



Remediation Management Services Company

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May 23, 2024

Washington Department of Ecology
Northwest Regional Office
Attn: Mr. Michael Warfel
15700 Dayton Avenue North
Shoreline, WA 98133

Dear Mr. Warfel:

Please find the enclosed Semi-Annual Groundwater Monitoring Report – Second Half of 2023, that documents the results at Former ARCO Facility No. 11060 located at 4580 Fauntleroy Way SW, Seattle, Washington.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Wade Melton', written over a light blue rectangular background.

Wade Melton
Operations Project Manager
Remediation Management Services Company
An affiliate of Atlantic Richfield Company

cc: File, Antea Group



Semi-Annual Groundwater Monitoring Report

Second Half of 2023
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, Washington

Antea[®]Group

Understanding today.
Improving tomorrow.

PREPARED FOR

Remediation Management Services Company
An affiliate of Atlantic Richfield Company
4 Centerpointe Drive, Suite 200
Room LPR-4-222
La Palma, CA 90623

PREPARED BY

Antea Group – Seattle, WA
May 23, 2024
Project WA – 11060 Seattle
FSID 99437681

us.anteagroup.com

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Semi-Annual Groundwater Monitoring Report

Second Half of 2023

Former ARCO Facility No. 11060

4580 Fauntleroy Way SW, Seattle, Washington

Former ARCO Facility No.	11060
Address	4580 Fauntleroy Way SW, Seattle, Washington
Atlantic Richfield Project Manager	Wade Melton, +1 360 594 7978
Consulting Co. /Contact Person	Antea Group / Lonnie Dent, +1 303 807 3627
Consultant Project Number	WA – 11060 Seattle
Ecology Facility Site ID No./VCP ID No.	Washington State Department of Ecology FSID # 99437681 / VCP # NW3308

WORK PERFORMED DURING SECOND HALF OF 2023

- Antea Group conducted routine remediation system operation and maintenance (O&M) with data collection on July 26 and September 21, 2023. Due to low Soil Vapor Extraction (SVE) recovery rates, the SVE system was deactivated on September 21, 2023.
- Antea Group conducted quarterly groundwater monitoring and sampling on August 9 and December 11, 2023.
- During the groundwater sampling event on August 9, 2023, monitoring wells MW-1, MW-4, and MW-5 did not contain sufficient groundwater to collect samples for laboratory analyses.
- During the groundwater sampling event on December 11, 2023, monitoring wells MW-1 and MW-5 did not contain sufficient groundwater to collect samples for laboratory analyses.
- Antea Group conducted a subsurface investigation on September 26 through 28 and December 18 through 22, 2023.
- Antea Group conducted soil vapor probe sampling on December 11, 2023.
- Antea Group prepared this semi-annual groundwater monitoring report.

WORK SCHEDULED FOR FIRST HALF OF 2024

- Antea Group will conduct quarterly groundwater monitoring and sampling.
- Antea Group will prepare a subsurface investigation report.
- Antea Group will prepare a soil vapor probe sampling report.
- Antea will prepare a semi-annual groundwater monitoring report.

Current Phase of Project	Remediation	
Frequency of Groundwater Sampling and Monitoring	Quarterly	
Are LPH Present On-Site	None	
LPH Recovered this Reporting Period	None	
Cumulative LPH Recovered to Date	Unknown	
Amount of Soil Removed to Date	Unknown	
Current Remediation Techniques	SVE system operation (deactivated September 21, 2023)	
Approximate Depth to Groundwater	August 9, 2023 December 11, 2023	22.85 – 26.04 ft. 11.78 – 25.11 ft.
Groundwater Gradient	August 9, 2023 December 11, 2023	Southeast 0.017 ft./linear ft. Southeast 0.111 ft./linear ft.

While the gradient was observed to the SE during the third quarter, a majority of the wells were dry thus limiting the dataset to the northern portion of the site. Historically, when water is present in the majority of the wells, the gradient is observed to be to the NE.

REMARKS

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

Prepared by

Colin Dechenne

Colin Dechenne
Staff Professional

Date: May 23, 2024

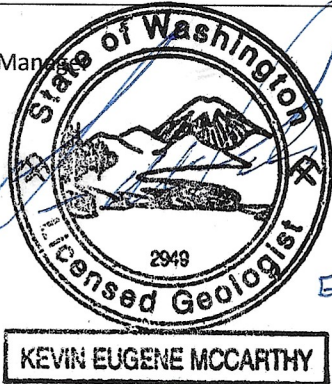
Reviewed by:

Lonnie Dent

Lonnie Dent
Senior Project Manager

Date: May 23, 2024

Reviewed by:



EXPIRES
9/29/24

Kevin McCarthy, LG
Senior Consultant

Date: May 23, 2024

cc: Mr. Michael Warfel, Washington Department of Ecology, Northwest Regional Office (Hardcopy, Electronic Copy)
Mr. Jack Davis, Jackson Energy (Electronic Copy)
Mr. Ken Lederman, McCullough Hill Leary P.S. (Electronic Copy)
Mr. Nathan Block, BP Legal (Electronic Copy)
Mr. Wade Melton, Remediation Management Services Company (Electronic Copy - RMO Upload)
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CONTACT INFORMATION

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Tables

Table 1 - Groundwater Gauging Data

Table 2 - Groundwater Analytical Data

Table 3 - SVE/AS System Operational Data

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
AS-1	5/7/2015	--	23.30	NP	--	--	NS
AS-1	3/2/2016	--	23.31	NP	--	--	NS
AS-2	3/2/2016	--	21.18	NP	--	--	NS
AS-3	3/2/2016	--	21.63	NP	--	--	NS
AS-4	3/2/2016	--	21.65	NP	--	--	NS
AS-5	3/2/2016	--	--	--	--	--	Dry
AS-6	3/2/2016	--	25.61	NP	--	--	NS
CW-2	3/2/2016	--	19.53	NP	--	--	NS
CW-3	3/2/2016	--	21.57	NP	--	--	NS
CW-4	3/2/2016	--	20.61	NP	--	--	NS
EW-1	5/9/2013	268.20	24.49	24.32	0.17	243.85	--
EW-1	5/7/2015	268.20	25.75	24.73	1.02	243.27	--
EW-1	3/2/2016	268.20	24.81	NP	--	243.39	NS
EW-1	6/6/2016	268.20	25.94	25.28	0.66	242.79	--
EW-1	9/12/2016	268.20	26.89	26.16	0.73	241.89	--
EW-1	12/12/2016	268.20	25.49	24.70	0.79	243.34	--
EW-1	2/22/2017	268.20	24.98	24.20	0.78	243.84	--
EW-1	8/29/2017	268.20	26.28	25.68	0.60	242.40	--
EW-1	10/25/2018	268.20	27.52	NP	--	240.68	NS
EW-1	2/20/2019	268.20	26.85	NP	--	241.35	NS
EW-1	5/14/2019	268.20	27.18	NP	--	241.02	NS
EW-1	8/27/2019	268.20	27.83	NP	--	240.37	NS
EW-1	11/25/2019	268.20	27.84	NP	--	240.36	NS
EW-1	3/25/2020	268.20	26.50	NP	--	241.70	NS
EW-1	8/6/2020	268.20	26.85	NP	--	241.35	NS
EW-2	5/9/2013	267.93	24.11	NP	--	243.82	NS
EW-2	5/7/2015	267.93	24.78	NP	--	243.15	NS
EW-2	3/2/2016	267.93	24.80	NP	--	243.13	NS
EW-2	6/6/2016	267.93	25.17	NP	--	242.76	NS
EW-2	9/12/2016	267.93	26.22	NP	--	241.71	NS
EW-2	12/12/2016	267.93	24.64	NP	--	243.29	NS
EW-2	2/22/2017	267.93	24.10	NP	--	243.83	NS
EW-2	8/29/2017	267.93	25.56	NP	--	242.37	NS
EW-2	10/25/2018	267.93	27.30	NP	--	240.63	NS
EW-2	2/20/2019	267.93	26.52	NP	--	241.41	NS
EW-2	5/14/2019	267.93	26.96	NP	--	240.97	NS
EW-2	8/27/2019	267.93	27.65	NP	--	240.28	NS
EW-2	11/25/2019	267.93	27.81	NP	--	240.12	NS
EW-2	3/25/2020	267.93	26.21	NP	--	241.72	NS
EW-2	8/6/2020	267.93	26.61	NP	--	241.32	NS

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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
EW-3	5/9/2013	268.50	24.90	24.59	0.31	243.85	--
EW-3	5/7/2015	268.50	25.77	23.23	2.54	244.76	--
EW-3	3/2/2016	268.50	25.44	25.19	0.25	243.26	--
EW-3	9/12/2016	268.50	27.17	25.63	1.54	242.56	--
EW-3	12/12/2016	268.50	25.58	24.75	0.83	243.58	--
EW-3	2/22/2017	268.50	25.06	24.22	0.84	244.11	--
EW-3	8/29/2017	268.50	26.75	25.99	0.76	242.36	--
EW-3	10/25/2018	268.50	27.81	NP	--	240.69	NS
EW-3	2/20/2019	268.50	26.93	NP	--	241.57	NS
EW-3	5/14/2019	268.50	27.45	NP	--	241.05	NS
EW-3	8/27/2019	268.50	27.98	NP	--	240.52	NS
EW-3	11/25/2019	268.50	27.98	NP	--	240.52	NS
EW-3	3/25/2020	268.50	26.69	NP	--	241.81	NS
EW-3	8/6/2020	268.50	27.11	NP	--	241.39	NS
GMW-1	5/10/2011	--	22.08	NP	--	--	--
GMW-1	11/29/2011	--	23.83	NP	--	--	--
GMW-1	6/1/2012	--	--	--	--	--	NM
GMW-1	11/29/2012	265.63	--	--	--	--	NM
GMW-1	5/9/2013	265.63	22.58	NP	--	243.05	--
GMW-1	11/19/2013	265.63	24.00	NP	--	241.63	--
GMW-1	5/13/2014	265.63	22.83	NP	--	242.80	NS
GMW-1	5/14/2014	265.63	--	--	--	--	--
GMW-1	5/7/2015	265.63	23.48	NP	--	242.15	--
GMW-1	3/2/2016	265.63	22.48	NP	--	243.15	--
GMW-1	6/6/2016	265.63	23.51	NP	--	242.12	--
GMW-1	9/12/2016	265.63	24.89	NP	--	240.74	--
GMW-1	12/12/2016	265.63	22.95	NP	--	242.68	--
GMW-1	2/22/2017	265.63	22.02	NP	--	243.61	--
GMW-1	8/29/2017	265.63	23.86	NP	--	241.77	--
GMW-1	3/13/2018	265.63	23.20	NP	--	242.43	--
GMW-1	10/25/2018	265.63	26.22	26.16	0.06	239.46	--
GMW-1	2/20/2019	265.63	24.34	NP	--	241.29	--
GMW-1	5/13/2019	265.63	25.28	NP	--	240.35	--
GMW-1	8/27/2019	265.63	26.68	NP	--	238.95	--
GMW-1	11/25/2019	265.63	26.95	26.90	0.05	238.72	NS
GMW-1	3/25/2020	265.63	24.91	NP	--	240.72	--
GMW-1	6/2/2020	265.63	25.05	NP	--	240.58	--
GMW-1	8/6/2020	265.63	25.92	NP	--	239.71	--
GMW-1	12/10/2020	265.63	25.50	25.49	0.01	240.14	--
GMW-1	3/8/2021	265.63	23.35	NP	--	242.28	--
GMW-1	6/9/2021	265.63	24.62	NP	--	241.01	--
GMW-1	9/13/2021	265.63	26.70	NP	--	238.93	Dry
GMW-1	12/7/2021	265.63	24.55	NP	--	241.08	--
GMW-1	9/22/2022	265.63	25.45	NP	--	240.18	--
GMW-1	11/29/2022	265.63	26.24	NP	--	239.39	--
GMW-1	2/27/2023	265.63	24.34	NP	--	241.29	--
GMW-1	5/25/2023	265.63	24.30	NP	--	241.33	--
GMW-1	8/9/2023	265.63	24.84	NP	--	240.79	--
GMW-1	12/11/2023	265.63	23.43	NP	--	242.20	--

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Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-1	5/11/1993	99.89	23.02	NP	--	76.87	--
MW-1	3/4/1994	99.89	24.32	NP	--	75.57	--
MW-1	7/6/1994	99.89	24.60	NP	--	75.29	--
MW-1	10/7/1994	99.89	24.97	NP	--	74.92	--
MW-1	12/28/1994	99.89	24.86	NP	--	75.03	--
MW-1	3/13/1995	99.89	24.16	NP	--	75.73	--
MW-1	6/30/1995	99.89	23.98	NP	--	75.91	--
MW-1	9/6/1995	99.89	24.30	NP	--	75.59	--
MW-1	12/8/1995	99.89	24.41	NP	--	75.48	--
MW-1	3/11/1996	99.89	23.11	NP	--	76.78	--
MW-1	6/18/1996	99.89	22.80	NP	--	77.09	--
MW-1	9/9/1996	99.89	23.11	NP	--	76.78	--
MW-1	12/11/1996	99.89	23.07	NP	--	76.82	--
MW-1	3/13/1997	99.89	22.12	NP	--	77.77	--
MW-1	6/5/1997	99.89	21.75	NP	--	78.14	--
MW-1	9/5/1997	99.89	22.03	NP	--	77.86	--
MW-1	4/2/1998	99.89	21.27	NP	--	78.62	--
MW-1	6/8/1998	99.89	21.53	NP	--	78.36	--
MW-1	12/9/1998	99.89	22.22	NP	--	77.67	--
MW-1	6/26/1999	99.89	21.08	NP	--	78.81	--
MW-1	9/28/1999	99.89	21.88	NP	--	78.01	--
MW-1	1/19/2000	99.89	21.46	NP	--	78.43	--
MW-1	3/24/2000	99.89	21.40	NP	--	78.49	--
MW-1	7/2/2000	99.89	21.92	NP	--	77.97	--
MW-1	9/14/2000	99.89	22.54	NP	--	77.35	--
MW-1	12/14/2000	99.89	22.81	NP	--	77.08	--
MW-1	9/22/2001	99.89	23.55	NP	--	76.34	--
MW-1	12/9/2001	99.89	23.63	NP	--	76.26	--
MW-1	3/20/2002	99.89	22.88	NP	--	77.01	--
MW-1	6/11/2002	99.89	23.02	NP	--	76.87	--
MW-1	12/21/2002	99.89	24.54	NP	--	75.35	NS
MW-1	3/19/2003	99.89	24.50	NP	--	75.39	NS
MW-1	6/18/2003	99.89	24.36	NP	--	75.53	NS
MW-1	9/23/2003	99.89	--	--	--	--	NS
MW-1	10/21/2003	99.89	25.04	NP	--	74.85	--
MW-1	6/29/2004	99.89	24.22	NP	--	75.67	NS
MW-1	11/15/2004	99.89	25.11	NP	--	74.78	NS
MW-1	4/14/2005	99.89	25.10	NP	--	74.79	NS
MW-1	12/18/2005	99.89	25.46	NP	--	74.43	--
MW-1	6/11/2006	99.89	24.54	NP	--	75.35	--
MW-1	11/5/2006	99.89	25.59	NP	--	74.30	--
MW-1	9/25/2007	99.89	25.08	NP	--	74.81	--
MW-1	12/31/2007	99.89	25.23	NP	--	74.66	--
MW-1	5/29/2008	99.89	25.01	NP	--	74.88	--
MW-1	10/28/2008	99.89	25.80	NP	--	74.09	--
MW-1	6/22/2009	99.89	26.11	NP	--	73.78	--
MW-1	12/15/2009	99.89	26.31	NP	--	73.58	--
MW-1	5/24/2010	267.43	25.20	NP	--	242.23	--
MW-1	10/12/2010	267.43	25.09	NP	--	242.34	--
MW-1	5/10/2011	267.43	23.60	NP	--	243.83	--
MW-1	11/29/2011	267.43	24.84	NP	--	242.59	--
MW-1	6/1/2012	267.43	23.67	NP	--	243.76	--

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Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-1	11/29/2012	267.43	24.00	NP	--	243.43	--
MW-1	5/9/2013	267.43	23.79	NP	--	243.64	--
MW-1	11/19/2013	267.43	25.30	NP	--	242.13	--
MW-1	5/13/2014	267.43	24.12	NP	--	243.31	--
MW-1	5/7/2015	267.43	24.26	NP	--	243.17	--
MW-1	3/2/2016	267.43	24.53	NP	--	242.90	--
MW-1	6/6/2016	267.43	24.82	NP	--	242.61	NS
MW-1	9/12/2016	267.43	26.88	NP	--	240.55	IW
MW-1	12/12/2016	267.43	24.76	NP	--	242.67	NS
MW-1	2/22/2017	267.43	24.11	NP	--	243.32	--
MW-1	8/29/2017	267.43	25.20	NP	--	242.23	--
MW-1	3/13/2018	267.43	25.35	NP	--	242.08	--
MW-1	10/25/2018	267.43	26.43	NP	--	241.00	NS
MW-1	2/20/2019	267.43	26.37	NP	--	241.06	NS
MW-1	2/22/2019	267.43	26.33	NP	--	241.10	--
MW-1	5/14/2019	267.43	26.70	NP	--	240.73	--
MW-1	8/27/2019	267.43	27.20	NP	--	240.23	NS
MW-1	11/25/2019	267.43	27.21	NP	--	240.22	NS
MW-1	3/26/2020	267.43	26.02	NP	--	241.41	--
MW-1	6/3/2020	267.43	25.92	NP	--	241.51	--
MW-1	8/6/2020	267.43	26.32	NP	--	241.11	--
MW-1	12/10/2020	267.43	--	--	--	--	Dry
MW-1	3/8/2021	267.43	25.27	NP	--	242.16	--
MW-1	6/9/2021	267.43	25.76	25.76	0.00	241.67	--
MW-1	9/13/2021	267.43	26.77	NP	--	240.66	Dry
MW-1	12/7/2021	--	--	--	--	--	Dry
MW-1	3/8/2022	267.43	25.89	NP	--	241.54	--
MW-1	6/22/2022	267.43	26.07	NP	--	241.36	--
MW-1	9/22/2022	267.43	26.81	NP	--	240.62	--
MW-1	11/29/2022	267.43	27.20	NP	--	240.23	IW
MW-1	12/12/2022	267.43	27.16	NP	--	240.27	--
MW-1	2/27/2023	267.43	--	--	--	--	Dry
MW-1	5/25/2023	267.43	--	--	--	--	Dry
MW-1	8/9/2023	267.43	--	--	--	--	Dry
MW-1	12/11/2023	267.43	--	--	--	--	Dry
MW-2	5/11/1993	99.05	22.98	NP	--	76.07	--
MW-2	3/4/1994	99.05	24.30	NP	--	74.75	--
MW-2	7/6/1994	99.05	24.54	NP	--	74.51	--
MW-2	10/7/1994	99.05	24.94	NP	--	74.11	--
MW-2	12/28/1994	99.05	24.60	NP	--	74.45	--
MW-2	3/13/1995	99.05	23.84	NP	--	75.21	--
MW-2	6/30/1995	99.05	23.72	NP	--	75.33	--
MW-2	9/6/1995	99.05	23.97	NP	--	75.08	--
MW-2	12/8/1995	99.05	23.97	NP	--	75.08	--
MW-2	3/11/1996	99.05	22.66	NP	--	76.39	--
MW-2	6/18/1996	99.05	22.18	NP	--	76.87	--
MW-2	9/9/1996	99.05	22.72	NP	--	76.33	--
MW-2	12/11/1996	99.05	22.67	NP	--	76.38	--
MW-2	3/13/1997	99.05	21.91	NP	--	77.14	--
MW-2	6/5/1997	99.05	21.06	NP	--	77.99	--
MW-2	9/5/1997	99.05	21.74	NP	--	77.31	--

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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-2	4/2/1998	99.05	20.71	NP	--	78.34	--
MW-2	6/8/1998	99.05	21.25	NP	--	77.80	--
MW-2	9/17/1998	99.05	22.10	NP	--	76.95	--
MW-2	12/9/1998	99.05	21.99	NP	--	77.06	--
MW-2	3/17/1999	99.05	19.67	NP	--	79.38	--
MW-2	6/26/1999	99.05	21.26	NP	--	77.79	--
MW-2	9/28/1999	99.05	21.75	NP	--	77.30	--
MW-2	1/19/2000	99.05	21.12	NP	--	77.93	--
MW-2	3/24/2000	99.05	20.74	NP	--	78.31	--
MW-2	7/2/2000	99.05	21.51	NP	--	77.54	--
MW-2	9/14/2000	99.05	22.31	NP	--	76.74	--
MW-2	12/14/2000	99.05	22.97	NP	--	76.08	--
MW-2	9/22/2001	99.05	23.59	NP	--	75.46	--
MW-2	12/9/2001	99.05	23.27	NP	--	75.78	--
MW-2	3/20/2002	99.05	22.41	NP	--	76.64	--
MW-2	6/11/2002	99.05	22.61	NP	--	76.44	--
MW-2	12/21/2002	99.05	24.30	NP	--	74.75	--
MW-2	3/19/2003	99.05	23.90	NP	--	75.15	--
MW-2	6/18/2003	99.05	23.87	NP	--	75.18	--
MW-2	9/23/2003	99.05	24.33	NP	--	74.72	--
MW-2	10/21/2003	99.05	24.38	NP	--	74.67	--
MW-2	6/29/2004	99.05	23.74	NP	--	75.31	--
MW-2	11/15/2004	99.05	24.70	NP	--	74.35	--
MW-2	4/14/2005	99.05	24.69	NP	--	74.36	--
MW-2	12/18/2005	99.05	25.15	NP	--	73.90	--
MW-2	6/11/2006	99.05	24.01	NP	--	75.04	--
MW-2	11/5/2006	99.05	25.40	NP	--	73.65	--
MW-2	9/25/2007	99.05	24.72	NP	--	74.33	--
MW-2	12/31/2007	99.05	24.67	NP	--	74.38	--
MW-2	5/29/2008	99.05	24.73	NP	--	74.32	--
MW-2	10/28/2008	99.05	25.74	NP	--	73.31	--
MW-2	6/22/2009	99.05	25.91	NP	--	73.14	--
MW-2	12/15/2009	99.05	25.87	NP	--	73.18	--
MW-2	5/24/2010	266.69	24.64	NP	--	242.05	--
MW-2	10/12/2010	266.69	25.03	NP	--	241.66	--
MW-2	5/10/2011	266.69	23.23	NP	--	243.46	--
MW-2	11/29/2011	266.69	24.82	NP	--	241.87	--
MW-2	6/1/2012	266.69	23.60	NP	--	243.09	--
MW-2	11/29/2012	266.69	23.86	NP	--	242.83	--
MW-2	5/9/2013	266.69	23.41	NP	--	243.28	--
MW-2	11/19/2013	266.69	24.40	NP	--	242.29	--
MW-2	5/13/2014	266.69	23.74	NP	--	242.95	--
MW-2	5/7/2015	266.69	24.14	NP	--	242.55	--
MW-2	3/2/2016	266.69	23.79	NP	--	242.90	--
MW-2	6/6/2016	266.69	24.49	NP	--	242.20	--
MW-2	9/12/2016	266.69	26.69	NP	--	240.00	--
MW-2	12/12/2016	266.69	23.96	NP	--	242.73	--
MW-2	2/22/2017	266.69	23.18	NP	--	243.51	--
MW-2	8/29/2017	266.69	24.86	NP	--	241.83	--
MW-2	3/13/2018	266.69	24.45	NP	--	242.24	--
MW-2	10/25/2018	266.69	26.85	NP	--	239.84	--
MW-2	2/20/2019	266.69	25.27	NP	--	241.42	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-2	5/14/2019	266.69	26.20	NP	--	240.49	--
MW-2	8/27/2019	266.69	27.30	NP	--	239.39	NS
MW-2	11/26/2019	266.69	27.29	NP	--	239.40	--
MW-2	3/26/2020	266.69	25.44	NP	--	241.25	--
MW-2	6/3/2020	266.69	25.60	NP	--	241.09	--
MW-2	8/7/2020	266.69	26.22	NP	--	240.47	--
MW-2	12/10/2020	266.69	24.06	NP	--	242.63	--
MW-2	3/8/2021	266.69	24.32	NP	--	242.37	--
MW-2	6/9/2021	266.69	25.45	NP	--	241.24	--
MW-2	9/13/2021	266.69	27.79	NP	--	238.90	Dry
MW-2	12/7/2021	266.69	25.12	NP	--	241.57	--
MW-2	3/8/2022	266.69	24.48	NP	--	242.21	--
MW-2	6/22/2022	266.69	25.03	NP	--	241.66	--
MW-2	9/22/2022	266.69	26.51	NP	--	240.18	--
MW-2	11/29/2022	266.69	25.93	NP	--	240.76	--
MW-2	2/27/2023	266.69	25.08	NP	--	241.61	--
MW-2	5/25/2023	266.69	25.52	NP	--	241.17	--
MW-2	8/9/2023	266.69	26.04	NP	--	240.65	--
MW-2	12/11/2023	266.69	24.29	NP	--	242.40	--
MW-3	6/7/1993	98.53	22.28	NP	--	76.25	--
MW-3	3/4/1994	98.53	23.62	NP	--	74.91	--
MW-3	7/6/1994	98.53	23.84	NP	--	74.69	--
MW-3	10/7/1994	98.53	24.21	NP	--	74.32	--
MW-3	12/28/1994	98.53	23.91	NP	--	74.62	--
MW-3	3/13/1995	98.53	23.12	NP	--	75.41	--
MW-3	6/30/1995	98.53	23.87	NP	--	74.66	--
MW-3	9/6/1995	98.53	23.14	NP	--	75.39	--
MW-3	12/8/1995	98.53	23.20	NP	--	75.33	--
MW-3	3/11/1996	98.53	21.63	NP	--	76.90	--
MW-3	6/18/1996	98.53	21.20	NP	--	77.33	--
MW-3	9/9/1996	98.53	21.67	NP	--	76.86	--
MW-3	12/11/1996	98.53	21.87	NP	--	76.66	--
MW-3	3/13/1997	98.53	20.67	NP	--	77.86	--
MW-3	6/5/1997	98.53	19.83	NP	--	78.70	--
MW-3	9/5/1997	98.53	20.72	NP	--	77.81	--
MW-3	4/2/1998	98.53	19.63	NP	--	78.90	--
MW-3	6/8/1998	98.53	20.26	NP	--	78.27	--
MW-3	9/17/1998	98.53	21.21	NP	--	77.32	--
MW-3	12/9/1998	98.53	21.06	NP	--	77.47	--
MW-3	3/17/1999	98.53	18.72	NP	--	79.81	--
MW-3	6/26/1999	98.53	19.92	NP	--	78.61	--
MW-3	9/28/1999	98.53	20.79	NP	--	77.74	--
MW-3	1/19/2000	98.53	20.19	NP	--	78.34	--
MW-3	3/24/2000	98.53	19.64	NP	--	78.89	--
MW-3	7/2/2000	98.53	20.53	NP	--	78.00	--
MW-3	9/14/2000	98.53	21.34	NP	--	77.19	--
MW-3	12/14/2000	98.53	21.90	NP	--	76.63	--
MW-3	9/22/2001	98.53	22.82	NP	--	75.71	--
MW-3	12/9/2001	98.53	22.50	NP	--	76.03	--
MW-3	3/20/2002	98.53	21.55	NP	--	76.98	--
MW-3	6/11/2002	98.53	21.69	NP	--	76.84	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-3	12/21/2002	98.53	24.37	NP	--	74.16	--
MW-3	3/19/2003	98.53	23.17	NP	--	75.36	NS
MW-3	6/18/2003	98.53	22.82	NP	--	75.71	--
MW-3	9/23/2003	98.53	23.55	NP	--	74.98	NS
MW-3	10/21/2003	98.53	23.52	NP	--	75.01	--
MW-3	6/29/2004	98.53	--	--	--	--	NS
MW-3	11/15/2004	98.53	23.95	NP	--	74.58	--
MW-3	4/14/2005	98.53	23.90	NP	--	74.63	--
MW-3	12/18/2005	98.53	24.42	NP	--	74.11	--
MW-3	6/11/2006	98.53	23.48	NP	--	75.05	--
MW-3	11/5/2006	98.53	24.59	NP	--	73.94	--
MW-3	9/25/2007	98.53	23.84	NP	--	74.69	--
MW-3	12/31/2007	98.53	23.83	NP	--	74.70	--
MW-3	5/29/2008	98.53	23.90	NP	--	74.63	--
MW-3	10/28/2008	98.53	24.97	NP	--	73.56	--
MW-3	6/22/2009	98.53	25.29	NP	--	73.24	--
MW-3	12/15/2009	98.53	25.14	NP	--	73.39	--
MW-3	5/24/2010	266.00	24.10	NP	--	241.90	--
MW-3	10/12/2010	266.00	24.40	NP	--	241.60	--
MW-3	5/10/2011	266.00	22.55	NP	--	243.45	--
MW-3	11/29/2011	266.00	24.19	NP	--	241.81	--
MW-3	6/1/2012	266.00	22.94	NP	--	243.06	--
MW-3	11/29/2012	266.00	22.90	NP	--	243.10	--
MW-3	5/9/2013	266.00	22.72	NP	--	243.28	--
MW-3	11/19/2013	266.00	24.30	NP	--	241.70	--
MW-3	5/13/2014	266.00	22.95	NP	--	243.05	--
MW-3	5/7/2015	266.00	23.52	NP	--	242.48	--
MW-3	3/2/2016	266.00	22.12	NP	--	243.88	--
MW-3	6/6/2016	266.00	23.76	NP	--	242.24	--
MW-3	9/12/2016	266.00	25.08	NP	--	240.92	--
MW-3	12/12/2016	266.00	22.42	NP	--	243.58	--
MW-3	2/22/2017	266.00	20.02	NP	--	245.98	--
MW-3	8/29/2017	266.00	24.09	NP	--	241.91	--
MW-3	3/13/2018	266.00	23.22	NP	--	242.78	--
MW-3	10/25/2018	266.00	26.11	NP	--	239.89	--
MW-3	2/20/2019	266.00	23.86	NP	--	242.14	NS
MW-3	5/14/2019	266.00	25.42	NP	--	240.58	--
MW-3	8/27/2019	266.00	26.38	NP	--	239.62	NS
MW-3	11/25/2019	266.00	24.70	NP	--	241.30	--
MW-3	3/26/2020	266.00	25.79	NP	--	240.21	--
MW-3	6/2/2020	266.00	24.64	NP	--	241.36	NS
MW-3	8/7/2020	266.00	25.53	NP	--	240.47	--
MW-3	12/10/2020	266.00	24.59	NP	--	241.41	--
MW-3	3/8/2021	266.00	23.11	NP	--	242.89	--
MW-3	6/9/2021	266.00	24.63	NP	--	241.37	--
MW-3	9/13/2021	266.00	26.07	NP	--	239.93	--
MW-3	12/7/2021	266.00	22.98	NP	--	243.02	--
MW-3	3/8/2022	266.00	23.19	NP	--	242.81	--
MW-3	6/22/2022	266.00	24.07	NP	--	241.93	--
MW-3	9/22/2022	266.00	25.76	NP	--	240.24	--
MW-3	11/29/2022	266.00	24.19	NP	--	241.81	--
MW-3	2/27/2023	266.00	22.40	NP	--	243.60	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-3	5/25/2023	266.00	24.78	NP	--	241.22	--
MW-3	8/9/2023	266.00	25.33	NP	--	240.67	--
MW-3	12/11/2023	266.00	20.72	NP	--	245.28	--
MW-4	5/11/1993	100.26	23.03	NP	--	77.23	--
MW-4	3/4/1994	100.26	26.83	22.83	4.00	76.63	--
MW-4	7/6/1994	100.26	25.63	24.20	1.43	75.77	--
MW-4	10/7/1994	100.26	26.07	24.44	1.63	75.49	--
MW-4	12/28/1994	100.26	25.85	24.42	1.43	75.55	--
MW-4	3/13/1995	100.26	25.59	23.71	1.88	76.17	--
MW-4	6/30/1995	100.26	24.64	23.53	1.11	76.51	--
MW-4	9/6/1995	100.26	24.78	23.73	1.05	76.32	--
MW-4	12/8/1995	100.26	24.94	23.89	1.05	76.16	--
MW-4	3/11/1996	100.26	24.68	22.30	2.38	77.48	--
MW-4	6/18/1996	100.26	24.04	21.93	2.11	77.91	--
MW-4	9/9/1996	100.26	24.08	22.23	1.85	77.66	--
MW-4	12/11/1996	100.26	23.07	22.69	0.38	77.49	--
MW-4	3/17/1999	100.26	--	--	--	--	--
MW-4	9/28/1999	100.26	--	--	--	--	--
MW-4	1/19/2000	100.26	--	--	--	--	--
MW-4	3/24/2000	100.26	--	--	--	--	--
MW-4	7/2/2000	100.26	--	--	--	--	--
MW-4	9/14/2000	100.26	--	--	--	--	--
MW-4	9/22/2001	100.26	26.60	23.33	3.27	76.28	--
MW-4	12/9/2001	100.26	25.50	23.13	2.37	76.66	--
MW-4	3/20/2002	100.26	26.50	22.77	3.73	76.74	--
MW-4	6/11/2002	100.26	24.25	23.15	1.10	76.89	--
MW-4	12/21/2002	100.26	--	--	--	--	NS
MW-4	3/19/2003	100.26	--	--	--	--	NS
MW-4	6/18/2003	100.26	--	--	--	--	NS
MW-4	9/23/2003	100.26	22.31	22.24	0.07	78.01	--
MW-4	10/21/2003	100.26	21.79	NP	--	78.47	--
MW-4	6/29/2004	100.26	22.88	NP	--	77.38	--
MW-4	11/15/2004	100.26	23.07	21.62	1.45	78.35	--
MW-4	4/14/2005	100.26	23.82	21.93	1.89	77.95	--
MW-4	12/18/2005	100.26	23.43	23.35	0.08	76.89	--
MW-4	6/11/2006	100.26	21.87	21.86	0.01	78.40	--
MW-4	11/5/2006	100.26	22.92	22.91	0.01	77.35	--
MW-4	9/25/2007	100.26	22.15	22.13	0.02	78.13	--
MW-4	12/31/2007	100.26	--	--	--	--	NS
MW-4	5/29/2008	100.26	--	--	--	--	NM
MW-4	10/28/2008	100.26	--	--	--	--	Dry
MW-4	6/22/2009	100.26	24.21	24.17	0.04	76.08	--
MW-4	12/15/2009	100.26	24.04	23.76	0.28	76.44	--
MW-4	5/24/2010	267.78	--	--	--	--	NM
MW-4	5/10/2011	267.78	--	--	--	--	NM
MW-4	11/29/2011	267.78	--	--	--	--	NM
MW-4	6/1/2012	267.78	--	--	--	--	NM
MW-4	11/29/2012	267.78	24.00	23.90	0.10	243.86	--
MW-4	5/9/2013	267.78	26.48	22.65	3.83	244.36	--
MW-4	11/19/2013	267.78	26.61	24.80	1.81	242.62	--
MW-4	5/13/2014	267.78	25.80	23.30	2.50	243.98	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-4	5/7/2015	267.78	26.50	23.55	2.95	243.64	--
MW-4	3/2/2016	267.78	24.67	23.27	1.40	244.23	--
MW-4	6/6/2016	267.78	25.86	24.33	1.53	243.14	--
MW-4	9/12/2016	267.78	26.51	25.40	1.11	242.16	--
MW-4	12/12/2016	267.78	23.27	NP	--	244.51	--
MW-4	2/22/2017	267.78	22.63	22.56	0.07	245.21	--
MW-4	8/29/2017	267.78	26.50	24.82	1.68	242.62	NS
MW-4	3/13/2018	267.78	24.74	24.26	0.48	243.42	NS
MW-4	10/25/2018	267.78	26.76	26.48	0.28	241.24	NS
MW-4	2/20/2019	267.78	24.80	NP	--	242.98	NS
MW-4	5/14/2019	267.78	26.33	NP	--	241.45	NS
MW-4	8/27/2019	267.78	26.51	NP	--	241.27	NS
MW-4	11/25/2019	267.78	26.51	NP	--	241.27	NS
MW-4	3/26/2020	267.78	24.62	NP	--	243.16	--
MW-4	6/2/2020	267.78	24.65	NP	--	243.13	NS
MW-4	8/6/2020	267.78	26.29	26.15	0.14	241.60	NS
MW-4	12/10/2020	267.78	25.81	25.76	0.05	242.01	--
MW-4	3/8/2021	267.78	24.01	NP	--	243.77	--
MW-4	6/9/2021	267.78	25.28	NP	--	242.50	--
MW-4	9/13/2021	267.78	26.82	NP	--	240.96	Dry
MW-4	12/7/2021	267.78	24.36	NP	--	243.42	--
MW-4	3/8/2022	267.78	23.40	NP	--	244.38	--
MW-4	6/22/2022	267.78	25.41	NP	--	242.37	--
MW-4	9/22/2022	267.78	26.70	NP	--	241.08	IW
MW-4	11/29/2022	267.78	26.76	26.75	0.01	241.03	IW
MW-4	12/12/2022	267.78	23.49	NP	--	244.29	--
MW-4	2/27/2023	267.78	22.01	NP	--	245.77	--
MW-4	5/25/2023	267.78	--	--	--	--	--
MW-4	8/9/2023	267.78	--	--	--	--	Dry
MW-4	12/11/2023	267.78	18.73	NP	--	249.05	--
MW-5	5/11/1993	100.88	22.97	NP	--	77.91	--
MW-5	3/4/1994	100.88	24.35	NP	--	76.53	--
MW-5	7/6/1994	100.88	24.72	NP	--	76.16	--
MW-5	10/7/1994	100.88	25.02	NP	--	75.86	--
MW-5	12/28/1994	100.88	24.98	NP	--	75.90	--
MW-5	3/13/1995	100.88	24.41	NP	--	76.47	--
MW-5	6/30/1995	100.88	24.06	NP	--	76.82	--
MW-5	9/6/1995	100.88	24.27	NP	--	76.61	--
MW-5	12/8/1995	100.88	24.49	NP	--	76.39	--
MW-5	3/11/1996	100.88	23.33	NP	--	77.55	--
MW-5	6/18/1996	100.88	22.91	NP	--	77.97	--
MW-5	9/9/1996	100.88	23.07	NP	--	77.81	--
MW-5	12/11/1996	100.88	23.13	NP	--	77.75	--
MW-5	3/13/1997	100.88	22.28	NP	--	78.60	--
MW-5	6/5/1997	100.88	21.78	NP	--	79.10	--
MW-5	9/5/1997	100.88	21.92	NP	--	78.96	--
MW-5	4/2/1998	100.88	21.35	NP	--	79.53	--
MW-5	6/8/1998	100.88	21.48	NP	--	79.40	--
MW-5	9/17/1998	100.88	22.12	NP	--	78.76	--
MW-5	12/9/1998	100.88	22.33	NP	--	78.55	--
MW-5	3/17/1999	100.88	20.93	NP	--	79.95	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-5	6/26/1999	100.88	21.02	NP	--	79.86	--
MW-5	9/28/1999	100.88	21.76	NP	--	79.12	--
MW-5	1/19/2000	100.88	21.65	NP	--	79.23	--
MW-5	3/24/2000	100.88	21.48	NP	--	79.40	--
MW-5	7/2/2000	100.88	22.01	NP	--	78.87	--
MW-5	9/14/2000	100.88	22.59	NP	--	78.29	--
MW-5	12/14/2000	100.88	22.95	NP	--	77.93	--
MW-5	9/22/2001	100.88	23.86	NP	--	77.02	--
MW-5	12/9/2001	100.88	23.90	NP	--	76.98	--
MW-5	3/20/2002	100.88	23.13	NP	--	77.75	--
MW-5	6/11/2002	100.88	23.09	NP	--	77.79	--
MW-5	12/21/2002	100.88	24.65	NP	--	76.23	--
MW-5	3/19/2003	100.88	24.68	NP	--	76.20	--
MW-5	6/18/2003	100.88	24.37	NP	--	76.51	--
MW-5	9/23/2003	100.88	24.88	NP	--	76.00	--
MW-5	10/21/2003	100.88	24.99	NP	--	75.89	--
MW-5	6/29/2004	100.88	24.22	NP	--	76.66	--
MW-5	11/15/2004	100.88	24.97	NP	--	75.91	--
MW-5	4/14/2005	100.88	25.08	NP	--	75.80	--
MW-5	12/18/2005	100.88	25.47	NP	--	75.41	--
MW-5	6/11/2006	100.88	24.43	NP	--	76.45	--
MW-5	11/5/2006	100.88	25.55	NP	--	75.33	--
MW-5	9/25/2007	100.88	24.95	NP	--	75.93	--
MW-5	12/31/2007	100.88	25.16	NP	--	75.72	--
MW-5	5/29/2008	100.88	25.01	NP	--	75.87	--
MW-5	10/28/2008	100.88	25.89	NP	--	74.99	--
MW-5	6/22/2009	100.88	26.95	NP	--	73.93	--
MW-5	12/15/2009	100.88	26.57	NP	--	74.31	--
MW-5	5/24/2010	100.88	25.55	NP	--	75.33	--
MW-5	10/12/2010	268.46	25.74	NP	--	242.72	--
MW-5	5/10/2011	268.46	24.61	NP	--	243.85	--
MW-5	11/29/2011	268.46	25.55	NP	--	242.91	--
MW-5	6/1/2012	268.46	24.60	NP	--	243.86	--
MW-5	11/29/2012	268.46	25.31	NP	--	243.15	--
MW-5	5/9/2013	268.46	24.52	NP	--	243.94	--
MW-5	11/19/2013	268.46	26.35	NP	--	242.11	--
MW-5	5/13/2014	268.46	25.18	NP	--	243.28	--
MW-5	5/7/2015	268.46	25.22	NP	--	243.24	--
MW-5	3/2/2016	268.46	25.55	NP	--	242.91	--
MW-5	6/6/2016	268.46	25.74	NP	--	242.72	--
MW-5	9/12/2016	268.46	27.43	NP	--	241.03	IW
MW-5	12/12/2016	268.46	25.36	NP	--	243.10	--
MW-5	2/22/2017	268.46	25.00	NP	--	243.46	--
MW-5	8/29/2017	268.46	26.20	NP	--	242.26	--
MW-5	3/13/2018	268.46	26.39	NP	--	242.07	--
MW-5	10/25/2018	268.46	27.13	NP	--	241.33	NS
MW-5	2/20/2019	268.46	27.33	NP	--	241.13	NS
MW-5	5/14/2019	268.46	27.24	NP	--	241.22	--
MW-5	8/27/2019	268.46	27.40	NP	--	241.06	NS
MW-5	11/25/2019	268.46	27.55	NP	--	240.91	NS
MW-5	3/25/2020	268.46	26.84	NP	--	241.62	--
MW-5	6/2/2020	268.46	26.80	NP	--	241.66	NS

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-5	8/6/2020	268.46	27.03	NP	--	241.43	NS
MW-5	12/10/2020	268.46	--	--	--	--	Dry
MW-5	3/8/2021	268.46	26.06	NP	--	242.40	--
MW-5	6/9/2021	268.46	26.70	NP	--	241.76	--
MW-5	9/13/2021	268.46	--	--	--	--	Dry
MW-5	12/7/2021	268.46	--	--	--	--	Dry
MW-5	3/8/2022	268.46	26.61	NP	--	241.85	IW
MW-5	6/22/2022	268.46	26.90	NP	--	241.56	--
MW-5	9/22/2022	268.46	27.15	NP	--	241.31	IW
MW-5	11/29/2022	268.46	27.19	NP	--	241.27	IW
MW-5	12/12/2022	268.46	27.19	NP	--	241.27	--
MW-5	2/27/2023	268.46	--	--	--	--	Dry
MW-5	5/25/2023	268.46	27.62	NP	--	240.84	--
MW-5	8/9/2023	268.46	--	--	--	--	Dry
MW-5	12/11/2023	268.46	--	--	--	--	Dry
MW-6	9/5/1997	98.62	21.20	NP	--	77.42	--
MW-6	4/2/1998	98.62	19.70	NP	--	78.92	--
MW-6	6/8/1998	98.62	20.58	NP	--	78.04	--
MW-6	9/17/1998	98.62	21.87	NP	--	76.75	--
MW-6	12/9/1998	98.62	21.20	NP	--	77.42	--
MW-6	3/17/1999	98.62	18.49	NP	--	80.13	--
MW-6	6/26/1999	98.62	18.49	NP	--	80.13	--
MW-6	9/28/1999	98.62	21.40	NP	--	77.22	--
MW-6	1/19/2000	98.62	20.39	NP	--	78.23	--
MW-6	3/24/2000	98.62	19.63	NP	--	78.99	--
MW-6	9/14/2000	98.62	21.92	NP	--	76.70	--
MW-6	12/14/2000	98.62	22.51	NP	--	76.11	--
MW-6	9/22/2001	98.62	23.31	NP	--	75.31	--
MW-6	12/9/2001	98.62	22.24	NP	--	76.38	--
MW-6	3/20/2002	98.62	21.44	NP	--	77.18	--
MW-6	6/11/2002	98.62	21.90	NP	--	76.72	--
MW-6	12/21/2002	98.62	--	--	--	--	NS
MW-6	3/19/2003	98.62	--	--	--	--	NS
MW-6	6/18/2003	98.62	--	--	--	--	NS
MW-6	9/23/2003	98.62	--	--	--	--	NS
MW-6	10/21/2003	98.62	22.69	NP	--	75.93	--
MW-6	6/29/2004	98.62	22.88	NP	--	75.74	--
MW-6	11/15/2004	98.62	24.12	NP	--	74.50	--
MW-6	4/14/2005	98.62	23.75	NP	--	74.87	--
MW-6	12/18/2005	98.62	24.79	NP	--	73.83	--
MW-6	6/11/2006	98.62	23.09	NP	--	75.53	--
MW-6	11/5/2006	98.62	25.80	NP	--	72.82	--
MW-6	9/25/2007	98.62	24.13	NP	--	74.49	--
MW-6	12/31/2007	98.62	23.59	NP	--	75.03	--
MW-6	5/29/2008	98.62	24.21	NP	--	74.41	--
MW-6	10/28/2008	98.62	25.47	NP	--	73.15	--
MW-6	6/22/2009	98.62	25.32	NP	--	73.30	--
MW-6	12/15/2009	98.62	23.33	NP	--	75.29	--
MW-6	5/24/2010	266.06	22.90	NP	--	243.16	--
MW-6	10/12/2010	266.06	23.06	NP	--	243.00	--
MW-6	5/10/2011	266.06	22.01	NP	--	244.05	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-6	11/29/2011	266.06	23.42	NP	--	242.64	--
MW-6	6/1/2012	266.06	22.75	NP	--	243.31	--
MW-6	11/29/2012	266.06	--	--	--	--	NM
MW-6	5/9/2013	266.06	22.82	NP	--	243.24	--
MW-6	11/19/2013	266.06	24.00	NP	--	242.06	--
MW-6	5/13/2014	266.06	22.76	NP	--	243.30	--
MW-6	5/7/2015	266.06	23.71	NP	--	242.35	--
MW-6	6/6/2016	266.06	23.82	NP	--	242.24	--
MW-6	9/12/2016	266.06	25.22	NP	--	240.84	--
MW-6	12/12/2016	266.06	22.66	NP	--	243.40	--
MW-6	2/22/2017	266.06	21.24	NP	--	244.82	--
MW-6	8/29/2017	266.06	24.16	NP	--	241.90	--
MW-6	3/13/2018	265.97	23.04	NP	--	242.93	--
MW-6	10/25/2018	265.97	26.28	NP	--	239.69	--
MW-6	2/20/2019	265.97	13.90	NP	--	252.07	NS
MW-6	2/22/2019	265.97	14.14	NP	--	251.83	--
MW-6	5/14/2019	265.97	25.51	NP	--	240.46	NS
MW-6	8/27/2019	265.97	26.73	NP	--	239.24	--
MW-6	11/26/2019	265.97	26.86	NP	--	239.11	NS
MW-6	3/26/2020	265.97	15.40	NP	--	250.57	--
MW-6	6/2/2020	265.97	15.09	NP	--	250.88	--
MW-6	8/7/2020	265.97	26.00	NP	--	239.97	NS
MW-6	12/10/2020	265.97	14.24	NP	--	251.73	--
MW-6	3/8/2021	265.97	13.52	NP	--	252.45	--
MW-6	6/9/2021	265.97	24.83	NP	--	241.14	--
MW-6	9/13/2021	265.97	26.14	NP	--	239.83	--
MW-6	12/7/2021	265.97	14.09	NP	--	251.88	--
MW-6	3/8/2022	265.97	15.19	NP	--	250.78	--
MW-6	6/22/2022	265.97	15.03	NP	--	250.94	--
MW-6	9/22/2022	265.97	25.64	NP	--	240.33	--
MW-6	11/29/2022	265.97	24.75	NP	--	241.22	--
MW-6	2/27/2023	265.97	18.10	NP	--	247.87	--
MW-6	5/25/2023	265.97	24.19	NP	--	241.78	--
MW-6	8/9/2023	265.97	25.14	NP	--	240.83	--
MW-6	12/11/2023	265.97	11.78	NP	--	254.19	--
MW-7	4/2/1998	97.32	18.79	NP	--	78.53	--
MW-7	6/8/1998	97.32	19.60	NP	--	77.72	--
MW-7	9/17/1998	97.32	20.82	NP	--	76.50	--
MW-7	12/9/1998	97.32	20.21	NP	--	77.11	--
MW-7	3/17/1999	97.32	17.61	NP	--	79.71	--
MW-7	6/26/1999	97.32	19.29	NP	--	78.03	--
MW-7	12/14/2000	97.32	--	--	--	--	--
MW-7	12/9/2001	97.32	--	--	--	--	--
MW-7	3/20/2002	97.32	--	--	--	--	--
MW-7	6/11/2002	97.32	--	--	--	--	--
MW-7	6/18/2003	97.32	--	--	--	--	AB
MW-8	4/2/1998	98.49	19.99	NP	--	78.50	--
MW-8	6/8/1998	98.49	20.39	NP	--	78.10	--
MW-8	9/17/1998	98.49	21.21	NP	--	77.28	--
MW-8	12/9/1998	98.49	21.03	NP	--	77.46	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-8	3/17/1999	98.49	19.03	NP	--	79.46	--
MW-8	6/26/1999	98.49	20.02	NP	--	78.47	--
MW-8	12/14/2000	98.49	--	--	--	--	--
MW-8	12/9/2001	98.49	--	--	--	--	--
MW-8	3/20/2002	98.49	--	--	--	--	--
MW-8	6/11/2002	98.49	--	--	--	--	--
MW-8	6/18/2003	98.49	--	--	--	--	AB
MW-9	10/12/2010	263.35	23.89	NP	--	239.46	--
MW-9	5/10/2011	263.35	20.70	NP	--	242.65	--
MW-9	11/29/2011	263.35	22.64	NP	--	240.71	--
MW-9	6/1/2012	263.35	--	--	--	--	NM
MW-9	11/29/2012	263.35	--	--	--	--	NM
MW-9	5/9/2013	263.35	21.09	NP	--	242.26	--
MW-9	11/19/2013	263.35	22.80	NP	--	240.55	--
MW-9	5/13/2014	263.35	21.39	NP	--	241.96	--
MW-9	5/7/2015	263.35	22.04	NP	--	241.31	--
MW-9	3/2/2016	263.35	22.29	NP	--	241.06	NS
MW-9	6/6/2016	263.35	22.01	NP	--	241.34	NS
MW-9	9/12/2016	263.35	23.43	NP	--	239.92	--
MW-9	2/22/2017	263.35	21.71	NP	--	241.64	NS
MW-9	8/29/2017	263.35	22.47	NP	--	240.88	--
MW-9	3/13/2018	263.35	21.78	NP	--	241.57	NS
MW-9	10/25/2018	263.35	24.61	NP	--	238.74	--
MW-9	2/20/2019	263.35	23.27	NP	--	240.08	--
MW-9	5/13/2019	263.35	23.78	NP	--	239.57	--
MW-9	8/27/2019	263.35	25.09	NP	--	238.26	--
MW-9	11/26/2019	263.35	25.60	NP	--	237.75	--
MW-9	3/26/2020	263.35	23.72	NP	--	239.63	--
MW-9	6/2/2020	263.35	23.76	NP	--	239.59	--
MW-9	8/7/2020	263.35	24.48	NP	--	238.87	--
MW-9	12/10/2020	263.35	24.33	NP	--	239.02	--
MW-9	3/8/2021	263.35	23.00	NP	--	240.35	--
MW-9	6/9/2021	263.35	23.02	NP	--	240.33	--
MW-9	9/13/2021	263.35	24.60	NP	--	238.75	--
MW-9	12/7/2021	263.35	23.47	NP	--	239.88	--
MW-9	9/22/2022	263.35	23.66	NP	--	239.69	--
MW-9	11/29/2022	263.35	23.65	NP	--	239.70	--
MW-9	5/25/2023	263.35	22.40	NP	--	240.95	--
MW-9	8/9/2023	263.35	22.85	NP	--	240.50	--
MW-9	12/11/2023	263.35	20.29	NP	--	243.06	--
MW-10	6/1/2012	268.30	24.20	NP	--	244.10	--
MW-10	11/29/2012	268.30	25.00	NP	--	243.30	--
MW-10	5/9/2013	268.30	24.25	NP	--	244.05	--
MW-10	11/19/2013	268.30	25.80	NP	--	242.50	--
MW-10	5/13/2014	268.30	24.78	NP	--	243.52	--
MW-10	5/7/2015	268.30	24.84	NP	--	243.46	--
MW-10	9/12/2016	268.30	26.52	NP	--	241.78	--
MW-10	8/29/2017	268.30	25.93	NP	--	242.37	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-11	10/25/2018	266.38	26.40	NP	--	239.98	--
MW-11	2/20/2019	266.38	25.49	NP	--	240.89	--
MW-11	5/13/2019	266.38	25.99	NP	--	240.39	--
MW-11	8/27/2019	266.38	26.83	NP	--	239.55	--
MW-11	11/25/2019	266.38	27.13	NP	--	239.25	--
MW-11	3/25/2020	266.38	25.39	NP	--	240.99	--
MW-11	6/2/2020	266.38	25.34	NP	--	241.04	--
MW-11	8/6/2020	266.38	25.79	NP	--	240.59	--
MW-11	12/10/2020	266.38	26.25	NP	--	240.13	--
MW-11	3/8/2021	266.38	24.40	NP	--	241.98	--
MW-11	6/9/2021	266.38	25.12	NP	--	241.26	--
MW-11	9/13/2021	266.38	26.32	NP	--	240.06	--
MW-11	12/7/2021	266.38	25.70	NP	--	240.68	--
MW-11	9/22/2022	266.38	26.16	NP	--	240.22	--
MW-11	11/29/2022	266.38	26.41	NP	--	239.97	--
MW-11	2/27/2023	266.38	25.41	NP	--	240.97	--
MW-11	5/25/2023	266.38	25.45	NP	--	240.93	--
MW-11	8/9/2023	266.38	25.83	NP	--	240.55	--
MW-11	12/11/2023	266.38	25.11	NP	--	241.27	--
MW-12	10/25/2018	266.51	27.39	NP	--	239.12	--
MW-12	2/20/2019	266.51	26.21	NP	--	240.30	--
MW-12	5/13/2019	266.51	26.78	NP	--	239.73	--
MW-12	8/27/2019	266.51	27.82	NP	--	238.69	--
MW-12	11/25/2019	266.51	28.19	NP	--	238.32	--
MW-12	3/26/2020	266.51	26.50	NP	--	240.01	--
MW-12	6/2/2020	266.51	26.53	NP	--	239.98	--
MW-12	8/6/2020	266.51	27.05	NP	--	239.46	--
MW-12	12/10/2020	266.51	27.31	NP	--	239.20	--
MW-12	3/8/2021	266.51	25.32	NP	--	241.19	--
MW-12	6/9/2021	266.51	26.11	NP	--	240.40	--
MW-12	9/13/2021	266.51	27.40	NP	--	239.11	--
MW-12	12/7/2021	266.51	26.55	NP	--	239.96	--
MW-12	9/22/2022	266.51	26.87	NP	--	239.64	--
MW-12	11/29/2022	266.51	27.05	NP	--	239.46	--
MW-12	2/27/2023	266.51	25.85	NP	--	240.66	--
MW-12	5/25/2023	266.51	25.71	NP	--	240.80	--
MW-12	8/9/2023	266.51	26.00	NP	--	240.51	--
MW-12	12/11/2023	266.51	24.82	NP	--	241.69	--
VE-1	4/2/1998	--	--	--	--	--	--
VE-1	9/17/1998	--	--	--	--	--	--
VE-1	12/9/1998	--	--	--	--	--	--
VE-1	3/17/1999	--	--	--	--	--	--
VE-1	6/26/1999	--	--	--	--	--	--
VE-1	9/28/1999	--	--	--	--	--	--
VE-1	3/24/2000	--	--	--	--	--	--
VE-1	7/2/2000	--	--	--	--	--	--
VE-1	9/14/2000	--	--	--	--	--	--
VE-1	12/14/2000	--	23.02	NP	--	--	--
VE-1	9/22/2001	--	24.22	NP	--	--	--
VE-1	12/9/2001	--	23.90	23.83	0.07	--	--

Table 1
Groundwater Gauging Data
Former ARCO Facility No. 11060
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Well I.D.	Date	GROUNDWATER ELEVATION DATA					
		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
VE-1	3/20/2002	--	23.30	23.25	0.05	--	--
VE-1	6/11/2002	--	23.25	23.14	0.11	--	--
VE-1	12/21/2002	--	24.89	NP	--	--	--
VE-1	3/19/2003	--	24.71	NP	--	--	--
VE-1	6/18/2003	--	24.50	24.45	0.05	--	--
VE-1	9/23/2003	--	25.01	24.98	0.03	--	--
VE-1	10/22/2003	--	24.98	24.81	0.17	--	--
VE-1	6/29/2004	--	25.12	NP	--	--	--
VE-1	11/15/2004	--	25.40	24.79	0.61	--	--
VE-1	4/14/2005	--	26.15	24.84	1.31	--	--
VE-1	12/18/2005	--	26.00	25.65	0.35	--	--
VE-1	6/11/2006	--	26.53	NP	--	--	--
VE-1	11/5/2006	--	26.33	25.88	0.45	--	--
VE-1	9/25/2007	--	25.02	24.88	0.14	--	--
VE-1	12/31/2007	--	--	--	--	--	NS
VE-1	5/29/2008	--	25.63	24.79	0.84	--	--
VE-1	10/28/2008	--	26.07	25.80	0.27	--	--
VE-1	6/22/2009	--	--	--	--	--	Dry
VE-1	12/15/2009	--	26.56	26.50	0.06	--	--
VE-1	5/24/2010	268.17	26.70	NP	--	241.47	NS
VE-1	5/10/2011	268.17	--	--	--	--	NM
VE-1	11/29/2012	268.17	24.05	23.95	0.10	244.20	--
VE-1	5/9/2013	268.17	24.23	NP	--	243.94	NS
VE-1	11/19/2013	268.17	26.35	25.80	0.55	242.26	--
VE-1	5/13/2014	268.17	25.20	24.80	0.40	243.29	--
VE-1	5/7/2015	268.17	25.40	24.79	0.61	243.26	--
VE-1	3/2/2016	268.17	24.99	NP	--	243.18	NS
VE-2	5/7/2015	--	--	--	--	--	Dry
VE-2	3/2/2016	--	13.84	NP	--	--	NS
VE-3	3/2/2016	--	12.99	NP	--	--	NS
VE-4	3/2/2016	--	14.45	NP	--	--	NS
VE-5	3/2/2016	--	14.15	NP	--	--	NS

Notes:

TOC - Top of Casing

ft - feet (in NAVD 88)

LNAPL - Light Non-Aqueous Phase Liquid

* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.80)

Wells were resurveyed in 2010 and are referenced to vertical datum NAVD 88 and horizontal datum NAD 83/98

-- - No Information Available

NP - No Product

Dry - Well Dry

AB - Well Abandoned

IW - Insufficient volume of water in the well to collect representative sample

NM - Not Measured

NS - Not Sampled

12/12/2022 - Data collected at MW-1, MW-4, and MW-5 prior to PetroFix injection for baseline readings

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT UNIT		B ug/L	T ug/L	E ug/L	X ug/L	MTBE ug/L	EDB ug/L	EDC ug/L	TPH-G ug/L	TPH-D ug/L	TPH-O ug/L	Dissolved Lead ug/L	Total Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
Well ID	Date												
GMW-1	5/10/2011	2.4	< 1.0	69.7	94.8	< 1.0	--	--	5,930	1,900	< 420	--	28.4
GMW-1	11/29/2011	< 1.0	< 1.0	86.9	113	--	--	--	6,080	610	< 380	--	< 10.0
GMW-1	5/9/2013	< 1.0	< 1.0	4.4	4.6	< 1.0	--	--	1,010	< 420	< 420	< 10.0	< 10.0
GMW-1	11/19/2013	< 0.50	< 0.70	6.6	6.8	< 0.50	--	--	1,400	2,500	< 73	1.2	16.7
GMW-1	5/14/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	590	560	< 66	< 4.7	< 4.7
GMW-1	5/7/2015	< 0.50	< 0.50	10	10	< 0.50	--	--	1,600	480	< 66	< 4.7	< 4.7
GMW-1	3/2/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	1,400	< 46	< 100	--	--
GMW-1	6/6/2016	< 0.50	< 0.50	5.3	4.0	< 0.50	--	--	3,300	130	< 100	--	--
GMW-1	9/12/2016	< 0.50	< 0.50	32	34	< 0.50	--	--	4,600	210	< 67	--	--
GMW-1	12/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	350	< 50	400	--	--
GMW-1	2/22/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	82.2 J	< 82.5	< 165	--	--
GMW-1	8/29/2017	< 0.331	0.480 J	2.45	2.66 J	< 0.367	--	--	2,070	216	104 J	--	--
GMW-1	3/13/2018	< 1.00	< 1.00	0.394 J	< 3.00	< 1.00	--	--	2,500	99.7 J	< 250	--	--
GMW-1	10/25/2018	< 1.00	< 1.00	9.58	12.8	< 1.00	< 0.0100	< 1.00	4,200	9,050	346 J	14.5	16.2
GMW-1	2/20/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	773 B	143 J	< 83.3	< 1.90	< 1.90
GMW-1	5/13/2019	< 0.331	< 0.412	2.36	4.18	< 0.367	< 0.00240	< 0.361	985	771	< 83.3	--	< 1.90
GMW-1	8/27/2019	< 0.0896	< 0.412	12	13.9	< 0.102	< 0.00240	< 0.108	2,750	777	< 167	--	8.01
GMW-1	3/25/2020	0.171 J	< 0.412	1.1	1.06 J	< 0.102	< 0.00240	< 0.108	594	409	< 83.3	--	< 1.90
GMW-1	6/2/2020	< 0.0941	< 0.278	0.216 J	0.210 J	< 0.101	< 0.00536	< 0.0819	1,840	--	--	--	< 2.95
GMW-1	8/6/2020	0.242 J	1.98	4.55	4.15	< 0.101	< 0.00536	< 0.0819	1,400	751	< 83.3	--	3.04 J
GMW-1	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	< 120	< 370	< 10	< 10
GMW-1	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	2,200	420	< 370	< 2.0	< 2.0
GMW-1	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	700	2,600	< 350	< 2.0	3.2
GMW-1	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	590	360	< 360	< 2.0	< 2.0
GMW-1	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	260	< 270	< 0.50	1.9
GMW-1	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	150	< 360	< 2.0	2.3
GMW-1	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	180	< 370	< 2.0	< 2.0
GMW-1	5/25/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	200	< 370	< 2.0	74
MW-1	5/11/1993	82	11	8	14	--	--	--	3,300	--	--	--	--
MW-1	3/4/1994	6	3	3	11	--	--	--	830	580	--	< 3	38
MW-1	7/6/1994	5	< 0.5	2	10	--	--	--	900	< 250	--	--	--
MW-1	10/7/1994	6	< 0.5	3	11	--	--	--	1,500	--	--	--	--
MW-1	12/28/1994	5	< 0.5	2	7	--	--	--	1,400	--	--	--	--
MW-1	3/13/1995	16	< 0.5	3	9	--	--	--	1,400	--	--	--	--
MW-1	6/30/1995	4	< 0.5	3	7	--	--	--	1,400	--	--	--	--
MW-1	9/6/1995	5	< 0.5	3	6	--	--	--	1,300	--	--	--	--
MW-1	12/8/1995	7	2	2	7	--	--	--	1,300	--	--	--	--
MW-1	3/11/1996	3	< 0.5	< 0.5	1	--	--	--	900	--	--	--	--
MW-1	6/18/1996	1	1	< 0.5	2	--	--	--	400	--	--	--	--
MW-1	9/9/1996	2	< 0.5	1	1	13	--	--	600	--	--	--	--
MW-1	12/11/1996	4	2	2	4	< 10	--	--	710	--	--	--	--
MW-1	3/13/1997	< 0.5	< 0.5	< 0.5	< 1.0	< 5	--	--	100	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fautleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-1	6/5/1997	2	2	< 0.5	< 1.5	5	--	--	250	--	--	--	--
MW-1	9/5/1997	8	4	2	6	8	--	--	300	--	--	--	--
MW-1	4/2/1998	1	3	< 0.5	< 1.5	< 5	--	--	210	--	--	--	--
MW-1	6/8/1998	< 0.5	3	1	4	6	--	--	300	--	--	--	--
MW-1	12/9/1998	< 0.5	< 5.0	< 5.0	< 5.0	< 5.0	--	--	< 500	--	--	--	--
MW-1	6/26/1999	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 100	--	--	--	--
MW-1	1/19/2000	< 0.5	4	1	3	< 0.5	--	--	< 50	--	--	--	--
MW-1	7/2/2000	1	< 0.5	1	2	2	--	--	120	--	--	--	--
MW-1	12/14/2000	< 10	19	< 10	< 30	< 40	--	--	1,700	--	--	--	--
MW-1	10/21/2003	32.5	4.61	17.3	19.2	< 1.00	--	--	3,270	--	--	--	--
MW-1	12/18/2005	10.8	2.04	1.23	2.76	< 1.00	--	--	2,960	--	--	--	--
MW-1	6/11/2006	11.4	1.12	1.6	2.34	19.8	--	--	1,840	--	--	--	--
MW-1	11/5/2006	73.2	6.12	2.04	< 6.00	--	--	--	3,880	--	--	--	--
MW-1	9/25/2007	27.8	1.67	0.86	< 3.00	--	--	--	1,640	--	--	--	--
MW-1	12/31/2007	22.7	1.34	1.03	< 3.00	--	--	--	1,970	--	--	--	--
MW-1	5/29/2008	3.58	0.58	< 0.500	< 3.00	--	--	--	2,370	--	--	--	--
MW-1	10/28/2008	2.8	1.07	< 0.500	< 3.00	--	--	--	1,450	--	--	--	--
MW-1	6/22/2009	30	5.7	24	30.5	--	--	--	2,200	--	--	< 2.00	4.9
MW-1	12/15/2009	11	2	4.8	3.6	--	--	--	1,500	--	--	< 2.00	3.8
MW-1	5/24/2010	18	< 2.5	< 2.5	6.4	--	--	--	940	--	--	--	--
MW-1	10/12/2010	2.8	< 1.0	1.2	< 3.0	5.2	--	--	849	--	--	--	< 10.0
MW-1	5/10/2011	17.8	6.6	1.8	10.9	2.5	--	--	642	840	< 420	--	< 10.0
MW-1	11/29/2011	5.5	< 1.0	< 1.0	< 3.0	--	--	--	815	< 75	< 380	--	10.3
MW-1	6/1/2012	3.6	< 1.0	< 1.0	3.0	7.4	--	--	544	362	< 396	< 10.0	< 10.0
MW-1	11/29/2012	1.2	< 1.0	< 1.0	< 3.0	< 1.0	--	--	1,320	< 430	< 430	< 3.0	11.3
MW-1	5/9/2013	6.3	< 1.0	< 1.0	4.1	1.6	--	--	557	620	< 430	< 10.0	< 10.0
MW-1	11/19/2013	1.9 J	< 0.70	< 0.80	1.7 J	1.5 J	--	--	470	400	320	0.15 J	4.8
MW-1	5/13/2014	1.4	< 0.50	< 0.50	0.57 J	0.67 J	--	--	490	250	110 J	< 4.7	6.9 J
MW-1	5/7/2015	1.2	< 0.50	< 0.50	< 0.50	< 0.50	--	--	610	270	190 J	7.1 J	18.7
MW-1	3/2/2016	1.2	< 0.50	0.77 J	3.0	< 0.50	--	--	460	140	< 110	--	--
MW-1	2/22/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	212	447	222 J	--	--
MW-1	8/29/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	526	611	450	--	--
MW-1	3/13/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	--	--	298 B	369	352	--	--
MW-1	2/22/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	< 31.6	369	322	< 1.90	< 1.90
MW-1	5/14/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	40.0 J	271	220 J	< 1.90	< 1.90
MW-1	3/26/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	104 B	339	131 J	--	< 1.90
MW-1	6/3/2020	< 0.0941	< 0.278	< 0.137	< 0.174	< 0.101	< 0.00536	< 0.0819	160	--	--	--	< 2.95
MW-1	8/6/2020	0.133 J	< 0.278	< 0.137	< 0.174	< 0.101	< 0.00536	< 0.0819	186 B	261	101 J	--	< 2.95
MW-1	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	410	360	< 10	< 10
MW-1	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	510	< 350	< 2.0	< 2.0
MW-1	3/8/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	100	1,700	930	< 2.0	< 2.0
MW-1	6/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	630	< 250	< 0.50	< 0.50

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-2	5/11/1993	2,500	48	100	240	--	--	--	17,000	--	--	--	--
MW-2	3/4/1994	1,500	20	130	180	--	--	--	4,300	1,300	--	< 3	5
MW-2	7/6/1994	1,100	16	53	97	--	--	--	4,400	390	--	--	--
MW-2	10/7/1994	1,100	18	57	82	--	--	--	4,400	--	--	--	--
MW-2	12/28/1994	250	5	13	14	--	--	--	2,100	--	--	--	--
MW-2	3/13/1995	200	12	29	50	--	--	--	2,700	--	--	--	--
MW-2	6/30/1995	400	8	50	39	--	--	--	3,400	--	--	--	--
MW-2	9/6/1995	350	8	50	35	--	--	--	3,400	--	--	--	--
MW-2	12/8/1995	610	5	29	36	--	--	--	3,100	--	--	--	--
MW-2	3/11/1996	280	12	100	120	--	--	--	5,400	--	--	--	--
MW-2	6/18/1996	280	12	130	56	--	--	--	4,500	--	--	--	--
MW-2	9/9/1996	790	5	78	35	< 1.0	--	--	4,100	--	--	--	--
MW-2	12/11/1996	460	13	65	41	43	--	--	3,700	--	--	--	--
MW-2	3/13/1997	140	12	130	48	< 50	--	--	3,200	--	--	--	--
MW-2	6/5/1997	160	22	180	79	< 100	--	--	3,400	--	--	--	--
MW-2	4/2/1998	170	51	35	210	< 50	--	--	4,700	--	--	--	--
MW-2	6/8/1998	420	26	150	75	140	--	--	3,800	--	--	--	--
MW-2	9/17/1998	720	15	79	44	< 5.0	--	--	2,900	--	--	--	--
MW-2	12/9/1998	520	8	100	62	< 5.0	--	--	4,500	--	--	--	--
MW-2	3/17/1999	19	27	300	230	< 5.0	--	--	5,000	--	--	--	--
MW-2	6/26/1999	400	29	160	130	13	--	--	3,400	--	--	--	--
MW-2	9/28/1999	690	20	23	110	87	--	--	7,300	--	--	--	--
MW-2	1/19/2000	920	20	260	74	< 0.5	--	--	8,700	--	--	--	--
MW-2	3/24/2000	310	79	240	97	< 5	--	--	10,000	--	--	--	--
MW-2	7/2/2000	520	35	190	85	49	--	--	8,200	--	--	--	--
MW-2	9/14/2000	1,100	100	110	100	< 5	--	--	14,000	--	--	--	--
MW-2	12/14/2000	740	< 10	68	< 30	< 40	--	--	15,000	--	--	--	--
MW-2	9/22/2001	180	9	240	110	20	--	--	12,000	--	--	--	--
MW-2	12/9/2001	310	9.5	100	96	< 4.0	--	--	14,000	--	--	--	--
MW-2	3/20/2002	250	< 5.0	220	98	280	--	--	15,000	--	--	--	--
MW-2	6/11/2002	290	< 10	160	57	< 40	--	--	13,000	--	--	--	--
MW-2	12/21/2002	111	13.4	211	70.3	148	--	--	5,970	--	--	--	--
MW-2	3/19/2003	79.9	8.71	156	55	< 25.0	--	--	5,270	--	--	--	--
MW-2	6/18/2003	36.7	14.7	245	119	143	--	--	6,770	--	--	--	--
MW-2	9/23/2003	40.5	15.8	179	103	< 20.0	--	--	6,490	--	--	--	--
MW-2	10/21/2003	31.1	9.38	86	61	< 1.00	--	--	4,600	--	--	--	--
MW-2	6/29/2004	17.8	11.2	228	76.5	95.2	--	--	5,550	--	--	--	--
MW-2	11/15/2004	12.3	6.11	135	63.3	< 2.00	--	--	5,670	--	--	--	--
MW-2	4/14/2005	130	2.8	41.8	26.6	< 2.00	--	--	4,680	--	--	--	--
MW-2	12/18/2005	122	3.5	43.9	27.8	< 5.00	--	--	5,700	--	--	--	--
MW-2	6/11/2006	4.48	5.8	118	56.7	< 2.00	--	--	5,450	--	--	--	--
MW-2	11/5/2006	263	< 5.00	46.2	< 30.0	--	--	--	7,490	--	--	--	--
MW-2	9/25/2007	715	9.74	50.8	64	--	--	--	7,530	--	--	--	--
MW-2	12/31/2007	477	10.6	69.3	76.3	--	--	--	6,000	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fautleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-2	5/29/2008	648	11.1	55.9	48.4	--	--	--	9,600	--	--	--	--
MW-2	10/28/2008	1,430	16	194	145	--	--	--	10,300	--	--	--	--
MW-2	6/22/2009	1,200	40	100	130	--	--	--	4,800	--	--	< 2.00	< 2.00
MW-2	12/15/2009	1,600	8.2	66	82	--	--	--	4,300	--	--	< 2.00	< 2.00
MW-2	5/24/2010	320	7.7	69	84	--	--	--	4,200	--	--	--	--
MW-2	10/12/2010	1,890	14.8	54.8	39.7	15.5	--	--	3,590	--	--	--	< 10.0
MW-2	5/10/2011	281	4.2	69.9	49.9	7.3	--	--	5,520	1,000	2,000	--	< 10.0
MW-2	11/29/2011	549	7.0	82.6	61.6	--	--	--	5,640	98	< 380	--	< 10.0
MW-2	6/1/2012	107	12.7	64.2	46.1	5.0	--	--	2,940	2,240	3,080	< 10.0	10.0
MW-2	11/29/2012	399	10.2	187	154	14.7	--	--	10,400	2,100	760	3.2	7.7
MW-2	5/9/2013	42.9	6.2	115	35.4	< 5.0	--	--	3,660	1,700	< 400	< 10.0	12.3
MW-2	11/19/2013	7.3	4.4 J	17	40	6.3	--	--	1,400	280	100 J	3.2	9.8
MW-2	5/13/2014	79	3.3 J	58	20	6.0	--	--	3,100	1,800	880	< 4.7	6.6 J
MW-2	5/7/2015	33	6.1	91	32	2.4	--	--	2,700	1,900	690	< 4.7	34.1
MW-2	3/2/2016	54	5.3 J	94	26	< 5.0	--	--	5,100	1,600	< 100	--	--
MW-2	6/6/2016	43	4.9	92	21	1.1 J	--	--	5,000	880	790	--	--
MW-2	9/12/2016	130	6.5	83	20	2.2	--	--	5,000	710	660	--	--
MW-2	12/12/2016	4.1	0.74 J	12	10	< 0.50	--	--	1,000	590	< 110	--	--
MW-2	2/22/2017	< 0.331	< 0.412	2.06	2.08 J	< 0.367	--	--	1,310	1,370	321 J	--	--
MW-2	8/29/2017	27.4	10.7	90.9	29.4	< 0.367	--	--	10,000	1,070	242 J	--	--
MW-2	3/13/2018	7.65	11.5	90.0	14.6	< 1.00	--	--	3,110	2,360	742	--	--
MW-2	10/25/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	171 B	788	444	0.623 J	25.5
MW-2	2/20/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	85.8 BJ	199 J	175 J	< 1.90	< 1.90
MW-2	5/14/2019	1.45	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	40.0 J	250	197 J	--	< 1.90
MW-2	11/26/2019	0.883 J	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	256 B	414	706	< 1.90	79.2
MW-2	3/26/2020	1.39	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	134 B	2,400	456	--	8.84
MW-2	6/3/2020	0.307 J	< 0.278	0.337 J	1.52 J	< 0.101	< 0.00536	< 0.0819	3,320	--	--	--	8.7
MW-2	8/7/2020	0.910 J	349 J	0.452 J	1.36 J	< 0.101	< 0.00536	< 0.0819	377 B	4,300	431	--	< 2.95
MW-2	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	590	190	< 350	< 4.0	< 4.0
MW-2	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	590	190	< 350	< 4.0	< 4.0
MW-2	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	300	< 370	< 10	< 10
MW-2	6/9/2021	1.3	< 1.0	< 1.0	< 2.0	< 1.0	--	--	410	1,200	< 350	< 2.0	< 2.0
MW-2	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	220	420	< 2.0	< 2.0
MW-2	3/8/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	140	< 380	< 2.0	< 2.0
MW-2	6/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 0.50	< 0.50
MW-2	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	230	< 260	< 0.50	1.4
MW-2	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0 F1	< 1.0	--	--	< 250	120	< 360	< 2.0	< 2.0
MW-2	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 120	< 370	< 2.0	< 2.0
MW-3	6/7/1993	140	7	13	14	--	--	--	2,200	--	--	--	--
MW-3	3/4/1994	99	2	11	10	--	--	--	1,200	590	--	< 3	4
MW-3	7/6/1994	44	6	26	27	--	--	--	1,500	270	--	--	--
MW-3	10/7/1994	63	4	16	13	--	--	--	1,500	--	--	--	--
MW-3	12/28/1994	77	3	13	9	--	--	--	1,800	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-3	3/13/1995	87	4	18	10	--	--	--	1,700	--	--	--	--
MW-3	6/30/1995	90	3	52	13	--	--	--	1,800	--	--	--	--
MW-3	9/6/1995	96	3	41	14	--	--	--	1,700	--	--	--	--
MW-3	12/8/1995	73	4	23	15	--	--	--	1,800	--	--	--	--
MW-3	3/11/1996	120	11	170	36	--	--	--	2,800	--	--	--	--
MW-3	6/18/1996	150	18	320	59	--	--	--	3,500	--	--	--	--
MW-3	9/9/1996	62	16	220	96	15	--	--	3,500	--	--	--	--
MW-3	12/11/1996	96	9	< 0.5	34	< 10	--	--	2,100	--	--	--	--
MW-3	3/13/1997	97	13	250	65	< 50	--	--	3,100	--	--	--	--
MW-3	6/5/1997	46	19	250	130	< 100	--	--	3,900	--	--	--	--
MW-3	9/5/1997	98	29	270	140	< 5	--	--	4,400	--	--	--	--
MW-3	4/2/1998	80	25	320	150	< 50	--	--	3,700	--	--	--	--
MW-3	6/8/1998	60	22	240	96	< 50	--	--	3,500	--	--	--	--
MW-3	12/9/1998	63	9	170	59	< 5.0	--	--	3,200	--	--	--	--
MW-3	6/26/1999	72	16	270	52	56	--	--	3,100	--	--	--	--
MW-3	1/19/2000	72	29	430	110	< 0.5	--	--	5,700	--	--	--	--
MW-3	7/2/2000	35	18	230	64	7	--	--	3,300	--	--	--	--
MW-3	12/14/2000	40	< 10	210	< 30	< 40	--	--	5,500	--	--	--	--
MW-3	12/9/2001	42	4.1	77	22	< 4.0	--	--	4,200	--	--	--	--
MW-3	6/11/2002	77	< 5.0	320	54	< 20	--	--	8,400	--	--	--	--
MW-3	12/21/2002	37.7	3.31	68.6	18.3	39.3	--	--	3,440	--	--	--	--
MW-3	6/18/2003	39.1	4.22	113	30.3	62.6	--	--	4,020	--	--	--	--
MW-3	10/21/2003	19.8	2.92	31.2	16.3	< 1.00	--	--	3,190	--	--	--	--
MW-3	11/15/2004	15.8	2.36	20.9	11.1	2.36	--	--	3,170	--	--	--	--
MW-3	4/14/2005	17.1	5.21	14.3	11.2	< 2.00	--	--	3,340	--	--	--	--
MW-3	12/18/2005	15.1	2.92	20.7	15.1	< 1.00	--	--	4,150	--	--	--	--
MW-3	6/11/2006	20.9	3.6	30	21.3	1.11	--	--	4,000	--	--	--	--
MW-3	11/5/2006	16.8	2.85	19	16.6	--	--	--	4,970	--	--	--	--
MW-3	9/25/2007	18.2	2.34	17.1	13.8	--	--	--	4,530	--	--	--	--
MW-3	12/31/2007	16.5	2.38	32.7	16.1	--	--	--	4,490	--	--	--	--
MW-3	5/29/2008	16.5	1.83	14.4	15	--	--	--	5,350	--	--	--	--
MW-3	10/28/2008	14.4	1.86	13.8	10.3	--	--	--	3,250	--	--	--	--
MW-3	6/22/2009	15	1.7	35	7.3	--	--	--	2,000	--	--	< 2.00	< 2.00
MW-3	12/15/2009	13	1.5	28	7.3	--	--	--	2,100	--	--	< 2.00	7.7
MW-3	5/24/2010	29	6.2	28	19	--	--	--	2,300	--	--	--	--
MW-3	10/12/2010	31.1	< 1.0	16.6	4.7	< 1.0	--	--	2,380	--	--	--	< 10.0
MW-3	5/10/2011	33.6	1.2	57.5	7.9	2.4	--	--	3,280	820	840	--	< 10.0
MW-3	11/29/2011	30.4	< 1.0	21.0	6.9	--	--	--	3,130	< 76	< 380	--	< 10.0
MW-3	6/1/2012	29.0	< 1.0	35.9	7.6	2.6	--	--	2,360	512	446	< 10.0	< 10.0
MW-3	11/29/2012	3.2	1.9	40.7	10.6	1.8	--	--	2,320	670	500	< 3.0	4.1
MW-3	5/9/2013	32.8	4.2	98.3	13.9	2.7	--	--	2,850	610	< 420	< 10.0	< 10.0
MW-3	11/19/2013	3.5 J	< 0.70	3.4 J	1.3 J	0.68 J	--	--	380	620	340	0.47 J	3.2
MW-3	5/13/2014	8.4	0.94 J	17	3.7	1.1	--	--	1,100	710	700	< 4.7	< 4.7
MW-3	5/7/2015	9.9	< 0.50	10	2.1	1.2	--	--	1,800	430	440	< 4.7	< 4.7

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-3	3/2/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 48	150 J	--	--
MW-3	6/6/2016	1.4	< 0.50	0.78 J	< 0.50	< 0.50	--	--	500	110	180 J	--	--
MW-3	9/12/2016	4.3	< 0.50	2.1	< 0.50	< 0.50	--	--	1,200	100	< 67	--	--
MW-3	12/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	53 J	210	140 J	--	--
MW-3	2/22/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	245	254	< 165	--	--
MW-3	8/29/2017	3.87	0.434 J	3.82	1.78 J	< 0.367	--	--	1,310	383	238 J	--	--
MW-3	3/13/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	--	--	52.8 B J	79.1 J	115 J	--	--
MW-3	10/25/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	35.6 B J	69.3 J	< 250	0.602 J	0.868 B J
MW-3	5/14/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	< 31.6	71.9 J	101 J	--	< 1.90
MW-3	11/25/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00245	< 0.361	63.6 BJ	< 66.7	276	--	2.06 J
MW-3	3/26/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	< 31.6	101 J	94.3 J	--	< 1.90
MW-3	8/7/2020	< 0.0941	< 0.278	< 0.137	1.44 J	< 0.101	< 0.00536	< 0.0819	66.5 BJ	109 J	101 J	--	< 2.95
MW-3	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-3	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-3	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	120	< 360	< 10	< 10
MW-3	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	120	< 350	< 2.0	< 2.0
MW-3	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	140	< 350	< 2.0	< 2.0
MW-3	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	110	< 360	< 2.0	< 2.0
MW-3	3/8/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 110	< 360	< 2.0	< 2.0
MW-3	6/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 250	< 0.50	< 0.50
MW-3	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 0.50	0.55
MW-3	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0
MW-3	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	130	< 370	< 2.0	< 2.0
MW-4	5/11/1993	8,700	4,000	57	3,200	--	--	--	31,000	--	--	--	--
MW-4	3/17/1999	12,000	17,000	1,800	10,000	< 50	--	--	100,000	--	--	--	--
MW-4	9/28/1999	27,000	65,000	18,000	100,000	< 1000	--	--	97,000	--	--	--	--
MW-4	1/19/2000	22,000	18,000	2,400	15,000	< 5	--	--	100,000	--	--	--	--
MW-4	3/24/2000	13,000	18,000	2,200	13,000	< 5	--	--	100,000	--	--	--	--
MW-4	7/2/2000	13,000	17,000	1,800	10,000	220	--	--	92,000	--	--	--	--
MW-4	9/14/2000	22,000	27,000	6,900	23,000	< 5	--	--	160,000	--	--	--	--
MW-4	12/9/2001	12,000	10,000	1,900	8,800	< 40	--	--	110,000	--	--	--	--
MW-4	3/20/2002	13,000	19,000	2,500	13,000	360	--	--	100,000	--	--	--	--
MW-4	6/11/2002	13,000	17,000	2,300	12,000	< 400	--	--	95,000	--	--	--	--
MW-4	9/23/2003	7,140	8,980	1,270	8,820	< 50.0	--	--	75,900	--	--	--	--
MW-4	10/21/2003	3,190	6,370	779	6,160	< 500	--	--	44,700	--	--	--	--
MW-4	6/29/2004	11,200	16,300	3,550	22,600	2,500	--	--	378,000	--	--	--	--
MW-4	12/18/2005	9,430	12,800	2,000	13,500	< 100	--	--	214,000	--	--	--	--
MW-4	6/11/2006	13,000	18,200	2,300	14,000	< 1000	--	--	117,000	--	--	--	--
MW-4	11/5/2006	6,950	10,500	2,070	13,500	--	--	--	120,000	--	--	--	--
MW-4	12/12/2016	120	37	57	1,000	< 2.5	--	--	25,000	2,100	380	--	--
MW-4	3/26/2020	162	209	130	1,670	< 5.10	< 0.00240	< 5.40	17,400	11,200	439	53.5	204
MW-4	3/8/2021	80	530	330	3,300	< 1.0	--	< 1.0	23,000	7,700	1,600	24	74
MW-4	6/9/2021	85	120	130	1,800	< 1.0	--	--	15,000	13,000	2,000	29	82

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-4	12/7/2021	61	73	130	2,300 H	< 1.0	--	--	19,000	11,000	1,900	110	220
MW-4	3/8/2022	1.6	< 1.0	6.3	61	< 1.0	--	--	1,000	760	630	46	74
MW-4	6/22/2022	15	10	45	340	< 1.0	--	--	6,800	7,000	< 260	48	110
MW-4	12/12/2022	< 10	11	66	830	< 10	--	--	5,800	2,500/2300 H*1	750/780 H*1	41	67
MW-4	2/27/2023	< 10	< 10	< 10	< 20	< 10	--	--	< 500	--	--	< 2.0	1,200
MW-4_PDB	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	240	< 380	--	--
MW-4_PDB	5/25/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	--	--	--	--
MW-4	12/11/2023	< 1.0	< 1.0	< 1.0	< 2.0	--	--	--	< 100	110	< 350	< 2.0	< 2.0
MW-4_PDB	12/11/2023	< 1.0	< 1.0	< 1.0	< 2.0	--	--	--	< 100	< 180	< 580	--	--
MW-5	5/11/1993	130	25	23	22	--	--	--	1,800	--	--	--	--
MW-5	3/4/1994	26	6	11	8	--	--	--	710	420	--	< 3	27
MW-5	7/6/1994	11	3	1	4	--	--	--	400	< 250	--	--	--
MW-5	10/7/1994	13	4	2	4	--	--	--	510	--	--	--	--
MW-5	12/28/1994	46	13	20	22	--	--	--	1,300	--	--	--	--
MW-5	3/13/1995	34	8	40	28	--	--	--	2,800	--	--	--	--
MW-5	6/30/1995	50	11	12	15	--	--	--	1,100	--	--	--	--
MW-5	9/6/1995	42	14	30	18	--	--	--	1,100	--	--	--	--
MW-5	12/8/1995	32	7	42	62	--	--	--	1,700	--	--	--	--
MW-5	3/11/1996	85	9	210	140	--	--	--	8,100	--	--	--	--
MW-5	6/18/1996	100	17	88	25	--	--	--	2,700	--	--	--	--
MW-5	9/9/1996	180	29	100	27	< 1.0	--	--	2,200	--	--	--	--
MW-5	12/11/1996	110	18	96	250	12	--	--	4,900	--	--	--	--
MW-5	3/13/1997	190	35	190	73	< 50	--	--	5,500	--	--	--	--
MW-5	6/5/1997	290	42	200	37	< 100	--	--	4,100	--	--	--	--
MW-5	9/5/1997	420	83	190	730	< 50	--	--	3,100	--	--	--	--
MW-5	4/2/1998	470	89	340	83	< 50	--	--	5,400	--	--	--	--
MW-5	6/8/1998	360	110	220	66	71	--	--	4,200	--	--	--	--
MW-5	12/9/1998	170	41	120	120	< 1.0	--	--	4,900	--	--	--	--
MW-5	6/26/1999	180	82	210	24	8	--	--	3,300	--	--	--	--
MW-5	1/19/2000	480	350	370	87	< 0.5	--	--	6,500	--	--	--	--
MW-5	7/2/2000	390	110	290	54	20	--	--	6,100	--	--	--	--
MW-5	12/14/2000	26	< 10	< 10	< 30	< 40	--	--	4,000	--	--	--	--
MW-5	12/9/2001	51	< 10	120	140	< 10	--	--	12,000	--	--	--	--
MW-5	6/11/2002	94	21	110	24	< 20	--	--	5,700	--	--	--	--
MW-5	12/21/2002	6.32	2.95	6.59	11.1	5.88	--	--	1,300	--	--	--	--
MW-5	6/18/2003	7.18	1.95	12	24.7	6	--	--	1,950	--	--	--	--
MW-5	10/21/2003	1.18	2.19	0.732	3.38	< 1.00	--	--	322	--	--	--	--
MW-5	6/29/2004	5.4	3.24	4.79	14.1	6.95	--	--	1,180	--	--	--	--
MW-5	11/15/2004	0.74	< 0.500	< 0.500	< 1.00	< 2.00	--	--	399	--	--	--	--
MW-5	4/14/2005	14.3	13.4	33.9	40	< 2.00	--	--	2,900	--	--	--	--
MW-5	12/18/2005	2.49	2.43	3.58	5.11	< 1.00	--	--	661	--	--	--	--
MW-5	6/11/2006	6.08	1.05	2.78	3.1	< 1.00	--	--	2,830	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-5	11/5/2006	1.41	0.78	1.29	< 3.00	--	--	--	723	--	--	--	--
MW-5	9/25/2007	1.86	0.53	0.77	< 3.00	--	--	--	712	--	--	--	--
MW-5	12/31/2007	9.4	11.3	38.1	75.7	--	--	--	7,190	--	--	--	--
MW-5	5/29/2008	7.47	9.12	15.7	23.7	--	--	--	2,740	--	--	--	--
MW-5	10/28/2008	2.01	1.46	< 0.500	3.48	--	--	--	516	--	--	--	--
MW-5	6/22/2009	36	24	87	49.9	--	--	--	4,800	--	--	--	23
MW-5	12/15/2009	24	19	29	23	--	--	--	2,300	--	--	11	12
MW-5	5/24/2010	59	8.4	96	41	--	--	--	4,200	--	--	--	--
MW-5	10/12/2010	31.4	2.6	12.7	4.8	< 1.0	--	--	2,320	--	--	--	< 10.0
MW-5	5/10/2011	12.4	4.1	39.3	25.5	< 1.0	--	--	4,710	470	< 400	--	< 10.0
MW-5	11/29/2011	12.3	2.2	6.4	3.1	--	--	--	2,210	95	< 380	--	10.5
MW-5	6/1/2012	13.3	3.0	9.6	10.7	< 1.0	--	--	1,620	1,040	< 392	< 10.0	< 10.0
MW-5	11/29/2012	18.0	8.0	61.7	28.2	< 1.0	--	--	4,160	1,100	< 440	< 3.0	42.5
MW-5	5/9/2013	19.0	6.7	48.3	18.5	< 1.0	--	--	3,470	< 400	< 400	< 10.0	< 10.0
MW-5	11/19/2013	24	5.7	17	6.3	< 0.50	--	--	1,800	240	660	1.3	6.7
MW-5	5/13/2014	17	7.5	69	23	< 0.50	--	--	4,400	440	370	9.2 J	16.2
MW-5	5/7/2015	11	4.8	32	12	< 0.50	--	--	2,800	240	260	5.2 J	18.4
MW-5	3/2/2016	4.5	2.8	24	13	< 0.50	--	--	4,100	320	530	--	--
MW-5	6/6/2016	6.9	4.4	23	15	< 0.50	--	--	5,300	310	620	--	--
MW-5	12/12/2016	1.7	1.8	9.0	4.5	< 0.50	--	--	4,300	17,000	< 540	--	--
MW-5	2/22/2017	0.572 J	< 0.412	1.39	1.10 J	< 0.367	--	--	3,440	9,890	204 J	--	--
MW-5	8/29/2017	7.48	1.60	6.01	11.1	< 0.367	--	--	1,810	7,040	432	--	--
MW-5	3/13/2018	< 1.00	< 1.00	0.544 J	< 3.00	< 1.00	--	--	356 B	1,440	216 J	--	--
MW-5	5/14/2019	0.403 J	< 0.412	< 0.384	5.45	< 0.367	< 0.00240	< 0.361	54.5 J	1,120	122 J	--	--
MW-5	3/25/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	< 31.6	300	108 J	3.84 J	21.2
MW-5	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	170	< 360	< 10	< 10
MW-5	3/8/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	270	< 360	< 2.0	6.8
MW-5	12/12/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	--	--	--	--
MW-6	9/5/1997	< 0.5	19	6	15	32	--	--	930	--	--	--	--
MW-6	4/2/1998	< 0.5	10	3	11	6	--	--	600	--	--	--	--
MW-6	6/8/1998	< 0.5	6	2	5	10	--	--	430	--	--	--	--
MW-6	12/9/1998	< 1.0	< 1.0	1	3	2	--	--	260	--	--	--	--
MW-6	1/19/2000	< 0.5	< 0.5	6	10	7	--	--	330	--	--	--	--
MW-6	12/14/2000	< 10	< 10	< 10	< 30	< 40	--	--	1,000	--	--	--	--
MW-6	10/21/2003	10	3.66	0.898	5.03	< 1.00	--	--	254	--	--	--	--
MW-6	6/29/2004	6.8	1.73	< 0.500	5.65	6.35	--	--	540	--	--	--	--
MW-6	11/15/2004	43.5	14.5	0.58	10.4	< 2.00	--	--	370	--	--	--	--
MW-6	4/14/2005	6.39	0.95	< 0.500	3.75	< 2.00	--	--	443	--	--	--	--
MW-6	12/18/2005	< 0.500	< 0.500	< 0.500	3.01	< 1.00	--	--	694	--	--	--	--
MW-6	6/11/2006	< 0.500	< 0.500	< 0.500	< 3.00	< 1.00	--	--	601	--	--	--	--
MW-6	11/5/2006	< 0.500	< 0.500	< 0.500	< 3.00	--	--	--	444	--	--	--	--
MW-6	9/25/2007	< 0.500	< 0.500	< 0.500	< 3.00	--	--	--	321	--	--	--	--
MW-6	12/31/2007	< 0.500	< 0.500	< 0.500	< 3.00	--	--	--	168	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT UNIT		B ug/L	T ug/L	E ug/L	X ug/L	MTBE ug/L	EDB ug/L	EDC ug/L	TPH-G ug/L	TPH-D ug/L	TPH-O ug/L	Dissolved Lead ug/L	Total Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-6	5/29/2008	< 0.500	< 0.500	< 0.500	< 3.00	--	--	--	1,620	--	--	--	--
MW-6	10/28/2008	< 0.500	< 0.500	< 0.500	< 3.00	--	--	--	481	--	--	--	--
MW-6	6/22/2009	< 1.00	< 1.00	< 1.00	< 3.00	--	--	--	< 50.0	--	--	< 2.00	< 2.00
MW-6	12/15/2009	< 1.00	< 1.00	< 1.00	< 2.00	--	--	--	190	--	--	< 2.00	< 2.00
MW-6	5/24/2010	8.1	< 2.5	< 2.5	< 5.0	--	--	--	280	--	--	--	--
MW-6	10/12/2010	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50.0	--	--	--	< 10.0
MW-6	5/10/2011	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	96.0	180	< 390	--	< 10.0
MW-6	11/29/2011	< 1.0	< 1.0	< 1.0	< 3.0	--	--	--	< 50.0	< 78	< 390	--	< 10.0
MW-6	6/1/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	124	< 76.9	< 385	< 10.0	< 10.0
MW-6	5/9/2013	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	216	< 400	< 400	< 10.0	< 10.0
MW-6	11/19/2013	< 0.50	< 0.70	< 0.80	< 0.80	< 0.50	--	--	130 J	31 J	< 71	0.12 J	0.97 J
MW-6	5/13/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	120 J	80 J	180 J	< 4.7	< 4.7
MW-6	5/7/2015	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 28	< 65	< 4.7	< 4.7
MW-6	6/6/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 46	< 100	--	--
MW-6	9/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	140	280	--	--
MW-6	12/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 47	< 100	--	--
MW-6	2/22/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	33.5 J	< 82.5	< 165	--	--
MW-6	8/29/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	160	< 139	183 J	--	--
MW-6	3/13/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	--	--	40.0 B J	< 200	< 250	--	--
MW-6	10/25/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	< 100	73.4 J	< 250	< 2.00	< 2.00
MW-6	2/22/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	< 31.6	76.5 J	214 J	< 1.90	< 1.90
MW-6	8/27/2019	< 0.0896	< 0.412	< 0.158	< 1.06	< 0.367	< 0.00245	< 1.00	< 31.6	79.6 J	85.9 J	--	3.18 J
MW-6	3/26/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	< 31.6	73.9 J	152 J	--	< 1.90
MW-6	6/2/2020	< 0.0941	< 0.278	< 0.137	< 0.174	< 0.101	< 0.00536	< 0.0819	< 31.6	--	--	--	< 2.95
MW-6	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-6	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-6	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	< 110	< 360	< 10	< 10
MW-6	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	--	--	--	--
MW-6	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0
MW-6	12/7/2021	< 1.0	< 1.0	< 1.0	3.5	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0
MW-6	3/8/2022	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	250	400	< 2.0	< 2.0
MW-6	6/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 260	< 0.50	< 0.50
MW-6	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 270	< 0.50	< 5.0
MW-6	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 350	< 2.0	< 2.0
MW-6	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	< 120	< 370	< 2.0	< 2.0
MW-7	4/2/1998	< 5	35	480	1,100	< 50	--	--	13,100	--	--	--	--
MW-7	6/8/1998	< 5.0	40	420	810	63	--	--	12,000	--	--	--	--
MW-7	12/9/1998	< 5.0	26	360	610	11	--	--	9,600	--	--	--	--
MW-7	6/26/1999	11	24	410	600	< 5.0	--	--	8,300	--	--	--	--
MW-8	4/2/1998	< 0.5	1	< 0.5	< 1.5	< 5	--	--	< 100	--	--	--	--
MW-8	6/8/1998	< 0.5	1	2	< 1.5	< 5.0	--	--	< 100	--	--	--	--
MW-8	12/9/1998	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	--	< 500	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-8	6/26/1999	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	--	--	< 500	--	--	--	--
MW-9	10/12/2010	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50.0	--	--	--	< 10.0
MW-9	5/10/2011	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50.0	160	< 420	--	< 10.0
MW-9	11/29/2011	< 1.0	< 1.0	< 1.0	< 3.0	--	--	--	< 50.0	< 76	< 380	--	< 10.0
MW-9	5/9/2013	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 400	< 400	< 10.0	< 10.0
MW-9	11/19/2013	< 0.50	< 0.70	< 0.80	< 0.80	< 0.50	--	--	< 50	49 J	< 75	0.090 J	1.0
MW-9	5/13/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 29	< 67	< 4.7	< 4.7
MW-9	5/7/2015	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	28 J	< 65	< 4.7	< 4.7
MW-9	9/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	190	170 J	--	--
MW-9	8/29/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	52.9 J	115 J	101 J	--	--
MW-9	10/25/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0101	< 1.00	78.3 BJ	217	140 J	< 2.00	0.299 B J
MW-9	2/20/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	36.7 BJ	116 J	120 J	< 1.90	< 1.90
MW-9	5/13/2019	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	< 0.00240	< 0.361	< 31.6	220	107 J	--	< 1.90
MW-9	8/27/2019	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	< 31.6	107 J	98.9 J	--	< 1.90
MW-9	11/26/2019	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	47 BJ	108 J	227 J	--	< 1.90
MW-9	3/26/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	< 31.6	190 J	199 J	--	< 1.90
MW-9	6/2/2020	< 0.0941	< 0.278	< 0.137	< 0.174	< 0.101	< 0.00536	< 0.0819	< 31.6	--	--	--	< 2.95
MW-9	8/7/2020	< 0.0941	< 0.278	< 0.137	< 0.174	< 0.101	< 0.00536	< 0.0819	< 31.6	216	110 J	--	< 2.95
MW-9	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-9	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-9	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	< 120	< 370	< 10	< 10
MW-9	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	210	< 360	< 2.0	< 2.0
MW-9	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	170	< 360	< 2.0	< 2.0
MW-9	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	< 110	< 360	< 2.0	< 2.0
MW-9	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 100	< 250	< 0.50	< 0.50
MW-9	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 120	< 370	< 2.0	< 2.0
MW-10	6/1/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 50.0	< 76.9	< 385	< 10.0	< 10.0
MW-10	11/29/2012	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 420	< 420	< 3.0	20.4
MW-10	5/9/2013	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	--	--	< 100	< 400	< 400	< 10.0	< 10.0
MW-10	11/19/2013	< 0.50	< 0.70	< 0.80	< 0.80	< 0.50	--	--	66 J	< 34	< 78	< 0.085	12.8
MW-10	5/13/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	< 50	< 28	< 66	< 4.7	< 4.7
MW-10	5/7/2015	< 0.50	< 0.50	0.81 J	7.1	< 0.50	--	--	150 J	75 J	150 J	< 4.7	6.3 J
MW-10	9/12/2016	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	--	--	130 J	< 29	< 68	--	--
MW-10	8/29/2017	< 0.331	< 0.412	< 0.384	< 1.06	< 0.367	--	--	< 31.6	78.2 J	126 J	--	--
MW-11	10/25/2018	< 1.00	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	170 B	343	419	0.582 J	1.09 B J
MW-11	2/20/2019	< 0.331	< 0.412	< 0.384	< 1.06	1.04	< 0.00240	< 0.361	132 B	354	466	< 1.90	< 1.90
MW-11	5/13/2019	< 0.331	< 0.412	< 0.384	< 1.06	0.674 J	< 0.00240	< 0.361	40.1 J	423	308	--	< 1.90
MW-11	8/27/2019	< 0.0896	< 0.412	< 0.158	< 0.316	0.818	< 0.00240	< 0.108	< 31.6	227	295	--	2.51 J
MW-11	11/25/2019	< 0.0896	< 0.412	< 0.158	< 0.316	0.771	< 0.00240	< 0.108	137 B	220	408	--	< 1.90
MW-11	3/25/2020	< 0.0896	< 0.412	< 0.158	< 0.316	< 0.102	< 0.00240	< 0.108	75.1 BJ	747	131 J	--	< 1.90
MW-11	6/2/2020	< 0.0941	< 0.278	< 0.137	< 0.174	0.229 J	< 0.00536	< 0.0819	91.5 J	--	--	--	3.23 J

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
MW-11	8/6/2020	< 0.0941	< 0.278	< 0.137	< 0.174	0.266 J	< 0.00536	< 0.0819	85.2 BJ	289	317	--	< 2.95
MW-11	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-11	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	< 250	< 110	< 350	< 4.0	< 4.0
MW-11	3/8/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	< 1.0	< 250	840	< 370	< 10	< 10
MW-11	6/9/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	390	< 350	< 2.0	< 2.0
MW-11	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	370	390	< 2.0	< 2.0
MW-11	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 250	540	480	< 2.0	< 2.0
MW-11	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	290	< 270	< 0.50	< 0.50
MW-11	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	680	460	< 2.0	< 2.0
MW-11	2/27/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	420	< 360	< 2.0	< 2.0
MW-11	5/25/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	< 50	310	< 360	< 2.0	< 2.0
MW-11	8/9/2023	--	--	--	--	--	--	--	--	420	--	< 2.0	< 2.0
MW-11	12/11/2023	--	--	--	--	--	--	--	--	420	< 360	< 2.0	< 2.0
MW-12	10/25/2018	1.17	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	867	705	189 J	< 2.00	1.00 B J
MW-12	2/20/2019	4.91	< 0.412	2.81	2.54 J	< 0.367	< 0.00240	< 0.361	3,370	486	206 J	< 1.90	< 1.90
MW-12	5/13/2019	3.79	< 0.412	0.457 J	< 1.06	< 0.367	< 0.00240	< 0.361	1,320	394	198 J	--	< 1.90
MW-12	8/27/2019	3.11	< 0.412	0.705	0.404 J	< 0.102	< 0.00245	< 0.108	260	404	192 J	--	< 1.90
MW-12	11/25/2019	2.79	< 0.412	1.06	0.464 J	< 0.102	< 0.00240	< 0.108	855	349	183 J	< 1.90	25.8
MW-12	3/26/2020	1.18	< 0.412	0.844	0.318 J	< 0.102	< 0.00240	< 0.108	300 B	1,710	281	--	< 1.90
MW-12	6/2/2020	0.872	< 0.278	2.35	0.526 J	< 0.101	< 0.00536	< 0.0819	917	--	--	--	< 2.95
MW-12	8/6/2020	0.644 J	< 0.278	0.500 J	0.448 J	< 0.101	< 0.00536	< 0.0819	268 J	1,630	317	--	< 2.95
MW-12	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	290	400	< 350	< 4.0	< 4.0
MW-12	12/10/2020	< 3.0	< 2.0	< 3.0	< 3.0	< 2.0	--	--	290	400	< 350	< 4.0	< 4.0
MW-12	3/8/2021	< 1.0 F1F2	< 1.0 F1F2	18 F1	< 2.0 F1F2	< 1.0 F1F2	--	< 1.0 F1F2	1,600	2,500	< 360	< 10	< 10 F1
MW-12	6/9/2021	< 1.0	< 1.0	2.2	< 2.0	< 1.0	--	--	530	3,000	390	< 2.0	< 2.0
MW-12	9/13/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	430	2,700	370	< 2.0	< 2.0
MW-12	12/7/2021	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	440	2,700	420	< 2.0	< 2.0
MW-12	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	950	440	< 240	< 0.50	< 0.50
MW-12	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	510	870	< 350	< 2.0	< 2.0
MW-12	2/27/2023	< 1.0	< 1.0	1.2	< 2.0	< 1.0	--	--	1,100	900	< 370	< 2.0	< 2.0
MW-12	5/25/2023	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	--	--	820	1,300	< 360	< 2.0	< 2.0
MW-12	8/9/2023	--	--	--	--	--	--	--	1,800	1,600	< 350	< 2.0	< 2.0
MW-12	12/11/2023	--	--	--	--	--	--	--	1,800	1,600	--	< 2.0	< 2.0
VE-1	4/2/1998	3,900	2,300	820	4,500	< 2500	--	--	60,500	--	--	--	--
VE-1	9/17/1998	2,700	2,000	1,400	7,700	< 100	--	--	240,000	--	--	--	--
VE-1	12/9/1998	2,200	1,400	770	3,700	< 25	--	--	73,000	--	--	--	--
VE-1	3/17/1999	4,000	2,400	790	4,100	< 25	--	--	42,000	--	--	--	--
VE-1	6/26/1999	3,800	2,600	670	3,500	< 100	--	--	42,000	--	--	--	--
VE-1	9/28/1999	3,400	2,000	630	3,000	< 25	--	--	25,000	--	--	--	--
VE-1	3/24/2000	3,200	610	27	3,600	< 5	--	--	31,000	--	--	--	--
VE-1	7/2/2000	3,200	1,900	620	3,000	130	--	--	27,000	--	--	--	--
VE-1	9/14/2000	3,200	2,200	920	3,000	< 5	--	--	29,000	--	--	--	--

Table 2
Groundwater Analytical Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Dissolved Lead	Total Lead
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
VE-1	12/14/2000	2,400	1,300	580	2,600	< 40	--	--	28,000	--	--	--	--
VE-1	12/9/2001	1,300	880	510	2,400	< 40	--	--	24,000	--	--	--	--
VE-1	3/20/2002	1,800	1,300	560	2,400	280	--	--	52,000	--	--	--	--
VE-1	6/11/2002	2,800	1,600	650	2,900	< 80	--	--	26,000	--	--	--	--
VE-1	12/21/2002	1,630	1,150	741	3,660	< 200	--	--	25,900	--	--	--	--
VE-1	3/19/2003	1,590	1,450	743	3,640	< 250	--	--	27,100	--	--	--	--
VE-1	6/18/2003	2,190	1,710	929	5,230	79.8	--	--	37,000	--	--	--	--
VE-1	9/23/2003	1,620	1,270	704	3,500	< 20.0	--	--	28,300	--	--	--	--
VE-1	10/22/2003	3,360	1,850	847	4,130	< 50.0	--	--	36,700	--	--	--	--
VE-1	6/29/2004	8,070	7,030	2,230	10,400	820	--	--	192,000	--	--	--	--
VE-1	11/15/2004	5,680	6,280	3,430	17,600	< 100	--	--	99,900	--	--	--	--
VE-1	4/14/2005	3,120	3,300	1,210	5,560	< 40.0	--	--	39,600	--	--	--	--
VE-1	12/18/2005	6,140	5,850	1,400	6,750	< 100	--	--	142,000	--	--	--	--
VE-1	6/11/2006	7,200	8,100	3,900	25,100	< 500	--	--	68,300	--	--	--	--
VE-1	11/5/2006	3,780	4,320	1,190	6,390	--	--	--	60,500	--	--	--	--

Notes:

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes, Total

MTBE = Methyl-tertiary-butyl ether

TPH-G = Total petroleum hydrocarbons as gasoline by Northwest Method NWTPH-Gx

TPH-D = Total petroleum hydrocarbons as diesel by Northwest Method NWTPH-Dx

TPH-O = Total petroleum hydrocarbons as oil by Northwest Method NWTPH-Dx

EDB = Ethylene dibromide

EDC = 1,2-Dichloroethane

1,000/800¹ ug/L if no detectable levels of Benzene in the sample - otherwise 800 ug/L

<1.0 = Concentrations were not detected above the laboratory method reporting limit.

ug/L = Micrograms per liter (ppb)

-- = No value given/Not analyzed/Not applicable

MTCA = Model Toxics Control Act

Results in **bold** indicate concentrations in excess of MTCA Method A Cleanup Levels

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

B = The same analyte is found in the associated blank.

F1 = MS and/or MSD recovery exceeds control limits

F2 = MS/MSD RPD exceeds control limits

H = Sample was prepped or analyzed beyond the specified holding time

*1 = LCS/LCSD RPD exceeds control limits.

MW-4_PDB = Sample collected from a Passive Diffusion Bag (PDB)

Regarding MW-4_20221212: Method NWTPH-Dx: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-413921 and analytical batch 580-414023 recovered outside control limits for the following analytes: #2 Diesel (C10-C24) and Motor Oil (>C24-C36). The following sample was re-prepared outside of preparation holding time due to low surrogate in the method blank MW4 _ 20221212 (580-121302-1). Both data sets are reported.

MW-5 12/12/2022 samples were not analized for TPH-D, TPH-O, Total Lead, or Dissolved Lead due to insufficient sample volume remaining in the well during time of collection.

Table 3
SVE/AS System Operational Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Date	SVE Operation (on or off) Arrival / Departure	SVE Hour Meter (Hours)	SVE Period Operation (Hours)	SVE Percent Uptime (%)	AS Operation (on or off) Arrival / Departure	AS Hour Meter (Hours)	AS Period Operation (Hours)	AS Percent Uptime (%)	Cat Ox Inlet Temperature (°F)	Post-Dilution ¹						Effluent PID (ppmv)	Destruction Efficiency (%)	VOC Mass Removal Rate (lbs/day)	VOC Mass Removal Rate (lbs/period)	Cumulative VOC Removal (lbs)	Comments
										Pressure (in. Wc)	Influent Temperature (°F)	Influent Velocity (fpm)	Influent Flowrate (acfm)	Influent Flowrate (scfm)	Influent PID (ppmv)						
Permit Requirements		--	--	--		--	--	--	> 625	--	--		--	<120	--	<200	>98% ²				
04/20/16	off / on	6021.5	--	--	on / on	37.8	--	--	633.0	3.0	83.0	1080.0	36.8	35.5	316.0	0.9	100%	3.61	--	--	Mass removal calculated with data from 12/17/15
04/22/16	on / on	6064.0	42.5	88.5%	on / on	37.8	0.0	0.0%	649.0	2.0	89.0	1110.0	37.9	36.0	283.7	2.1	99%	3.29	5.83	5.83	
04/27/16	on / on	6189.6	125.6	100.0%	off / off	37.8	0.0	0.0%	626.0	3.0	88.0	840.0	28.6	27.4	367.5	6.0	98%	3.24	16.96	22.78	
05/04/16	on / on	6354.2	164.6	100.0%	on / on	37.8	0.0	0.0%	626.0	3.0	91.0	920.0	31.4	29.8	245.5	1.4	99%	2.36	16.17	38.95	
05/10/16	on / on	6496.4	142.2	100.0%	on / on	37.8	0.0	0.0%	647.6	3.0	99.0	760.0	25.9	24.3	211.0	1.5	99%	1.65	9.78	48.73	
06/13/16	off / on	7131.0	634.6	77.8%	off / on	37.8	0.0	0.0%	649.4	2.0	90.0	897.0	30.6	29.1	586.0	2.5	100%	5.48	177.48	226.21	
7/12/16 ³	on / on	--	--	--	off / off	--	--	--	--	--	--	--	--	--	--	0.0	--	--	--	226.21	
08/24/16	on / on	7492.0	361.0	20.9%	on / on	37.8	0.0	0.0%	644.0	5.0	86.5	1650.0	56.3	54.2	288.9	0.4	100%	5.04	75.83	302.03	
09/20/16	on / on	8141.5	649.5	100.2%	on / on	37.8	0.0	0.0%	662.0	4.0	84.0	1029.0	35.1	33.9	398.0	1.1	100%	4.34	117.46	419.50	
10/27/16	off / on	8721.0	579.5	65.3%	off / on	37.8	0.0	0.0%	662.0	1.0	75.0	120.0	4.1	4.0	135.0	0.0	100%	0.17	4.18	423.68	
11/16/16	off / on	8831.1	110.1	22.9%	off / on	37.8	0.0	0.0%	719.6	1.0	59.0	290.0	9.9	9.9	451.8	5.2	99%	1.44	6.63	430.31	
12/15/16	off / on	8989.1	158.0	22.7%	off / on	37.8	0.0	0.0%	645.8	0.5	65.0	280.0	9.5	9.5	388.0	6.4	98%	1.18	7.79	438.10	
01/31/17	on / on	10005.0	1015.9	90.1%	on / on	38.2	0.4	0.0%	662.0	1.0	62.0	480.0	16.4	16.3	159.6	2.5	98%	0.84	35.55	473.65	
02/13/17	off / on	10104.9	99.9	32.0%	off / on	38.2	0.0	0.0%	625.8	1.0	94.5	745.0	25.4	23.9	182.8	0.0	100%	1.41	5.85	479.51	
03/01/17	off / on	10112.1	7.2	1.9%	off / on	38.3	0.1	0.0%	663.8	3.0	120.0	885.0	30.2	27.3	215.0	0.5	100%	1.89	0.57	480.07	
04/26/17	on / on	11208.2	1096.1	81.6%	on / on	38.3	0.0	0.0%	645.8	5.0	78.0	1800.0	61.4	60.1	64.4	0.9	99%	1.25	56.87	536.94	
06/06/17	off / on	11250.7	42.5	4.3%	off / on	38.4	0.1	0.0%	665.6	9.0	152.7	2290.0	78.1	67.7	198.8	3.0	98%	4.34	7.68	544.62	
07/07/17	on / on	11967.3	716.6	96.3%	on / on	38.4	0.0	0.0%	663.8	9.0	122.4	1460.0	49.8	45.4	160.0	3.2	98%	2.34	69.89	614.51	
08/30/17	on / on	13184.3	1217.0	93.9%	off / on	38.4	0.0	0.0%	663.8	10.0	85.0	1900.0	64.8	63.3	395.0	4.5	99%	8.06	408.47	1022.98	
09/21/17	on / on	13708.3	524.0	99.2%	on / on	38.4	0.0	0.0%	663.8	8.0	127.5	2105.0	71.8	64.8	385.5	1.3	100%	8.04	175.56	1198.54	
10/05/17	off / on	13903.3	195.0	58.0%	off / on	38.4	0.0	0.0%	665.6	12.0	127.0	2502.0	85.3	77.8	402.0	2.4	99%	10.07	81.83	1280.37	
11/02/17	on / on	14536.5	633.2	94.2%	on / on	38.4	0.0	0.0%	676.4	8.0	84.2	1882.0	64.2	62.5	230.0	0.2	100%	4.63	122.17	1402.54	
12/27/17	on / on	15330.2	793.7	60.1%	on / on	38.5	0.0	0.0%	663.8	2.0	72.0	860.0	29.3	28.8	24.6	0.1	100%	0.23	7.55	1410.09	
01/30/18	on / on	16147.3	817.1	100.1%	off/off	38.5	0.0	0.0%	663.8	3.0	93.5	980.0	33.4	31.6	13.4	0.2	99%	0.14	4.65	1414.73	
02/21/18	on / on	16675.8	528.5	100.1%	off / off	38.5	0.0	0.0%	663.8	1.9	58.9	819.0	27.9	28.1	19.6	0.0	100%	0.18	3.91	1418.64	
03/13/18	on / on	17135.6	459.8	95.8%	on / on	39.6	1.1	0.2%	662.0	15.0	65.0	2297.0	78.3	80.4	60.9	1.3	98%	1.58	30.22	1448.86	
04/18/18	off / on	17399.9	264.3	30.6%	off / on	281.4	241.8	28.0%	667.0	20.0	68.0	2875.0	98.0	101.3	263.7	2.9	99%	8.60	94.71	1543.57	
05/21/18	on / on	18190.8	790.9	100.0%	on / on	999.2	717.8	90.6%	694.4	1.0	145.0	840.0	28.6	24.7	148.0	3.1	98%	1.18	38.76	1582.33	
06/19/18	off / on	--	--	--	off / on	--	--	--	690.0	--	--	--	--	105.0	140.0	2.0	99%	4.73	--	1582.33	
07/18/18	off / on	19156.4	965.6	69.4%	off / off	1548.9	549.7	39.5%	674.6	12.0	90.0	3105.0	105.9	103.1	49.0	1.0	98%	1.63	65.42	1647.75	
08/23/18	off / on	20019.6	863.2	99.9%	off / off	1548.9	0	0.0%	671.0	30.0	88.0	2234.0	76.2	77.6	104.0	1.0	99%	2.60	93.48	1741.22	
09/13/18	on / on	20523.2	503.6	99.9%	off / off	1548.9	0	0.0%	671.0	5.0	91.5	1730.0	59.0	56.3	102.4	2.3	98%	1.86	38.96	1780.18	
10/05/18	on / on	21048.9	525.7	99.6%	off / off	1548.9	0	0.0%	671.0	5.0	73.0	778.0	26.53	26.2	68.0	0.8	99%	0.57	12.57	1792.74	
11/06/18	off / on	21197.4	148.5	19.3%	off / off	1548.9	0	0.0%	678.2	10.0	108.0	724.0	24.69	23.2	148.0	1.9	99%	1.10	6.83	1799.57	
12/13/18	off / on	21892.5	695.1	78.3%	off / off	1548.9	0	0.0%	789.8	2.0	77.7	758.0	25.85	25.1	578.2	11.7	98%	4.68	135.45	1935.02	
01/10/19	off / on	22560.6	668.1	99.4%	off / off	1548.9	0	0.0%	788.0	4.0	85.0	1100.0	37.51	36.1							

Table 3
SVE/AS System Operational Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Date	SVE Operation (on or off) Arrival / Departure	SVE Hour Meter (Hours)	SVE Period Operation (Hours)	SVE Percent Uptime (%)	AS Operation (on or off) Arrival / Departure	AS Hour Meter (Hours)	AS Period Operation (Hours)	AS Percent Uptime (%)	Cat Ox Inlet Temperature (°F)	Post-Dilution ¹						Effluent PID (ppmv)	Destruction Efficiency (%)	VOC Mass Removal Rate (lbs/day)	VOC Mass Removal Rate (lbs/period)	Cumulative VOC Removal (lbs)	Comments
										Pressure (in. Wc)	Influent Temperature (°F)	Influent Velocity (fpm)	Influent Flowrate (acfm)	Influent Flowrate (scfm)	Influent PID (ppmv)						
Permit Requirements		--	--	--		--	--	--	> 625	--	--		--	<120	--	<200	>98% ²				
11/17/21	off / on	30928.2	433.2	82.0%	off / off	1564.1	0.0	0.0%	631.4	7.0	60.0	2479.4	84.55	86.0	1.0	0.0	100%	0.03	0.50	2375.70	Cat Ox not reaching permit temp at typical 70% VFD setting, VFD set to 50% for colder weather
12/06/21	on / on	31368.6	440.4	96.6%	off / off	1564.1	0.0	0.0%	629.6	10.0	54.0	2574.6	87.79	91.0	0.4	0.0	100%	0.01	0.22	2375.91	O&M data post self verification
01/06/22	on / on	31647.0	278.4	37.4%	off / off	1564.1	0	0.0%	626.0	10.0	10.0	1810.9	61.75	70.0	0.9	0.3	67%	0.02	0.24	2376.15	Control panel latch broke
02/02/22	on / on	32202.0	555.0	85.6%	off / off	1564.1	0	0.0%	604.4	9.0	65.0	2954.7	100.75	102.0	1.5	0.0	100%	0.05	1.14	2377.29	Fix control panel latch
03/10/22	off / on	32990.0	788.0	91.2%	off / off	1564.1	0	0.0%	617.0	23.0	50.0	2559.1	87.26	94.0	18.0	1.5	92%	0.54	17.89	2395.17	System turned on after GWM event
03/24/22	on / on	33327.0	337.0	100.0%	off / off	1564.1	0	0.0%	629.6	9.0	120.0	2528.2	86.21	79.0	18.0	0.3	98%	0.46	6.43	2401.60	
04/07/22	on / on	33659.6	332.6	99.0%	off / off	1564.1	0	0.0%	629.6	9.0	110.0	2453.1	83.65	78.0	14.7	0.5	97%	0.37	5.12	2406.72	
05/05/22	on / on	34333.4	673.8	100.0%	off / off	1564.1	0	0.0%	629.6	8.0	52.0	2237.1	76.29	79.0	3.8	0.0	100%	0.10	2.71	2409.43	Pre vac event readings
05/05/22	on / on	34333.9	0.5	100.0%	off / off	1564.1	0	0.0%	633.2	6.0	78.0	2481.7	84.63	83.0	25.5	0.0	100%	0.68	0.01	2409.45	Post vac event readings
05/29/22	off / on	34338.7	4.8	0.9%	off / off	1564.1	0	0.0%	629.6	8.0	65.0	1650.0	69.31	70.0	45.3	1.4	97%	1.02	0.20	2409.65	
06/30/22	on / on	35125.3	786.6	100.0%	off / off	1564.1	0	0.0%	629.6	7.0	70.0	1880.6	64.13	64.0	38.9	0.8	98%	0.80	26.27	2435.92	System shutdown due to alarm engaging, no alarm sent
07/21/22	off / on	35190.0	64.7	12.8%	off / off	1564.1	0	0.0%	629.6	7.0	135.0	2639.1	89.99	80.0	59.2	2.2	96%	1.52	4.11	2440.03	System Shutdown with inactive telemetry alarm
07/27/22	on / on	35333.2	143.2	99.4%	off / off	1564.1	0	0.0%	629.6	8.0	130.0	2447.4	83.46	75.0	39.3	0.0	100%	0.95	5.66	2445.70	
08/30/22	on / on	36147.9	814.7	99.8%	off / off	1564.1	0	0.0%	629.6	9.0	125.0	2517.7	85.85	78.0	33.3	0.0	100%	0.84	28.39	2474.09	
09/21/22	on / on	36640.9	493.0	93.4%	off / off	1564.1	0	0.0%	629.6	8.0	105.0	2406.2	82.05	77.0	50.1	0.1	100%	1.24	25.52	2499.60	
10/24/22	on / on	37408.0	767.1	96.9%	off / off	1564.1	0	0.0%	627.8	9.0	95.0	2449.8	83.54	80.0	25.7	0.1	100%	0.66	21.16	2520.76	
11/21/22	on/ on	37947.7	539.7	80.3%	off / off	1564.1	0	0.0%	629.6	6.0	75.0	1367.7	46.64	46.0	21.7	0.0	100%	0.32	7.23	2527.99	System shutdown down during cold temperatures
12/20/22	off / off	38163.7	216.0	31.0%	off / off	1564.1	0	0.0%	629.6	--	--	--	--	--	16.8	0.0	100%	--	--	--	System shutdown down during cold temperatures, readings for permit compliance
01/18/23	on / on	38195.2	31.5	4.5%	off / off	1564.1	0	0.0%	629.6	1.0	70.0	1600.0	73.21	72.0	0.1	0.0	100%	0.00	0.00	2527.99	
02/24/23	on / on	39079.7	884.5	99.6%	off / off	1564.1	0	0.0%	629.6	7.0	80.0	1300.0	68.40	67.0	0.6	0.0	100%	0.01	0.48	2528.47	
03/31/23	on / on	39844.3	764.6	91.0%	off / off	1564.1	0	0.0%	629.6	5.0	87.0	1950.3	66.51	64.0	0.6	0.0	100%	0.01	0.39	2528.86	
04/21/23	on / off	40284.4	440.1	87.3%	off / off	1564.1	0	0.0%	629.6	1.0	60.0	2047.8	69.83	70.0	0.4	0.0	100%	0.01	0.17	2529.03	System shutdown after readings
06/29/23	off / on	40286.0	1.6	0.1%	off / off	1564.1	0	0.0%	631.4	10.0	75.0	2591.5	88.37	88.0	1.3	0.0	100%	0.04	0.00	2529.03	System started up for rebound study
06/29/23	on / on	40288.3	2.3	100.0%	off / off	1564.1	0	0.0%	627.8	10.0	80.0	2675.1	91.22	90.0	3.8	0.0	100%	0.11	0.01	2529.04	Increased number of SVE wells under vacuum
07/26/23	off / off	40352.8	64.5	10.0%	off / off	1564.1	0	0.0%	633.2	8.0	60.0	2646.0	90.23	92.0	12.2	0.0	100%	0.36	0.97	2530.01	System shutdown 7/1/23 due to CATOX low temp. System shutdown after readings
09/21/23	off / off	40355.2	2.4	0.2%	off / off	1564.1	0	0.0%	638.6	5.0	75.0	2056.6	70.13	69.0	33.0	0.0	100%	0.73	0.07	2530.09	System shutdown after readings

2023 Annual Operational Hours	2,160
2023 Average Uptime Percentage	36.59%
2023 Average SVE flow rate (scfm):	76.5

Table 3
SVE/AS System Operational Data
Former ARCO Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

Date	SVE Operation (on or off) Arrival / Departure	SVE Hour Meter (Hours)	SVE Period Operation (Hours)	SVE Percent Uptime (%)	AS Operation (on or off) Arrival / Departure	AS Hour Meter (Hours)	AS Period Operation (Hours)	AS Percent Uptime (%)	Cat Ox Inlet Temperature (°F)	Post-Dilution ¹						Effluent PID (ppmv)	Destruction Efficiency (%)	VOC Mass Removal Rate (lbs/day)	VOC Mass Removal Rate (lbs/period)	Cumulative VOC Removal (lbs)	Comments
										Pressure (in. Wc)	Influent Temperature (°F)	Influent Velocity (fpm)	Influent Flowrate (acfm)	Influent Flowrate (scfm)	Influent PID (ppmv)						
Permit Requirements		--	--	--		--	--	--	> 625	--	--		--	<120	--	<200	>98% ²				

SVE = Soil Vapor Extraction
AS = Air Sparge
Air Sparge and Soil Vapor Extraction = Ambient air is pressurized and pumped into the subsurface to volatilize constituents for extraction by the SVE System. Vapor is extracted by vacuum and is treated by combustion before discharging to the atmosphere.

PSCAA Permit = Puget Sound Clean Air Agency (PSCAA) emission discharge permit #29642
< = Operation data must be less than the permit requirement
> = Operation data must be greater than the permit requirement

Period = Length of time since the previous date that operational data was collected

% = Percentage

Uptime = Calculated percentage of operation during the period. (Hours of operation per period / total hours per period)

Cat Ox = Catalytic Oxidizer, the system component that catalyzes combustion of extracted Volatile Organic Compounds (VOCs)

°F = Fahrenheit

in Wc = Inches of water column

fpm = feet per minute

acfm = Actual cubic feet per minute measured by anemometer

scfm = Standard cubic feet per minute. scfm = acfm * (Pactual / Pstandard) * (Tstandard / Tactual)

Standard = Standard pressure = 1 atmosphere (14.7 pounds per square inch [psi])

Tstandard = Standard temperature = 68 °F, as used by the National Institute of Standards and Technology (NIST)

Pactual = Influent vacuum. Units converted in the formula from in.Hg to psi.

Tactual = Influent temperature. Units converted in the formula from °F to °R (degrees Rankine)

PID = Photoionization Detector

PSD = Process Safety Device

ppmv = Parts per million volume

Destruction Efficiency = (influent VOCs - effluent VOCs) / (influent VOCs). VOCs measured by PID

Mass Removal Rate= Flowrate * time * Concentration * Molecular Weight * Molar Density of Air

VOC molecular weight = 86 lb / [lb mol]

Molar density of air = P/RT = 1 atm / (0.7302 [ft³ * atm] / [lb mol * °R]) / (68 + 459.67)°R = 0.00260 lb mol / ft³

Molar density of air based on standard pressure of 1 atm and standard temperature of 68°F, as used by the National Institute of Standards and Technology (NIST).

P = pressure

R = gas constant

°R = degrees Rankine

T = temperature

atm = atmosphere

lb mol = Pound per Mole

ft³ = cubic feet

lbs = Pounds

lbs/day = Pounds per day

lbs/period = Pounds per period

Cumulative mass removed = Previous mass removed + Removal rate * Elapsed time

-- = Not collected/ not available

1 = Influent sample port is located post-dilution thus flow rate through cat ox is equal to exhaust flowrate and compliant with Puget Sound Clean Air Agency (PSCAA) permit #29664 subpart 7b.

2= Destruction Efficiency must be >97% when TPH influent is greater than 200 ppmv per PSCAA permit # 29664 subpart 5.

3=System shut down on 7/13/16 before O&M measurements were collected for the month. System restarted on 8/19/19. Effluent PID collected on 7/12/16 on system visit.

4=Post dilution flow rate is taken in a 2.5-inch pipe. Flow rate on field forms may differ from final table due to flow calculation based on a 2-inch pipe.

5= Flow rate for the 6/19/18 O&M Event was collected from the PLC Screen.

6= New CATOX Installed

$$scfm = acfm \cdot \frac{(14.7 [psi] + (influent\ pressure \cdot 0.0361 [\frac{psi}{in.Wc}])}{14.7 [psi]} \frac{68\text{ }^{\circ}F + 460\text{ }^{\circ}R}{(460^{\circ}R + influent\ temperature\text{ }^{\circ}F)}$$

$$Mass\ Removal\ Rate = (flowrate\ [scfm] * 60\ [min]x\ 24\ [hr])x\ (VOCs\ [ppmv] * 10^6x\ 86\ [\frac{lbs}{mol}]x\ .0026\ [\frac{lbmol}{ft^3}])$$

Figures

Figure 1 - Site Location Map

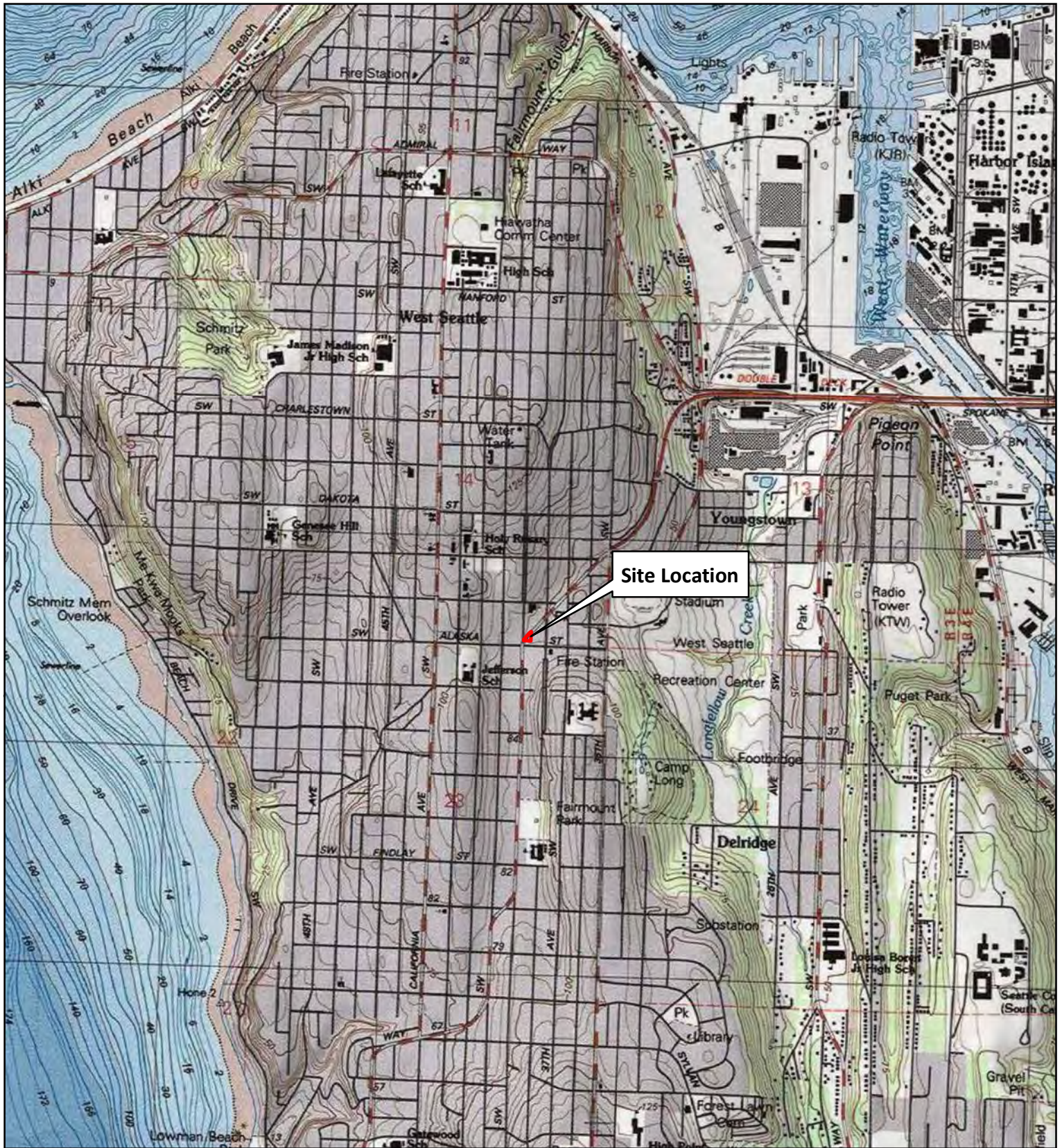
Figure 2 - Site Aerial Map

Figure 3 - Groundwater Elevation Contour Map – August 9, 2023

Figure 4 - Groundwater Analytical Data Map – August 9, 2023

Figure 5 – Groundwater Elevation Contour Map – December 11, 2023

Figure 6 – Groundwater Analytical Data Map – December 11, 2023



USGS Topographic Map 1:24,000
Duwamish Head, WA 2017

0 500 1,000 2,000 3,000 4,000 Feet

FIGURE 1

SITE LOCATION MAP
FORMER ARCO FACILITY NO. 11060
4580 FAUNTLEROY WAY SW
SEATTLE, WA

PROJECT NO.
WA - 11060 SEATTLE

PREPARED BY
SAA

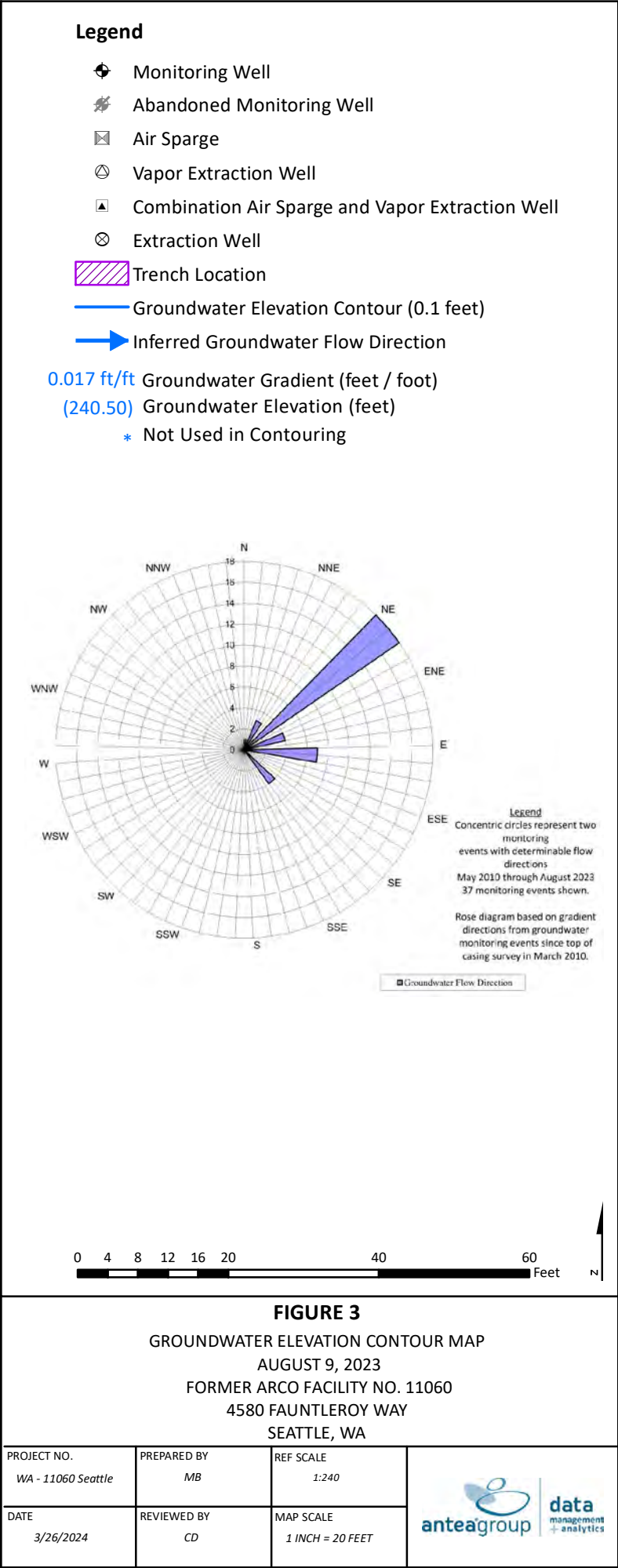
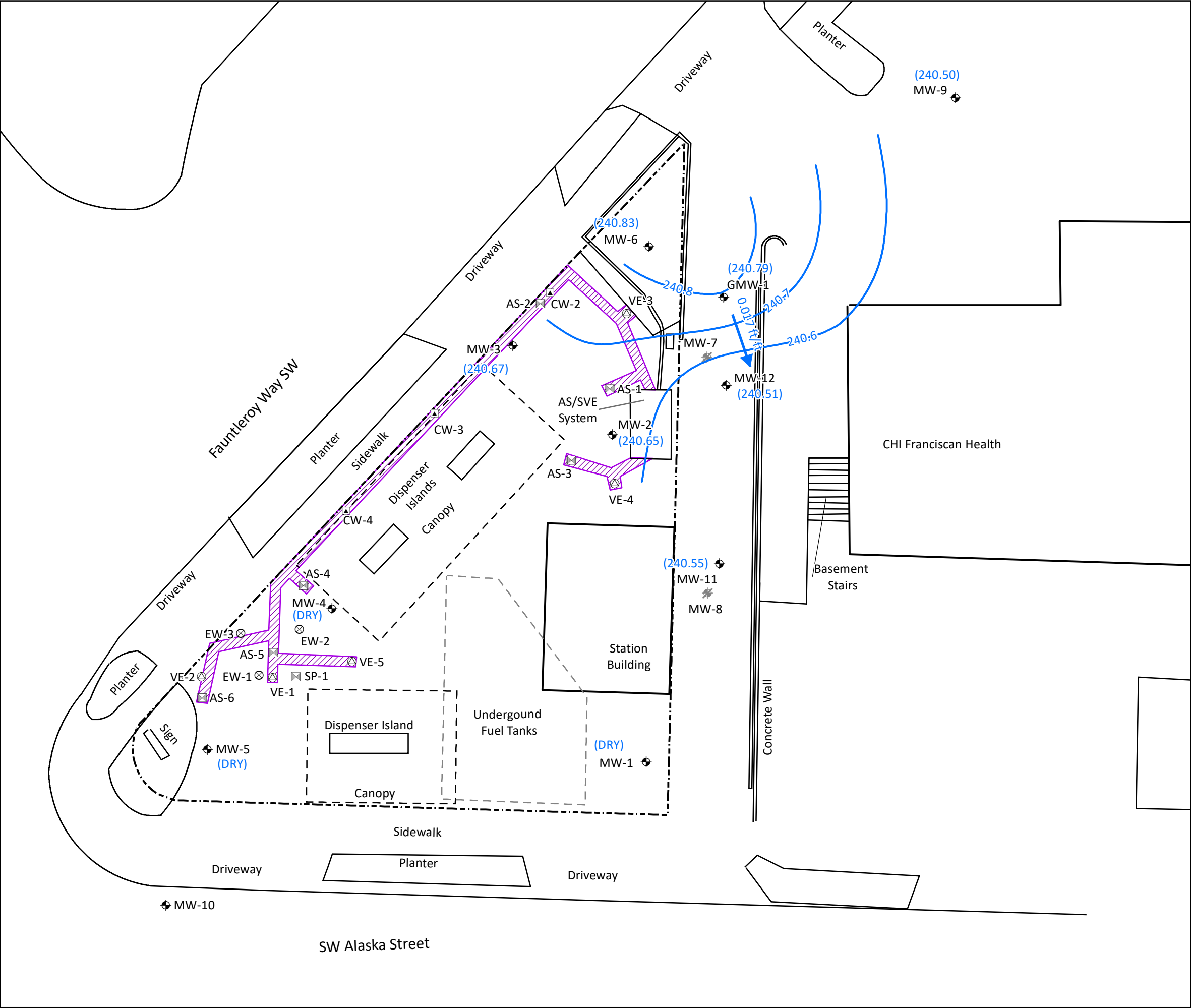
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1:24,000

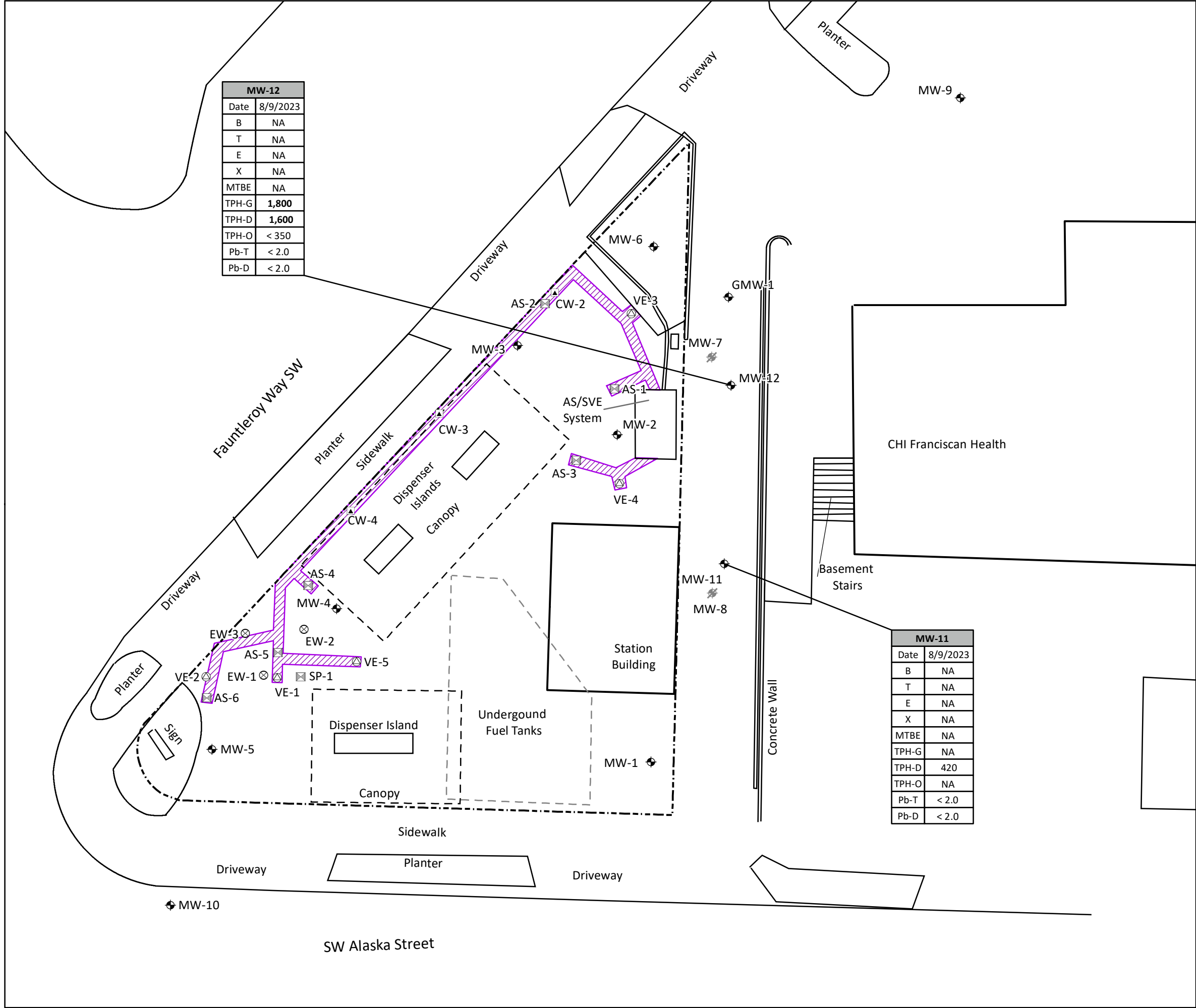
DATE
2/15/2021

REVIEWED BY
JS

MAP SCALE
1 INCH = 2,000 FEET







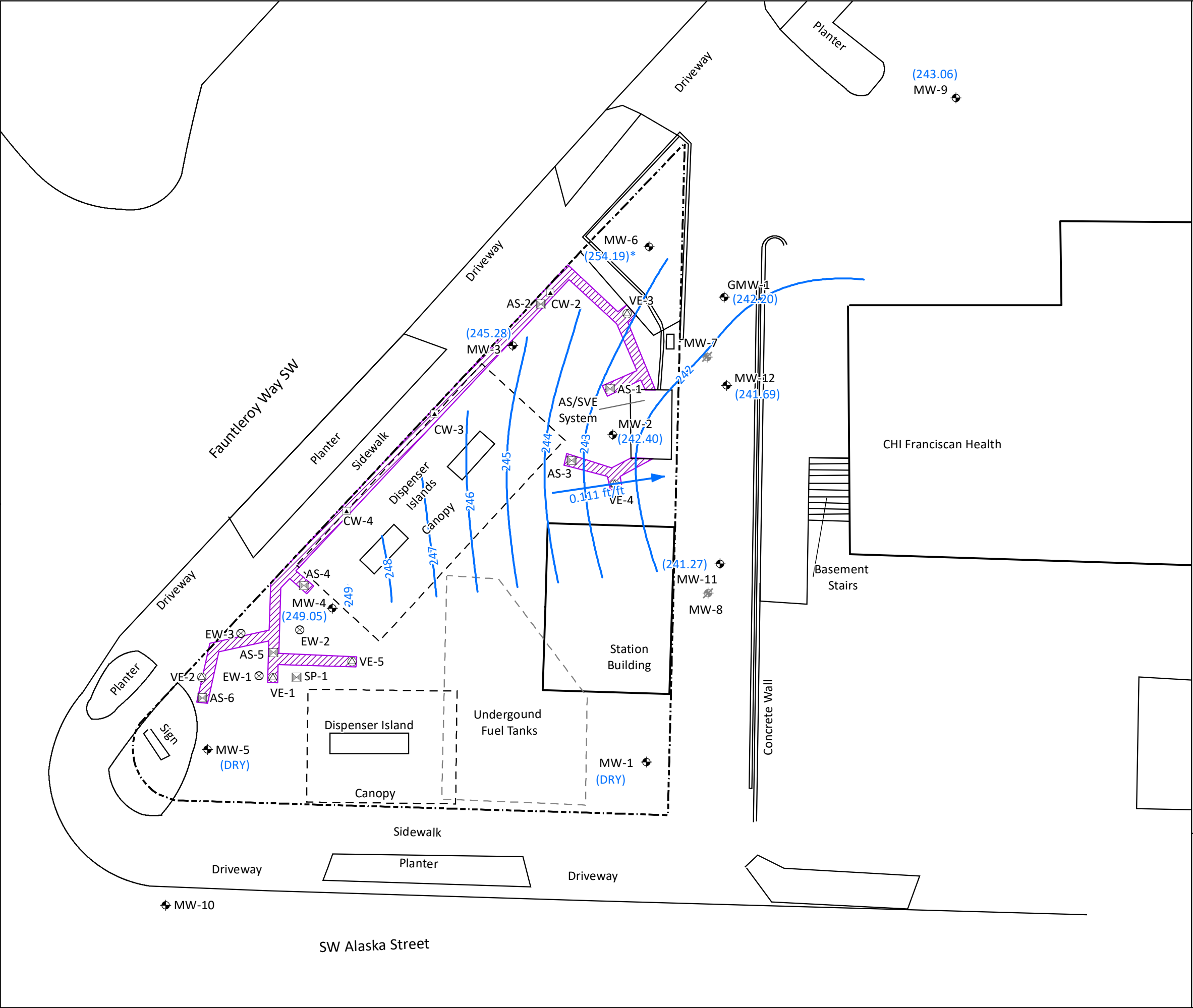
- Legend**
- Monitoring Well
 - Abandoned Monitoring Well
 - Air Sparge
 - Vapor Extraction Well
 - Combination Air Sparge and Vapor Extraction Well
 - Extraction Well
 - Trench Location

Notes:
All concentrations reported in micrograms per liter (ug/L)
B - Benzene
T - Toluene
E - Ethylbenzene
X - Total Xylenes
MTBE - Methyl-tertiary-butyl ether
TPH-G = Total petroleum hydrocarbons as gasoline
TPH-D = Total petroleum hydrocarbons as diesel
TPH-O = Total petroleum hydrocarbons as oil
Pb-T = Total Lead
Pb-D = Dissolved Lead
NA - Not Analyzed
< - Concentrations were not detected above the laboratory method reporting limit
Bold = Value above MTCA Method A Cleanup Level
MTCA = Model Toxics Control Act



FIGURE 4
GROUNDWATER ANALYTICAL DATA MAP
AUGUST 9, 2023
FORMER ARCO FACILITY NO. 11060
4580 FAUNTLEROY WAY
SEATTLE, WA

PROJECT NO. WA - 11060 Seattle	PREPARED BY MH	REF SCALE 1:240	
DATE 3/21/2024	REVIEWED BY JL	MAP SCALE 1 INCH = 20 FEET	



- Legend**
- Monitoring Well
 - Abandoned Monitoring Well
 - Air Sparge
 - Vapor Extraction Well
 - Combination Air Sparge and Vapor Extraction Well
 - Extraction Well
 - Groundwater Elevation Contour (1 foot)
 - Inferred Groundwater Flow Direction
 - Trench Location

0.111 ft/ft Groundwater Gradient (feet / foot)
(242.40) Groundwater Elevation (feet)
* Not Used in Contouring

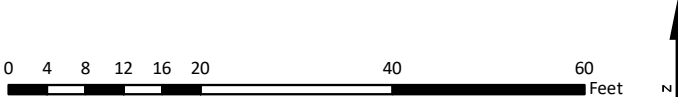
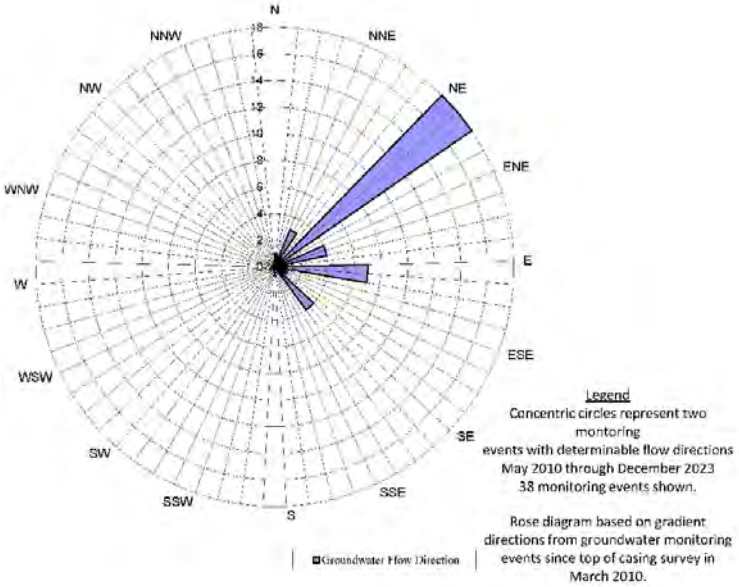


FIGURE 5

GROUNDWATER ELEVATION CONTOUR MAP

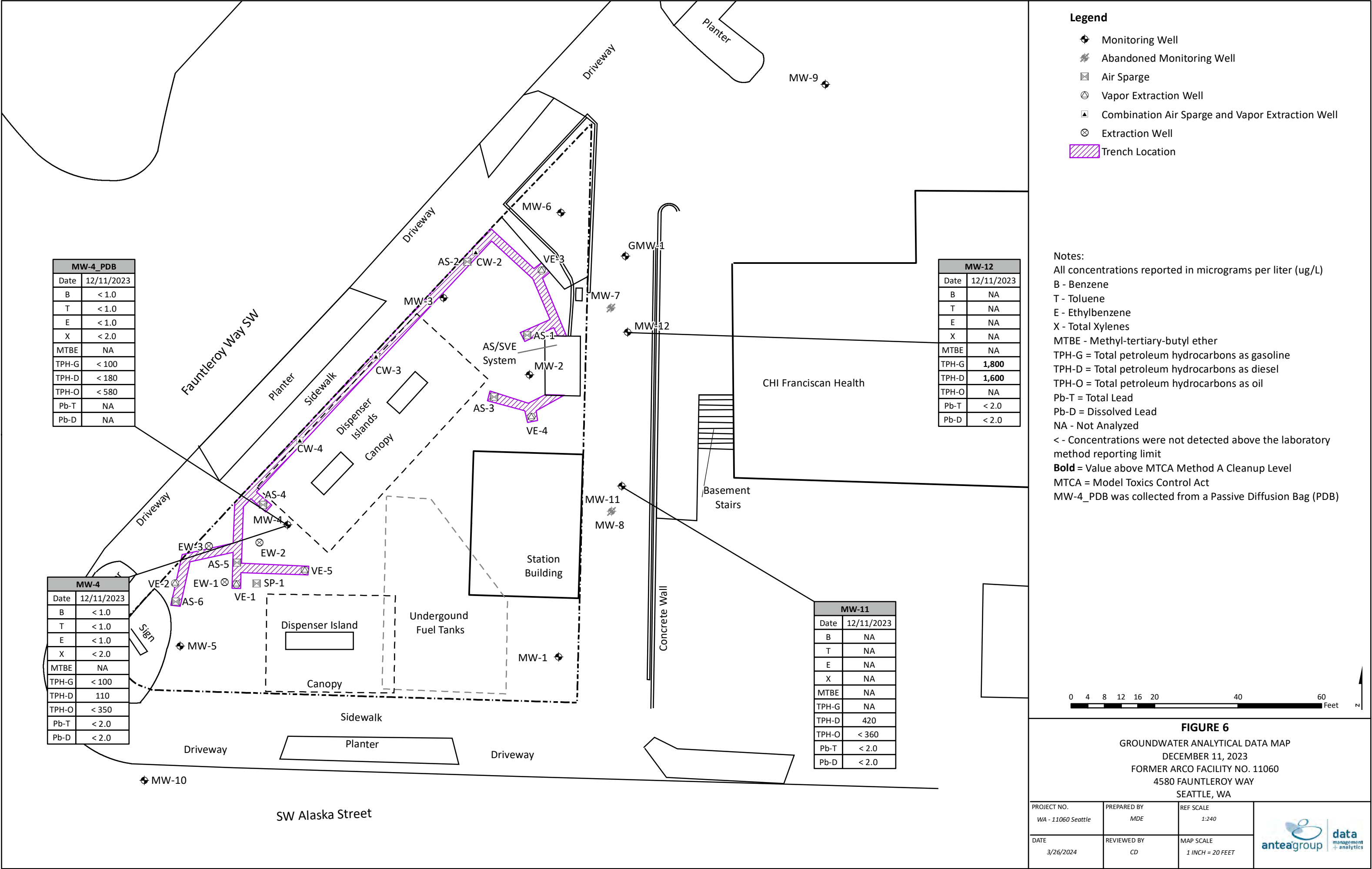
DECEMBER 11, 2023

FORMER ARCO FACILITY NO. 11060

4580 FAUNTLEROY WAY

SEATTLE, WA

PROJECT NO. WA - 11060 Seattle	PREPARED BY MB	REF SCALE 1:240	
DATE 3/19/2024	REVIEWED BY CD	MAP SCALE 1 INCH = 20 FEET	



Appendix A - Analytical Lab Reports and Chain-of-Custody Documentation



ANALYTICAL REPORT

PREPARED FOR

Attn: Megan Richard
Antea USA Inc.
18378-B Redmond Way
Redmond, Washington 98052

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JOB DESCRIPTION

BP - ARCO 11060

JOB NUMBER

580-130440-1

Eurofins Seattle

Job Notes

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Compliance Statement

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPLAMP Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPLAMP. This Laboratory Report is confidential and is intended for the sole use of Eurofins Environment Testing (USA) and its client. This report shall not be reproduced, except in full, without written permission from Eurofins Environment Testing (USA). The signature on the cover page extends to the case narrative and all the data and forms in the package. The Chain of Custody is included and is an integral part of this report.

Authorization



Authorized for release by
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Katie.Grant@et.eurofinsus.com
(253)922-2310

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8/28/2023 3:41:13 PM

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Definitions/Glossary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Job ID: 580-130440-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-130440-1

Receipt

The samples were received on 8/10/2023 3:25 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.5° C.

Receipt Exceptions

The Trip blank requested BTEX analysis on the Chain of Custody (COC) however none of the samples are requesting BTEX. The Trip Blank was logged for BTEX as requested.
TB_20230809 (580-130440-3)

GC/MS VOA

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

GC Semi VOA

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

Metals

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

Organic Prep

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

VOA Prep

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

Detection Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Client Sample ID: MW-11_20230809

Lab Sample ID: 580-130440-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	420		110	66	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-12_20230809

Lab Sample ID: 580-130440-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline	1800		50	14	ug/L	1		NWTPH-Gx	Total/NA
#2 Diesel (C10-C24)	1600		110	66	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: TB_20230809

Lab Sample ID: 580-130440-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Seattle

Client Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Client Sample ID: MW-11_20230809

Lab Sample ID: 580-130440-1

Date Collected: 08/09/23 12:51

Matrix: Water

Date Received: 08/10/23 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	420		110	66	ug/L		08/15/23 08:54	08/17/23 07:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150				08/15/23 08:54	08/17/23 07:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		08/11/23 17:00	08/17/23 11:40	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		08/16/23 16:27	08/18/23 01:10	5

Client Sample ID: MW-12_20230809

Lab Sample ID: 580-130440-2

Date Collected: 08/09/23 11:57

Matrix: Water

Date Received: 08/10/23 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	1800		50	14	ug/L			08/16/23 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		77 - 123					08/16/23 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1600		110	66	ug/L		08/15/23 08:54	08/23/23 21:27	1
Motor Oil (>C24-C36)	ND		350	97	ug/L		08/15/23 08:54	08/23/23 21:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61		50 - 150				08/15/23 08:54	08/23/23 21:27	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		08/11/23 17:00	08/17/23 11:42	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		08/16/23 16:27	08/18/23 01:44	5

Client Sample ID: TB_20230809

Lab Sample ID: 580-130440-3

Date Collected: 08/09/23 10:00

Matrix: Water

Date Received: 08/10/23 15:25

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			08/16/23 15:55	1
Toluene	ND		1.0	0.39	ug/L			08/16/23 15:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/16/23 15:55	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			08/16/23 15:55	1
o-Xylene	ND		1.0	0.39	ug/L			08/16/23 15:55	1
Xylenes, Total	ND		2.0	0.53	ug/L			08/16/23 15:55	1

Eurofins Seattle

Client Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Client Sample ID: TB_20230809

Lab Sample ID: 580-130440-3

Date Collected: 08/09/23 10:00

Matrix: Water

Date Received: 08/10/23 15:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		08/16/23 15:55	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		08/16/23 15:55	1
4-Bromofluorobenzene (Surr)	96		80 - 120		08/16/23 15:55	1
Dibromofluoromethane (Surr)	106		80 - 120		08/16/23 15:55	1

Method: NWTPH-Gx - Northwest - Volatile Petroleum Products (GC/MS)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50	14	ug/L			08/16/23 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		77 - 123		08/16/23 15:55	1

Surrogate Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (80-120)	BFB (80-120)	DBFM (80-120)
580-130440-3	TB_20230809	98	106	96	106
LCS 580-434874/6	Lab Control Sample	101	96	106	99
LCSD 580-434874/7	Lab Control Sample Dup	98	97	98	99
MB 580-434874/11	Method Blank	97	104	97	105

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-123)			
580-130440-2	MW-12_20230809	86			
580-130440-3	TB_20230809	96			
LCS 580-434875/8	Lab Control Sample	105			
LCSD 580-434875/9	Lab Control Sample Dup	103			
MB 580-434875/11	Method Blank	97			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH (50-150)			
580-130440-1	MW-11_20230809	70			
580-130440-2	MW-12_20230809	61			
LCS 580-434694/2-A	Lab Control Sample	82			
LCSD 580-434694/3-A	Lab Control Sample Dup	85			
MB 580-434694/1-A	Method Blank	79			

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-434874/11

Matrix: Water

Analysis Batch: 434874

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			08/16/23 15:06	1
Toluene	ND		1.0	0.39	ug/L			08/16/23 15:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			08/16/23 15:06	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			08/16/23 15:06	1
o-Xylene	ND		1.0	0.39	ug/L			08/16/23 15:06	1
Xylenes, Total	ND		2.0	0.53	ug/L			08/16/23 15:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		08/16/23 15:06	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		08/16/23 15:06	1
4-Bromofluorobenzene (Surr)	97		80 - 120		08/16/23 15:06	1
Dibromofluoromethane (Surr)	105		80 - 120		08/16/23 15:06	1

Lab Sample ID: LCS 580-434874/6

Matrix: Water

Analysis Batch: 434874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	10.0	9.77		ug/L		98	80 - 122
Toluene	10.0	10.5		ug/L		105	80 - 120
Ethylbenzene	10.0	10.8		ug/L		108	80 - 120
m-Xylene & p-Xylene	10.0	11.4		ug/L		114	80 - 120
o-Xylene	10.0	10.8		ug/L		108	80 - 120
Xylenes, Total	20.0	22.2		ug/L		111	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	96		80 - 120
4-Bromofluorobenzene (Surr)	106		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: LCSD 580-434874/7

Matrix: Water

Analysis Batch: 434874

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	10.0	9.41		ug/L		94	80 - 122	4	14
Toluene	10.0	9.94		ug/L		99	80 - 120	6	13
Ethylbenzene	10.0	10.0		ug/L		100	80 - 120	8	14
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	80 - 120	10	14
o-Xylene	10.0	9.86		ug/L		99	80 - 120	10	16
Xylenes, Total	20.0	20.2		ug/L		101	80 - 120	10	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120

Eurofins Seattle

QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

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

Lab Sample ID: LCSD 580-434874/7

Matrix: Water

Analysis Batch: 434874

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	99		80 - 120

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

Lab Sample ID: MB 580-434875/11

Matrix: Water

Analysis Batch: 434875

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		50	14	ug/L			08/16/23 15:06	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		77 - 123					08/16/23 15:06	1

Lab Sample ID: LCS 580-434875/8

Matrix: Water

Analysis Batch: 434875

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline	1000	1120		ug/L		112	55 - 148	
Surrogate	%Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	105		77 - 123					

Lab Sample ID: LCSD 580-434875/9

Matrix: Water

Analysis Batch: 434875

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline	1000	1090		ug/L		109	55 - 148	3	10
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	103		77 - 123						

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

Lab Sample ID: MB 580-434694/1-A

Matrix: Water

Analysis Batch: 434856

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 434694

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		08/15/23 08:54	08/17/23 05:55	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		08/15/23 08:54	08/17/23 05:55	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		50 - 150				08/15/23 08:54	08/17/23 05:55	1

Eurofins Seattle

QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

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

Lab Sample ID: LCS 580-434694/2-A

Matrix: Water

Analysis Batch: 434856

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 434694

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)			4000	2820		ug/L		71	50 - 120		
Motor Oil (>C24-C36)			4000	3370		ug/L		84	64 - 120		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	82		50 - 150								

Lab Sample ID: LCSD 580-434694/3-A

Matrix: Water

Analysis Batch: 434856

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 434694

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)			4000	2860		ug/L		72	50 - 120	2	26
Motor Oil (>C24-C36)			4000	3580		ug/L		90	64 - 120	6	24
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	85		50 - 150								

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-434459/24-A

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		08/11/23 17:00	08/17/23 10:54	5

Lab Sample ID: LCS 580-434459/25-A

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	988		ug/L		99	80 - 120

Lab Sample ID: LCSD 580-434459/26-A

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	985		ug/L		98	80 - 120	0	20

Lab Sample ID: 580-130432-J-3-C MS

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	987		ug/L		99	80 - 120

Eurofins Seattle

QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

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

Lab Sample ID: 580-130432-J-3-D MSD

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	989		ug/L		99	80 - 120	0	20

Lab Sample ID: 580-130432-J-3-B DU

Matrix: Water

Analysis Batch: 435106

Client Sample ID: Duplicate

Prep Type: Total Recoverable

Prep Batch: 434459

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	ND		ND		ug/L		NC	20

Lab Sample ID: MB 580-434709/1-B

Matrix: Water

Analysis Batch: 435136

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 434942

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40	0.040	ug/L		08/16/23 16:27	08/18/23 01:08	1

Lab Sample ID: LCS 580-434709/2-B

Matrix: Water

Analysis Batch: 435136

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 434942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	976		ug/L		98	80 - 120

Lab Sample ID: LCSD 580-434709/3-B

Matrix: Water

Analysis Batch: 435136

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 434942

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	962		ug/L		96	80 - 120	1	20

Lab Sample ID: 580-130440-1 MS

Matrix: Water

Analysis Batch: 435136

Client Sample ID: MW-11_20230809

Prep Type: Dissolved

Prep Batch: 434942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	1020		ug/L		102	80 - 120

Lab Sample ID: 580-130440-1 MSD

Matrix: Water

Analysis Batch: 435136

Client Sample ID: MW-11_20230809

Prep Type: Dissolved

Prep Batch: 434942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	1010		ug/L		101	80 - 120	1	20

Lab Sample ID: 580-130440-2 MS

Matrix: Water

Analysis Batch: 435136

Client Sample ID: MW-12_20230809

Prep Type: Dissolved

Prep Batch: 434942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	1010		ug/L		101	80 - 120

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QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 580-130440-2 MSD
Matrix: Water
Analysis Batch: 435136

Client Sample ID: MW-12_20230809
Prep Type: Dissolved
Prep Batch: 434942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	1030		ug/L		103	80 - 120	2	20

Lab Sample ID: 580-130440-1 DU
Matrix: Water
Analysis Batch: 435136

Client Sample ID: MW-11_20230809
Prep Type: Dissolved
Prep Batch: 434942

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	ND		ND		ug/L		NC	20

QC Association Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

GC/MS VOA

Analysis Batch: 434874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-3	TB_20230809	Total/NA	Water	8260D	
MB 580-434874/11	Method Blank	Total/NA	Water	8260D	
LCS 580-434874/6	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-434874/7	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 434875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-2	MW-12_20230809	Total/NA	Water	NWTPH-Gx	
580-130440-3	TB_20230809	Total/NA	Water	NWTPH-Gx	
MB 580-434875/11	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 580-434875/8	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 580-434875/9	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 434694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Total/NA	Water	3510C	
580-130440-2	MW-12_20230809	Total/NA	Water	3510C	
MB 580-434694/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-434694/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-434694/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 434856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Total/NA	Water	NWTPH-Dx	434694
MB 580-434694/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	434694
LCS 580-434694/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	434694
LCSD 580-434694/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	434694

Analysis Batch: 435642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-2	MW-12_20230809	Total/NA	Water	NWTPH-Dx	434694

Metals

Prep Batch: 434459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Total Recoverable	Water	3005A	
580-130440-2	MW-12_20230809	Total Recoverable	Water	3005A	
MB 580-434459/24-A	Method Blank	Total Recoverable	Water	3005A	
LCS 580-434459/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 580-434459/26-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
580-130432-J-3-C MS	Matrix Spike	Total Recoverable	Water	3005A	
580-130432-J-3-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
580-130432-J-3-B DU	Duplicate	Total Recoverable	Water	3005A	

Filtration Batch: 434709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Dissolved	Water	FILTRATION	
580-130440-2	MW-12_20230809	Dissolved	Water	FILTRATION	
MB 580-434709/1-B	Method Blank	Dissolved	Water	FILTRATION	

Eurofins Seattle

QC Association Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Metals (Continued)

Filtration Batch: 434709 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 580-434709/2-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 580-434709/3-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
580-130440-1 MS	MW-11_20230809	Dissolved	Water	FILTRATION	
580-130440-1 MSD	MW-11_20230809	Dissolved	Water	FILTRATION	
580-130440-2 MS	MW-12_20230809	Dissolved	Water	FILTRATION	
580-130440-2 MSD	MW-12_20230809	Dissolved	Water	FILTRATION	
580-130440-1 DU	MW-11_20230809	Dissolved	Water	FILTRATION	

Prep Batch: 434942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Dissolved	Water	3005A	434709
580-130440-2	MW-12_20230809	Dissolved	Water	3005A	434709
MB 580-434709/1-B	Method Blank	Dissolved	Water	3005A	434709
LCS 580-434709/2-B	Lab Control Sample	Dissolved	Water	3005A	434709
LCSD 580-434709/3-B	Lab Control Sample Dup	Dissolved	Water	3005A	434709
580-130440-1 MS	MW-11_20230809	Dissolved	Water	3005A	434709
580-130440-1 MSD	MW-11_20230809	Dissolved	Water	3005A	434709
580-130440-2 MS	MW-12_20230809	Dissolved	Water	3005A	434709
580-130440-2 MSD	MW-12_20230809	Dissolved	Water	3005A	434709
580-130440-1 DU	MW-11_20230809	Dissolved	Water	3005A	434709

Analysis Batch: 435106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Total Recoverable	Water	6020B	434459
580-130440-2	MW-12_20230809	Total Recoverable	Water	6020B	434459
MB 580-434459/24-A	Method Blank	Total Recoverable	Water	6020B	434459
LCS 580-434459/25-A	Lab Control Sample	Total Recoverable	Water	6020B	434459
LCSD 580-434459/26-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	434459
580-130432-J-3-C MS	Matrix Spike	Total Recoverable	Water	6020B	434459
580-130432-J-3-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	434459
580-130432-J-3-B DU	Duplicate	Total Recoverable	Water	6020B	434459

Analysis Batch: 435136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-130440-1	MW-11_20230809	Dissolved	Water	6020B	434942
580-130440-2	MW-12_20230809	Dissolved	Water	6020B	434942
MB 580-434709/1-B	Method Blank	Dissolved	Water	6020B	434942
LCS 580-434709/2-B	Lab Control Sample	Dissolved	Water	6020B	434942
LCSD 580-434709/3-B	Lab Control Sample Dup	Dissolved	Water	6020B	434942
580-130440-1 MS	MW-11_20230809	Dissolved	Water	6020B	434942
580-130440-1 MSD	MW-11_20230809	Dissolved	Water	6020B	434942
580-130440-2 MS	MW-12_20230809	Dissolved	Water	6020B	434942
580-130440-2 MSD	MW-12_20230809	Dissolved	Water	6020B	434942
580-130440-1 DU	MW-11_20230809	Dissolved	Water	6020B	434942

Lab Chronicle

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Client Sample ID: MW-11_20230809

Lab Sample ID: 580-130440-1

Date Collected: 08/09/23 12:51

Matrix: Water

Date Received: 08/10/23 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			434694	SL	EET SEA	08/15/23 08:54
Total/NA	Analysis	NWTPH-Dx		1	434856	KLW	EET SEA	08/17/23 07:31
Dissolved	Filtration	FILTRATION			434709	TMH	EET SEA	08/15/23 10:52
Dissolved	Prep	3005A			434942	TMH	EET SEA	08/16/23 16:27
Dissolved	Analysis	6020B		5	435136	FCW	EET SEA	08/18/23 01:10
Total Recoverable	Prep	3005A			434459	TMH	EET SEA	08/11/23 17:00
Total Recoverable	Analysis	6020B		5	435106	FCW	EET SEA	08/17/23 11:40

Client Sample ID: MW-12_20230809

Lab Sample ID: 580-130440-2

Date Collected: 08/09/23 11:57

Matrix: Water

Date Received: 08/10/23 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	NWTPH-Gx		1	434875	JBT	EET SEA	08/16/23 19:48
Total/NA	Prep	3510C			434694	SL	EET SEA	08/15/23 08:54
Total/NA	Analysis	NWTPH-Dx		1	435642	KLW	EET SEA	08/23/23 21:27
Dissolved	Filtration	FILTRATION			434709	TMH	EET SEA	08/15/23 10:52
Dissolved	Prep	3005A			434942	TMH	EET SEA	08/16/23 16:27
Dissolved	Analysis	6020B		5	435136	FCW	EET SEA	08/18/23 01:44
Total Recoverable	Prep	3005A			434459	TMH	EET SEA	08/11/23 17:00
Total Recoverable	Analysis	6020B		5	435106	FCW	EET SEA	08/17/23 11:42

Client Sample ID: TB_20230809

Lab Sample ID: 580-130440-3

Date Collected: 08/09/23 10:00

Matrix: Water

Date Received: 08/10/23 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	434874	JBT	EET SEA	08/16/23 15:55
Total/NA	Analysis	NWTPH-Gx		1	434875	JBT	EET SEA	08/16/23 15:55

Laboratory References:

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

Accreditation/Certification Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-23 *

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

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

Method Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SEA
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	EET SEA
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SEA
6020B	Metals (ICP/MS)	SW846	EET SEA
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SEA
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET SEA
5030B	Purge and Trap	SW846	EET SEA
FILTRATION	Sample Filtration	None	EET SEA

Protocol References:

None = None

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-130440-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-130440-1	MW-11_20230809	Water	08/09/23 12:51	08/10/23 15:25
580-130440-2	MW-12_20230809	Water	08/09/23 11:57	08/10/23 15:25
580-130440-3	TB_20230809	Water	08/09/23 10:00	08/10/23 15:25

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

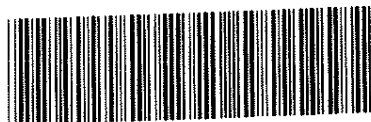
BP Site Node Path: Former BP 11060
BP/RM Facility No: Former BP Facility No. 11060

Req Due Date (mm/dd/yy): Standard TAT Rush TAT Yes No X
Lab Work Order Number:

Page 1 of 1

Lab Name: Eurofins		BP/ARC Facility Address: 4580 Fauntleroy Way SW		Consultant/Contractor: Antea Group									
Lab Address: 5755 8th Street East, Tacoma, WA 98424		City, State, ZIP Code: Seattle, WA		Consultant/Contractor Project No: WA - 11060 Groundwater Monitoring									
Lab PM: Katie Grant		Lead Regulatory Agency: Washington State Department of Ecology		Address: 18378-B Redmond Way, Redmond, WA 98052									
Lab Phone: 253-922-2310		California Global ID No.: NA		Consultant/Contractor PM: Lonnie Dent									
Lab Shipping Acont:		Enfos Proposal No: WR1027162/00C87-0002		Phone: 303-807-3627 Email: lonnie.dent@anteagroup.us									
Lab Bottle Order No.		Accounting Mode: Provision <u> X </u> OOC-BU <u> </u> OOC-RM <u> </u>		Send/Submit EDD to: lonnie.dent@anteagroup.us									
Other Info: katie.grant@et.eurofinsus.com		Stage Commercial-Site Activities (70) Activity Contracts Management (116)		Invoice To: BP-RM <u> </u> BP/ARC <u> X </u>									
BP/RM PM: Wade Melton		Sample Details		Requested Analyses									
PM Phone: 360--594-7978				Report Type & QC Level									
PM Email: wade.melton@bp.com				Limited (Standard) Package <u> </u>									
				Limited Plus Package <u> </u>									
				Full Package <u> </u>									
Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	Filt	Pres	Comments
										BTEX by EPA 8260B			
										MTBE by EPA 8260B			
										NWTPH-Gx			
										NWTPH-Dx			
										Total Lead by EPA 6000/7000			
										Dissolved Lead by EPA 6000/7000			
	MW-1			W				G		X	X	X	
	MW-4			W				G		X	X	X	
	MW-4_PDB			W				G		X	X	X	
	MW-5			W				G		X	X	X	
	MW-11_20230809	8/9/23	1251	W				G	840 4	X	X	X	
	MW-12_20230809	8/9/23	1157	W				G	K44 10	X	X	X	
	Temp Blank ID_20230809	8/9/23	1000	W				G	2	X	X		
Sampler's Name: Emily Hudak / Katrina Adams		Relinquished By / Affiliation		Date	Time	Accepted By / Affiliation		Date	Time				
Sampler's Company: Antea Group		Emily Hudak / Antea Group		8/9/23	1530	BETN		8/10/23	1925				
Ship Method: Ship Date:		Ship Date:											
Shipment Tracking No:													
Special Instructions:													

THIS LINE - LAB USE ONLY:



580-130440 Chain of Custody

Cooler Temp on Receipt:

Therm. ID: A3 Cor: 0.5 Unc: 0.5 °led. Yes / No

Cooler Dsc: A13

Packing: Antea

Cust. Seal: Yes No

Blue Ice, Wet, Dry, None

FedEx:

UPS:

Lab Cour:

Other: CHG

BP LaMP Soil/H2O COC July 2018

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-130440-1

Login Number: 130440

List Number: 1

Creator: Presley, Kim A

List Source: Eurofins Seattle

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

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434874 Batch Start Date: 08/16/23 11:29 Batch Analyst: Tucker, Jonathon BBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00031	VOAMasterMix 00104	VOAMasterVA 00001
LCS 580-434874/6		8260D		5 mL	5 mL		1 uL	10 uL	10 uL
LCSD 580-434874/7		8260D		5 mL	5 mL		1 uL	10 uL	10 uL
MB 580-434874/11		8260D		5 mL	5 mL		1 uL		
580-130440-A-3	TB_20230809	8260D	T	5 mL	5 mL	<2 SU	1 uL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	VOASTDGASweek 00145					
LCS 580-434874/6		8260D		10 uL					
LCSD 580-434874/7		8260D		10 uL					
MB 580-434874/11		8260D							
580-130440-A-3	TB_20230809	8260D	T						

Batch Notes	
pH Indicator ID	215322
Vial Lot Number	0126501H

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D

Page 1 of 1

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434875 Batch Start Date: 08/16/23 11:29 Batch Analyst: Tucker, Jonathon BBatch Method: NWTPH-Gx Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00031	GRO_LCS 00088	
LCS 580-434875/8		NWTPH-Gx		5 mL	5 mL		1 uL	25 uL	
LCSD 580-434875/9		NWTPH-Gx		5 mL	5 mL		1 uL	25 uL	
MB 580-434875/11		NWTPH-Gx		5 mL	5 mL		1 uL		
580-130440-A-3	TB_20230809	NWTPH-Gx	T	5 mL	5 mL	<2 SU	1 uL		
580-130440-G-2	MW-12_20230809	NWTPH-Gx	T	5 mL	5 mL	<2 SU	1 uL		

Batch Notes	
pH Indicator ID	215322
Vial Lot Number	0126501H

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Gx

Page 1 of 1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-130440-1

SDG No.: _____

Batch Number: 434694Batch Start Date: 08/15/23 08:54Batch Analyst: Ledesma, SantiagoBatch Method: 3510CBatch End Date: 08/15/23 15:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-434694/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-434694/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-434694/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-130440-B-1	MW-11_20230809	3510C, NWTPH-Dx	T	00414.89 g	00167.93 g	247 mL	2 mL	2 SU	n/a SU
580-130440-A-2	MW-12_20230809	3510C, NWTPH-Dx	T	00415.11 g	00167.26 g	247.9 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00039	TPH_WaterSurr 00102			
MB 580-434694/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-434694/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-434694/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-130440-B-1	MW-11_20230809	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-130440-A-2	MW-12_20230809	3510C, NWTPH-Dx	T	n/a SU		100 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Dx

Page 1 of 2

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434694 Batch Start Date: 08/15/23 08:54 Batch Analyst: Ledesma, SantiagoBatch Method: 3510C Batch End Date: 08/15/23 15:02

Batch Notes	
Method/Fraction	3510C_LVI/NWTPH_Dx
Balance ID	SEA225
Balance is Level? (Y/N)	yes
pH Indicator ID	10BDH3421/6105009/6204001
Pipette/Syringe/Dispenser ID	E4
Analyst ID - Extraction	JW/SL
Reagent Water ID	DI
Analyst ID - Spike Analyst	SL
Analyst ID - Spike Witness Analyst	JW
Sufficient Volume for Batch QC	no
Acid Used for pH Adjustment ID	224621
Prep Solvent ID	MeCl_CT_00265
Prep Solvent Volume Used	100 mL
Filter ID	09-790-12F
Na2SO4 ID	baked Na2SO4_00466
Analyst ID - Concentration	SL
Equipment ID - Concentration 1	Steambath 1
Thermometer ID - Concentration 1	61013-040-1
Concentration 1 Uncorrected Temperature	70.0-75.0 Degrees C
Concentration 1 Corrected Temperature	69.4-74.4 Degrees C
Equipment ID - Concentration 2	Turbovap 5
Thermometer ID - Concentration 2	DIGITAL READOUT
Concentration 2 Uncorrected Temperature	20.0 Degrees C
Concentration 2 Corrected Temperature	21.7 Degrees C
Vial Lot Number	13-09-1335
Pipette Tip Lot ID	14672-200
Batch Comment	Vialed by:EF

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Dx

Page 2 of 2

METALS BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-130440-1

SDG No.: _____

Batch Number: 434459Batch Start Date: 08/11/23 17:00Batch Analyst: Hua, Tammy MBatch Method: 3005ABatch End Date: 08/11/23 22:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00025	ICP CAL 2 00024	MET Spike 3C 00045	
580-130432-J-3		3005A, 6020B	R	50 mL	50 mL				
580-130432-J-3 DU		3005A, 6020B	R	50 mL	50 mL				
580-130432-J-3 MS		3005A, 6020B	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-130432-J-3 MSD		3005A, 6020B	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-130440-D-1	MW-11_20230809	3005A, 6020B	R	50 mL	50 mL				
580-130440-D-2	MW-12_20230809	3005A, 6020B	R	50 mL	50 mL				
MB 580-434459/24		3005A, 6020B		50 mL	50 mL				
LCS 580-434459/25		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-434459/26		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes

Digestion Tube/Cup ID	3534234
Pipette/Syringe/Dispenser ID	METALS-PREP-2
Analyst ID - Spike Analyst	TH
Analyst ID - Spike Witness Analyst	DLV
Sufficient Volume for Batch QC	YES
Hydrochloric Acid ID	3553560
Nitric Acid ID	3545103
Digestion Unit ID	block b
Thermometer ID	m99938
Thermometer Location ID	b33
Temperature - Uncorrected - Start	92.5 Degrees C
Temperature - Corrected - Start	92.3 Degrees C
Digestion Start Time	08/11/2023 18:27
Digestion End Time	08/11/2023 22:27
Temperature - Uncorrected - End	92.5 Degrees C
Temperature - Corrected - End	92.3 Degrees C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020B

Page 1 of 2

METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434459 Batch Start Date: 08/11/23 17:00 Batch Analyst: Hua, Tammy M

Batch Method: 3005A Batch End Date: 08/11/23 22:27

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020B

Page 2 of 2

METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434709 Batch Start Date: 08/15/23 10:52 Batch Analyst: Hua, Tammy MBatch Method: FILTRATION Batch End Date: 08/15/23 13:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
MB 580-434709/1		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCS 580-434709/2		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCSD 580-434709/3		FILTRATION, 3005A, 6020B		250 mL	250 mL				
580-130440-C-2	MW-12_20230809	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-130440-C-1	MW-11_20230809	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				

Batch Notes	
Filter ID	1372242
Nitric Acid ID	3545103

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020B

Page 1 of 1

METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434942 Batch Start Date: 08/16/23 18:30 Batch Analyst: Hua, Tammy MBatch Method: 3005A Batch End Date: 08/16/23 22:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00025	ICP CAL 2 00024	MET Spike 3C 00045	
580-130440-C-1-A	MW-11_20230809	3005A, 6020B	D	50 mL	50 mL				
580-130440-C-1-A DU	MW-11_20230809	3005A, 6020B	D	50 mL	50 mL				
580-130440-C-1-A MS	MW-11_20230809	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-130440-C-1-A MSD	MW-11_20230809	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-130440-C-2-A	MW-12_20230809	3005A, 6020B	D	50 mL	50 mL				
580-130440-C-2-A MS	MW-12_20230809	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-130440-C-2-A MSD	MW-12_20230809	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
MB 580-434709/1-A		3005A, 6020B		50 mL	50 mL				
LCS 580-434709/2-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-434709/3-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020B

Page 1 of 2

METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-130440-1

SDG No.: _____

Batch Number: 434942 Batch Start Date: 08/16/23 18:30 Batch Analyst: Hua, Tammy MBatch Method: 3005A Batch End Date: 08/16/23 22:30

Batch Notes	
Hot Block ID	block b
Thermometer ID	m99938
Thermometer Location ID	b25
Uncorrected Temperature	91.0 Celsius
Oven, Bath or Block Temperature 1	90.8 Degrees C
Uncorrected Temperature 2	91.0 Celsius
Oven, Bath or Block Temperature 2	90.8 Degrees C
Lot # of hydrochloric acid	3553555
Lot # of Nitric Acid	3545102
Pipette ID	Metals Prep 2
Digestion Tube/Cup ID	3554226
First Start time	see above
First End time	see above
Analyst ID - Spike Witness Analyst	TH - JLS

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

6020B

Page 2 of 2



ANALYTICAL REPORT

PREPARED FOR

Attn: Megan Richard
Antea USA Inc.
18378-B Redmond Way
Redmond, Washington 98052

Generated 12/28/2023 9:46:06 AM

JOB DESCRIPTION

BP - ARCO 11060

JOB NUMBER

580-134890-1

Eurofins Seattle

Job Notes

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Compliance Statement

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPLAMP Technical Specifications, applicable federal, state, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPLAMP. This Laboratory Report is confidential and is intended for the sole use of Eurofins Environment Testing (USA) and its client. This report shall not be reproduced, except in full, without written permission from Eurofins Environment Testing (USA). The signature on the cover page extends to the case narrative and all the data and forms in the package. The Chain of Custody is included and is an integral part of this report.

Authorization



Authorized for release by
Katie Grant, Project Manager I
Katie.Grant@et.eurofinsus.com
(253)922-2310

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12/28/2023 9:46:06 AM

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Definitions/Glossary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Antea USA Inc.
Project: BP - ARCO 11060

Job ID: 580-134890-1

Job ID: 580-134890-1

Eurofins Seattle

Job Narrative 580-134890-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/13/2023 11:47 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were -0.2°C, 2.0°C and 2.2°C

GC/MS VOA

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

GC Semi VOA

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

Metals

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

Eurofins Seattle

Detection Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-4_20231211

Lab Sample ID: 580-134890-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	110		110	65	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-4_PDB_20231211

Lab Sample ID: 580-134890-2

No Detections.

Client Sample ID: MW-11_20231211

Lab Sample ID: 580-134890-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	420		110	66	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-12_20231211

Lab Sample ID: 580-134890-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline	1800		100	14	ug/L	1		NWTPH-Gx	Total/NA
#2 Diesel (C10-C24)	1600		110	66	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: Trip Blank_20231211

Lab Sample ID: 580-134890-5

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Seattle

Client Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-4_20231211

Lab Sample ID: 580-134890-1

Date Collected: 12/11/23 09:05

Matrix: Water

Date Received: 12/13/23 11:47

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			12/14/23 19:41	1
Toluene	ND		1.0	0.39	ug/L			12/14/23 19:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/14/23 19:41	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/14/23 19:41	1
o-Xylene	ND		1.0	0.39	ug/L			12/14/23 19:41	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/14/23 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		12/14/23 19:41	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		12/14/23 19:41	1
4-Bromofluorobenzene (Surr)	97		80 - 120		12/14/23 19:41	1
Dibromofluoromethane (Surr)	97		80 - 120		12/14/23 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		100	14	ug/L			12/14/23 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		77 - 123		12/14/23 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	110		110	65	ug/L		12/14/23 08:58	12/15/23 20:46	1
Motor Oil (>C24-C36)	ND		350	97	ug/L		12/14/23 08:58	12/15/23 20:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150	12/14/23 08:58	12/15/23 20:46	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/15/23 14:59	12/18/23 12:24	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/20/23 15:52	12/22/23 11:07	5

Client Sample ID: MW-4_PDB_20231211

Lab Sample ID: 580-134890-2

Date Collected: 12/11/23 08:30

Matrix: Water

Date Received: 12/13/23 11:47

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			12/14/23 20:03	1
Toluene	ND		1.0	0.39	ug/L			12/14/23 20:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/14/23 20:03	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/14/23 20:03	1
o-Xylene	ND		1.0	0.39	ug/L			12/14/23 20:03	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/14/23 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/14/23 20:03	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/14/23 20:03	1

Eurofins Seattle

Client Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-4_PDB_20231211

Lab Sample ID: 580-134890-2

Date Collected: 12/11/23 08:30

Matrix: Water

Date Received: 12/13/23 11:47

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		80 - 120		12/14/23 20:03	1
Dibromofluoromethane (Surr)	99		80 - 120		12/14/23 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		100	14	ug/L			12/14/23 20:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		77 - 123					12/14/23 20:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		180	110	ug/L		12/14/23 08:58	12/15/23 21:05	1
Motor Oil (>C24-C36)	ND		580	160	ug/L		12/14/23 08:58	12/15/23 21:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150				12/14/23 08:58	12/15/23 21:05	1

Client Sample ID: MW-11_20231211

Lab Sample ID: 580-134890-3

Date Collected: 12/11/23 10:06

Matrix: Water

Date Received: 12/13/23 11:47

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	420		110	66	ug/L		12/14/23 08:58	12/15/23 21:44	1
Motor Oil (>C24-C36)	ND		360	98	ug/L		12/14/23 08:58	12/15/23 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150				12/14/23 08:58	12/15/23 21:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/15/23 14:59	12/18/23 12:27	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/20/23 15:52	12/22/23 11:23	5

Client Sample ID: MW-12_20231211

Lab Sample ID: 580-134890-4

Date Collected: 12/11/23 10:50

Matrix: Water

Date Received: 12/13/23 11:47

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	1800		100	14	ug/L			12/15/23 01:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		77 - 123					12/15/23 01:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	1600		110	66	ug/L		12/14/23 08:58	12/15/23 22:03	1

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Client Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-12_20231211

Lab Sample ID: 580-134890-4

Date Collected: 12/11/23 10:50

Matrix: Water

Date Received: 12/13/23 11:47

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	91		50 - 150	12/14/23 08:58	12/15/23 22:03	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/15/23 14:59	12/18/23 12:21	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/20/23 15:52	12/22/23 11:15	5

Client Sample ID: Trip Blank_20231211

Lab Sample ID: 580-134890-5

Date Collected: 12/11/23 00:01

Matrix: Water

Date Received: 12/13/23 11:47

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			12/14/23 17:55	1
Toluene	ND		1.0	0.39	ug/L			12/14/23 17:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/14/23 17:55	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/14/23 17:55	1
o-Xylene	ND		1.0	0.39	ug/L			12/14/23 17:55	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/14/23 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Toluene-d8 (Surr)</i>	102		80 - 120		12/14/23 17:55	1
<i>1,2-Dichloroethane-d4 (Surr)</i>	102		80 - 120		12/14/23 17:55	1
<i>4-Bromofluorobenzene (Surr)</i>	103		80 - 120		12/14/23 17:55	1
<i>Dibromofluoromethane (Surr)</i>	99		80 - 120		12/14/23 17:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		100	14	ug/L			12/14/23 17:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>4-Bromofluorobenzene (Surr)</i>	103		77 - 123		12/14/23 17:55	1

Surrogate Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (80-120)	DCA (80-120)	BFB (80-120)	DBFM (80-120)
580-134890-1	MW-4_20231211	103	104	97	97
580-134890-2	MW-4_PDB_20231211	102	103	98	99
580-134890-5	Trip Blank_20231211	102	102	103	99
LCS 580-446245/8	Lab Control Sample	100	103	92	98
LCSD 580-446245/9	Lab Control Sample Dup	108	105	97	98
MB 580-446245/13	Method Blank	103	106	103	97

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-123)			
580-134890-1	MW-4_20231211	97			
580-134890-2	MW-4_PDB_20231211	98			
580-134890-4	MW-12_20231211	94			
580-134890-5	Trip Blank_20231211	103			
LCS 580-446239/10	Lab Control Sample	94			
LCSD 580-446239/11	Lab Control Sample Dup	95			
MB 580-446239/13	Method Blank	103			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		OTPH (50-150)			
580-134890-1	MW-4_20231211	74			
580-134890-2	MW-4_PDB_20231211	74			
580-134890-3	MW-11_20231211	81			
580-134890-4	MW-12_20231211	91			
LCS 580-446210/2-A	Lab Control Sample	71			
LCSD 580-446210/3-A	Lab Control Sample Dup	72			
MB 580-446210/1-A	Method Blank	80			

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-446245/13

Matrix: Water

Analysis Batch: 446245

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.24	ug/L			12/14/23 17:33	1
Toluene	ND		1.0	0.39	ug/L			12/14/23 17:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/14/23 17:33	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/14/23 17:33	1
o-Xylene	ND		1.0	0.39	ug/L			12/14/23 17:33	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/14/23 17:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		12/14/23 17:33	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		12/14/23 17:33	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/14/23 17:33	1
Dibromofluoromethane (Surr)	97		80 - 120		12/14/23 17:33	1

Lab Sample ID: LCS 580-446245/8

Matrix: Water

Analysis Batch: 446245

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	10.0	8.93		ug/L		89	80 - 122
Toluene	10.0	8.31		ug/L		83	80 - 120
Ethylbenzene	10.0	8.60		ug/L		86	80 - 120
m-Xylene & p-Xylene	10.0	8.75		ug/L		88	80 - 120
o-Xylene	10.0	8.60		ug/L		86	80 - 120
Xylenes, Total	20.0	17.4		ug/L		87	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	92		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-446245/9

Matrix: Water

Analysis Batch: 446245

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	10.0	9.36		ug/L		94	80 - 122	5	14
Toluene	10.0	9.39		ug/L		94	80 - 120	12	13
Ethylbenzene	10.0	9.11		ug/L		91	80 - 120	6	14
m-Xylene & p-Xylene	10.0	9.00		ug/L		90	80 - 120	3	14
o-Xylene	10.0	8.74		ug/L		87	80 - 120	2	16
Xylenes, Total	20.0	17.7		ug/L		89	80 - 120	2	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	108		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120

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QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

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

Lab Sample ID: LCSD 580-446245/9

Matrix: Water

Analysis Batch: 446245

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane (Surr)	98		80 - 120

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

Lab Sample ID: MB 580-446239/13

Matrix: Water

Analysis Batch: 446239

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		100	14	ug/L			12/14/23 17:33	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		77 - 123					12/14/23 17:33	1

Lab Sample ID: LCS 580-446239/10

Matrix: Water

Analysis Batch: 446239

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline	1000	873		ug/L		87	55 - 148		
Surrogate	%Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	94		77 - 123						

Lab Sample ID: LCSD 580-446239/11

Matrix: Water

Analysis Batch: 446239

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline	1000	908		ug/L		91	55 - 148	4	10
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	95		77 - 123						

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

Lab Sample ID: MB 580-446210/1-A

Matrix: Water

Analysis Batch: 446374

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 446210

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		12/14/23 08:58	12/15/23 14:32	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		12/14/23 08:58	12/15/23 14:32	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150				12/14/23 08:58	12/15/23 14:32	1

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QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

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

Lab Sample ID: LCS 580-446210/2-A

Matrix: Water

Analysis Batch: 446374

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 446210

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)			4000	2980		ug/L		74	50 - 120		
Motor Oil (>C24-C36)			4000	3170		ug/L		79	64 - 120		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
<i>o</i> -Terphenyl	71		50 - 150								

Lab Sample ID: LCSD 580-446210/3-A

Matrix: Water

Analysis Batch: 446374

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 446210

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)			4000	3050		ug/L		76	50 - 120	2	26
Motor Oil (>C24-C36)			4000	3140		ug/L		79	64 - 120	1	24
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	72		50 - 150								

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-446395/12-A

Matrix: Water

Analysis Batch: 446502

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 446395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/15/23 15:00	12/18/23 11:37	5

Lab Sample ID: LCS 580-446395/13-A

Matrix: Water

Analysis Batch: 446502

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 446395

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	948		ug/L		95	80 - 120

Lab Sample ID: LCSD 580-446395/14-A

Matrix: Water

Analysis Batch: 446502

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 446395

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	943		ug/L		94	80 - 120	1	20

Lab Sample ID: 580-134886-A-1-C MS

Matrix: Water

Analysis Batch: 446502

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 446395

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	971		ug/L		97	80 - 120

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QC Sample Results

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

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

Lab Sample ID: 580-134886-A-1-D MSD
Matrix: Water
Analysis Batch: 446502

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 446395

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	962		ug/L		96	80 - 120	1	20

Lab Sample ID: 580-134886-A-1-B DU
Matrix: Water
Analysis Batch: 446502

Client Sample ID: Duplicate
Prep Type: Total Recoverable
Prep Batch: 446395

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	ND		ND		ug/L		NC	20

Lab Sample ID: MB 580-446663/21-B
Matrix: Water
Analysis Batch: 447094

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 446761

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		2.0	0.20	ug/L		12/20/23 15:52	12/22/23 09:50	5

Lab Sample ID: LCS 580-446663/22-B
Matrix: Water
Analysis Batch: 447094

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 446761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	985		ug/L		99	80 - 120

Lab Sample ID: LCSD 580-446663/23-B
Matrix: Water
Analysis Batch: 447094

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 446761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	988		ug/L		99	80 - 120	0	20

Lab Sample ID: 580-134890-1 MS
Matrix: Water
Analysis Batch: 447094

Client Sample ID: MW-4_20231211
Prep Type: Dissolved
Prep Batch: 446761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	1000		ug/L		100	80 - 120

Lab Sample ID: 580-134890-1 MSD
Matrix: Water
Analysis Batch: 447094

Client Sample ID: MW-4_20231211
Prep Type: Dissolved
Prep Batch: 446761

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	1010		ug/L		101	80 - 120	0	20

Lab Sample ID: 590-22504-L-2-C DU
Matrix: Water
Analysis Batch: 447094

Client Sample ID: Duplicate
Prep Type: Dissolved
Prep Batch: 446761

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	ND		ND		ug/L		NC	20

Eurofins Seattle

QC Association Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

GC/MS VOA

Analysis Batch: 446239

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total/NA	Water	NWTPH-Gx	
580-134890-2	MW-4_PDB_20231211	Total/NA	Water	NWTPH-Gx	
580-134890-4	MW-12_20231211	Total/NA	Water	NWTPH-Gx	
580-134890-5	Trip Blank_20231211	Total/NA	Water	NWTPH-Gx	
MB 580-446239/13	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 580-446239/10	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 580-446239/11	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 446245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total/NA	Water	8260D	
580-134890-2	MW-4_PDB_20231211	Total/NA	Water	8260D	
580-134890-5	Trip Blank_20231211	Total/NA	Water	8260D	
MB 580-446245/13	Method Blank	Total/NA	Water	8260D	
LCS 580-446245/8	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-446245/9	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 446210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total/NA	Water	3510C	
580-134890-2	MW-4_PDB_20231211	Total/NA	Water	3510C	
580-134890-3	MW-11_20231211	Total/NA	Water	3510C	
580-134890-4	MW-12_20231211	Total/NA	Water	3510C	
MB 580-446210/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-446210/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-446210/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 446374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total/NA	Water	NWTPH-Dx	446210
580-134890-2	MW-4_PDB_20231211	Total/NA	Water	NWTPH-Dx	446210
580-134890-3	MW-11_20231211	Total/NA	Water	NWTPH-Dx	446210
580-134890-4	MW-12_20231211	Total/NA	Water	NWTPH-Dx	446210
MB 580-446210/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	446210
LCS 580-446210/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	446210
LCSD 580-446210/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	446210

Metals

Prep Batch: 446395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total Recoverable	Water	3005A	
580-134890-3	MW-11_20231211	Total Recoverable	Water	3005A	
580-134890-4	MW-12_20231211	Total Recoverable	Water	3005A	
MB 580-446395/12-A	Method Blank	Total Recoverable	Water	3005A	
LCS 580-446395/13-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 580-446395/14-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
580-134886-A-1-C MS	Matrix Spike	Total Recoverable	Water	3005A	
580-134886-A-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
580-134886-A-1-B DU	Duplicate	Total Recoverable	Water	3005A	

Eurofins Seattle

QC Association Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Metals

Analysis Batch: 446502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Total Recoverable	Water	6020B	446395
580-134890-3	MW-11_20231211	Total Recoverable	Water	6020B	446395
580-134890-4	MW-12_20231211	Total Recoverable	Water	6020B	446395
MB 580-446395/12-A	Method Blank	Total Recoverable	Water	6020B	446395
LCS 580-446395/13-A	Lab Control Sample	Total Recoverable	Water	6020B	446395
LCSD 580-446395/14-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	446395
580-134886-A-1-C MS	Matrix Spike	Total Recoverable	Water	6020B	446395
580-134886-A-1-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020B	446395
580-134886-A-1-B DU	Duplicate	Total Recoverable	Water	6020B	446395

Filtration Batch: 446663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Dissolved	Water	FILTRATION	
580-134890-3	MW-11_20231211	Dissolved	Water	FILTRATION	
580-134890-4	MW-12_20231211	Dissolved	Water	FILTRATION	
MB 580-446663/21-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 580-446663/22-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 580-446663/23-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
580-134890-1 MS	MW-4_20231211	Dissolved	Water	FILTRATION	
580-134890-1 MSD	MW-4_20231211	Dissolved	Water	FILTRATION	
590-22504-L-2-C DU	Duplicate	Dissolved	Water	FILTRATION	

Prep Batch: 446761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Dissolved	Water	3005A	446663
580-134890-3	MW-11_20231211	Dissolved	Water	3005A	446663
580-134890-4	MW-12_20231211	Dissolved	Water	3005A	446663
MB 580-446663/21-B	Method Blank	Dissolved	Water	3005A	446663
LCS 580-446663/22-B	Lab Control Sample	Dissolved	Water	3005A	446663
LCSD 580-446663/23-B	Lab Control Sample Dup	Dissolved	Water	3005A	446663
580-134890-1 MS	MW-4_20231211	Dissolved	Water	3005A	446663
580-134890-1 MSD	MW-4_20231211	Dissolved	Water	3005A	446663
590-22504-L-2-C DU	Duplicate	Dissolved	Water	3005A	446663

Analysis Batch: 447094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-134890-1	MW-4_20231211	Dissolved	Water	6020B	446761
580-134890-3	MW-11_20231211	Dissolved	Water	6020B	446761
580-134890-4	MW-12_20231211	Dissolved	Water	6020B	446761
MB 580-446663/21-B	Method Blank	Dissolved	Water	6020B	446761
LCS 580-446663/22-B	Lab Control Sample	Dissolved	Water	6020B	446761
LCSD 580-446663/23-B	Lab Control Sample Dup	Dissolved	Water	6020B	446761
580-134890-1 MS	MW-4_20231211	Dissolved	Water	6020B	446761
580-134890-1 MSD	MW-4_20231211	Dissolved	Water	6020B	446761
590-22504-L-2-C DU	Duplicate	Dissolved	Water	6020B	446761

Lab Chronicle

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-4_20231211

Lab Sample ID: 580-134890-1

Date Collected: 12/11/23 09:05

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	446245	K1K	EET SEA	12/14/23 19:41
Total/NA	Analysis	NWTPH-Gx		1	446239	K1K	EET SEA	12/14/23 19:41
Total/NA	Prep	3510C			446210	SL	EET SEA	12/14/23 08:58
Total/NA	Analysis	NWTPH-Dx		1	446374	T1L	EET SEA	12/15/23 20:46
Dissolved	Filtration	FILTRATION			446663	AUA	EET SEA	12/19/23 16:28
Dissolved	Prep	3005A			446761	JL	EET SEA	12/20/23 15:52
Dissolved	Analysis	6020B		5	447094	FCW	EET SEA	12/22/23 11:07
Total Recoverable	Prep	3005A			446395	AUA	EET SEA	12/15/23 14:59
Total Recoverable	Analysis	6020B		5	446502	FCW	EET SEA	12/18/23 12:24

Client Sample ID: MW-4_PDB_20231211

Lab Sample ID: 580-134890-2

Date Collected: 12/11/23 08:30

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	446245	K1K	EET SEA	12/14/23 20:03
Total/NA	Analysis	NWTPH-Gx		1	446239	K1K	EET SEA	12/14/23 20:03
Total/NA	Prep	3510C			446210	SL	EET SEA	12/14/23 08:58
Total/NA	Analysis	NWTPH-Dx		1	446374	T1L	EET SEA	12/15/23 21:05

Client Sample ID: MW-11_20231211

Lab Sample ID: 580-134890-3

Date Collected: 12/11/23 10:06

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			446210	SL	EET SEA	12/14/23 08:58
Total/NA	Analysis	NWTPH-Dx		1	446374	T1L	EET SEA	12/15/23 21:44
Dissolved	Filtration	FILTRATION			446663	AUA	EET SEA	12/19/23 16:28
Dissolved	Prep	3005A			446761	JL	EET SEA	12/20/23 15:52
Dissolved	Analysis	6020B		5	447094	FCW	EET SEA	12/22/23 11:23
Total Recoverable	Prep	3005A			446395	AUA	EET SEA	12/15/23 14:59
Total Recoverable	Analysis	6020B		5	446502	FCW	EET SEA	12/18/23 12:27

Client Sample ID: MW-12_20231211

Lab Sample ID: 580-134890-4

Date Collected: 12/11/23 10:50

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	NWTPH-Gx		1	446239	K1K	EET SEA	12/15/23 01:02
Total/NA	Prep	3510C			446210	SL	EET SEA	12/14/23 08:58
Total/NA	Analysis	NWTPH-Dx		1	446374	T1L	EET SEA	12/15/23 22:03
Dissolved	Filtration	FILTRATION			446663	AUA	EET SEA	12/19/23 16:28
Dissolved	Prep	3005A			446761	JL	EET SEA	12/20/23 15:52
Dissolved	Analysis	6020B		5	447094	FCW	EET SEA	12/22/23 11:15

Eurofins Seattle

Lab Chronicle

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Client Sample ID: MW-12_20231211

Lab Sample ID: 580-134890-4

Date Collected: 12/11/23 10:50

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			446395	AUA	EET SEA	12/15/23 14:59
Total Recoverable	Analysis	6020B		5	446502	FCW	EET SEA	12/18/23 12:21

Client Sample ID: Trip Blank_20231211

Lab Sample ID: 580-134890-5

Date Collected: 12/11/23 00:01

Matrix: Water

Date Received: 12/13/23 11:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	446245	K1K	EET SEA	12/14/23 17:55
Total/NA	Analysis	NWTPH-Gx		1	446239	K1K	EET SEA	12/14/23 17:55

Laboratory References:

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

Accreditation/Certification Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Washington	State	C788	07-13-24

- 1
- 2
- 3
- 4
- 5
- 6
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- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Method Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET SEA
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC/MS)	NWTPH	EET SEA
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SEA
6020B	Metals (ICP/MS)	SW846	EET SEA
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET SEA
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET SEA
5030B	Purge and Trap	SW846	EET SEA
FILTRATION	Sample Filtration	None	EET SEA

Protocol References:

None = None

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

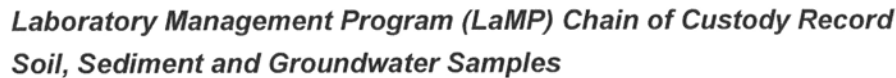
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Antea USA Inc.
Project/Site: BP - ARCO 11060

Job ID: 580-134890-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-134890-1	MW-4_20231211	Water	12/11/23 09:05	12/13/23 11:47
580-134890-2	MW-4_PDB_20231211	Water	12/11/23 08:30	12/13/23 11:47
580-134890-3	MW-11_20231211	Water	12/11/23 10:06	12/13/23 11:47
580-134890-4	MW-12_20231211	Water	12/11/23 10:50	12/13/23 11:47
580-134890-5	Trip Blank_20231211	Water	12/11/23 00:01	12/13/23 11:47



BP Site Node Path:	Former BP 11060
BP/RM Facility No:	Former BP Facility No. 11060

Lab Work Order Number: _____



580-134890 Chain of Custody

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-134890-1

Login Number: 134890

List Source: Eurofins Seattle

List Number: 1

Creator: Prigge, Madison

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

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446245 Batch Start Date: 12/14/23 14:19 Batch Analyst: Klongnganchui, Kanjana 1Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00038	VOAMasterSEC 00086	
LCS 580-446245/8		8260D		5 mL	5 mL		5 uL	10 uL	
LCSD 580-446245/9		8260D		5 mL	5 mL		5 uL	10 uL	
MB 580-446245/13		8260D		5 mL	5 mL		5 uL		
580-134890-D-5	Trip Blank 20231211	8260D	T	5 mL	5 mL	<2 SU	5 uL		
580-134890-J-1	MW-4_20231211	8260D	T	5 mL	5 mL	<2 SU	5 uL		
580-134890-G-2	MW-4_PDB_20231211	8260D	T	5 mL	5 mL	<2 SU	5 uL		

Batch Notes

pH Indicator ID	206722
Vial Lot Number	0112201I

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8260D

Page 1 of 1

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446239 Batch Start Date: 12/14/23 14:19 Batch Analyst: Klongnganchui, Kanjana 1Batch Method: NWTPH-Gx Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00038	GRO_LCS 00092	
LCS 580-446239/10		NWTPH-Gx		5 mL	5 mL		5 uL	25 uL	
LCSD 580-446239/11		NWTPH-Gx		5 mL	5 mL		5 uL	25 uL	
MB 580-446239/13		NWTPH-Gx		5 mL	5 mL		5 uL		
580-134890-D-5	Trip Blank 20231211	NWTPH-Gx	T	5 mL	5 mL	<2 SU	5 uL		
580-134890-J-1	MW-4_20231211	NWTPH-Gx	T	5 mL	5 mL	<2 SU	5 uL		
580-134890-G-2	MW-4_PDB_20231211	NWTPH-Gx	T	5 mL	5 mL	<2 SU	5 uL		
580-134890-E-4	MW-12_20231211	NWTPH-Gx	T	5 mL	5 mL	<2 SU	5 uL		

Batch Notes

pH Indicator ID	206722
Vial Lot Number	0112201I

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Gx

Page 1 of 1

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-134890-1

SDG No.: _____

Batch Number: 446210Batch Start Date: 12/14/23 08:58Batch Analyst: Ledesma, SantiagoBatch Method: 3510CBatch End Date: 12/14/23 14:42

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-446210/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-446210/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-446210/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-134890-D-1	MW-4_20231211	3510C, NWTPH-Dx	T	00416.48 g	00167.95 g	248.5 mL	2 mL	2 SU	n/a SU
580-134890-B-2	MW-4_PDB_20231211	3510C, NWTPH-Dx	T	00316.09 g	00166.33 g	149.8 mL	2 mL	2 SU	n/a SU
580-134890-D-3	MW-11_20231211	3510C, NWTPH-Dx	T	00414.15 g	00168.23 g	245.9 mL	2 mL	2 SU	n/a SU
580-134890-D-4	MW-12_20231211	3510C, NWTPH-Dx	T	00414.74 g	00167.45 g	247.3 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00041	TPH_WaterSurr 00108			
MB 580-446210/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-446210/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-446210/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-134890-D-1	MW-4_20231211	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-134890-B-2	MW-4_PDB_20231211	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-134890-D-3	MW-11_20231211	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-134890-D-4	MW-12_20231211	3510C, NWTPH-Dx	T	n/a SU		100 uL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Dx

Page 1 of 3

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446210 Batch Start Date: 12/14/23 08:58 Batch Analyst: Ledesma, SantiagoBatch Method: 3510C Batch End Date: 12/14/23 14:42

Batch Notes	
Method/Fraction	3510C_LVI//NWTPH_Dx
Balance ID	SEA225
Balance is Level? (Y/N)	yes
pH Indicator ID	10BDH3421/6105009/6204001
Pipette/Syringe/Dispenser ID	E4
Analyst ID - Extraction	EF/JW/SL
Reagent Water ID	DI
Analyst ID - Spike Analyst	JW
Analyst ID - Spike Witness Analyst	EF
Sufficient Volume for Batch QC	no
Acid Used for pH Adjustment ID	3548691
Prep Solvent ID	MeCl_CT_00268
Prep Solvent Volume Used	100 mL
Filter ID	09-790-12F
Na2SO4 ID	baked Na2SO4_00480
Analyst ID - Concentration	JW
Equipment ID - Concentration 1	Steambath 1
Thermometer ID - Concentration 1	61013-040-1
Concentration 1 Uncorrected Temperature	70.0-75.0 Degrees C
Concentration 1 Corrected Temperature	69.4-74.4 Degrees C
Equipment ID - Concentration 2	Turbovap 6
Thermometer ID - Concentration 2	DIGITAL READOUT
Concentration 2 Uncorrected Temperature	42 Degrees C
Concentration 2 Corrected Temperature	40 Degrees C
Vial Lot Number	13-09-1335
Analyst ID - Clean Up	EF
Pipette Tip Lot ID	14672-200
Batch Comment	viald by:EF

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Dx

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-134890-1

SDG No.: _____

Batch Number: 446210Batch Start Date: 12/14/23 08:58Batch Analyst: Ledesma, SantiagoBatch Method: 3510CBatch End Date: 12/14/23 14:42

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

NWTPH-Dx

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METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446395 Batch Start Date: 12/15/23 14:59 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: 3005A Batch End Date: 12/15/23 21:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00029	ICP CAL 2 00028	MET Spike 3C 00048	
580-134886-A-1		3005A, 6020B	R	50 mL	50 mL				
580-134886-A-1 DU		3005A, 6020B	R	50 mL	50 mL				
580-134886-A-1 MS		3005A, 6020B	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-134886-A-1 MSD		3005A, 6020B	R	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-134890-B-1	MW-4_20231211	3005A, 6020B	R	50 mL	50 mL				
580-134890-B-3	MW-11_20231211	3005A, 6020B	R	50 mL	50 mL				
580-134890-B-4	MW-12_20231211	3005A, 6020B	R	50 mL	50 mL				
MB 580-446395/12		3005A, 6020B		50 mL	50 mL				
LCS 580-446395/13		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-446395/14		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes	
Digestion Tube/Cup ID	3635323
Pipette/Syringe/Dispenser ID	METALS-PREP-2
Analyst ID - Spike Analyst	TH
Analyst ID - Spike Witness Analyst	JLS
Hydrochloric Acid ID	3636810
Nitric Acid ID	3638586
Digestion Unit ID	BLOCK A
Thermometer ID	1108438
Thermometer Location ID	A44
Temperature - Uncorrected - Start	93.5 Degrees C
Temperature - Corrected - Start	93.1 Degrees C
Digestion Start Time	12/15/2023 17:43
Digestion End Time	12/15/2023 21:43
Temperature - Uncorrected - End	93.5 Degrees C
Temperature - Corrected - End	93.1 Degrees C

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446395 Batch Start Date: 12/15/23 14:59 Batch Analyst: Ulloa Aguilar, Ashley

Batch Method: 3005A Batch End Date: 12/15/23 21:43

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446663 Batch Start Date: 12/19/23 16:28 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: FILTRATION Batch End Date: 12/19/23 17:19

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
590-22504-L-2		FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-134890-A-1	MW-4_20231211	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-134890-A-3	MW-11_20231211	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-134890-A-4	MW-12_20231211	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
MB 580-446663/21		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCS 580-446663/22		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCSD 580-446663/23		FILTRATION, 3005A, 6020B		250 mL	250 mL				

Batch Notes	
Filter ID	Lot #: 1388108
Nitric Acid ID	3638579

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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METALS BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-134890-1

SDG No.: _____

Batch Number: 446761Batch Start Date: 12/20/23 15:52Batch Analyst: Lees, JensenBatch Method: 3005ABatch End Date: 12/20/23 23:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00029	ICP CAL 2 00028	MET Spike 3C 00048	
590-22504-L-2-A		3005A, 6020B	D	50 mL	50 mL				
590-22504-L-2-A DU		3005A, 6020B	D	50 mL	50 mL				
580-134890-A-1-A	MW-4_20231211	3005A, 6020B	D	50 mL	50 mL				
580-134890-A-1-A MS	MW-4_20231211	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-134890-A-1-A MSD	MW-4_20231211	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-134890-A-4-A	MW-12_20231211	3005A, 6020B	D	50 mL	50 mL				
580-134890-A-3-A	MW-11_20231211	3005A, 6020B	D	50 mL	50 mL				
MB 580-446663/21-A		3005A, 6020B		50 mL	50 mL				
LCS 580-446663/22-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-446663/23-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes

Hot Block ID	BLOCK B
Thermometer ID	M99938
Thermometer Location ID	B34
Uncorrected Temperature	93.0 Celsius
Oven, Bath or Block Temperature 1	92.8 Degrees C
Uncorrected Temperature 2	93.0 Celsius
Oven, Bath or Block Temperature 2	92.8 Degrees C
Lot # of hydrochloric acid	3636812
Lot # of Nitric Acid	3638579
Pipette ID	Metals Prep 2
Digestion Tube/Cup ID	3635325
First Start time	12/20/2023 @1915
First End time	12/20/2023 @2315
Analyst ID - Spike Witness Analyst	JL - MP

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-134890-1

SDG No.: _____

Batch Number: 446761 Batch Start Date: 12/20/23 15:52 Batch Analyst: Lees, Jensen

Batch Method: 3005A Batch End Date: 12/20/23 23:15

Basis	Basis Description
D	Dissolved

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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