,a,a-Trifluorotoluene	113			80.0-120		04/01/2017 16:29	WG964663
(S) 4-Bromofluorobenzene	104			80.0-120		04/01/2017 16:29	WG964663



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	32.5		1.90	5.00	1	04/03/2017 13:34	WG965510

1
Cp2
Tc3
Ss4
Cn5
Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2017 05:22	WG964352
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-122		04/03/2017 05:22	WG964352

6
Qc7
Gl8
Al9
Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	04/01/2017 16:48	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 16:48	WG964663
Ethylbenzene	U		0.384	1.00	1	04/01/2017 16:48	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 16:48	WG964663
(S) Toluene-d8	101			80.0-120		04/01/2017 16:48	WG964663
(S) Dibromofluoromethane	86.0			76.0-123		04/01/2017 16:48	WG964663
(S) a,a,a-Trifluorotoluene	111			80.0-120		04/01/2017 16:48	WG964663
(S) 4-Bromofluorobenzene	105			80.0-120		04/01/2017 16:48	WG964663



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		1.90	5.00	1	04/03/2017 13:37	WG965510

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2017 05:43	WG964352
(S) a,a,a-Trifluorotoluene(FID) 101				77.0-122		04/03/2017 05:43	WG964352

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	03/31/2017 17:09	WG964669
Toluene	U		0.412	1.00	1	03/31/2017 17:09	WG964669
Ethylbenzene	U		0.384	1.00	1	03/31/2017 17:09	WG964669
Total Xylenes	U		1.06	3.00	1	03/31/2017 17:09	WG964669
(S) Toluene-d8 103				80.0-120		03/31/2017 17:09	WG964669
(S) Dibromofluoromethane 104				76.0-123		03/31/2017 17:09	WG964669
(S) a,a,a-Trifluorotoluene 101				80.0-120		03/31/2017 17:09	WG964669
(S) 4-Bromofluorobenzene 97.2				80.0-120		03/31/2017 17:09	WG964669



Metals (ICP) by Method 6010C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		1.90	5.00	1	04/03/2017 13:40	WG965510

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/03/2017 06:04	WG964352
(S) a,a,a-Trifluorotoluene(FID) 101				77.0-122		04/03/2017 06:04	WG964352

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.331	1.00	1	04/01/2017 17:07	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 17:07	WG964663
Ethylbenzene	U		0.384	1.00	1	04/01/2017 17:07	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 17:07	WG964663
(S) Toluene-d8	103			80.0-120		04/01/2017 17:07	WG964663
(S) Dibromofluoromethane	86.0			76.0-123		04/01/2017 17:07	WG964663
(S) a,a,a-Trifluorotoluene	111			80.0-120		04/01/2017 17:07	WG964663
(S) 4-Bromofluorobenzene	104			80.0-120		04/01/2017 17:07	WG964663



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2650		31.6	100	1	04/03/2017 06:25	WG964352
(S) a,a,a-Trifluorotoluene(FID)	93.8			77.0-122		04/03/2017 06:25	WG964352

1
Cp2
Tc3
Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	7.16		0.331	1.00	1	04/04/2017 04:50	WG964663
Toluene	0.832	J	0.412	1.00	1	04/04/2017 04:50	WG964663
Ethylbenzene	1.79		0.384	1.00	1	04/04/2017 04:50	WG964663
Total Xylenes	2.89	J	1.06	3.00	1	04/04/2017 04:50	WG964663
(S) Toluene-d8	101			80.0-120		04/04/2017 04:50	WG964663
(S) Dibromofluoromethane	95.3			76.0-123		04/04/2017 04:50	WG964663
(S) a,a,a-Trifluorotoluene	99.3			80.0-120		04/04/2017 04:50	WG964663
(S) 4-Bromofluorobenzene	104			80.0-120		04/04/2017 04:50	WG964663

4
Cn5
Sr6
Qc7
Gl8
Al9
Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.331	1.00	1	04/01/2017 12:06	WG964663
Toluene	U		0.412	1.00	1	04/01/2017 12:06	WG964663
Ethylbenzene	U		0.384	1.00	1	04/01/2017 12:06	WG964663
Total Xylenes	U		1.06	3.00	1	04/01/2017 12:06	WG964663
(S) Toluene-d8	101			80.0-120		04/01/2017 12:06	WG964663
(S) Dibromofluoromethane	86.8			76.0-123		04/01/2017 12:06	WG964663
(S) a,a,a-Trifluorotoluene	111			80.0-120		04/01/2017 12:06	WG964663
(S) 4-Bromofluorobenzene	106			80.0-120		04/01/2017 12:06	WG964663

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



L898339-01,02,03,04,05,06,07

Method Blank (MB)

(MB) R3207785-1 04/03/17 12:50

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Lead	U		1.90	5.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207785-2 04/03/17 13:00 • (LCSD) R3207785-3 04/03/17 13:03

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Lead	1000	980	970	98	97	80-120			1	20

L898413-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L898413-01 04/03/17 13:06 • (MS) R3207785-5 04/03/17 13:11 • (MSD) R3207785-6 04/03/17 13:14

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Lead	1000	U	1000	984	100	98	1	75-125			2	20



Method Blank (MB)

(MB) R3207916-3 04/02/17 22:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		31.6	100
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-122

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207916-1 04/02/17 21:40 • (LCSD) R3207916-2 04/02/17 22:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	6210	6330	113	115	72.0-134			1.96	20
(S) a,a,a-Trifluorotoluene(FID)				106	106	77.0-122				

L898330-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L898330-01 04/03/17 00:08 • (MS) R3207916-4 04/02/17 23:04 • (MSD) R3207916-5 04/02/17 23:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	3330	7750	10200	80.3	125	1	23.0-159		J3	27.5	20
(S) a,a,a-Trifluorotoluene(FID)					97.0	97.7		77.0-122				



Method Blank (MB)

(MB) R3207907-3 04/01/17 11:47

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	102			80.0-120
(S) Dibromofluoromethane	85.3			76.0-123
(S) a,a,a-Trifluorotoluene	112			80.0-120
(S) 4-Bromofluorobenzene	104			80.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207907-1 04/01/17 10:52 • (LCSD) R3207907-2 04/01/17 11:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.7	23.9	94.9	95.5	69.0-123			0.640	20
Ethylbenzene	25.0	25.5	24.9	102	99.6	77.0-120			2.50	20
Toluene	25.0	23.7	23.3	94.9	93.4	77.0-120			1.63	20
Xylenes, Total	75.0	75.6	74.4	101	99.2	77.0-120			1.60	20
(S) Toluene-d8				102	103	80.0-120				
(S) Dibromofluoromethane				85.2	87.3	76.0-123				
(S) a,a,a-Trifluorotoluene				112	112	80.0-120				
(S) 4-Bromofluorobenzene				104	104	80.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3207819-3 03/31/17 16:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.331	1.00
Ethylbenzene	U		0.384	1.00
Toluene	U		0.412	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	102			80.0-120
(S) Dibromofluoromethane	104			76.0-123
(S) a,a,a-Trifluorotoluene	101			80.0-120
(S) 4-Bromofluorobenzene	98.0			80.0-120

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207819-1 03/31/17 15:55 • (LCSD) R3207819-2 03/31/17 16:08

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	25.0	21.5	22.3	85.9	89.3	69.0-123			3.85	20
Ethylbenzene	25.0	22.5	22.1	89.9	88.2	77.0-120			1.88	20
Toluene	25.0	21.7	22.1	86.8	88.3	77.0-120			1.67	20
Xylenes, Total	75.0	66.8	65.1	89.1	86.8	77.0-120			2.58	20
(S) Toluene-d8				100	101	80.0-120				
(S) Dibromofluoromethane				95.3	99.6	76.0-123				
(S) a,a,a-Trifluorotoluene				102	101	80.0-120				
(S) 4-Bromofluorobenzene				99.4	97.9	80.0-120				

L898376-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L898376-02 03/31/17 21:01 • (MS) R3207819-4 03/31/17 21:14 • (MSD) R3207819-5 03/31/17 21:26

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Benzene	25.0	533	3330	3280	112	110	100	34.0-147			1.39	20
Ethylbenzene	25.0	2120	4870	4890	110	111	100	42.0-147			0.410	20
Toluene	25.0	233	2910	2880	107	106	100	42.0-141			0.840	20
Xylenes, Total	75.0	5830	14000	13800	109	106	100	41.0-148			1.59	20
(S) Toluene-d8					103	101		80.0-120				
(S) Dibromofluoromethane					106	102		76.0-123				
(S) a,a,a-Trifluorotoluene					99.8	99.1		80.0-120				
(S) 4-Bromofluorobenzene					96.3	93.8		80.0-120				



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

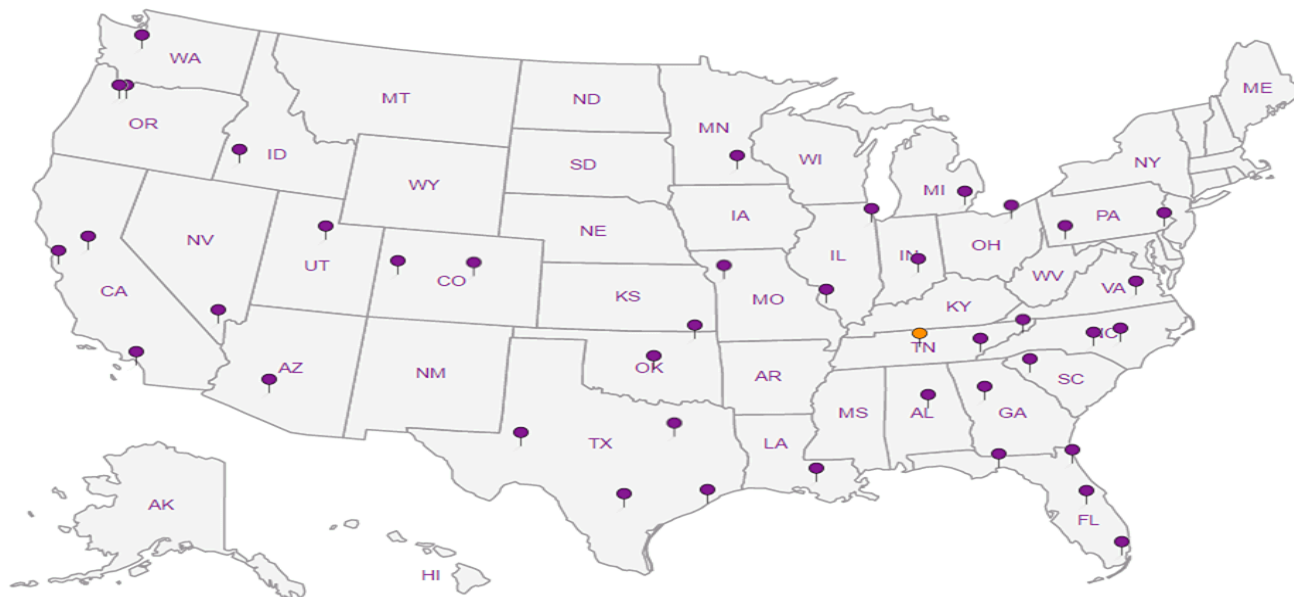
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Arcadis - Seattle, WA

1100 Olive Way
Suite 800
Seattle WA 98101

Report to:
Ross LaGrandeur

Project
Description: WA-217

Phone: 509-438-9828
Fax:

Collected by (print):
Alex Pink

Collected by (signature):
Alex Pink

Immediately
Packed on Ice N ☐ Y ☒

Billing Information:

Attn: Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Email To: Ross.LaGrandeur@arcadis.com;
Ryan.Brauchla@arcadis.com;

City/State
Collected: Everett, WA

Lab Project #
ARCABPWA-WA217

P.O. #
GP09BPNA, WA01

Quote #

Rush? (Lab MUST Be Notified)

Same Day ☐ Five Day ☐
Next Day ☐ 5 Day (Rad Only) ☐
Two Day ☐ 10 Day (Rad Only) ☐
Three Day ☐

Date Results Needed

Standard TAT

No.
of
Knl's

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Knl's	BTEX 8260C 40mlAmb-HCl	Diss. Pb 6010C 250mlHDPE-NoPres	NWTPHG 40mlAmb-HCl	Total Pb 6010C 250mlHDPE-HNO3	trip blk BTEX 8260C 40mlAmb-HCl-Blk						
MW-2	Grab	GW	—	3/24/17	1255	6	X	X	X	X							-01
MW-6		GW	—		1130	6	X	X	X	X							02
MW-7		GW	—		1055	6	X	X	X	X							03
MW-11		GW	—		1010	6	X	X	X	X							04
MW-12		GW	—		1205	6	X	X	X	X							05
IW-1		GW	—		1400	6	X	X	X	X							06
IW-3		GW	—		1325	6	X	X	X	X							07
DUP-1		GW	—		—	4	X		X								08
Trip Blank		GW	—		—	2					X						09
		GW															

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: questions or concerns, call Alex Pink: 906-410-8394
Dissolved Lead submitted on Hold

Samples returned via:
UPS ☒ FedEx ☐ Courier ☐

Tracking # 7215 4516 3644

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Trip Blank Received:

Yes/No
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 8.8 °C

Bottles Received: 48

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Hold:

Condition:
NCF / OK

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# LB98339

1217

Acctnum: ARCABPWA

Template: T120670

Prelogin: P588875

TSR: 110 - Brian Ford

PB:

Shipped Via:

Remarks

Sample # (lab only)

Sample Receipt Checklist

COC Seal Present/Intact: ☒ NP ☐ Y ☐ N
COC Signed/Accurate: ☒ Y ☐ N
Bottles arrive intact: ☒ Y ☐ N
Correct bottles used: ☒ Y ☐ N
Sufficient volume sent: ☒ Y ☐ N
If Applicable
VQA Zero Headspace: ☒ Y ☐ N
Preservation Correct/Checked: ☒ Y ☐ N

Arcadis U.S., Inc.

1100 Olive Way

Suite 800

Seattle, Washington 98101

Tel 206 325 5254

Fax 206 325 8218

www.arcadis.com

A decorative graphic consisting of three thin orange lines. One line is horizontal, extending across the width of the page. Two other lines are diagonal, starting from the bottom left and extending towards the top right, intersecting the horizontal line.