



Remediation Management Services Company

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February 28, 2023

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 2022, that documents the results at Former BP Facility No. 11060 located at 4580 Fauntleroy Way SW, Seattle, Washington.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Wade Melton', on a light blue 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 2022
Former BP 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
February 28, 2023
Project No. WA – 11060 Seattle
FSID No. 99437681

us.anteagroup.com

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Semi-Annual Groundwater Monitoring Report

Second Half of 2022

Former BP Facility No. 11060

4580 Fauntleroy Way SW, Seattle, Washington

Former BP 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 2022

- Antea Group conducted routine remediation system operation and maintenance (O&M) with data collection on July 21, July 27, August 30, September 21, October 24, November 21, and December 20, 2022.
- Antea Group performed non-routine remediation system O&M activity on October 24 and December 16, 2022.
- Antea Group conducted quarterly groundwater monitoring and sampling on September 22, November 29, and December 12, 2022. Monitoring activity conducted on December 12 was a follow up to the November 29 event to fill in data gaps for Site baseline groundwater (GW) information prior to injection activity.
- During the sampling event on September 22, 2022, monitoring wells MW-1, MW-4 and MW-5 did not contain sufficient groundwater to collect samples for laboratory analyses.
- During the sampling event on November 29, 2022 and prior to conducting the PetroFix™ injection event, baseline sampling was performed. As part of the baseline sampling for the underground injection control (UIC) permit, Bio-parameters were analyzed for Nitrite as N, Nitrate as N, Sulfate, Total Dissolved Solids (TDS) and dissolved Arsenic. Monitoring wells MW-1, MW-4 and MW-5 did not contain sufficient groundwater to collect samples for laboratory analyses on this date.
- On December 12, 2022, and prior to conducting the PetroFix™ injection event, groundwater samples were collected from monitoring wells MW-4 and MW-5. The sample volume from monitoring well MW-5 was not enough to submit for TPH-D, TPH-O, Total Lead, Dissolved Lead and Bio-parameter analyses. However, there was sufficient preserved sample volume to complete Total Arsenic analysis. Monitoring well MW-1 did not contain sufficient groundwater to collect a sample for laboratory analyses on this date.

- Antea Group conducted a PetroFix™ injection event on December 12 through 14, 2022. Target well and total volumes injected are summarized in the table below.

Well ID	Total Volume Injected (Gallons)
MW-4	50
EW-1	250
EW-2	450
EW-3	250

- Antea Group prepared this semi-annual groundwater monitoring report.

WORK SCHEDULED FOR FIRST HALF OF 2023

- Antea Group will conduct performance groundwater monitoring and sampling.
- Antea Group will conduct quarterly groundwater monitoring and sampling.
- Antea Group will conduct remediation system O&M.
- Antea Group 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 and Post PetroFix™ Injection Monitoring	
Approximate Depth to Groundwater	September 22, 2022 November 29, 2022	23.66 to 27.15 ft. bgs. 23.65 to 27.20 ft. bgs.
Groundwater Gradient	September 22, 2022 November 29, 2022	Northeast 0.013 ft./linear ft. East 0.052 ft./linear ft.

REMARKS

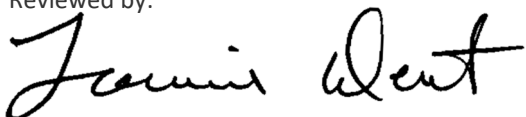
The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The 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


Jonah Leurquin
Project Professional

Date: February 28, 2023

Reviewed by:


Lonnie Dent
Senior Project Manager

Date: February 28, 2023

Reviewed by:


Megan Richard, LG
Senior Project Manager

Date: February 28, 2023

cc: Mr. Michael Warfel, Washington Department of Ecology, Northwest Regional Office (Electronic Copy)
Mr. Richard Wright, Jackson Energy (Electronic Copy)
Mr. Wade Melton, Remediation Management Services Company (Electronic Copy - RMO Upload)
File, Antea Group

CONTACT INFORMATION

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Tables

Table 1 - Groundwater Gauging Data

Table 2 - Groundwater Analytical Data

Table 3 - PAH Groundwater Analytical Data

Table 4 - Select VOCs Groundwater Analytical Data

Table 5 - Baseline Bioparameter Groundwater Analytical Data

Table 6 - SVE/AS System Operational Data

Table 1
Groundwater Gauging Data
Former BP 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	243.84	--
EW-1	5/7/2015	268.20	25.75	24.73	1.02	243.22	--
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	242.76	--
EW-1	9/12/2016	268.20	26.89	26.16	0.73	241.86	--
EW-1	12/12/2016	268.20	25.49	24.70	0.79	243.30	--
EW-1	2/22/2017	268.20	24.98	24.20	0.78	243.81	--
EW-1	8/29/2017	268.20	26.28	25.68	0.60	242.37	--
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

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		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
EW-2	8/6/2020	267.93	26.61	NP	--	241.32	NS
EW-3	5/9/2013	268.50	24.90	24.59	0.31	243.83	--
EW-3	5/7/2015	268.50	25.77	23.23	2.54	244.64	--
EW-3	3/2/2016	268.50	25.44	25.19	0.25	243.25	--
EW-3	9/12/2016	268.50	27.17	25.63	1.54	242.49	--
EW-3	12/12/2016	268.50	25.58	24.75	0.83	243.54	--
EW-3	2/22/2017	268.50	25.06	24.22	0.84	244.07	--
EW-3	8/29/2017	268.50	26.75	25.99	0.76	242.32	--
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	--

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Former BP 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	--

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		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
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	--
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	IW
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	--

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		TOC Elevation (ft)	Water Level Depth (ft)	LNAPL Depth (ft)	LNAPL Thickness (ft)	Water Level Elevation* (ft)	Qualifiers
MW-2	6/5/1997	99.05	21.06	NP	--	77.99	--
MW-2	9/5/1997	99.05	21.74	NP	--	77.31	--
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	--

Table 1
Groundwater Gauging Data
Former BP 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	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	--
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-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	--

Table 1
Groundwater Gauging Data
Former BP 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	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	--
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	--

Table 1
Groundwater Gauging Data
Former BP 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	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-4	5/11/1993	100.26	23.03	NP	--	77.23	--
MW-4	3/4/1994	100.26	26.83	22.83	4.00	76.43	--
MW-4	7/6/1994	100.26	25.63	24.20	1.43	75.70	--
MW-4	10/7/1994	100.26	26.07	24.44	1.63	75.41	--
MW-4	12/28/1994	100.26	25.85	24.42	1.43	75.48	--
MW-4	3/13/1995	100.26	25.59	23.71	1.88	76.08	--
MW-4	6/30/1995	100.26	24.64	23.53	1.11	76.45	--
MW-4	9/6/1995	100.26	24.78	23.73	1.05	76.27	--
MW-4	12/8/1995	100.26	24.94	23.89	1.05	76.11	--
MW-4	3/11/1996	100.26	24.68	22.30	2.38	77.37	--
MW-4	6/18/1996	100.26	24.04	21.93	2.11	77.80	--
MW-4	9/9/1996	100.26	24.08	22.23	1.85	77.57	--
MW-4	12/11/1996	100.26	23.07	22.69	0.38	77.48	--
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	76.11	--
MW-4	12/9/2001	100.26	25.50	23.13	2.37	76.54	--
MW-4	3/20/2002	100.26	26.50	22.77	3.73	76.56	--
MW-4	6/11/2002	100.26	24.25	23.15	1.10	76.84	--
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	78.00	--
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	78.28	--
MW-4	4/14/2005	100.26	23.82	21.93	1.89	77.86	--
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	76.43	--
MW-4	5/24/2010	267.78	--	--	--	--	NM
MW-4	5/10/2011	267.78	--	--	--	--	NM

Table 1
Groundwater Gauging Data
Former BP 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	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	244.17	--
MW-4	11/19/2013	267.78	26.61	24.80	1.81	242.53	--
MW-4	5/13/2014	267.78	25.80	23.30	2.50	243.86	--
MW-4	5/7/2015	267.78	26.50	23.55	2.95	243.49	--
MW-4	3/2/2016	267.78	24.67	23.27	1.40	244.16	--
MW-4	6/6/2016	267.78	25.86	24.33	1.53	243.07	--
MW-4	9/12/2016	267.78	26.51	25.40	1.11	242.10	--
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	245.20	--
MW-4	8/29/2017	267.78	26.50	24.82	1.68	242.54	NS
MW-4	3/13/2018	267.78	24.74	24.26	0.48	243.40	NS
MW-4	10/25/2018	267.78	26.76	26.48	0.28	241.23	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-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	--

Table 1
Groundwater Gauging Data
Former BP 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	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	--
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	--

Table 1
Groundwater Gauging Data
Former BP 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	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
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	27.16	NP	--	241.30	Dry
MW-5	12/7/2021	--	--	--	--	--	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-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	--

Table 1
Groundwater Gauging Data
Former BP 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	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	--
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-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	--	--	--	--	--

Table 1
Groundwater Gauging Data
Former BP 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-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	--
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-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	--

Table 1
Groundwater Gauging Data
Former BP 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-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	--
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-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	--
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 BP 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
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	242.23	--
VE-1	5/13/2014	268.17	25.20	24.80	0.40	243.27	--
VE-1	5/7/2015	268.17	25.40	24.79	0.61	243.23	--
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

Table 1
Groundwater Gauging Data
Former BP 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

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

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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
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	16.7	1.2
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	16.2	14.5
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	9/22/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	260	< 270	1.9	< 0.50
GMW-1	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	150	< 360	2.3	< 2.0
MW-1	5/11/1993	82	11	8	14	--	--	--	3,300	--	--	--	--
MW-1	3/4/1994	6	3	3	11	--	--	--	830	580	--	38	< 3
MW-1	7/6/1994	5	< 0.5	2	10	--	--	--	900	< 250	--	--	--

Table 2
Groundwater Analytical Data
Former BP Facility No. 11060
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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	Total Lead ug/L	Dissolved Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
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	--	--	--	--
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	--	--	4.9	< 2.00

Table 2
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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	12/15/2009	11	2	4.8	3.6	--	--	--	1,500	--	--	3.8	< 2.00
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	11.3	< 3.0
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	4.8	0.15 J
MW-1	5/13/2014	1.4	< 0.50	< 0.50	0.57 J	0.67 J	--	--	490	250	110 J	6.9 J	< 4.7
MW-1	5/7/2015	1.2	< 0.50	< 0.50	< 0.50	< 0.50	--	--	610	270	190 J	18.7	7.1 J
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
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	--	5	< 3
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	--	--	--	--

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4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	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	--	--	--	--

Table 2
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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	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	--	--	--	--
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	7.7	3.2
MW-2	5/9/2013	42.9	6.2	115	35.4	< 5.0	--	--	3,660	1,700	< 400	12.3	< 10.0
MW-2	11/19/2013	7.3	4.4 J	17	40	6.3	--	--	1,400	280	100 J	9.8	3.2
MW-2	5/13/2014	79	3.3 J	58	20	6.0	--	--	3,100	1,800	880	6.6 J	< 4.7
MW-2	5/7/2015	33	6.1	91	32	2.4	--	--	2,700	1,900	690	34.1	< 4.7
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	--	--

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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	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	25.5	0.623 J
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	79.2	< 1.90
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	1.4	< 0.50
MW-2	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0 F1	< 1.0	--	--	< 250	120	< 360	< 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	--	4	< 3
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	--	--	--	--
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	--	--	--	--

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

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	3/11/1996	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

Table 2
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Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	12/15/2009	13	1.5	28	7.3	--	--	--	2,100	--	--	7.7	< 2.00
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	4.1	< 3.0
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	3.2	0.47 J
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
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	0.868 B J	0.602 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

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

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	3/8/2022	< 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	0.55	< 0.50
MW-3	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 350	< 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	204	53.5
MW-4	3/8/2021	80	530	330	3,300	< 1.0	--	< 1.0	23,000	7,700	1,600	74	24
MW-4	6/9/2021	85	120	130	1,800	< 1.0	--	--	15,000	13,000	2,000	82	29
MW-4	12/7/2021	61	73	130	2,300 H	< 1.0	--	--	19,000	11,000	1,900	220	110
MW-4	3/8/2022	1.6	< 1.0	6.3	61	< 1.0	--	--	1,000	760	630	74	46
MW-4	6/22/2022	15	10	45	340	< 1.0	--	--	6,800	7,000	< 260	110	48
MW-4	12/12/2022	< 10	11	66	830	< 10	--	--	5,800	2,500/2,300 H *1	750/780 H *1	67	41

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

CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	5/11/1993	130	25	23	22	--	--	--	1,800	--	--	--	--
MW-5	3/4/1994	26	6	11	8	--	--	--	710	420	--	27	< 3
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	--	--	--	--

Table 2
Groundwater Analytical Data
Former BP Facility No. 11060
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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	Total Lead ug/L	Dissolved Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
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	--	--	--	--
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	--	--	12	11
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	42.5	< 3.0
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	6.7	1.3
MW-5	5/13/2014	17	7.5	69	23	< 0.50	--	--	4,400	440	370	16.2	9.2 J
MW-5	5/7/2015	11	4.8	32	12	< 0.50	--	--	2,800	240	260	18.4	5.2 J
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	21.2	3.84 J

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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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	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	6.8	< 2.0
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	--	--	--	--
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

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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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-6	11/19/2013	< 0.50	< 0.70	< 0.80	< 0.80	< 0.50	--	--	130 J	31 J	< 71	0.97 J	0.12 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	< 5.0	< 0.50
MW-6	11/29/2022	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	--	--	< 250	< 110	< 350	< 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	--	--	--	--

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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	Total Lead ug/L	Dissolved Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
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	--	--	--	--
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	1.0	0.090 J
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	0.299 B J	< 2.00
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

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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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-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	20.4	< 3.0
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	12.8	< 0.085
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	6.3 J	< 4.7
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	1.09 B J	0.582 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	--
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-12	10/25/2018	1.17	< 1.00	< 1.00	< 3.00	< 1.00	< 0.0100	< 1.00	867	705	189 J	1.00 B J	< 2.00

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CONSTITUENT		B	T	E	X	MTBE	EDB	EDC	TPH-G	TPH-D	TPH-O	Total Lead	Dissolved 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-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	25.8	< 1.90
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 F1	< 10
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
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	--	--	--	--
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	--	--	--	--

Table 2
Groundwater Analytical Data
Former BP 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	Total Lead ug/L	Dissolved Lead ug/L
MTCA METHOD A CLEANUP LEVELS		5	1000	700	1000	20	0.01	5	800	500	500	15	15
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	--	--	--	--

Table 2
Groundwater Analytical Data
Former BP 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	Total Lead ug/L	Dissolved Lead ug/L
MTCA METHOD A CLEANUP LEVELS	5	1000	700	1000	20	0.01	5	800	500	500	15	15

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.

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 analyzed 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
PAH Groundwater Analytical Data
Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes	Phenanthrene	Pyrene	Total Polynuclear Aromatic Hydrocarbons
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	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS																					
Well ID	Date														160			160			0.1
GMW-1	5/7/2015	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	7.4	1.8	4	13.2	--	--	< 0.00755
GMW-1	3/2/2016	--	--	--	0.043 J	0.029 J	0.031 J	--	0.031 J	0.021 J	0.061	--	--	0.032 J	< 0.030	0.079	0.17	0.264	--	--	0.04861
GMW-1	6/6/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	0.53	1.1	3.83	--	--	--
GMW-1	9/12/2016	--	--	--	< 0.0095	< 0.0095	< 0.0095	--	< 0.0095	< 0.0095	< 0.0095	--	--	< 0.0095	7.1	1.4	2.8	11.3	--	--	< 0.00717
GMW-1	9/12/2016	--	--	--	< 0.0095	< 0.0095	< 0.0095	--	< 0.0095	< 0.0095	< 0.0095	--	--	< 0.0095	6.8	1.4	2.8	11	--	--	< 0.00717
GMW-1	2/20/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	< 0.0198	0.0121 J	0.024 J	< 0.046	--	--	< 0.007783
GMW-1	5/13/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.377	0.0625 J	0.0189 J	0.4584	--	--	< 0.007783
GMW-1	8/27/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.642	0.0389 J	0.140 J	0.8209	--	--	< 0.007783
GMW-1	3/25/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.200 BJ	0.0274 J	0.0130 J	0.24	--	--	< 0.007783
GMW-1	6/2/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.108 J	< 0.0687	< 0.0674	< 0.176	--	--	< 0.0137
GMW-1	8/6/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	< 0.917	< 0.687	< 0.674	< 1.14	--	--	< 0.0137
GMW-1	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-1	5/7/2015	--	--	--	0.025 J	0.026 J	0.044 J	--	0.020 J	0.032 J	0.018 J	--	--	0.033 J	< 0.031	0.023 J	0.026 J	0.0645	--	--	0.04032
MW-1	3/2/2016	--	--	--	< 0.011	< 0.011	< 0.011	--	< 0.011	< 0.011	< 0.011	--	--	< 0.011	0.4	0.12	0.2	0.72	--	--	< 0.008305
MW-1	2/22/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	< 0.0198	0.0129 J	0.0207 J	< 0.0435	--	--	< 0.007783
MW-1	5/14/2019	--	--	--	< 0.00820	< 0.0232	< 0.00424	--	< 0.0272	< 0.0216	< 0.00792	--	--	< 0.0296	0.110 J	0.0309 J	0.0414 J	0.1823	--	--	< 0.015566
MW-1	3/26/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0777 BJ	< 0.00821	< 0.00902	< 0.0863	--	--	< 0.007783
MW-1	6/3/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	< 0.0917	< 0.0687	< 0.0674	< 0.114	--	--	< 0.0137
MW-1	8/6/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.0925 J	< 0.687	< 0.674	< 0.773	--	--	< 0.0137
MW-1	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	< 0.20	< 0.10	< 0.10	--
MW-2	5/7/2015	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	4.3	1.1	0.35	5.75	--	--	< 0.0137
MW-2	3/2/2016	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	4.3	1.7	0.34	6.34	--	--	< 0.0137
MW-2	6/6/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	4.6	2.5	0.29	7.39	--	--	< 0.0137
MW-2	9/12/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0137
MW-2	2/20/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	< 0.0198	0.00849 J	0.0174 J	< 0.03579	--	--	< 0.0137
MW-2	5/14/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0593 J	0.0214 J	0.0228 J	0.1035	--	--	< 0.0137
MW-2	8/27/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0137
MW-2	11/26/2019	--	--	--	0.00684 BJ	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0680 BJ	0.0255 BJ	0.0174 BJ	0.1109	--	--	< 0.0137
MW-2	3/26/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0939 BJ	< 0.00821	< 0.00902	< 0.103	--	--	< 0.0137
MW-2	6/3/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.188 J	< 0.0687	0.150 J	< 0.372	--	--	< 0.0137
MW-2	8/7/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.171 J	< 0.687	< 0.674	< 0.852	--	--	< 0.0137
MW-2	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-2	12/7/2021	< 0.10	< 0.052	< 0.10	< 0.052	< 0.10	< 0.052	< 0.052	< 0.052	< 0.10	< 0.10	< 0.21	< 0.10	< 0.052	< 0.10	< 0.10	< 0.21	--	< 0.10	< 0.10	--
MW-3	5/7/2015	--	--	--	0.016 J	0.015 J	0.025 J	--	< 0.010	0.018 J	< 0.010	--	--	0.016 J	< 0.030	0.76	0.041	0.816	--	--	0.02188
MW-3	3/2/2016	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	< 0.030	< 0.010	< 0.010	< 0.025	--	--	< 0.00755
MW-3	6/6/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.031	0.032 J	< 0.010	0.053	--	--	--
MW-3	9/12/2016	--	--	--	< 0.0095	< 0.0095	< 0.0095	--	< 0.0095	< 0.0095	< 0.0095	--	--	< 0.0095	< 0.029	0.19	< 0.0095	0.20925	--	--	< 0.00717
MW-3	5/14/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0335 J	< 0.00821	< 0.00902	< 0.0421	--	--	< 0.007783
MW-3	11/25/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	< 0.0198	< 0.00821	< 0.00902	< 0.0185	--	--	< 0.007783
MW-3	3/26/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0293 BJ	< 0.00821	< 0.00902	< 0.0379	--	--	< 0.007783
MW-3	8/7/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	< 0.917	< 0.687	< 0.674	< 1.14	--	--	< 0.0137
MW-3	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-3	9/13/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-3	12/7/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.21	< 0.10	< 0.051	0.59	< 0.10	< 0.21	--	< 0.10	< 0.10	--
MW-4	3/26/2020	--	--	--	0.0381 J	0.0250 J	0.0344 J	--	< 0.0272	< 0.0216	< 0.00792	--	--	< 0.0296	113	21.7	35.5	170.2	--	--	< 0.03559
MW-4	6/9/2021	< 5.1	< 2.5	< 0.10	< 0.051	< 0.10	0.061	0.076	< 0.051	< 0.10	< 0.10	< 0.20	< 5.1	< 0.051	76	16	28	--	0.34	0.23	--
MW-4	12/7/2021	< 0.11	< 0.053	< 0.11	< 0.053	< 0.11	0.063	< 0.053	< 0.053	< 0.11	< 0.11	< 0.21	< 0.11	< 0.053	28	4.4	8.7	--	0.16	0.17	--
MW-5	5/7/2015	--	--	--	< 0.010	< 0.010	0.014 J	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	11	3	2.5	16.5	--	--	0.00845
MW-5	3/2/2016	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	9.9	2.7	2.8	15.4	--	--	< 0.00755
MW-5	6/6/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	7.3	2.3	2.3	11.9	--	--	--
MW-5	3/25/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0349 BJ	< 0.00821	< 0.00902	< 0.0435	--	--	< 0.007783
MW-6	5/7/2015	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	<										

Table 3
PAH Groundwater Analytical Data
Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno (1,2,3-cd) pyrene	Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Total Naphthalenes	Phenanthrene	Pyrene	Total Polynuclear Aromatic Hydrocarbons
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	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA METHOD A CLEANUP LEVELS						0.1									160			160			0.1
MW-10	5/7/2015	--	--	--	< 0.010	< 0.010	< 0.010	--	< 0.010	< 0.010	< 0.010	--	--	< 0.010	0.77	0.23	0.35	1.35	--	--	< 0.00755
MW-10	9/12/2016	--	--	--	< 0.0095	< 0.0095	< 0.0095	--	< 0.0095	< 0.0095	< 0.0095	--	--	< 0.0095	< 0.029	< 0.0095	< 0.0095	< 0.024	--	--	< 0.00717
MW-11	2/20/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	< 0.0198	0.00930 J	< 0.00902	< 0.02371	--	--	< 0.007783
MW-11	5/13/2019	--	--	--	0.00965 J	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.165 J	0.0258 J	0.0121 J	0.2029	--	--	0.008543
MW-11	8/27/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.169 BJ	0.0102 J	0.0107 J	0.1899	--	--	< 0.007783
MW-11	11/25/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.141 J	< 0.00821	0.0104 J	< 0.1556	--	--	< 0.007783
MW-11	3/25/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.0887 BJ	0.0194 J	0.0106 J	0.119	--	--	< 0.00778
MW-11	6/2/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	< 0.0917	< 0.0687	< 0.0674	< 0.114	--	--	< 0.0137
MW-11	8/6/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.0917 J	< 0.687	0.0678 BJ	< 0.503	--	--	< 0.0137
MW-11	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-11	9/13/2021	< 0.10	< 0.052	< 0.10	< 0.052	< 0.10	< 0.052	< 0.052	< 0.052	< 0.10	< 0.10	< 0.21	< 0.10	< 0.052	< 0.10	< 0.10	< 0.21	--	< 0.10	< 0.10	--
MW-11	12/7/2021	< 0.10	< 0.052	< 0.10	< 0.052	< 0.10	< 0.052	< 0.052	< 0.052	< 0.10	< 0.10	< 0.21	< 0.10	< 0.052	0.38	< 0.10	< 0.21	--	< 0.10	< 0.10	--
MW-12	2/20/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	4.81	0.897	0.782	6.489	--	--	< 0.0137
MW-12	5/13/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.463	0.328	0.0239 J	0.8149	--	--	< 0.0137
MW-12	8/27/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.257 B	0.235 J	0.0224 J	0.5144	--	--	< 0.0137
MW-12	11/25/2019	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.659	0.244 J	0.0269 J	0.9299	--	--	< 0.0137
MW-12	3/26/2020	--	--	--	< 0.00410	< 0.0116	< 0.00212	--	< 0.0136	< 0.0108	< 0.00396	--	--	< 0.0148	0.523	0.190 J	0.0407 J	0.754	--	--	< 0.0137
MW-12	6/2/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	0.519	0.138 J	0.0727 J	0.73	--	--	< 0.0137
MW-12	8/6/2020	--	--	--	< 0.0203	< 0.0184	< 0.0168	--	< 0.0202	< 0.0179	< 0.0160	--	--	< 0.0158	< 0.917	< 0.687	< 0.674	< 1.14	--	--	< 0.0137
MW-12	6/9/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	1.6	0.44	0.59	--	< 0.10	< 0.10	--
MW-12	9/13/2021	< 0.10	< 0.051	< 0.10	< 0.051	< 0.10	< 0.051	< 0.051	< 0.051	< 0.10	< 0.10	< 0.20	< 0.10	< 0.051	< 0.10	< 0.10	< 0.20	--	< 0.10	< 0.10	--
MW-12	12/7/2021	< 0.10	0.11	< 0.10	< 0.050	< 0.10	< 0.050	< 0.050	< 0.050	< 0.10	< 0.10	< 0.20	< 0.10	< 0.050	0.32	< 0.10	< 0.20	--	< 0.10	< 0.10	--

Notes:
PAH = Polycyclic Aromatic Hydrocarbons
Total Carcinogenic PAH (cPAH) value is the sum of all analyzed cPAHs
Total naphthlenes value is the sum of the naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene values
<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

Table 4
Select VOCs Groundwater Analytical Data
Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		1,3-Butadiene	Chloroform	Ethanol	Hexane	Vinyl Chloride	1,1-Dichloroethene (1,1-DCE)	cis-1,2-Dichloroethene (cis-1,2-DCE)	trans-1,2-dichloroethene	1,1,2-Trichloroethane	Trichloroethene (TCE)	Tetrachloroethene (PCE)
UNIT		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						0.2					5	5
Well ID	Date											
GMW-1	8/27/2019	< 0.157	< 0.0860	< 42	6.17	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
GMW-1	3/25/2020	< 0.157	< 0.0860	< 42.0 J0	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
GMW-1	6/2/2020	< 0.337 J0	< 0.111	< 42.0	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
GMW-1	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
GMW-1	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+	< 1.0 *+
MW-1	6/3/2020	< 0.337 J0	< 0.111	< 42.0	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-1	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-1	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+	< 1.0 *+
MW-2	6/3/2020	< 0.337 J0	< 0.111	46.6 J	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-2	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-2	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+	< 1.0 *+
MW-2	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+	< 1.0 *+
MW-3	9/13/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-3	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	3/8/2021	11	4.0	--	81	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	6/9/2021	5.4	< 1.0	--	53	< 1.0 *+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-4	12/7/2021	3.1	< 1.0	--	41	< 1.0	< 1.0	< 1.0	< 1.0	31	< 1.0	< 1.0
MW-5	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6	6/2/2020	< 0.337 J0	< 0.111	< 42.0	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-6	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6	6/9/2021	< 1.0 *1	< 1.0	--	< 3.0	< 1.0 *+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6	9/13/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-6	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-9	8/27/2019	< 0.157	< 0.0860	< 42	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-9	11/26/2019	< 0.157	< 0.0860	54.0 J,J4	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-9	3/26/2020	< 0.157	< 0.0860	< 42.0 J0	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-9	6/2/2020	< 0.337 J0	< 0.111	< 42.0	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-9	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-9	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0 *+	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-9	9/13/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Table 4
Select VOCs Groundwater Analytical Data
Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		1,3-Butadiene	Chloroform	Ethanol	Hexane	Vinyl Chloride	1,1-Dichloroethene (1,1-DCE)	cis-1,2-Dichloroethene (cis-1,2-DCE)	trans-1,2-dichloroethene	1,1,2-Trichloroethane	Trichloroethene (TCE)	Tetrachloroethene (PCE)
UNIT		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						0.2					5	5
Well ID	Date											
MW-9	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-11	8/27/2019	< 0.157	< 0.0860	< 42	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-11	11/25/2019	< 0.157	< 0.0860	< 42 J4	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-11	3/25/2020	< 0.157	< 0.0860	< 42 J0	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-11	6/2/2020	< 0.337 J0	< 0.111	< 42.0	< 0.749	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-11	3/8/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-11	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+
MW-11	9/13/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-11	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-12	8/27/2019	< 0.157	< 0.0860	< 42	< 0.305	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-12	11/25/2019	< 0.157	< 0.0860	< 42 J4	1.82 J	< 0.118	< 0.188	< 0.0933	< 0.152	3.39	< 0.153	< 0.199
MW-12	3/26/2020	< 0.157	< 0.0860	< 42.0 J0	1.82 J	< 0.118	< 0.188	< 0.0933	< 0.152	< 0.186	< 0.153	< 0.199
MW-12	6/2/2020	< 0.337 J0	< 0.111	< 42.0	1.54 J	< 0.234	< 0.188	< 0.126	< 0.149	< 0.158	< 0.190	< 0.300
MW-12	3/8/2021	< 1.0 F2	< 1.0 F1F2	--	< 3.0 F2	< 1.0 F2	< 1.0 F1F2	< 1.0 F1F2	< 1.0 F1F2	< 1.0 F1F2	< 1.0 F1F2	< 1.0 F1F2
MW-12	6/9/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *+
MW-12	9/13/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MW-12	12/7/2021	< 1.0	< 1.0	--	< 3.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Notes:

<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 = estimated value – The result is greater than or equal to the Method Detection Limit (MDL) and less than the Limit of Quantitation (LOQ)

J0 = The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria

J4 = The associated batch QC was outside the established quality control range for accuracy

*+ = The LCS and/or LCSD is outside acceptance limits, high biased

F1 = MS and/or MSD recovery exceeds control limits

F2 = MS/MSD RPD exceeds control limits

Table 5
Baseline Bioparameter Groundwater Analytical Data
Former BP Facility No. 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

CONSTITUENT		Nitrogen, Nitrite as N	Nitrogen, Nitrate as N	Sulfate	Total Dissolved Solids	Dissolved Arsenic	Total Arsenic
UNIT		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Well ID	Date						
GMW-1	11/29/2022	< 400	860	42,000	150,000	< 5.0	--
MW-2	11/29/2022	< 400	13,000	110,000	320,000	< 5.0	--
MW-3	11/29/2022	< 400	1,900	36,000	120,000	< 5.0	--
MW-4	12/12/2022	< 400 HH3	< 200 HH3	300,000	610,000	< 5.0	--
MW-5	12/12/2022	--	--	--	--	--	38
MW-6	11/29/2022	< 400	1,500	11,000	230,000	< 5.0	--
MW-9	11/29/2022	< 400	820	20,000	69,000	< 5.0	--
MW-11	11/29/2022	< 400	5,500	230,000	800,000	< 5.0	--
MW-12	11/29/2022	< 400	< 200	260,000	780,000	< 5.0	--

Notes:

ug/L = Micrograms per liter (ppb)

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

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

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

H3 - Sample was received and analyzed past holding time

Table 6
SVE/AS System Operational Data
Former BP Facility 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	377.0	7.8	98%	4.39	122.13	2057.14	
02/28/19	off / on	23429.9	td																		

Table 6
SVE/AS System Operational Data
Former BP Facility 11060
4580 Fauntleroy Way SW, Seattle, WA 98126

09/17/21	on / on	29887.0	308.3	80.3%	off / off	1564.1	5.1	1.3%	627.8	15.0	77.0	3037.7	103.58	104.0	50.3	0.0	100%	1.68	21.64	2354.64	Flushed water out of CW-4 line connected to VE system
10/26/21	on / on	30495.0	608.0	65.0%	off / off	1564.1	0.0	0.0%	627.8	8.5	86.0	2513.0	108.00	105.0	24.0	0.0	100%	0.81	20.56	2375.20	Faulty phase monitor shutting down system; replaced
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	13%	off / off	1564.1	0.0	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	32%	off / off	1564.1	0.0	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	100%	off / off	1564.1	0.0	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%	off / off	1564.1	0.0	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	97%	off / off	1564.1	0.0	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%	off / off	1564.1	0.0	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%	off / off	1564.1	0.0	0.0%	629.6	--	--	--	--	--	16.8	0.0	100%	--	--	--	System shutdown down during cold temperatures, readings for permit compliance

2022 Annual Operational Hours	6,517
2022 Average Uptime Percentage	78.03%
2022 Average SVE flow rate (scfm):	77.0

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)

Pstandard = 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

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

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

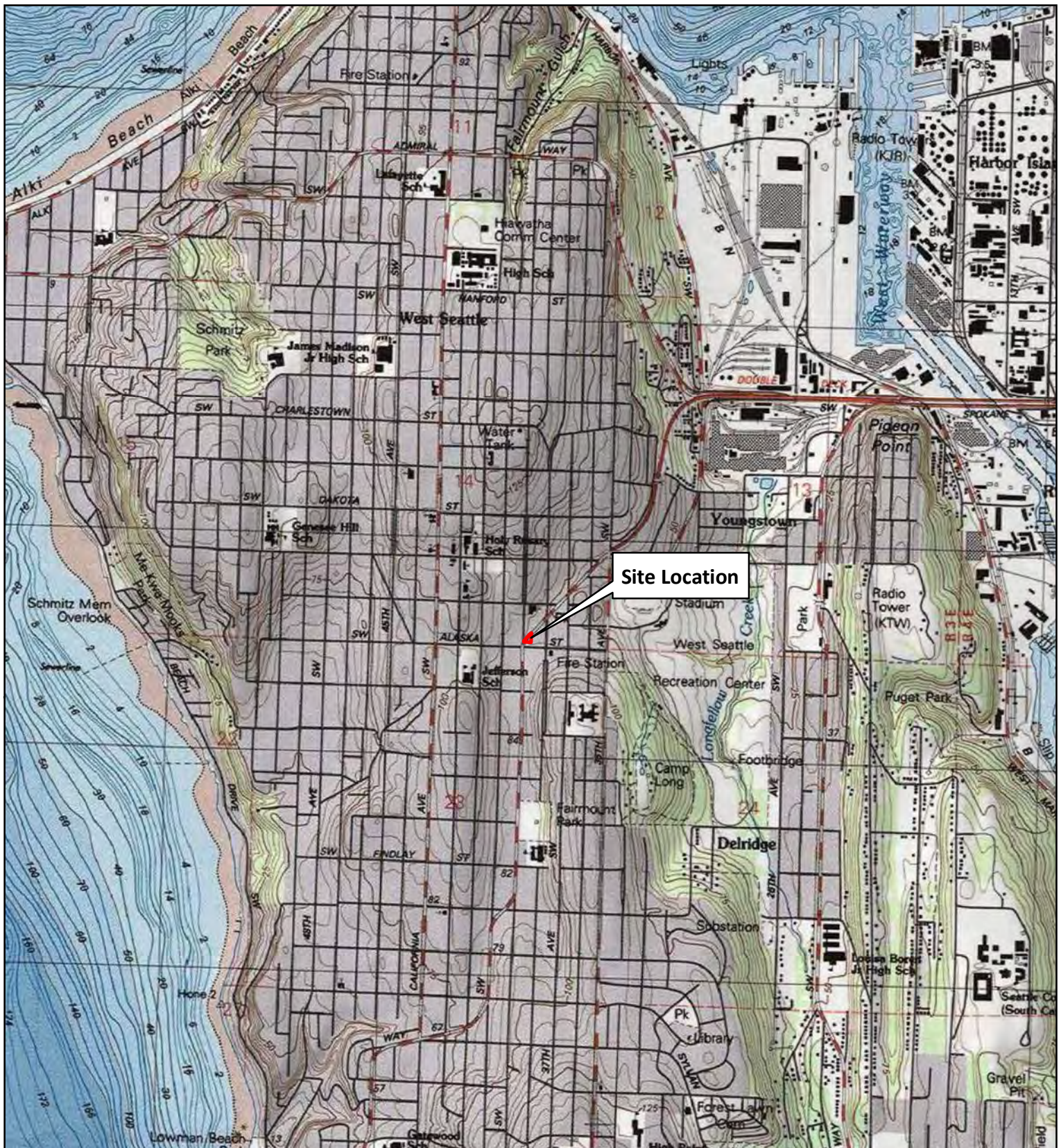
Figures

Figure 1 - Site Location Map

Figure 2 - Site Aerial Map

Figure 3 - Groundwater Analytical and Elevation Contour Map – September 22, 2022

Figure 4 - Groundwater Analytical and Elevation Contour Map – November 29 and December 12, 2022



Site Location



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 BP FACILITY NO. 11060
4580 FAUNTLEROY WAY SW
SEATTLE, WA

PROJECT NO.
WA - 11060 SEATTLE

PREPARED BY
SAA

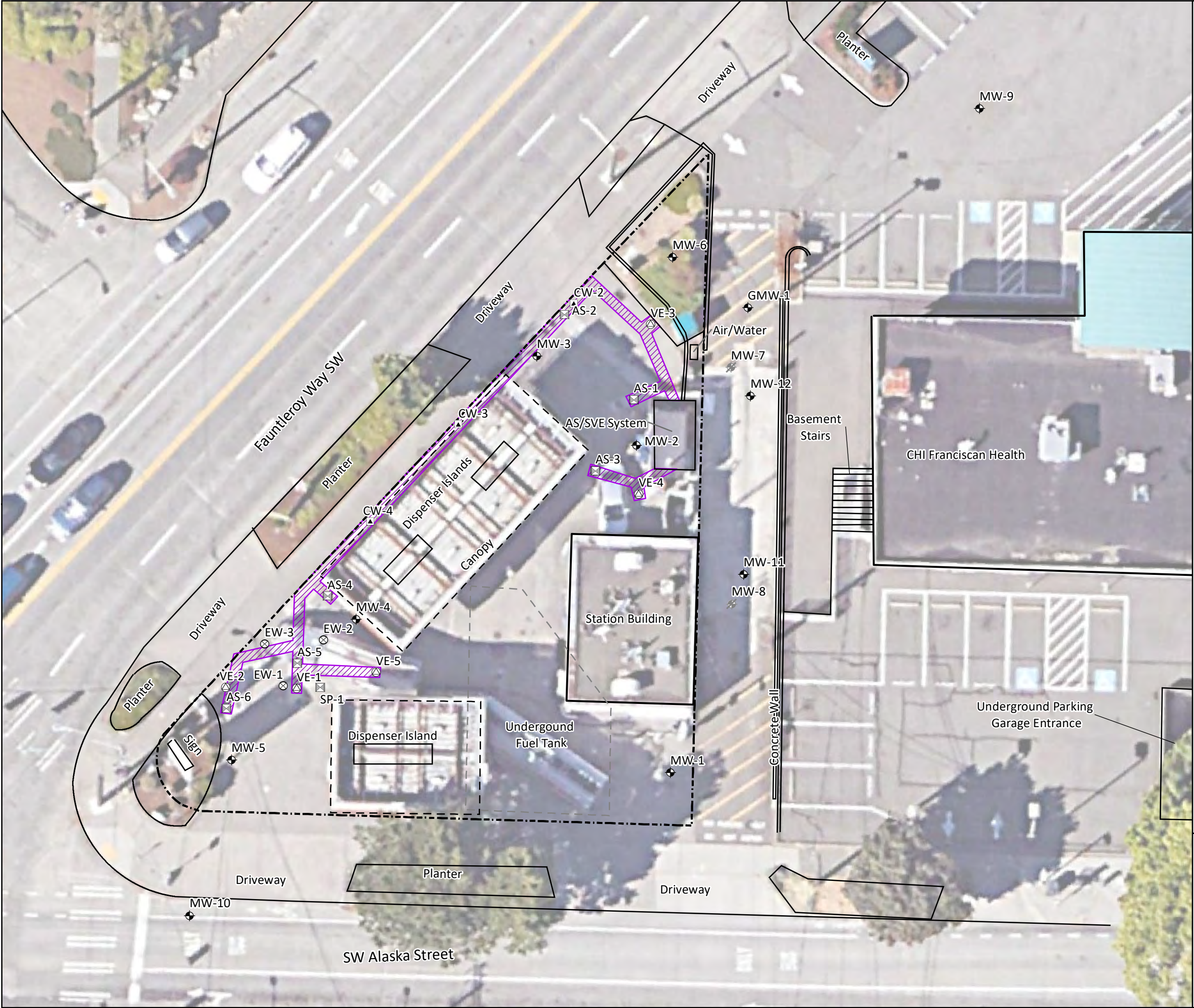
REF SCALE
1:24,000

DATE
2/15/2021

REVIEWED BY
JS

MAP SCALE
1 INCH = 2,000 FEET





- Legend**
- ☒ Air Sparge
 - ⊗ Vapor Extraction Well
 - ⬢ Combination Air Sparge and Vapor Extraction Well
 - ⊗ Extraction Well
 - ⬢ Monitoring Well
 - ✖ Abandoned Monitoring Well
 - - - Approximate Property Boundary
 - ▨ Trench Location

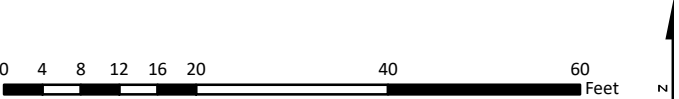
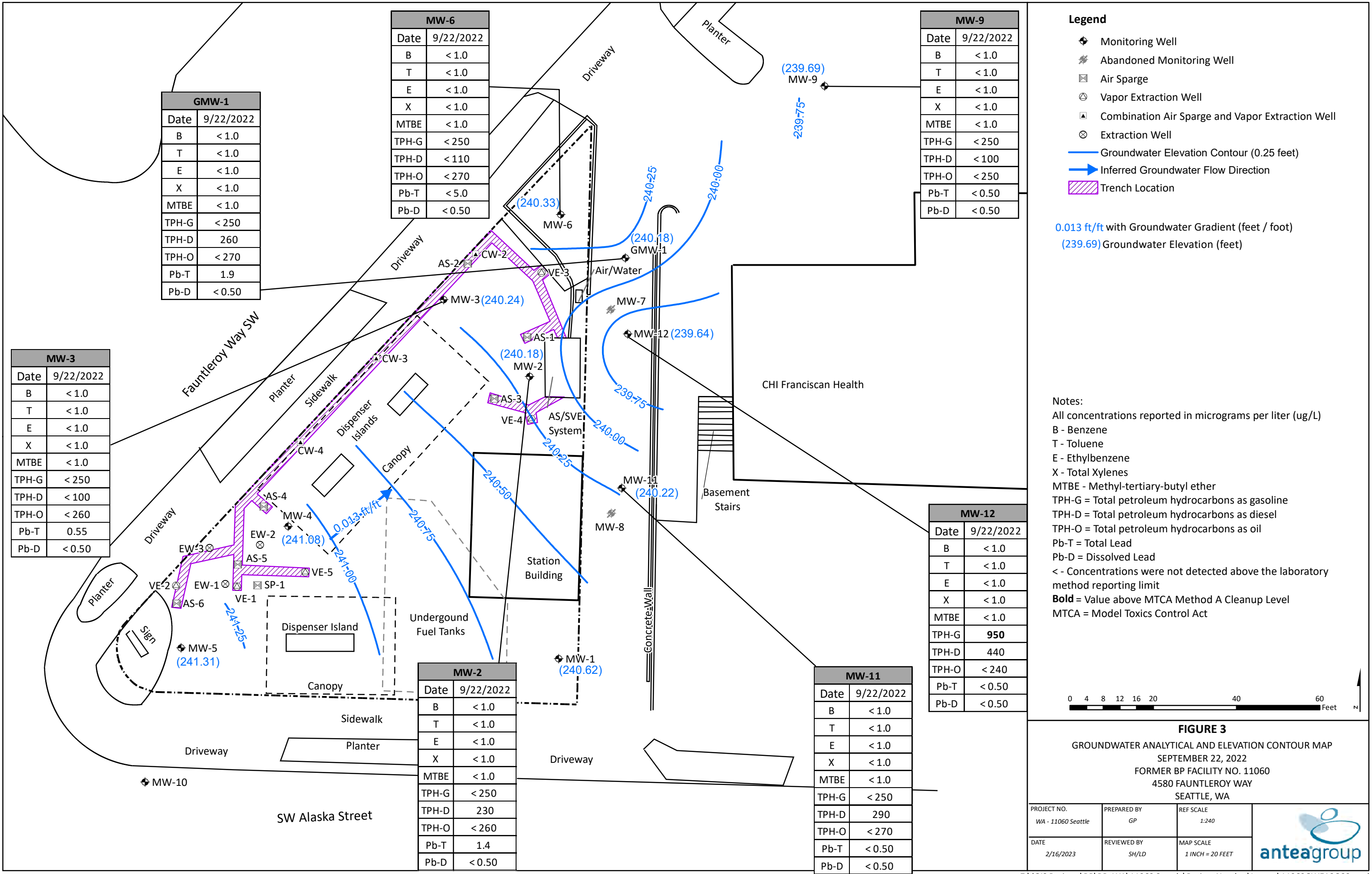
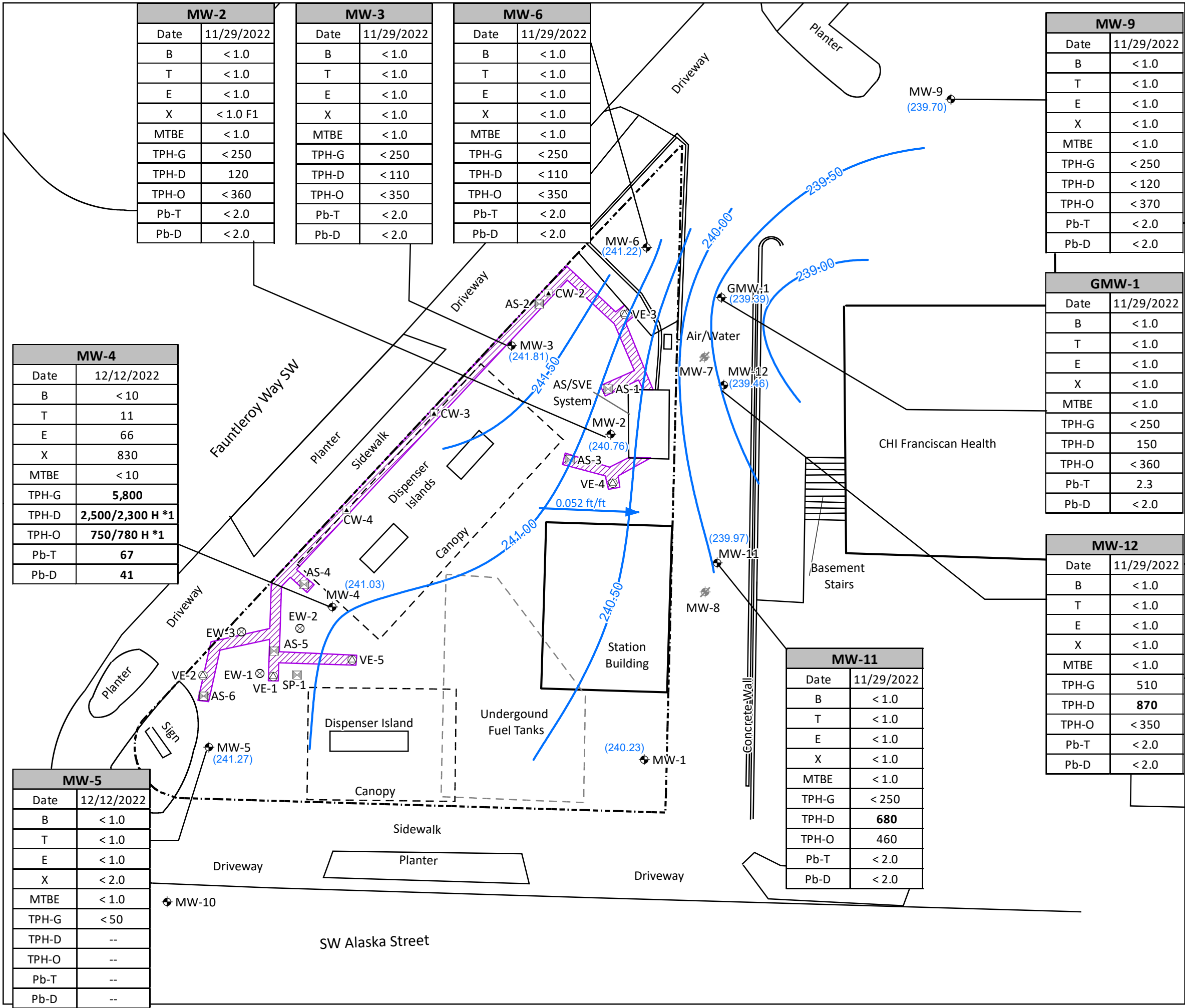


FIGURE 2
SITE AERIAL MAP
FORMER BP FACILITY NO. 11060
4580 FAUNTLEROY WAY
SEATTLE, WA

PROJECT NO. WA - 11060 SEATTLE	PREPARED BY SAA	REF SCALE 1:240	
DATE 2/15/2021	REVIEWED BY JS	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 (0.50 feet)
- Inferred Groundwater Flow Direction
- Trench Location

0.052 ft/ft with Groundwater Gradient (feet / foot)
(239.39) Groundwater Elevation (feet)

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

< - Concentrations were not detected above the laboratory method reporting limit

Bold = Value above MTCA Method A Cleanup Level

MTCA = Model Toxics Control Act

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

*1 = LCS/LCSD RPD exceeds control limits

F1 = MS and/or MSD recovery exceeds control limits

Note on MW-4: 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.

Note on MW-5: Samples were not analyzed for TPH-D, TPH-O, Total Lead, or Dissolved Lead due to insufficient sample volume remaining in the well during time of collection.

Note on MW-4 and MW-5: Groundwater elevation data was collected on 11/29/2022. Samples for groundwater analytical data were collected 12/12/2022.



FIGURE 4

GROUNDWATER ANALYTICAL AND ELEVATION CONTOUR MAP
NOVEMBER 29 AND DECEMBER 12, 2022
FORMER BP FACILITY NO. 11060
4580 FAUNTLEROY WAY
SEATTLE, WA

PROJECT NO. WA - 11060 Seattle	PREPARED BY JS	REF SCALE 1:240	
DATE 2/16/2023	REVIEWED BY JL	MAP SCALE 1 INCH = 20 FEET	

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

ANALYTICAL REPORT

Eurofins Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

Laboratory Job ID: 580-118237-1
Client Project/Site: BP - ARCO 11060

For:

Antea USA Inc.
4006 148th Ave NE
Redmond, Washington 98052

Attn: Jesse Schewe



Authorized for release by:
10/14/2022 11:50:50 AM

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

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results through



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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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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 TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. 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.



Katie Grant
Project Manager I
10/14/2022 11:50:50 AM

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Definitions/Glossary

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

Job ID: 580-118237-1

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: 580-118237-1

Job ID: 580-118237-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-118237-1

Comments

No additional comments.

Receipt

The samples were received on 9/23/2022 8:34 AM. 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

A trip blank was not submitted for analysis with this sample shipment; and was not listed on the Chain of Custody (COC).

GC/MS VOA

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

GC 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

Method Filtration: The following samples were not filtered within 15 minutes of sample collection as required by the method: MW-2_20220922 (580-118237-1), MW-3_20220922 (580-118237-2), MW-6_20220922 (580-118237-3), MW-9_20220922 (580-118237-4), MW-11_20220922 (580-118237-5), MW-12_20220922 (580-118237-6) and GMW-1_20220922 (580-118237-7). The samples were filtered prior to analysis at the laboratory, and the results have been reported.

No additional analytical or quality issues were noted, other than those described above or 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: 580-118237-1

Client Sample ID: MW-2_20220922

Lab Sample ID: 580-118237-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (C12-C24)	230		100	47	ug/L	1		NWTPH-Dx	Total/NA
Lead	1.4		0.50	0.071	ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-3_20220922

Lab Sample ID: 580-118237-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.55		0.50	0.071	ug/L	1		6020B	Total Recoverable

Client Sample ID: MW-6_20220922

Lab Sample ID: 580-118237-3

No Detections.

Client Sample ID: MW-9_20220922

Lab Sample ID: 580-118237-4

No Detections.

Client Sample ID: MW-11_20220922

Lab Sample ID: 580-118237-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (C12-C24)	290		110	48	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: MW-12_20220922

Lab Sample ID: 580-118237-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (C7-C12)	950		250	43	ug/L	1		NWTPH-Gx	Total/NA
Diesel Range Organics (C12-C24)	440		96	43	ug/L	1		NWTPH-Dx	Total/NA

Client Sample ID: GMW-1_20220922

Lab Sample ID: 580-118237-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (C12-C24)	260		110	48	ug/L	1		NWTPH-Dx	Total/NA
Lead	1.9		0.50	0.071	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: MW-2_20220922

Lab Sample ID: 580-118237-1

Date Collected: 09/22/22 08:10

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 14:30	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 14:30	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 14:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 14:30	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 14:30	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 14:30	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 14:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		10/05/22 14:30	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		10/05/22 14:30	1
4-Bromofluorobenzene (Surr)	97		80 - 120		10/05/22 14:30	1
Dibromofluoromethane (Surr)	105		80 - 120		10/05/22 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 19:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		50 - 150					10/05/22 19:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	230		100	47	ug/L		10/05/22 11:12	10/06/22 07:05	1
Motor Oil Range Organics (C24-C40)	ND		260	100	ug/L		10/05/22 11:12	10/06/22 07:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	104		50 - 150				10/05/22 11:12	10/06/22 07:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.4		0.50	0.071	ug/L		10/04/22 17:50	10/13/22 19:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:39	1

Client Sample ID: MW-3_20220922

Lab Sample ID: 580-118237-2

Date Collected: 09/22/22 10:20

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 14:56	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 14:56	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 14:56	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 14:56	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 14:56	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 14:56	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 14:56	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: MW-3_20220922

Lab Sample ID: 580-118237-2

Date Collected: 09/22/22 10:20

Matrix: Water

Date Received: 09/23/22 08:34

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/05/22 14:56	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		10/05/22 14:56	1
4-Bromofluorobenzene (Surr)	96		80 - 120		10/05/22 14:56	1
Dibromofluoromethane (Surr)	103		80 - 120		10/05/22 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		50 - 150		10/05/22 20:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	ND		100	47	ug/L		10/05/22 11:12	10/06/22 07:28	1
Motor Oil Range Organics (C24-C40)	ND		260	100	ug/L		10/05/22 11:12	10/06/22 07:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	101		50 - 150	10/05/22 11:12	10/06/22 07:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.55		0.50	0.071	ug/L		10/04/22 17:50	10/13/22 19:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:41	1

Client Sample ID: MW-6_20220922

Lab Sample ID: 580-118237-3

Date Collected: 09/22/22 14:10

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 15:22	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 15:22	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 15:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 15:22	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 15:22	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 15:22	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		10/05/22 15:22	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		10/05/22 15:22	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/05/22 15:22	1
Dibromofluoromethane (Surr)	103		80 - 120		10/05/22 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 21:14	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: MW-6_20220922

Lab Sample ID: 580-118237-3

Date Collected: 09/22/22 14:10

Matrix: Water

Date Received: 09/23/22 08:34

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101		50 - 150		10/05/22 21:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	ND		110	49	ug/L		10/05/22 11:12	10/06/22 07:50	1
Motor Oil Range Organics (C24-C40)	ND		270	110	ug/L		10/05/22 11:12	10/06/22 07:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	93		50 - 150	10/05/22 11:12	10/06/22 07:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		5.0	0.71	ug/L		10/04/22 17:50	10/13/22 18:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:37	1

Client Sample ID: MW-9_20220922

Lab Sample ID: 580-118237-4

Date Collected: 09/22/22 13:40

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 15:35	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 15:35	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 15:35	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 15:35	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 15:35	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 15:35	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		10/05/22 15:35	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		10/05/22 15:35	1
4-Bromofluorobenzene (Surr)	101		80 - 120		10/05/22 15:35	1
Dibromofluoromethane (Surr)	99		80 - 120		10/05/22 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		50 - 150		10/05/22 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	ND		100	46	ug/L		10/05/22 11:12	10/06/22 08:13	1
Motor Oil Range Organics (C24-C40)	ND		250	100	ug/L		10/05/22 11:12	10/06/22 08:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	105		50 - 150	10/05/22 11:12	10/06/22 08:13	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: MW-9_20220922

Lab Sample ID: 580-118237-4

Date Collected: 09/22/22 13:40

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:50	10/13/22 18:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:18	1

Client Sample ID: MW-11_20220922

Lab Sample ID: 580-118237-5

Date Collected: 09/22/22 11:40

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 14:17	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 14:17	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 14:17	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 14:17	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 14:17	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 14:17	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 14:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/05/22 14:17	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		10/05/22 14:17	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/05/22 14:17	1
Dibromofluoromethane (Surr)	104		80 - 120		10/05/22 14:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		50 - 150		10/05/22 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	290		110	48	ug/L		10/05/22 11:12	10/06/22 08:58	1
Motor Oil Range Organics (C24-C40)	ND		270	110	ug/L		10/05/22 11:12	10/06/22 08:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	106		50 - 150	10/05/22 11:12	10/06/22 08:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:50	10/13/22 18:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:47	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: MW-12_20220922

Lab Sample ID: 580-118237-6

Date Collected: 09/22/22 12:20

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 14:43	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 14:43	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 14:43	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 14:43	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 14:43	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 14:43	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		10/05/22 14:43	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		10/05/22 14:43	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/05/22 14:43	1
Dibromofluoromethane (Surr)	104		80 - 120		10/05/22 14:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	950		250	43	ug/L			10/05/22 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101		50 - 150					10/05/22 22:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	440		96	43	ug/L		10/05/22 11:12	10/06/22 09:21	1
Motor Oil Range Organics (C24-C40)	ND		240	96	ug/L		10/05/22 11:12	10/06/22 09:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	100		50 - 150				10/05/22 11:12	10/06/22 09:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:45	10/07/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:43	1

Client Sample ID: GMW-1_20220922

Lab Sample ID: 580-118237-7

Date Collected: 09/22/22 13:00

Matrix: Water

Date Received: 09/23/22 08:34

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 15:09	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 15:09	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 15:09	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 15:09	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 15:09	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 15:09	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 15:09	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-118237-1

Client Sample ID: GMW-1_20220922

Lab Sample ID: 580-118237-7

Date Collected: 09/22/22 13:00

Matrix: Water

Date Received: 09/23/22 08:34

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/05/22 15:09	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		10/05/22 15:09	1
4-Bromofluorobenzene (Surr)	98		80 - 120		10/05/22 15:09	1
Dibromofluoromethane (Surr)	105		80 - 120		10/05/22 15:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		50 - 150		10/05/22 22:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	260		110	48	ug/L		10/05/22 11:12	10/06/22 09:43	1
Motor Oil Range Organics (C24-C40)	ND		270	110	ug/L		10/05/22 11:12	10/06/22 09:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	104		50 - 150	10/05/22 11:12	10/06/22 09:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1.9		0.50	0.071	ug/L		10/04/22 17:55	10/12/22 10:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:45	1

Surrogate Summary

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

Job ID: 580-118237-1

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)
580-118237-1	MW-2_20220922	97	107	97	105
580-118237-2	MW-3_20220922	99	105	96	103
580-118237-3	MW-6_20220922	100	105	99	103
580-118237-4	MW-9_20220922	98	103	101	99
580-118237-5	MW-11_20220922	99	102	98	104
580-118237-6	MW-12_20220922	98	102	99	104
580-118237-7	GMW-1_20220922	99	104	98	105
LCS 410-303338/4	Lab Control Sample	98	105	98	107
LCS 410-303339/4	Lab Control Sample	100	106	101	107
LCSD 410-303338/5	Lab Control Sample Dup	99	104	97	107
LCSD 410-303339/5	Lab Control Sample Dup	98	108	97	107
MB 410-303338/7	Method Blank	99	103	99	105
MB 410-303339/7	Method Blank	99	104	97	104
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)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F1 (50-150)			
580-118237-1	MW-2_20220922	104			
580-118237-2	MW-3_20220922	103			
580-118237-3	MW-6_20220922	101			
580-118237-4	MW-9_20220922	102			
580-118237-5	MW-11_20220922	103			
580-118237-6	MW-12_20220922	101			
580-118237-7	GMW-1_20220922	104			
LCS 410-303348/5	Lab Control Sample	94			
LCSD 410-303348/6	Lab Control Sample Dup	94			
MB 410-303348/4	Method Blank	103			
Surrogate Legend					
TFT-F = a,a,a-Trifluorotoluene (fid)					

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)			
		OTP (50-150)			
580-118237-1	MW-2_20220922	104			
580-118237-2	MW-3_20220922	101			
580-118237-3	MW-6_20220922	93			
580-118237-4	MW-9_20220922	105			
580-118237-4 DU	MW-9_20220922	99			

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Surrogate Summary

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

Job ID: 580-118237-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTP (50-150)
580-118237-5	MW-11_20220922	106
580-118237-6	MW-12_20220922	100
580-118237-7	GMW-1_20220922	104
LCS 410-303249/2-A	Lab Control Sample	88
LCSD 410-303249/3-A	Lab Control Sample Dup	91
MB 410-303249/1-A	Method Blank	98

Surrogate Legend

OTP = o- terphenyl (Surr)

QC Sample Results

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

Job ID: 580-118237-1

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

Lab Sample ID: MB 410-303338/7

Matrix: Water

Analysis Batch: 303338

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 13:51	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 13:51	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 13:51	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 13:51	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 13:51	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 13:51	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 13:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		10/05/22 13:51	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		10/05/22 13:51	1
4-Bromofluorobenzene (Surr)	99		80 - 120		10/05/22 13:51	1
Dibromofluoromethane (Surr)	105		80 - 120		10/05/22 13:51	1

Lab Sample ID: LCS 410-303338/4

Matrix: Water

Analysis Batch: 303338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	20.0	21.7		ug/L		109	69 - 122
Benzene	20.0	21.1		ug/L		105	80 - 120
Toluene	20.0	20.7		ug/L		103	80 - 120
Ethylbenzene	20.0	20.9		ug/L		105	80 - 120
m-Xylene & p-Xylene	40.0	42.3		ug/L		106	80 - 120
o-Xylene	20.0	21.0		ug/L		105	80 - 120
Xylenes, Total	60.0	63.3		ug/L		106	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120

Lab Sample ID: LCSD 410-303338/5

Matrix: Water

Analysis Batch: 303338

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
Methyl tert-butyl ether	20.0	22.2		ug/L		111	69 - 122	2	30
Benzene	20.0	21.4		ug/L		107	80 - 120	2	30
Toluene	20.0	21.0		ug/L		105	80 - 120	2	30
Ethylbenzene	20.0	21.1		ug/L		106	80 - 120	1	30
m-Xylene & p-Xylene	40.0	42.6		ug/L		107	80 - 120	1	30
o-Xylene	20.0	21.5		ug/L		108	80 - 120	2	30
Xylenes, Total	60.0	64.1		ug/L		107	80 - 120	1	30

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QC Sample Results

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

Job ID: 580-118237-1

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

Lab Sample ID: LCSD 410-303338/5

Matrix: Water

Analysis Batch: 303338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120

Lab Sample ID: MB 410-303339/7

Matrix: Water

Analysis Batch: 303339

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			10/05/22 14:04	1
Benzene	ND		1.0	0.30	ug/L			10/05/22 14:04	1
Toluene	ND		1.0	0.20	ug/L			10/05/22 14:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			10/05/22 14:04	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			10/05/22 14:04	1
o-Xylene	ND		1.0	0.40	ug/L			10/05/22 14:04	1
Xylenes, Total	ND		1.0	0.40	ug/L			10/05/22 14:04	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
Toluene-d8 (Surr)	99		80 - 120		10/05/22 14:04	1			
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		10/05/22 14:04	1			
4-Bromofluorobenzene (Surr)	97		80 - 120		10/05/22 14:04	1			
Dibromofluoromethane (Surr)	104		80 - 120		10/05/22 14:04	1			

Lab Sample ID: LCS 410-303339/4

Matrix: Water

Analysis Batch: 303339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS						%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Methyl tert-butyl ether	20.0	24.5		ug/L		122	69 - 122		
Benzene	20.0	21.5		ug/L		107	80 - 120		
Toluene	20.0	21.3		ug/L		107	80 - 120		
Ethylbenzene	20.0	21.3		ug/L		106	80 - 120		
m-Xylene & p-Xylene	40.0	42.7		ug/L		107	80 - 120		
o-Xylene	20.0	22.1		ug/L		111	80 - 120		
Xylenes, Total	60.0	64.8		ug/L		108	80 - 120		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120

QC Sample Results

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

Job ID: 580-118237-1

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

Lab Sample ID: LCSD 410-303339/5

Matrix: Water

Analysis Batch: 303339

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
Methyl tert-butyl ether	20.0	23.7		ug/L		119	69 - 122	3	30
Benzene	20.0	21.9		ug/L		109	80 - 120	2	30
Toluene	20.0	21.4		ug/L		107	80 - 120	0	30
Ethylbenzene	20.0	21.3		ug/L		106	80 - 120	0	30
m-Xylene & p-Xylene	40.0	42.6		ug/L		107	80 - 120	0	30
o-Xylene	20.0	21.6		ug/L		108	80 - 120	2	30
Xylenes, Total	60.0	64.2		ug/L		107	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	108		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120

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

Lab Sample ID: MB 410-303348/4

Matrix: Water

Analysis Batch: 303348

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			10/05/22 13:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		50 - 150		10/05/22 13:37	1

Lab Sample ID: LCS 410-303348/5

Matrix: Water

Analysis Batch: 303348

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C7-C12)	1100	1070		ug/L		97	64 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	94		50 - 150

Lab Sample ID: LCSD 410-303348/6

Matrix: Water

Analysis Batch: 303348

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 Range Organics (C7-C12)	1100	1060		ug/L		97	64 - 131	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	94		50 - 150

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QC Sample Results

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

Job ID: 580-118237-1

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

Lab Sample ID: MB 410-303249/1-A

Matrix: Water

Analysis Batch: 303594

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 303249

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C12-C24)	ND		100	45	ug/L		10/05/22 11:12	10/06/22 05:35	1
Motor Oil Range Organics (C24-C40)	ND		250	100	ug/L		10/05/22 11:12	10/06/22 05:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -terphenyl (Surr)	98		50 - 150				10/05/22 11:12	10/06/22 05:35	1

Lab Sample ID: LCS 410-303249/2-A

Matrix: Water

Analysis Batch: 303594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 303249

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel Range Organics (C12-C24)	600	268		ug/L		45	14 - 115		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -terphenyl (Surr)	88		50 - 150						

Lab Sample ID: LCSD 410-303249/3-A

Matrix: Water

Analysis Batch: 303594

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 303249

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (C12-C24)	600	294		ug/L		49	14 - 115	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -terphenyl (Surr)	91		50 - 150						

Lab Sample ID: 580-118237-4 DU

Matrix: Water

Analysis Batch: 303594

Client Sample ID: MW-9_20220922

Prep Type: Total/NA

Prep Batch: 303249

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Diesel Range Organics (C12-C24)	ND		ND		ug/L		NC	20
Motor Oil Range Organics (C24-C40)	ND		ND		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
<i>o</i> -terphenyl (Surr)	99		50 - 150					

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-303077/1-A

Matrix: Water

Analysis Batch: 304416

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 303077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:45	10/07/22 13:28	1

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QC Sample Results

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

Job ID: 580-118237-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: LCS 410-303077/2-A
Matrix: Water
Analysis Batch: 304416

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 303077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	50.0		ug/L		100	90 - 115

Lab Sample ID: MB 410-303078/1-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 303078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:50	10/13/22 18:29	1

Lab Sample ID: LCS 410-303078/2-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 303078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	49.3		ug/L		99	90 - 115

Lab Sample ID: LCSD 410-303078/3-A
Matrix: Water
Analysis Batch: 306542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 303078

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	50.0	50.3		ug/L		101	90 - 115	2	20

Lab Sample ID: MB 410-303081/1-A
Matrix: Water
Analysis Batch: 305815

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 303081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 17:54	10/12/22 09:34	1

Lab Sample ID: LCS 410-303081/2-A
Matrix: Water
Analysis Batch: 305815

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 303081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	50.0		ug/L		100	90 - 115

Lab Sample ID: MB 410-303107/1-A
Matrix: Water
Analysis Batch: 304281

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 303107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.50	0.071	ug/L		10/04/22 18:43	10/07/22 09:14	1

Lab Sample ID: LCS 410-303107/2-A
Matrix: Water
Analysis Batch: 304281

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 303107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	50.4		ug/L		101	90 - 115

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QC Sample Results

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

Job ID: 580-118237-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 580-118237-4 MS

Matrix: Water

Analysis Batch: 304281

Client Sample ID: MW-9_20220922

Prep Type: Dissolved

Prep Batch: 303107

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		50.0	50.6		ug/L		101	75 - 125

Lab Sample ID: 580-118237-4 MSD

Matrix: Water

Analysis Batch: 304281

Client Sample ID: MW-9_20220922

Prep Type: Dissolved

Prep Batch: 303107

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		50.0	50.3		ug/L		101	75 - 125	1	20

Lab Sample ID: 580-118237-4 DU

Matrix: Water

Analysis Batch: 304281

Client Sample ID: MW-9_20220922

Prep Type: Dissolved

Prep Batch: 303107

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: 580-118237-1

GC/MS VOA

Analysis Batch: 303338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-4	MW-9_20220922	Total/NA	Water	8260D	
580-118237-5	MW-11_20220922	Total/NA	Water	8260D	
580-118237-6	MW-12_20220922	Total/NA	Water	8260D	
580-118237-7	GMW-1_20220922	Total/NA	Water	8260D	
MB 410-303338/7	Method Blank	Total/NA	Water	8260D	
LCS 410-303338/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-303338/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 303339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total/NA	Water	8260D	
580-118237-2	MW-3_20220922	Total/NA	Water	8260D	
580-118237-3	MW-6_20220922	Total/NA	Water	8260D	
MB 410-303339/7	Method Blank	Total/NA	Water	8260D	
LCS 410-303339/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-303339/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC VOA

Analysis Batch: 303348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-2	MW-3_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-3	MW-6_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-4	MW-9_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-5	MW-11_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-6	MW-12_20220922	Total/NA	Water	NWTPH-Gx	
580-118237-7	GMW-1_20220922	Total/NA	Water	NWTPH-Gx	
MB 410-303348/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-303348/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-303348/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 303249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total/NA	Water	3510C	
580-118237-2	MW-3_20220922	Total/NA	Water	3510C	
580-118237-3	MW-6_20220922	Total/NA	Water	3510C	
580-118237-4	MW-9_20220922	Total/NA	Water	3510C	
580-118237-5	MW-11_20220922	Total/NA	Water	3510C	
580-118237-6	MW-12_20220922	Total/NA	Water	3510C	
580-118237-7	GMW-1_20220922	Total/NA	Water	3510C	
MB 410-303249/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-303249/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-303249/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
580-118237-4 DU	MW-9_20220922	Total/NA	Water	3510C	

Analysis Batch: 303594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total/NA	Water	NWTPH-Dx	303249
580-118237-2	MW-3_20220922	Total/NA	Water	NWTPH-Dx	303249

Eurofins Seattle

QC Association Summary

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

Job ID: 580-118237-1

GC Semi VOA (Continued)

Analysis Batch: 303594 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-3	MW-6_20220922	Total/NA	Water	NWTPH-Dx	303249
580-118237-4	MW-9_20220922	Total/NA	Water	NWTPH-Dx	303249
580-118237-5	MW-11_20220922	Total/NA	Water	NWTPH-Dx	303249
580-118237-6	MW-12_20220922	Total/NA	Water	NWTPH-Dx	303249
580-118237-7	GMW-1_20220922	Total/NA	Water	NWTPH-Dx	303249
MB 410-303249/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	303249
LCS 410-303249/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	303249
LCSD 410-303249/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	303249
580-118237-4 DU	MW-9_20220922	Total/NA	Water	NWTPH-Dx	303249

Metals

Filtration Batch: 302747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Dissolved	Water	Filtration	
580-118237-2	MW-3_20220922	Dissolved	Water	Filtration	
580-118237-3	MW-6_20220922	Dissolved	Water	Filtration	
580-118237-4	MW-9_20220922	Dissolved	Water	Filtration	
580-118237-5	MW-11_20220922	Dissolved	Water	Filtration	
580-118237-6	MW-12_20220922	Dissolved	Water	Filtration	
580-118237-7	GMW-1_20220922	Dissolved	Water	Filtration	
580-118237-4 MS	MW-9_20220922	Dissolved	Water	Filtration	
580-118237-4 MSD	MW-9_20220922	Dissolved	Water	Filtration	
580-118237-4 DU	MW-9_20220922	Dissolved	Water	Filtration	

Prep Batch: 303077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-6	MW-12_20220922	Total Recoverable	Water	3005A	
MB 410-303077/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-303077/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 303078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total Recoverable	Water	3005A	
580-118237-2	MW-3_20220922	Total Recoverable	Water	3005A	
580-118237-3	MW-6_20220922	Total Recoverable	Water	3005A	
580-118237-4	MW-9_20220922	Total Recoverable	Water	3005A	
580-118237-5	MW-11_20220922	Total Recoverable	Water	3005A	
MB 410-303078/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-303078/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-303078/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 303081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-7	GMW-1_20220922	Total Recoverable	Water	3005A	
MB 410-303081/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-303081/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 303107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Dissolved	Water	3005A	302747

Eurofins Seattle

QC Association Summary

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

Job ID: 580-118237-1

Metals (Continued)

Prep Batch: 303107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-2	MW-3_20220922	Dissolved	Water	3005A	302747
580-118237-3	MW-6_20220922	Dissolved	Water	3005A	302747
580-118237-4	MW-9_20220922	Dissolved	Water	3005A	302747
580-118237-5	MW-11_20220922	Dissolved	Water	3005A	302747
580-118237-6	MW-12_20220922	Dissolved	Water	3005A	302747
580-118237-7	GMW-1_20220922	Dissolved	Water	3005A	302747
MB 410-303107/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-303107/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
580-118237-4 MS	MW-9_20220922	Dissolved	Water	3005A	302747
580-118237-4 MSD	MW-9_20220922	Dissolved	Water	3005A	302747
580-118237-4 DU	MW-9_20220922	Dissolved	Water	3005A	302747

Analysis Batch: 304281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Dissolved	Water	6020B	303107
580-118237-2	MW-3_20220922	Dissolved	Water	6020B	303107
580-118237-3	MW-6_20220922	Dissolved	Water	6020B	303107
580-118237-4	MW-9_20220922	Dissolved	Water	6020B	303107
580-118237-5	MW-11_20220922	Dissolved	Water	6020B	303107
580-118237-6	MW-12_20220922	Dissolved	Water	6020B	303107
580-118237-7	GMW-1_20220922	Dissolved	Water	6020B	303107
MB 410-303107/1-A	Method Blank	Total Recoverable	Water	6020B	303107
LCS 410-303107/2-A	Lab Control Sample	Total Recoverable	Water	6020B	303107
580-118237-4 MS	MW-9_20220922	Dissolved	Water	6020B	303107
580-118237-4 MSD	MW-9_20220922	Dissolved	Water	6020B	303107
580-118237-4 DU	MW-9_20220922	Dissolved	Water	6020B	303107

Analysis Batch: 304416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-6	MW-12_20220922	Total Recoverable	Water	6020B	303077
MB 410-303077/1-A	Method Blank	Total Recoverable	Water	6020B	303077
LCS 410-303077/2-A	Lab Control Sample	Total Recoverable	Water	6020B	303077

Analysis Batch: 305815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-7	GMW-1_20220922	Total Recoverable	Water	6020B	303081
MB 410-303081/1-A	Method Blank	Total Recoverable	Water	6020B	303081
LCS 410-303081/2-A	Lab Control Sample	Total Recoverable	Water	6020B	303081

Analysis Batch: 306542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-118237-1	MW-2_20220922	Total Recoverable	Water	6020B	303078
580-118237-2	MW-3_20220922	Total Recoverable	Water	6020B	303078
580-118237-3	MW-6_20220922	Total Recoverable	Water	6020B	303078
580-118237-4	MW-9_20220922	Total Recoverable	Water	6020B	303078
580-118237-5	MW-11_20220922	Total Recoverable	Water	6020B	303078
MB 410-303078/1-A	Method Blank	Total Recoverable	Water	6020B	303078
LCS 410-303078/2-A	Lab Control Sample	Total Recoverable	Water	6020B	303078
LCSD 410-303078/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	303078

Eurofins Seattle

Lab Chronicle

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

Job ID: 580-118237-1

Client Sample ID: MW-2_20220922

Lab Sample ID: 580-118237-1

Date Collected: 09/22/22 08:10

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303339	K4WN	ELLE	10/05/22 14:30
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 19:31
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 07:05
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:39
Total Recoverable	Prep	3005A			303078	UAMX	ELLE	10/04/22 17:50
Total Recoverable	Analysis	6020B		1	306542	F7JF	ELLE	10/13/22 19:34

Client Sample ID: MW-3_20220922

Lab Sample ID: 580-118237-2

Date Collected: 09/22/22 10:20

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303339	K4WN	ELLE	10/05/22 14:56
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 20:48
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 07:28
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:41
Total Recoverable	Prep	3005A			303078	UAMX	ELLE	10/04/22 17:50
Total Recoverable	Analysis	6020B		1	306542	F7JF	ELLE	10/13/22 19:24

Client Sample ID: MW-6_20220922

Lab Sample ID: 580-118237-3

Date Collected: 09/22/22 14:10

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303339	K4WN	ELLE	10/05/22 15:22
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 21:14
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 07:50
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:37
Total Recoverable	Prep	3005A			303078	UAMX	ELLE	10/04/22 17:50
Total Recoverable	Analysis	6020B		1	306542	F7JF	ELLE	10/13/22 18:57

Lab Chronicle

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

Job ID: 580-118237-1

Client Sample ID: MW-9_20220922

Lab Sample ID: 580-118237-4

Date Collected: 09/22/22 13:40

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303338	K4WN	ELLE	10/05/22 15:35
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 21:40
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 08:13
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:18
Total Recoverable	Prep	3005A			303078	UAMX	ELLE	10/04/22 17:50
Total Recoverable	Analysis	6020B		1	306542	F7JF	ELLE	10/13/22 18:53

Client Sample ID: MW-11_20220922

Lab Sample ID: 580-118237-5

Date Collected: 09/22/22 11:40

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303338	K4WN	ELLE	10/05/22 14:17
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 22:05
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 08:58
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:47
Total Recoverable	Prep	3005A			303078	UAMX	ELLE	10/04/22 17:50
Total Recoverable	Analysis	6020B		1	306542	F7JF	ELLE	10/13/22 18:55

Client Sample ID: MW-12_20220922

Lab Sample ID: 580-118237-6

Date Collected: 09/22/22 12:20

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303338	K4WN	ELLE	10/05/22 14:43
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 22:31
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 09:21
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:43
Total Recoverable	Prep	3005A			303077	UAMX	ELLE	10/04/22 17:45
Total Recoverable	Analysis	6020B		1	304416	S4PD	ELLE	10/07/22 14:38

Lab Chronicle

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

Job ID: 580-118237-1

Client Sample ID: GMW-1_20220922

Lab Sample ID: 580-118237-7

Date Collected: 09/22/22 13:00

Matrix: Water

Date Received: 09/23/22 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	303338	K4WN	ELLE	10/05/22 15:09
Total/NA	Analysis	NWTPH-Gx		1	303348	MXX6	ELLE	10/05/22 22:57
Total/NA	Prep	3510C			303249	YDF5	ELLE	10/05/22 11:12
Total/NA	Analysis	NWTPH-Dx		1	303594	IUSB	ELLE	10/06/22 09:43
Dissolved	Filtration	Filtration			302747	UDL9	ELLE	10/04/22 07:14
Dissolved	Prep	3005A			303107	UAMX	ELLE	10/04/22 18:43
Dissolved	Analysis	6020B		1	304281	F7JF	ELLE	10/07/22 09:45
Total Recoverable	Prep	3005A			303081	UAMX	ELLE	10/04/22 17:55
Total Recoverable	Analysis	6020B		1	305815	F7JF	ELLE	10/12/22 10:02

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

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

Job ID: 580-118237-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-22
A2LA	ISO/IEC 17025	0001.01	11-30-22
Alaska	State	PA00009	07-01-23
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-00660	08-09-23
California	State	2792	11-30-22
Colorado	State	PA00009	06-30-23
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-23
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-22
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	1.01	11-30-22
Kentucky (WW)	State	KY90088	01-01-23
Louisiana	NELAP	02055	06-30-23
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-23
Massachusetts	State	M-PA009	06-30-23
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Mississippi	State	022	01-31-23
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-23
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-23
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23
Texas	NELAP	T104704194-22-43	08-31-23
USDA	US Federal Programs	P330-19-00197	08-09-23
Vermont	State	VT - 36037	10-28-22
Virginia	NELAP	460182	06-15-23
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22

Eurofins Seattle

Accreditation/Certification Summary

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

Job ID: 580-118237-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	055	10-31-22
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	1.01	11-30-22

Method Summary

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

Job ID: 580-118237-1

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

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:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

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

Job ID: 580-118237-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-118237-1	MW-2_20220922	Water	09/22/22 08:10	09/23/22 08:34
580-118237-2	MW-3_20220922	Water	09/22/22 10:20	09/23/22 08:34
580-118237-3	MW-6_20220922	Water	09/22/22 14:10	09/23/22 08:34
580-118237-4	MW-9_20220922	Water	09/22/22 13:40	09/23/22 08:34
580-118237-5	MW-11_20220922	Water	09/22/22 11:40	09/23/22 08:34
580-118237-6	MW-12_20220922	Water	09/22/22 12:20	09/23/22 08:34
580-118237-7	GMW-1_20220922	Water	09/22/22 13:00	09/23/22 08:34



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

Page 1 of 2

BP Site Node Path: Former BP 11060

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT Yes No X

BP/RM Facility No: Former BP Facility No. 11060

Lab Work Order Number:

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: Elaine Walker		Lead Regulatory Agency: Washington State Department of Ecology		Address: 4006 148th Ave NE, Redmond, WA 98052									
Lab Phone: 253.248.4972		California Global ID No.: NA		Consultant/Contractor PM: Lonnie Dent									
Lab Shipping Acct:		Enfos Proposal No: WR1027162/00C87-0002		Phone: 303-807-3627 Email: lonnie.dent@anteagroup.us									
Lab Bottle Order No:		Accounting Mode: Provision ☒ OOC-BU ☐ OOC-RM ☐		Send/Submit EDD to: lonnie.dent@anteagroup.us									
Other Info: M.Elaine.Walker@Eurofinsus.com		Stage Commercial-Site Activities (70) Activity Contracts Management (116)		Invoice To: BP-RM ☐ BP/ARC ☒									
BP/RM PM: Wade Melton		Sample Details		Requested Analyses									
PM Phone: 360-594-7978		Report Type & QC Level		Limited (Standard) Package ☐									
PM Email: wade.melton@bp.com		Limited Plus Package ☐		Full Package ☐									
Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	Filter	Pres	Comments
MW-1	20220922	9/22/22		W				G	10	X	X	X	
MW-2	20220922	9/22/22	0810	W				G	10	X	X	X	
MW-3	20220922	9/22/22	1020	W				G	10	X	X	X	
MW-4	20220922	9/22/22		W				G		X	X	X	
MW-5	20220922	9/22/22		W				G		X	X	X	
MW-6	20220922	9/22/22	1410	W				G	10	X	X	X	
Trip Blank	20220922	9/22/22		W				G		X	X		
Sampler's Name: Jesse Scheure + Sam Hartz		Relinquished By / Affiliation		Date	Time	Accepted By / Affiliation		Date	Time				
Sampler's Company: Antea Group		Jesse Scheure / Antea		9/23/22	8:34	Sydney Law/Moff		9/23/22	8:34				
Ship Method: Drop off		Ship Date: 9/23/22											
Shipment Tracking No:													
Special Instructions:													
THIS LINE - LAB USE ONLY: Custody Seals													



580-118237 Chain of Custody

Therm. ID: 129 Cor: 0.5 ° Unc: 0.1 °

Cooler Desc: 66

Packing: Bulk

Cust. Seal: Yes No ☒

Blue Ice, Wet, Dry, None

FedEx:

UPS:

Lab Cour:

Other: Client Dropoff

Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018



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

Page 2 of 2

BP Site Node Path: Former BP 11060

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT Yes No X

BP/RM Facility No: Former BP Facility No. 11060

Lab Work Order Number:

Lab Name: Eurofins		BP/ARC Facility Address: 4580 Fauntleroy Way SW		Consultant/Contractor: Antea Group									
Lab Address: 5755 6th Street East, Tacoma, WA 98424		City, State, ZIP Code: Seattle, WA		Consultant/Contractor Project No: WA - 11060 Groundwater Monitoring									
Lab PM: Elaine Walker		Lead Regulatory Agency: Washington State Department of Ecology		Address: 4006 148th Ave NE, Redmond, WA 98052									
Lab Phone: 253.248.4972		California Global ID No.: NA		Consultant/Contractor PM: Lonnie Dent									
Lab Shipping Acctn:		Enfos Proposal No: WR1027162/00C87-0002		Phone: 303-807-3627 Email: lonnie.dent@anteagroup.us									
Lab Bottle Order No:		Accounting Mode: Provision ☒ OOC-BU ☐ OOC-RM ☐		Send/Submit EDD to: lonnie.dent@anteagroup.us									
Other Info: M.Elaine.Walker@Eurofins.com		Stage Commercial-Site Activities (70) Activity Contracts Management (116)		Invoice To: BP-RM ☐ BP/ARC ☒									
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 ☐ Limited Plus Package ☐ Full Package ☐									
Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	Fill	Pres	Comments
	MW-9 - 20220922	9/22/22	1340	W				G	10	BTX by EPA 8260	X	X	
	MW-11 - 20220922	9/22/22	1140	W				G	10	MTBE by EPA 8260	X	X	
	MW-12 - 20220922	9/22/22	1220	W				G	10	NWTPH-Gx	X	X	
	GMW-1 - 20220922	9/22/22	1300	W				G	10	NWTPH-Dx	X	X	
	Dup 1 - 20220922	9/22/22		W				G		Pb-T by EPA 6020	X	X	
	Trip Blank			W				G		Pb-D by EPA 6020	X	X	
										EDS by EPA 8011			
										PAHs			
										Select VOCs by EPA 8260			
Sampler's Name: Jesse Schewe + Sam Hinze		Relinquished By / Affiliation		Date	Time	Accepted By / Affiliation		Date	Time				
Sampler's Company: Antea Group		Jesse Schewe / Antea		9/23/22	8:54	Sydney Lawlor		9/23/22	8:34				
Ship Method: Drop Off		Ship Date: 9/23/22											
Shipment Tracking No:													
Special Instructions:													
THIS LINE - LAB USE ONLY: Custody Seals in Place: Yes / No Temp Blank: Yes / No Cooler Temp on Receipt: _____ °F/C Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No													

BP LaMP Soil/H2O COC July 2018

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310

1000



Environment Testing: America

Client Information (Sub Contract Lab)		Lab PM: Grant, Katie		Carrier Tracking No(s):		SOC No: 580-109616.1																							
Client Contact: Shipping/Receiving		Phone:		E-Mail: Katie.Grant@et.eurofinsus.com		Page: Page 1 of 1																							
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note). State Program - Washington		Job #: 580-118237-1																							
Address: 2425 New Holland Pike.		Due Date Requested: 10/6/2022		Analysis Requested																									
City: Lancaster		TAT Requested (days):		Total Number of Containers																									
State, Zip: PA. 17601																													
Phone: 717-656-2300(Tel)		PO #:																											
Email:		WO #:																											
Project Name: BP - ARCO 11060		Project #: 58015961																											
Site:		SSOW#:		Preservation Codes:																									
				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)																									
				Other:																									
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=organic, L=liquid, BT=Issue, AA=As)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8260D/5030C (MOD) BTEX + MTBE		NWTPH_G/5030B (MOD) Copy Analytes		NWTPH_O/23510C_LVI_14d (MOD) Northwest - DRO/RRO		6020B/2005A Total Lead (ICP/MS)		6020B/Filtration_ME Total Lead (ICP/MS)		Total Number of Containers		Special Instructions/Note:			
MW-2_20220922 (580-118237-1)		9/22/22		08:10 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
MW-3_20220922 (580-118237-2)		9/22/22		10:20 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
MW-6_20220922 (580-118237-3)		9/22/22		14:10 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
MW-9_20220922 (580-118237-4)		9/22/22		13:40 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
MW-11_20220922 (580-118237-5)		9/22/22		11:40 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
MW-12_20220922 (580-118237-6)		9/22/22		12:20 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	
GMW-1_20220922 (580-118237-7)		9/22/22		13:00 Pacific				Water				X		X		X		X		X						10		BP LaMP ICOC, Analyze LCS/LCSD if no MS/MSD volume is available.	

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-118237-1

Login Number: 118237

List Source: Eurofins Seattle

List Number: 1

Creator: Vallelunga, Diana L

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.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-118237-1

Login Number: 118237

List Number: 2

Creator: Metzger, Katherine A

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Creation: 09/28/22 10:18 PM

Question	Answer	Comment
The cooler's custody seal is 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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	True	
WV: Container 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	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	
Sample custody seals are intact.	N/A	Not present.
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	True	

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303338 Batch Start Date: 10/05/22 11:16 Batch Analyst: Campbell, Miranda E

Batch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
LCS 410-303338/4		8260D		5 mL	5 mL				2660
LCSD 410-303338/5		8260D		5 mL	5 mL				2660
MB 410-303338/7		8260D		5 mL	5 mL				2660
580-118237-A-5	MW-11_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-118237-A-6	MW-12_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-118237-A-7	GMW-1_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-118237-A-4	MW-9_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_502QGas 00214	MSV_HP28_ISSS 00005	MSV_LCS_2CEVE 00080	MSV_LCS_ACROL 00078	MSV_LCS_VOC#1 00076	
LCS 410-303338/4		8260D		1 uL	5.917 uL	50 uL	50 uL	50 uL	
LCSD 410-303338/5		8260D		1 uL	5.917 uL	50 uL	50 uL	50 uL	
MB 410-303338/7		8260D			5.917 uL				
580-118237-A-5	MW-11_20220922	8260D	T		5.917 uL				
580-118237-A-6	MW-12_20220922	8260D	T		5.917 uL				
580-118237-A-7	GMW-1_20220922	8260D	T		5.917 uL				
580-118237-A-4	MW-9_20220922	8260D	T		5.917 uL				

Batch Notes

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 Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303339 Batch Start Date: 10/05/22 11:16 Batch Analyst: Campbell, Miranda EBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
LCS 410-303339/4		8260D		5 mL	5 mL				2660
LCSD 410-303339/5		8260D		5 mL	5 mL				2660
MB 410-303339/7		8260D		5 mL	5 mL				2660
580-118237-A-1	MW-2_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-118237-A-2	MW-3_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-118237-A-3	MW-6_20220922	8260D	T	5 mL	5 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_502QGas 00214	MSV_HP28_ISSS 00005	MSV_LCS_2CEVE 00080	MSV_LCS_ACROL 00078	MSV_LCS_VOC#1 00076	
LCS 410-303339/4		8260D		1 uL	5.917 uL	50 uL	50 uL	50 uL	
LCSD 410-303339/5		8260D		1 uL	5.917 uL	50 uL	50 uL	50 uL	
MB 410-303339/7		8260D			5.917 uL				
580-118237-A-1	MW-2_20220922	8260D	T		5.917 uL				
580-118237-A-2	MW-3_20220922	8260D	T		5.917 uL				
580-118237-A-3	MW-6_20220922	8260D	T		5.917 uL				

Batch Notes

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 VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303348 Batch Start Date: 10/05/22 12:46 Batch Analyst: Serago, Ryan

Batch Method: NWTPH-Gx Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Headspace	Lot#Vial	GCV Q GRO 00034
MB 410-303348/4		NWTPH-Gx		5 mL	5 mL			2660	
LCS 410-303348/5		NWTPH-Gx		5 mL	5 mL			2660	55 uL
LCSD 410-303348/6		NWTPH-Gx		5 mL	5 mL			2660	55 uL
580-118237-D-1	MW-2_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-D-2	MW-3_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-D-3	MW-6_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-D-4	MW-9_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-E-5	MW-11_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-D-6	MW-12_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-118237-D-7	GMW-1_20220922	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	GCV_W_TFT 00007					
MB 410-303348/4		NWTPH-Gx		1 uL					
LCS 410-303348/5		NWTPH-Gx		1 uL					
LCSD 410-303348/6		NWTPH-Gx		1 uL					
580-118237-D-1	MW-2_20220922	NWTPH-Gx	T	1 uL					
580-118237-D-2	MW-3_20220922	NWTPH-Gx	T	1 uL					
580-118237-D-3	MW-6_20220922	NWTPH-Gx	T	1 uL					
580-118237-D-4	MW-9_20220922	NWTPH-Gx	T	1 uL					
580-118237-E-5	MW-11_20220922	NWTPH-Gx	T	1 uL					
580-118237-D-6	MW-12_20220922	NWTPH-Gx	T	1 uL					
580-118237-D-7	GMW-1_20220922	NWTPH-Gx	T	1 uL					

Batch Notes

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 Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303249 Batch Start Date: 10/05/22 11:12 Batch Analyst: Carrick, AdamBatch Method: 3510C Batch End Date: 10/05/22 13:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	DensityAcc	InitialAmount	FinalAmount	ReceivedpH
MB 410-303249/1		3510C, NWTPH-Dx				n/a	250 mL	2 mL	n/a SU
LCS 410-303249/2		3510C, NWTPH-Dx				n/a	250 mL	2 mL	n/a SU
LCSD 410-303249/3		3510C, NWTPH-Dx				n/a	250 mL	2 mL	n/a SU
580-118237-J-1	MW-2_20220922	3510C, NWTPH-Dx	T	405.40 g	166.73 g	n/a	238.7 mL	2 mL	<2 SU
580-118237-J-2	MW-3_20220922	3510C, NWTPH-Dx	T	408.73 g	167.87 g	n/a	240.9 mL	2 mL	<2 SU
580-118237-J-3	MW-6_20220922	3510C, NWTPH-Dx	T	394.08 g	166.02 g	n/a	228.1 mL	2 mL	<2 SU
580-118237-I-4 DU	MW-9_20220922	3510C, NWTPH-Dx	T	414.93 g	168.26 g	n/a	246.7 mL	2 mL	<2 SU
580-118237-J-4	MW-9_20220922	3510C, NWTPH-Dx	T	411.99 g	166.54 g	n/a	245.5 mL	2 mL	<2 SU
580-118237-J-5	MW-11_20220922	3510C, NWTPH-Dx	T	402.15 g	167.92 g	n/a	234.2 mL	2 mL	<2 SU
580-118237-J-6	MW-12_20220922	3510C, NWTPH-Dx	T	441.79 g	182.21 g	n/a	259.6 mL	2 mL	<2 SU
580-118237-J-7	GMW-1_20220922	3510C, NWTPH-Dx	T	401.21 g	167.25 g	n/a	234 mL	2 mL	<2 SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	FirstAdjustpH	SecondAdjustpH	CUPerformed	OP_MINIDRO_MS 00070	OP_MINIDRO_SS 00048	AnalysisComment
MB 410-303249/1		3510C, NWTPH-Dx		<2 SU	n/a SU	n		1 mL	DI H2O
LCS 410-303249/2		3510C, NWTPH-Dx		<2 SU	n/a SU	n	1 mL	1 mL	DI H2O
LCSD 410-303249/3		3510C, NWTPH-Dx		<2 SU	n/a SU	n	1 mL	1 mL	DI H2O
580-118237-J-1	MW-2_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	pale yellow tint
580-118237-J-2	MW-3_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	pale yellow tint
580-118237-J-3	MW-6_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	orange cloudy orange sediment
580-118237-I-4 DU	MW-9_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	orange tint with orange sediment

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 Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303249 Batch Start Date: 10/05/22 11:12 Batch Analyst: Carrick, Adam

Batch Method: 3510C Batch End Date: 10/05/22 13:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	FirstAdjustpH	SecondAdjustpH	CUPerformed	OP_MINIDRO_MS 00070	OP_MINIDRO_SS 00048	AnalysisComment
580-118237-J-4	MW-9_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	orange tint with orange sediment
580-118237-J-5	MW-11_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	pale yellow tint
580-118237-J-6	MW-12_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	pale yellow tint
580-118237-J-7	GMW-1_20220922	3510C, NWTPH-Dx	T	n/a SU	n/a SU	n		1 mL	pale yellow tint

Batch Notes

Balance ID	25996
Pipette/Syringe/Dispenser ID	4
Analyst ID - Extraction	AGC40572, RSR34942
Analyst ID - Spike Analyst	AGC40572
Acid Used for pH Adjustment ID	HCl:1108912
Prep Solvent ID	MeCl2:224289
Prep Solvent Volume Used	45 mL
Na2SO4 ID	22274A
Analyst ID - Concentration	AGC40572, RSR34942
Equipment ID - Concentration 1	RapidVap#4,3
Concentration 1 Corrected Temperature	80 Degrees C

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 Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 302747 Batch Start Date: 10/04/22 07:14 Batch Analyst: Trimby, Denise LBatch Method: Filtration Batch End Date: 10/04/22 07:24

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Final pH	MP_PresSol 00020	
580-118237-H-1	MW-2_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-2	MW-3_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-3	MW-6_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-4	MW-9_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-5	MW-11_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-6	MW-12_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	
580-118237-H-7	GMW-1_20220922	Filtration, 3005A, 6020B	D	250 mL	250 mL	6 SU	<2 SU	2.5 mL	

Batch Notes

Filter ID	1363484
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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 Lancaster Laboratories Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303077 Batch Start Date: 10/05/22 05:30 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 10/05/22 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00022	MP_1:1HNO3 00032	MT_LCS-SPK-A 00019	MT_LCS-SPK-B 00018
MB 410-303077/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL		
LCS 410-303077/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
580-118237-K-6	MW-12_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	G20054G
Digestion Unit ID	16
Thermometer ID	3811
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Temperature - Uncorrected - End	94 Degrees C
Temperature - Corrected - End	94 Degrees C

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 1 of 1

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303078 Batch Start Date: 10/05/22 05:30 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 10/05/22 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00022	MP_1:1HNO3 00032	MT_LCS-SPK-A 00019	MT_LCS-SPK-B 00018
MB 410-303078/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL		
LCS 410-303078/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
LCSD 410-303078/3		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
580-118237-K-4	MW-9_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
580-118237-K-5	MW-11_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
580-118237-K-3	MW-6_20220922	3005A, 6020B	R	5 mL	50 mL	5 mL	2 mL		
580-118237-L-2	MW-3_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		
580-118237-K-1	MW-2_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	AnalysisComment					
MB 410-303078/1		3005A, 6020B							
LCS 410-303078/2		3005A, 6020B							
LCSD 410-303078/3		3005A, 6020B							
580-118237-K-4	MW-9_20220922	3005A, 6020B	R						
580-118237-K-5	MW-11_20220922	3005A, 6020B	R						
580-118237-K-3	MW-6_20220922	3005A, 6020B	R	Bad matrix 5/50					
580-118237-L-2	MW-3_20220922	3005A, 6020B	R						
580-118237-K-1	MW-2_20220922	3005A, 6020B	R						

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	G20054G
Digestion Unit ID	16
Thermometer ID	3811
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Temperature - Uncorrected - End	94 Degrees C
Temperature - Corrected - End	94 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.

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303078 Batch Start Date: 10/05/22 05:30 Batch Analyst: Kuhns, Annamaria M

Batch Method: 3005A Batch End Date: 10/05/22 09:30

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

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METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303081 Batch Start Date: 10/05/22 05:20 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 10/05/22 09:20

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00022	MP_1:1HNO3 00032	MT_LCS-SPK-A 00019	MT_LCS-SPK-B 00018
MB 410-303081/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL		
LCS 410-303081/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	0.2 mL	0.2 mL
580-118237-K-7	GMW-1_20220922	3005A, 6020B	R	50 mL	50 mL	5 mL	2 mL		

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	G20054G
Digestion Unit ID	15
Thermometer ID	3811
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Temperature - Uncorrected - End	94 Degrees C
Temperature - Corrected - End	94 Degrees C

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 1 of 1

METALS BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303107 Batch Start Date: 10/05/22 05:00 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 10/05/22 09:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MP_1:1HCl 00022	MP_1:1HNO3 00032	MP_FilterH2O 00089	MT_LCS-SPK-A 00019
MB 410-303107/1		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	50 mL	
LCS 410-303107/2		3005A, 6020B		50 mL	50 mL	5 mL	2 mL	50 mL	0.2 mL
580-118237-H-4-A	MW-9_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-4-A DU	MW-9_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-4-A MS	MW-9_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		0.2 mL
580-118237-H-4-A MSD	MW-9_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		0.2 mL
580-118237-H-3-A	MW-6_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-1-A	MW-2_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-2-A	MW-3_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-6-A	MW-12_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-7-A	GMW-1_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		
580-118237-H-5-A	MW-11_20220922	3005A, 6020B	D	50 mL	50 mL	5 mL	2 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MT_LCS-SPK-B 00018	AnalysisComment				
MB 410-303107/1		3005A, 6020B			Filtered Reagent				
LCS 410-303107/2		3005A, 6020B		0.2 mL					
580-118237-H-4-A	MW-9_20220922	3005A, 6020B	D						
580-118237-H-4-A DU	MW-9_20220922	3005A, 6020B	D						
580-118237-H-4-A MS	MW-9_20220922	3005A, 6020B	D	0.2 mL					
580-118237-H-4-A MSD	MW-9_20220922	3005A, 6020B	D	0.2 mL					
580-118237-H-3-A	MW-6_20220922	3005A, 6020B	D						

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 Lancaster Laboratories : Job No.: 580-118237-1

SDG No.: _____

Batch Number: 303107 Batch Start Date: 10/05/22 05:00 Batch Analyst: Kuhns, Annamaria MBatch Method: 3005A Batch End Date: 10/05/22 09:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	MT_LCS-SPK-B 00018	AnalysisComment				
580-118237-H-1-A	MW-2_20220922	3005A, 6020B	D						
580-118237-H-2-A	MW-3_20220922	3005A, 6020B	D						
580-118237-H-6-A	MW-12_20220922	3005A, 6020B	D						
580-118237-H-7-A	GMW-1_20220922	3005A, 6020B	D						
580-118237-H-5-A	MW-11_20220922	3005A, 6020B	D						

Batch Notes	
Digestion Tube/Cup ID	2204135
Pipette/Syringe/Dispenser ID	G20054G
Digestion Unit ID	15
Thermometer ID	3811
Temperature - Uncorrected - Start	94 Degrees C
Temperature - Corrected - Start	94 Degrees C
Temperature - Uncorrected - End	94 Degrees C
Temperature - Corrected - End	94 Degrees C

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Lonnie Dent
Antea USA Inc.
3855 Precision Drive
Suite 160
Loveland, Colorado 80538

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JOB DESCRIPTION

BP - ARCO 11060

JOB NUMBER

580-120537-1

Eurofins Seattle

Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

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Definitions/Glossary

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

Job ID: 580-120537-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 580-120537-1

Job ID: 580-120537-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-120537-1

Comments

No additional comments.

Receipt

The samples were received on 11/30/2022 10:19 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 1.5° C.

Receipt Exceptions

The containers submitted for the following sample does not match the analysis requested on the Chain of Custody (COC). The containers are laboratory prepared trip blanks that are typically analyzed for 8260 BTEX and NWTPH-Gx however all other analysis on the COC were requested. The sample was logged for BTEX and Gx.Trip Blank_20221129 (580-120537-8)

The sample time on the container label for the following sample did not match the information listed on the Chain-of-Custody (COC): MW-6_20221129 (580-120537-3). The container labels list 0822, while the COC lists 0820. The sample was logged per the COC pending client verification.

GC/MS VOA

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

GC 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.

General Chemistry

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: 580-120537-1

Client Sample ID: MW-2_20221129

Lab Sample ID: 580-120537-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	120		110	66	ug/L	1		NWTPH-Dx	Total/NA
Sulfate	110		7.5	4.0	mg/L	5		300.0	Total/NA
Nitrate as N	13		1.0	0.15	mg/L	5		300.0	Total/NA
Nitrate Nitrite as N	13		2.0	0.35	mg/L	5		300.0	Total/NA
Total Dissolved Solids	320		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3_20221129

Lab Sample ID: 580-120537-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	36		1.5	0.80	mg/L	1		300.0	Total/NA
Nitrate as N	1.9		0.20	0.030	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	1.9		0.40	0.070	mg/L	1		300.0	Total/NA
Total Dissolved Solids	120		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-6_20221129

Lab Sample ID: 580-120537-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	11		1.5	0.80	mg/L	1		300.0	Total/NA
Nitrate as N	1.5		0.20	0.030	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	1.5		0.40	0.070	mg/L	1		300.0	Total/NA
Total Dissolved Solids	230		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-9_20221129

Lab Sample ID: 580-120537-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	20		1.5	0.80	mg/L	1		300.0	Total/NA
Nitrate as N	0.82		0.20	0.030	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.88		0.40	0.070	mg/L	1		300.0	Total/NA
Total Dissolved Solids	69		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-11_20221129

Lab Sample ID: 580-120537-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	680		120	69	ug/L	1		NWTPH-Dx	Total/NA
Motor Oil (>C24-C36)	460		370	100	ug/L	1		NWTPH-Dx	Total/NA
Sulfate	230		7.5	4.0	mg/L	5		300.0	Total/NA
Nitrate as N	5.5		0.20	0.030	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	5.7		0.40	0.070	mg/L	1		300.0	Total/NA
Total Dissolved Solids	800		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-12_20221129

Lab Sample ID: 580-120537-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (C7-C12)	510		250	43	ug/L	1		NWTPH-Gx	Total/NA
#2 Diesel (C10-C24)	870		110	66	ug/L	1		NWTPH-Dx	Total/NA
Sulfate	260		7.5	4.0	mg/L	5		300.0	Total/NA
Total Dissolved Solids	780		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: GMW-1_20221129

Lab Sample ID: 580-120537-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
#2 Diesel (C10-C24)	150		110	66	ug/L	1		NWTPH-Dx	Total/NA
Lead	2.3		2.0	0.20	ug/L	5		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Seattle

Detection Summary

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

Job ID: 580-120537-1

Client Sample ID: GMW-1_20221129 (Continued)

Lab Sample ID: 580-120537-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	42		1.5	0.80	mg/L	1		300.0	Total/NA
Nitrate as N	0.86		0.20	0.030	mg/L	1		300.0	Total/NA
Nitrate Nitrite as N	0.94		0.40	0.070	mg/L	1		300.0	Total/NA
Total Dissolved Solids	150		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: Trip Blank_20221129

Lab Sample ID: 580-120537-8

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: 580-120537-1

Client Sample ID: MW-2_20221129

Lab Sample ID: 580-120537-1

Date Collected: 11/29/22 15:00

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 11:50	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 11:50	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 11:50	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 11:50	1
m-Xylene & p-Xylene	ND	F1	5.0	2.0	ug/L			12/07/22 11:50	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 11:50	1
Xylenes, Total	ND	F1	1.0	0.40	ug/L			12/07/22 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/07/22 11:50	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		12/07/22 11:50	1
4-Bromofluorobenzene (Surr)	92		80 - 120		12/07/22 11:50	1
Dibromofluoromethane (Surr)	100		80 - 120		12/07/22 11:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 00:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		50 - 150		12/06/22 00:01	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)	120		110	66	ug/L		12/02/22 09:58	12/04/22 00:36	1
Motor Oil (>C24-C36)	ND		360	98	ug/L		12/02/22 09:58	12/04/22 00:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	61		50 - 150	12/02/22 09:58	12/04/22 00:36	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		12/12/22 17:31	12/14/22 15:32	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		12/05/22 15:40	12/13/22 16:33	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 16:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 18:07	1
Sulfate (MCAWW 300.0)	110		7.5	4.0	mg/L			11/30/22 18:19	5
Nitrate as N (MCAWW 300.0)	13		1.0	0.15	mg/L			11/30/22 18:19	5
Nitrate Nitrite as N (MCAWW 300.0)	13		2.0	0.35	mg/L			11/30/22 18:19	5
Total Dissolved Solids (SM 2540C)	320		10	10	mg/L			12/05/22 15:53	1

Eurofins Seattle

Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: MW-3_20221129

Lab Sample ID: 580-120537-2

Date Collected: 11/29/22 09:30

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 12:49	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 12:49	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 12:49	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 12:49	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 12:49	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 12:49	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/07/22 12:49	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/07/22 12:49	1
4-Bromofluorobenzene (Surr)	91		80 - 120		12/07/22 12:49	1
Dibromofluoromethane (Surr)	100		80 - 120		12/07/22 12:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		50 - 150		12/06/22 00:26	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		110	65	ug/L		12/02/22 09:58	12/04/22 00:54	1
Motor Oil (>C24-C36)	ND		350	97	ug/L		12/02/22 09:58	12/04/22 00:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150	12/02/22 09:58	12/04/22 00:54	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		12/12/22 17:31	12/14/22 15:34	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		12/05/22 15:40	12/13/22 22:44	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 22:44	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 18:31	1
Sulfate (MCAWW 300.0)	36		1.5	0.80	mg/L			11/30/22 18:31	1
Nitrate as N (MCAWW 300.0)	1.9		0.20	0.030	mg/L			11/30/22 18:31	1
Nitrate Nitrite as N (MCAWW 300.0)	1.9		0.40	0.070	mg/L			11/30/22 18:31	1
Total Dissolved Solids (SM 2540C)	120		10	10	mg/L			12/05/22 15:53	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: MW-6_20221129

Lab Sample ID: 580-120537-3

Date Collected: 11/29/22 08:20

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 13:09	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 13:09	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 13:09	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 13:09	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 13:09	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 13:09	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		12/07/22 13:09	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/07/22 13:09	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/07/22 13:09	1
Dibromofluoromethane (Surr)	99		80 - 120		12/07/22 13:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 01:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene (fid)</i>	102		50 - 150					12/06/22 01:43	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		110	66	ug/L		12/02/22 10:07	12/04/22 01:13	1
Motor Oil (>C24-C36)	ND		350	97	ug/L		12/02/22 10:07	12/04/22 01:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150				12/02/22 10:07	12/04/22 01:13	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		12/12/22 17:31	12/14/22 15:37	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		12/05/22 15:40	12/13/22 22:51	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 22:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 18:42	1
Sulfate (MCAWW 300.0)	11		1.5	0.80	mg/L			11/30/22 18:42	1
Nitrate as N (MCAWW 300.0)	1.5		0.20	0.030	mg/L			11/30/22 18:42	1
Nitrate Nitrite as N (MCAWW 300.0)	1.5		0.40	0.070	mg/L			11/30/22 18:42	1
Total Dissolved Solids (SM 2540C)	230		10	10	mg/L			12/06/22 15:10	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: MW-9_20221129

Lab Sample ID: 580-120537-4

Date Collected: 11/29/22 13:50

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 13:29	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 13:29	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 13:29	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 13:29	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 13:29	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 13:29	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		12/07/22 13:29	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		12/07/22 13:29	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/07/22 13:29	1
Dibromofluoromethane (Surr)	101		80 - 120		12/07/22 13:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		50 - 150		12/06/22 02:09	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		120	68	ug/L		12/02/22 10:07	12/04/22 01:50	1
Motor Oil (>C24-C36)	ND		370	100	ug/L		12/02/22 10:07	12/04/22 01:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150	12/02/22 10:07	12/04/22 01:50	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		12/12/22 17:31	12/14/22 15:39	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		12/05/22 15:40	12/13/22 22:54	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 22:54	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 18:54	1
Sulfate (MCAWW 300.0)	20		1.5	0.80	mg/L			11/30/22 18:54	1
Nitrate as N (MCAWW 300.0)	0.82		0.20	0.030	mg/L			11/30/22 18:54	1
Nitrate Nitrite as N (MCAWW 300.0)	0.88		0.40	0.070	mg/L			11/30/22 18:54	1
Total Dissolved Solids (SM 2540C)	69		10	10	mg/L			12/06/22 15:10	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: MW-11_20221129

Lab Sample ID: 580-120537-5

Date Collected: 11/29/22 11:00

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 13:48	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 13:48	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 13:48	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 13:48	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 13:48	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 13:48	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/07/22 13:48	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/07/22 13:48	1
4-Bromofluorobenzene (Surr)	91		80 - 120		12/07/22 13:48	1
Dibromofluoromethane (Surr)	101		80 - 120		12/07/22 13:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 02:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		50 - 150					12/06/22 02:34	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)	680		120	69	ug/L		12/02/22 10:07	12/04/22 02:08	1
Motor Oil (>C24-C36)	460		370	100	ug/L		12/02/22 10:07	12/04/22 02:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		50 - 150				12/02/22 10:07	12/04/22 02:08	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		12/12/22 17:31	12/14/22 15:49	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		12/05/22 15:40	12/13/22 22:56	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 22:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 19:06	1
Sulfate (MCAWW 300.0)	230		7.5	4.0	mg/L			11/30/22 19:18	5
Nitrate as N (MCAWW 300.0)	5.5		0.20	0.030	mg/L			11/30/22 19:06	1
Nitrate Nitrite as N (MCAWW 300.0)	5.7		0.40	0.070	mg/L			11/30/22 19:06	1
Total Dissolved Solids (SM 2540C)	800		10	10	mg/L			12/06/22 15:10	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: MW-12_20221129

Lab Sample ID: 580-120537-6

Date Collected: 11/29/22 11:50

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 14:08	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 14:08	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 14:08	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 14:08	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 14:08	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 14:08	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/07/22 14:08	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		12/07/22 14:08	1
4-Bromofluorobenzene (Surr)	92		80 - 120		12/07/22 14:08	1
Dibromofluoromethane (Surr)	102		80 - 120		12/07/22 14:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	510		250	43	ug/L			12/06/22 03:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	109		50 - 150		12/06/22 03:00	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)	870		110	66	ug/L		12/02/22 10:07	12/04/22 02:27	1
Motor Oil (>C24-C36)	ND		350	97	ug/L		12/02/22 10:07	12/04/22 02:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	67		50 - 150	12/02/22 10:07	12/04/22 02:27	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		12/12/22 17:31	12/14/22 15:51	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		12/05/22 15:40	12/13/22 22:58	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 22:58	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 20:04	1
Sulfate (MCAWW 300.0)	260		7.5	4.0	mg/L			11/30/22 21:15	5
Nitrate as N (MCAWW 300.0)	ND		0.20	0.030	mg/L			11/30/22 20:04	1
Nitrate Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 20:04	1
Total Dissolved Solids (SM 2540C)	780		10	10	mg/L			12/06/22 15:10	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: GMW-1_20221129

Lab Sample ID: 580-120537-7

Date Collected: 11/29/22 12:40

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 14:28	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 14:28	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 14:28	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 14:28	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 14:28	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 14:28	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/07/22 14:28	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/07/22 14:28	1
4-Bromofluorobenzene (Surr)	96		80 - 120		12/07/22 14:28	1
Dibromofluoromethane (Surr)	101		80 - 120		12/07/22 14:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/06/22 03:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		50 - 150		12/06/22 03:26	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)	150		110	66	ug/L		12/05/22 10:47	12/06/22 02:20	1
Motor Oil (>C24-C36)	ND		360	98	ug/L		12/05/22 10:47	12/06/22 02:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	61		50 - 150	12/05/22 10:47	12/06/22 02:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.3		2.0	0.20	ug/L		12/12/22 17:31	12/14/22 15:53	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		12/05/22 15:40	12/13/22 23:01	5
Arsenic	ND		5.0	1.0	ug/L		12/05/22 15:40	12/13/22 23:01	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (MCAWW 300.0)	ND		0.40	0.070	mg/L			11/30/22 20:40	1
Sulfate (MCAWW 300.0)	42		1.5	0.80	mg/L			11/30/22 20:40	1
Nitrate as N (MCAWW 300.0)	0.86		0.20	0.030	mg/L			11/30/22 20:40	1
Nitrate Nitrite as N (MCAWW 300.0)	0.94		0.40	0.070	mg/L			11/30/22 20:40	1
Total Dissolved Solids (SM 2540C)	150		10	10	mg/L			12/06/22 15:10	1

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Client Sample Results

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

Job ID: 580-120537-1

Client Sample ID: Trip Blank_20221129

Lab Sample ID: 580-120537-8

Date Collected: 11/29/22 00:00

Matrix: Water

Date Received: 11/30/22 10:19

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 11:30	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 11:30	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 11:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 11:30	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 11:30	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 11:30	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 11:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		12/07/22 11:30	1
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		12/07/22 11:30	1
4-Bromofluorobenzene (Surr)	92		80 - 120		12/07/22 11:30	1
Dibromofluoromethane (Surr)	100		80 - 120		12/07/22 11:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/05/22 20:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	101		50 - 150		12/05/22 20:35	1

Surrogate Summary

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

Job ID: 580-120537-1

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)
580-120537-1	MW-2_20221129	100	98	92	100
580-120537-1 MS	MW-2_20221129	102	94	95	99
580-120537-1 MSD	MW-2_20221129	103	97	96	99
580-120537-2	MW-3_20221129	99	103	91	100
580-120537-3	MW-6_20221129	101	99	94	99
580-120537-4	MW-9_20221129	101	98	93	101
580-120537-5	MW-11_20221129	99	99	91	101
580-120537-6	MW-12_20221129	102	106	92	102
580-120537-7	GMW-1_20221129	102	103	96	101
580-120537-8	Trip Blank_20221129	101	94	92	100
LCS 410-324465/4	Lab Control Sample	100	98	94	100
MB 410-324465/6	Method Blank	99	99	93	101

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)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TFT-F1 (50-150)			
580-120537-1	MW-2_20221129	102			
580-120537-2	MW-3_20221129	103			
580-120537-3	MW-6_20221129	102			
580-120537-4	MW-9_20221129	102			
580-120537-5	MW-11_20221129	103			
580-120537-6	MW-12_20221129	109			
580-120537-7	GMW-1_20221129	105			
580-120537-8	Trip Blank_20221129	101			
LCS 410-323842/5	Lab Control Sample	94			
LCSD 410-323842/6	Lab Control Sample Dup	93			
MB 410-323842/4	Method Blank	102			

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

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)			
580-120537-1	MW-2_20221129	61			
580-120537-2	MW-3_20221129	67			
580-120537-3	MW-6_20221129	67			
580-120537-4	MW-9_20221129	67			
580-120537-5	MW-11_20221129	68			

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Surrogate Summary

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

Job ID: 580-120537-1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTPH (50-150)
580-120537-6	MW-12_20221129	67
580-120537-7	GMW-1_20221129	61
LCS 580-411715/2-A	Lab Control Sample	93
LCS 580-411891/2-A	Lab Control Sample	91
LCSD 580-411715/3-A	Lab Control Sample Dup	88
LCSD 580-411891/3-A	Lab Control Sample Dup	85
MB 580-411715/1-A	Method Blank	67
MB 580-411891/1-A	Method Blank	69

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 580-120537-1

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

Lab Sample ID: MB 410-324465/6

Matrix: Water

Analysis Batch: 324465

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		1.0	0.20	ug/L			12/07/22 10:10	1
Benzene	ND		1.0	0.30	ug/L			12/07/22 10:10	1
Toluene	ND		1.0	0.20	ug/L			12/07/22 10:10	1
Ethylbenzene	ND		1.0	0.40	ug/L			12/07/22 10:10	1
m-Xylene & p-Xylene	ND		5.0	2.0	ug/L			12/07/22 10:10	1
o-Xylene	ND		1.0	0.40	ug/L			12/07/22 10:10	1
Xylenes, Total	ND		1.0	0.40	ug/L			12/07/22 10:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/07/22 10:10	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/07/22 10:10	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/07/22 10:10	1
Dibromofluoromethane (Surr)	101		80 - 120		12/07/22 10:10	1

Lab Sample ID: LCS 410-324465/4

Matrix: Water

Analysis Batch: 324465

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	20.0	20.0		ug/L		100	69 - 122
Benzene	20.0	20.1		ug/L		100	80 - 120
Toluene	20.0	20.9		ug/L		105	80 - 120
Ethylbenzene	20.0	22.0		ug/L		110	80 - 120
m-Xylene & p-Xylene	40.0	44.7		ug/L		112	80 - 120
o-Xylene	20.0	21.8		ug/L		109	80 - 120
Xylenes, Total	60.0	66.5		ug/L		111	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120

Lab Sample ID: 580-120537-1 MS

Matrix: Water

Analysis Batch: 324465

Client Sample ID: MW-2_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl tert-butyl ether	ND		20.0	20.6		ug/L		103	69 - 122
Benzene	ND		20.0	22.0		ug/L		110	80 - 120
Toluene	ND		20.0	22.8		ug/L		114	80 - 120
Ethylbenzene	ND		20.0	23.4		ug/L		117	80 - 120
m-Xylene & p-Xylene	ND	F1	40.0	48.8	F1	ug/L		122	80 - 120
o-Xylene	ND		20.0	23.9		ug/L		119	80 - 120
Xylenes, Total	ND	F1	60.0	72.7	F1	ug/L		121	80 - 120

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QC Sample Results

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

Job ID: 580-120537-1

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

Lab Sample ID: 580-120537-1 MS

Matrix: Water

Analysis Batch: 324465

Client Sample ID: MW-2_20221129

Prep Type: Total/NA

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	94		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: 580-120537-1 MSD

Matrix: Water

Analysis Batch: 324465

Client Sample ID: MW-2_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		20.0	18.5		ug/L		92	69 - 122	11	30
Benzene	ND		20.0	19.8		ug/L		99	80 - 120	11	30
Toluene	ND		20.0	20.7		ug/L		104	80 - 120	10	30
Ethylbenzene	ND		20.0	21.0		ug/L		105	80 - 120	11	30
m-Xylene & p-Xylene	ND	F1	40.0	43.6		ug/L		109	80 - 120	11	30
o-Xylene	ND		20.0	21.2		ug/L		106	80 - 120	12	30
Xylenes, Total	ND	F1	60.0	64.8		ug/L		108	80 - 120	11	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

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

Lab Sample ID: MB 410-323842/4

Matrix: Water

Analysis Batch: 323842

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (C7-C12)	ND		250	43	ug/L			12/05/22 18:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		50 - 150		12/05/22 18:27	1

Lab Sample ID: LCS 410-323842/5

Matrix: Water

Analysis Batch: 323842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C7-C12)	1100	913		ug/L		83	64 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	94		50 - 150

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QC Sample Results

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

Job ID: 580-120537-1

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

Lab Sample ID: LCSD 410-323842/6

Matrix: Water

Analysis Batch: 323842

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 Range Organics (C7-C12)	1100	911		ug/L		83	64 - 131	0	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid)	93		50 - 150						

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

Lab Sample ID: MB 580-411715/1-A

Matrix: Water

Analysis Batch: 411805

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 411715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		12/02/22 09:58	12/03/22 19:02	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		12/02/22 09:58	12/03/22 19:02	1
Surrogate	%Recovery	MB Qualifier	Limits						
o-Terphenyl	67		50 - 150						
							Prepared	Analyzed	Dil Fac
							12/02/22 09:58	12/03/22 19:02	1

Lab Sample ID: LCS 580-411715/2-A

Matrix: Water

Analysis Batch: 411805

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 411715

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec	Limits	
#2 Diesel (C10-C24)			4000	3390		ug/L		85		50 - 120	
Motor Oil (>C24-C36)			4000	3910		ug/L		98		64 - 120	
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
o-Terphenyl	93		50 - 150								

Lab Sample ID: LCSD 580-411715/3-A

Matrix: Water

Analysis Batch: 411805

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 411715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4000	3350		ug/L		84	50 - 120	1	26
Motor Oil (>C24-C36)	4000	3780		ug/L		95	64 - 120	3	24
Surrogate	%Recovery	LCSD Qualifier	Limits						
o-Terphenyl	88		50 - 150						

Lab Sample ID: MB 580-411891/1-A

Matrix: Water

Analysis Batch: 412061

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 411891

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		12/05/22 10:47	12/05/22 20:11	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		12/05/22 10:47	12/05/22 20:11	1

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QC Sample Results

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

Job ID: 580-120537-1

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	12/05/22 10:47	12/05/22 20:11	1

Lab Sample ID: LCS 580-411891/2-A
Matrix: Water
Analysis Batch: 412061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 411891

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
#2 Diesel (C10-C24)	4000	3620		ug/L		90	50 - 120
Motor Oil (>C24-C36)	4000	3860		ug/L		97	64 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	91		50 - 150

Lab Sample ID: LCSD 580-411891/3-A
Matrix: Water
Analysis Batch: 412061

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 411891

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4000	3200		ug/L		80	50 - 120	12	26
Motor Oil (>C24-C36)	4000	3610		ug/L		90	64 - 120	7	24

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	85		50 - 150

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-412680/22-A
Matrix: Water
Analysis Batch: 412997

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 412680

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40	0.040	ug/L		12/12/22 17:31	12/14/22 14:50	1

Lab Sample ID: LCS 580-412680/23-A
Matrix: Water
Analysis Batch: 412997

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 412680

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	1040		ug/L		104	80 - 120

Lab Sample ID: LCSD 580-412680/24-A
Matrix: Water
Analysis Batch: 412997

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 412680

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	983		ug/L		98	80 - 120	6	20

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QC Sample Results

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

Job ID: 580-120537-1

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

Lab Sample ID: MB 580-411679/18-B
Matrix: Water
Analysis Batch: 412851

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 411987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40	0.040	ug/L		12/05/22 15:40	12/13/22 16:31	1
Arsenic	ND		1.0	0.20	ug/L		12/05/22 15:40	12/13/22 16:31	1

Lab Sample ID: LCS 580-411679/19-B
Matrix: Water
Analysis Batch: 412851

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	961		ug/L		96	80 - 120
Arsenic	1000	946		ug/L		95	80 - 120

Lab Sample ID: LCSD 580-411679/20-B
Matrix: Water
Analysis Batch: 412851

Client Sample ID: Lab Control Sample Dup
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	940		ug/L		94	80 - 120	2	20
Arsenic	1000	909		ug/L		91	80 - 120	4	20

Lab Sample ID: 580-120537-1 MS
Matrix: Water
Analysis Batch: 412851

Client Sample ID: MW-2_20221129
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	832		ug/L		83	80 - 120
Arsenic	ND		1000	861		ug/L		86	80 - 120

Lab Sample ID: 580-120537-1 MSD
Matrix: Water
Analysis Batch: 412851

Client Sample ID: MW-2_20221129
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	926		ug/L		93	80 - 120	11	20
Arsenic	ND		1000	942		ug/L		94	80 - 120	9	20

Lab Sample ID: 580-120537-2 MS
Matrix: Water
Analysis Batch: 412887

Client Sample ID: MW-3_20221129
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	ND		1000	931		ug/L		93	80 - 120
Arsenic	ND		1000	938		ug/L		94	80 - 120

Lab Sample ID: 580-120537-2 MSD
Matrix: Water
Analysis Batch: 412887

Client Sample ID: MW-3_20221129
Prep Type: Dissolved
Prep Batch: 411987

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	ND		1000	959		ug/L		96	80 - 120	3	20
Arsenic	ND		1000	974		ug/L		97	80 - 120	4	20

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QC Sample Results

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

Job ID: 580-120537-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: 580-120537-1 DU

Matrix: Water

Analysis Batch: 412851

Client Sample ID: MW-2_20221129

Prep Type: Dissolved

Prep Batch: 411987

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-412054/4

Matrix: Water

Analysis Batch: 412054

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.5	0.80	mg/L			11/30/22 17:32	1

Lab Sample ID: LCS 580-412054/5

Matrix: Water

Analysis Batch: 412054

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	50.7		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-412054/6

Matrix: Water

Analysis Batch: 412054

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfate	50.0	50.7		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-120537-7 MS

Matrix: Water

Analysis Batch: 412054

Client Sample ID: GMW-1_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	42		50.0	90.8		mg/L		98	90 - 110

Lab Sample ID: 580-120537-7 MSD

Matrix: Water

Analysis Batch: 412054

Client Sample ID: GMW-1_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Sulfate	42		50.0	90.6		mg/L		98	90 - 110	0	15

Lab Sample ID: MB 580-412055/4

Matrix: Water

Analysis Batch: 412055

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.40	0.070	mg/L			11/30/22 17:32	1
Nitrate as N	ND		0.20	0.030	mg/L			11/30/22 17:32	1
Nitrate Nitrite as N	ND		0.40	0.070	mg/L			11/30/22 17:32	1

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QC Sample Results

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

Job ID: 580-120537-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-412055/5

Matrix: Water

Analysis Batch: 412055

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	5.00	5.04		mg/L		101	90 - 110
Nitrate as N	5.00	5.04		mg/L		101	90 - 110
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-412055/6

Matrix: Water

Analysis Batch: 412055

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
Nitrite as N	5.00	5.05		mg/L		101	90 - 110	0	15
Nitrate as N	5.00	5.03		mg/L		101	90 - 110	0	15
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-120537-6 MS

Matrix: Water

Analysis Batch: 412055

Client Sample ID: MW-12_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		5.00	5.03		mg/L		101	90 - 110
Nitrate as N	ND		5.00	4.89		mg/L		97	90 - 110
Nitrate Nitrite as N	ND		10.0	9.92		mg/L		99	90 - 110

Lab Sample ID: 580-120537-6 MSD

Matrix: Water

Analysis Batch: 412055

Client Sample ID: MW-12_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		5.00	5.04		mg/L		101	90 - 110	0	15
Nitrate as N	ND		5.00	4.89		mg/L		97	90 - 110	0	15
Nitrate Nitrite as N	ND		10.0	9.93		mg/L		99	90 - 110	0	15

Lab Sample ID: 580-120537-7 MS

Matrix: Water

Analysis Batch: 412055

Client Sample ID: GMW-1_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND		5.00	5.20		mg/L		102	90 - 110
Nitrate as N	0.86		5.00	5.90		mg/L		101	90 - 110
Nitrate Nitrite as N	0.94		10.0	11.1		mg/L		102	90 - 110

Lab Sample ID: 580-120537-7 MSD

Matrix: Water

Analysis Batch: 412055

Client Sample ID: GMW-1_20221129

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND		5.00	5.20		mg/L		102	90 - 110	0	15
Nitrate as N	0.86		5.00	5.90		mg/L		101	90 - 110	0	15
Nitrate Nitrite as N	0.94		10.0	11.1		mg/L		102	90 - 110	0	15

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QC Sample Results

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

Job ID: 580-120537-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-411989/1
Matrix: Water
Analysis Batch: 411989

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			12/05/22 15:53	1

Lab Sample ID: LCS 580-411989/2
Matrix: Water
Analysis Batch: 411989

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	966		mg/L		97	80 - 120

Lab Sample ID: MB 580-412127/1
Matrix: Water
Analysis Batch: 412127

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			12/06/22 15:10	1

Lab Sample ID: LCS 580-412127/2
Matrix: Water
Analysis Batch: 412127

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1120		mg/L		112	80 - 120

Lab Sample ID: 580-120537-3 DU
Matrix: Water
Analysis Batch: 412127

Client Sample ID: MW-6_20221129
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	230		184		mg/L		NC	20

Lab Sample ID: 580-120537-6 DU
Matrix: Water
Analysis Batch: 412127

Client Sample ID: MW-12_20221129
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	780		676		mg/L		15	20

QC Association Summary

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

Job ID: 580-120537-1

GC/MS VOA

Analysis Batch: 324465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	8260D	
580-120537-2	MW-3_20221129	Total/NA	Water	8260D	
580-120537-3	MW-6_20221129	Total/NA	Water	8260D	
580-120537-4	MW-9_20221129	Total/NA	Water	8260D	
580-120537-5	MW-11_20221129	Total/NA	Water	8260D	
580-120537-6	MW-12_20221129	Total/NA	Water	8260D	
580-120537-7	GMW-1_20221129	Total/NA	Water	8260D	
580-120537-8	Trip Blank_20221129	Total/NA	Water	8260D	
MB 410-324465/6	Method Blank	Total/NA	Water	8260D	
LCS 410-324465/4	Lab Control Sample	Total/NA	Water	8260D	
580-120537-1 MS	MW-2_20221129	Total/NA	Water	8260D	
580-120537-1 MSD	MW-2_20221129	Total/NA	Water	8260D	

GC VOA

Analysis Batch: 323842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-2	MW-3_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-3	MW-6_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-4	MW-9_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-5	MW-11_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-6	MW-12_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-7	GMW-1_20221129	Total/NA	Water	NWTPH-Gx	
580-120537-8	Trip Blank_20221129	Total/NA	Water	NWTPH-Gx	
MB 410-323842/4	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 410-323842/5	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 410-323842/6	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

GC Semi VOA

Prep Batch: 411715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	3510C	
580-120537-2	MW-3_20221129	Total/NA	Water	3510C	
580-120537-3	MW-6_20221129	Total/NA	Water	3510C	
580-120537-4	MW-9_20221129	Total/NA	Water	3510C	
580-120537-5	MW-11_20221129	Total/NA	Water	3510C	
580-120537-6	MW-12_20221129	Total/NA	Water	3510C	
MB 580-411715/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-411715/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-411715/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 411805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	NWTPH-Dx	411715
580-120537-2	MW-3_20221129	Total/NA	Water	NWTPH-Dx	411715
580-120537-3	MW-6_20221129	Total/NA	Water	NWTPH-Dx	411715
580-120537-4	MW-9_20221129	Total/NA	Water	NWTPH-Dx	411715
580-120537-5	MW-11_20221129	Total/NA	Water	NWTPH-Dx	411715
580-120537-6	MW-12_20221129	Total/NA	Water	NWTPH-Dx	411715
MB 580-411715/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	411715

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QC Association Summary

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

Job ID: 580-120537-1

GC Semi VOA (Continued)

Analysis Batch: 411805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 580-411715/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	411715
LCSD 580-411715/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	411715

Prep Batch: 411891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-7	GMW-1_20221129	Total/NA	Water	3510C	
MB 580-411891/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-411891/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-411891/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 412061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-7	GMW-1_20221129	Total/NA	Water	NWTPH-Dx	411891
MB 580-411891/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	411891
LCS 580-411891/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	411891
LCSD 580-411891/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	411891

Metals

Filtration Batch: 411679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Dissolved	Water	FILTRATION	
580-120537-2	MW-3_20221129	Dissolved	Water	FILTRATION	
580-120537-3	MW-6_20221129	Dissolved	Water	FILTRATION	
580-120537-4	MW-9_20221129	Dissolved	Water	FILTRATION	
580-120537-5	MW-11_20221129	Dissolved	Water	FILTRATION	
580-120537-6	MW-12_20221129	Dissolved	Water	FILTRATION	
580-120537-7	GMW-1_20221129	Dissolved	Water	FILTRATION	
MB 580-411679/18-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 580-411679/19-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 580-411679/20-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
580-120537-1 MS	MW-2_20221129	Dissolved	Water	FILTRATION	
580-120537-1 MSD	MW-2_20221129	Dissolved	Water	FILTRATION	
580-120537-2 MS	MW-3_20221129	Dissolved	Water	FILTRATION	
580-120537-2 MSD	MW-3_20221129	Dissolved	Water	FILTRATION	
580-120537-1 DU	MW-2_20221129	Dissolved	Water	FILTRATION	

Prep Batch: 411987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Dissolved	Water	3005A	411679
580-120537-2	MW-3_20221129	Dissolved	Water	3005A	411679
580-120537-3	MW-6_20221129	Dissolved	Water	3005A	411679
580-120537-4	MW-9_20221129	Dissolved	Water	3005A	411679
580-120537-5	MW-11_20221129	Dissolved	Water	3005A	411679
580-120537-6	MW-12_20221129	Dissolved	Water	3005A	411679
580-120537-7	GMW-1_20221129	Dissolved	Water	3005A	411679
MB 580-411679/18-B	Method Blank	Dissolved	Water	3005A	411679
LCS 580-411679/19-B	Lab Control Sample	Dissolved	Water	3005A	411679
LCSD 580-411679/20-B	Lab Control Sample Dup	Dissolved	Water	3005A	411679
580-120537-1 MS	MW-2_20221129	Dissolved	Water	3005A	411679
580-120537-1 MSD	MW-2_20221129	Dissolved	Water	3005A	411679

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QC Association Summary

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

Job ID: 580-120537-1

Metals (Continued)

Prep Batch: 411987 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-2 MS	MW-3_20221129	Dissolved	Water	3005A	411679
580-120537-2 MSD	MW-3_20221129	Dissolved	Water	3005A	411679
580-120537-1 DU	MW-2_20221129	Dissolved	Water	3005A	411679

Prep Batch: 412680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total Recoverable	Water	3005A	
580-120537-2	MW-3_20221129	Total Recoverable	Water	3005A	
580-120537-3	MW-6_20221129	Total Recoverable	Water	3005A	
580-120537-4	MW-9_20221129	Total Recoverable	Water	3005A	
580-120537-5	MW-11_20221129	Total Recoverable	Water	3005A	
580-120537-6	MW-12_20221129	Total Recoverable	Water	3005A	
580-120537-7	GMW-1_20221129	Total Recoverable	Water	3005A	
MB 580-412680/22-A	Method Blank	Total Recoverable	Water	3005A	
LCS 580-412680/23-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 580-412680/24-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Analysis Batch: 412851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Dissolved	Water	6020B	411987
MB 580-411679/18-B	Method Blank	Dissolved	Water	6020B	411987
LCS 580-411679/19-B	Lab Control Sample	Dissolved	Water	6020B	411987
LCSD 580-411679/20-B	Lab Control Sample Dup	Dissolved	Water	6020B	411987
580-120537-1 MS	MW-2_20221129	Dissolved	Water	6020B	411987
580-120537-1 MSD	MW-2_20221129	Dissolved	Water	6020B	411987
580-120537-1 DU	MW-2_20221129	Dissolved	Water	6020B	411987

Analysis Batch: 412887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-2	MW-3_20221129	Dissolved	Water	6020B	411987
580-120537-3	MW-6_20221129	Dissolved	Water	6020B	411987
580-120537-4	MW-9_20221129	Dissolved	Water	6020B	411987
580-120537-5	MW-11_20221129	Dissolved	Water	6020B	411987
580-120537-6	MW-12_20221129	Dissolved	Water	6020B	411987
580-120537-7	GMW-1_20221129	Dissolved	Water	6020B	411987
580-120537-2 MS	MW-3_20221129	Dissolved	Water	6020B	411987
580-120537-2 MSD	MW-3_20221129	Dissolved	Water	6020B	411987

Analysis Batch: 412997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total Recoverable	Water	6020B	412680
580-120537-2	MW-3_20221129	Total Recoverable	Water	6020B	412680
580-120537-3	MW-6_20221129	Total Recoverable	Water	6020B	412680
580-120537-4	MW-9_20221129	Total Recoverable	Water	6020B	412680
580-120537-5	MW-11_20221129	Total Recoverable	Water	6020B	412680
580-120537-6	MW-12_20221129	Total Recoverable	Water	6020B	412680
580-120537-7	GMW-1_20221129	Total Recoverable	Water	6020B	412680
MB 580-412680/22-A	Method Blank	Total Recoverable	Water	6020B	412680
LCS 580-412680/23-A	Lab Control Sample	Total Recoverable	Water	6020B	412680
LCSD 580-412680/24-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	412680

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QC Association Summary

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

Job ID: 580-120537-1

General Chemistry

Analysis Batch: 411989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	SM 2540C	
580-120537-2	MW-3_20221129	Total/NA	Water	SM 2540C	
MB 580-411989/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 580-411989/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 412054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	300.0	
580-120537-2	MW-3_20221129	Total/NA	Water	300.0	
580-120537-3	MW-6_20221129	Total/NA	Water	300.0	
580-120537-4	MW-9_20221129	Total/NA	Water	300.0	
580-120537-5	MW-11_20221129	Total/NA	Water	300.0	
580-120537-6	MW-12_20221129	Total/NA	Water	300.0	
580-120537-7	GMW-1_20221129	Total/NA	Water	300.0	
MB 580-412054/4	Method Blank	Total/NA	Water	300.0	
LCS 580-412054/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-412054/6	Lab Control Sample Dup	Total/NA	Water	300.0	
580-120537-7 MS	GMW-1_20221129	Total/NA	Water	300.0	
580-120537-7 MSD	GMW-1_20221129	Total/NA	Water	300.0	

Analysis Batch: 412055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-1	MW-2_20221129	Total/NA	Water	300.0	
580-120537-1	MW-2_20221129	Total/NA	Water	300.0	
580-120537-2	MW-3_20221129	Total/NA	Water	300.0	
580-120537-3	MW-6_20221129	Total/NA	Water	300.0	
580-120537-4	MW-9_20221129	Total/NA	Water	300.0	
580-120537-5	MW-11_20221129	Total/NA	Water	300.0	
580-120537-6	MW-12_20221129	Total/NA	Water	300.0	
580-120537-7	GMW-1_20221129	Total/NA	Water	300.0	
MB 580-412055/4	Method Blank	Total/NA	Water	300.0	
LCS 580-412055/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-412055/6	Lab Control Sample Dup	Total/NA	Water	300.0	
580-120537-6 MS	MW-12_20221129	Total/NA	Water	300.0	
580-120537-6 MSD	MW-12_20221129	Total/NA	Water	300.0	
580-120537-7 MS	GMW-1_20221129	Total/NA	Water	300.0	
580-120537-7 MSD	GMW-1_20221129	Total/NA	Water	300.0	

Analysis Batch: 412127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-120537-3	MW-6_20221129	Total/NA	Water	SM 2540C	
580-120537-4	MW-9_20221129	Total/NA	Water	SM 2540C	
580-120537-5	MW-11_20221129	Total/NA	Water	SM 2540C	
580-120537-6	MW-12_20221129	Total/NA	Water	SM 2540C	
580-120537-7	GMW-1_20221129	Total/NA	Water	SM 2540C	
MB 580-412127/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 580-412127/2	Lab Control Sample	Total/NA	Water	SM 2540C	
580-120537-3 DU	MW-6_20221129	Total/NA	Water	SM 2540C	
580-120537-6 DU	MW-12_20221129	Total/NA	Water	SM 2540C	

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Lab Chronicle

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

Job ID: 580-120537-1

Client Sample ID: MW-2_20221129

Lab Sample ID: 580-120537-1

Date Collected: 11/29/22 15:00

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 11:50
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 00:01
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 09:58
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 00:36
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412851	FCW	EET SEA	12/13/22 16:33
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:32
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 18:07
Total/NA	Analysis	300.0		5	412054	JHR	EET SEA	11/30/22 18:19
Total/NA	Analysis	300.0		5	412055	JHR	EET SEA	11/30/22 18:19
Total/NA	Analysis	SM 2540C		1	411989	AUA	EET SEA	12/05/22 15:53

Client Sample ID: MW-3_20221129

Lab Sample ID: 580-120537-2

Date Collected: 11/29/22 09:30

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 12:49
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 00:26
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 09:58
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 00:54
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 22:44
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:34
Total/NA	Analysis	300.0		1	412054	JHR	EET SEA	11/30/22 18:31
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 18:31
Total/NA	Analysis	SM 2540C		1	411989	AUA	EET SEA	12/05/22 15:53

Client Sample ID: MW-6_20221129

Lab Sample ID: 580-120537-3

Date Collected: 11/29/22 08:20

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 13:09
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 01:43
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 10:07
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 01:13
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 22:51

Eurofins Seattle

Lab Chronicle

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

Job ID: 580-120537-1

Client Sample ID: MW-6_20221129

Lab Sample ID: 580-120537-3

Date Collected: 11/29/22 08:20

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:37
Total/NA	Analysis	300.0		1	412054	JHR	EET SEA	11/30/22 18:42
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 18:42
Total/NA	Analysis	SM 2540C		1	412127	AUA	EET SEA	12/06/22 15:10

Client Sample ID: MW-9_20221129

Lab Sample ID: 580-120537-4

Date Collected: 11/29/22 13:50

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 13:29
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 02:09
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 10:07
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 01:50
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 22:54
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:39
Total/NA	Analysis	300.0		1	412054	JHR	EET SEA	11/30/22 18:54
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 18:54
Total/NA	Analysis	SM 2540C		1	412127	AUA	EET SEA	12/06/22 15:10

Client Sample ID: MW-11_20221129

Lab Sample ID: 580-120537-5

Date Collected: 11/29/22 11:00

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 13:48
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 02:34
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 10:07
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 02:08
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 22:56
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:49
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 19:06
Total/NA	Analysis	300.0		5	412054	JHR	EET SEA	11/30/22 19:18
Total/NA	Analysis	SM 2540C		1	412127	AUA	EET SEA	12/06/22 15:10

Lab Chronicle

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

Job ID: 580-120537-1

Client Sample ID: MW-12_20221129

Lab Sample ID: 580-120537-6

Date Collected: 11/29/22 11:50

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 14:08
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 03:00
Total/NA	Prep	3510C			411715	KLW	EET SEA	12/02/22 10:07
Total/NA	Analysis	NWTPH-Dx		1	411805	DH	EET SEA	12/04/22 02:27
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:32
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 22:58
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:51
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 20:04
Total/NA	Analysis	300.0		5	412054	JHR	EET SEA	11/30/22 21:15
Total/NA	Analysis	SM 2540C		1	412127	AUA	EET SEA	12/06/22 15:10

Client Sample ID: GMW-1_20221129

Lab Sample ID: 580-120537-7

Date Collected: 11/29/22 12:40

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 14:28
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/06/22 03:26
Total/NA	Prep	3510C			411891	KLW	EET SEA	12/05/22 10:47
Total/NA	Analysis	NWTPH-Dx		1	412061	DH	EET SEA	12/06/22 02:20
Dissolved	Filtration	FILTRATION			411679	TMH	EET SEA	12/01/22 20:33
Dissolved	Prep	3005A			411987	TMH	EET SEA	12/05/22 15:40
Dissolved	Analysis	6020B		5	412887	FCW	EET SEA	12/13/22 23:01
Total Recoverable	Prep	3005A			412680	JLS	EET SEA	12/12/22 17:31
Total Recoverable	Analysis	6020B		5	412997	FCW	EET SEA	12/14/22 15:53
Total/NA	Analysis	300.0		1	412054	JHR	EET SEA	11/30/22 20:40
Total/NA	Analysis	300.0		1	412055	JHR	EET SEA	11/30/22 20:40
Total/NA	Analysis	SM 2540C		1	412127	AUA	EET SEA	12/06/22 15:10

Client Sample ID: Trip Blank_20221129

Lab Sample ID: 580-120537-8

Date Collected: 11/29/22 00:00

Matrix: Water

Date Received: 11/30/22 10:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	324465	USEJ	ELLE	12/07/22 11:30
Total/NA	Analysis	NWTPH-Gx		1	323842	MXX6	ELLE	12/05/22 20:35

Laboratory References:

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Eurofins Seattle

Accreditation/Certification Summary

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

Job ID: 580-120537-1

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

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alaska	State	PA00009	12-08-22
Alaska (UST)	State	17-027	02-28-23
Arizona	State	AZ0780	03-12-23
Arkansas DEQ	State	88-00660	08-09-23
California	State	2792	11-30-22 *
Colorado	State	PA00009	06-30-23
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-23
Delaware (DW)	State	N/A	01-31-23
Florida	NELAP	E87997	06-30-23
Georgia (DW)	State	C048	01-31-23
Hawaii	State	N/A	01-31-23
Illinois	NELAP	200027	01-31-23
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-22 *
Kentucky (DW)	State	KY90088	12-31-22
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-22
Louisiana (All)	NELAP	02055	06-30-23
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-23
Massachusetts	State	M-PA009	06-30-23
Michigan	State	9930	01-31-23
Minnesota	NELAP	042-999-487	12-31-22
Mississippi	State	022	01-31-23
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-23
Montana (UST)	State	<cert No.>	02-01-23
Nebraska	State	NE-OS-32-17	01-31-23
New Hampshire	NELAP	2730	01-10-23
New Jersey	NELAP	PA011	06-30-23
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-23
North Carolina (WW/SW)	State	521	12-31-22
North Dakota	State	R-205	01-31-23
Oklahoma	NELAP	R-205	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-23
Rhode Island	State	LAO00338	12-30-22
South Carolina	State	89002	01-31-23
Tennessee	State	02838	01-31-23

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

Eurofins Seattle

Accreditation/Certification Summary

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

Job ID: 580-120537-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704194-22-45	08-31-23
USDA	US Federal Programs	P330-19-00197	08-09-23
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-23
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-22
West Virginia DEP	State	055	07-31-23
Wyoming	State	8TMS-L	01-31-23
Wyoming (UST)	A2LA	0001.01	11-30-24

Method Summary

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

Job ID: 580-120537-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
NWTPH-Gx	Northwest - Volatile Petroleum Products (GC)	NWTPH	ELLE
NWTPH-Dx	Northwest - Semi-Volatile Petroleum Products (GC)	NWTPH	EET SEA
6020B	Metals (ICP/MS)	SW846	EET SEA
300.0	Anions, Ion Chromatography	MCAWW	EET SEA
SM 2540C	Solids, Total Dissolved (TDS)	SM	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	ELLE
5030C	Purge and Trap	SW846	ELLE
FILTRATION	Sample Filtration	None	EET SEA

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

NWTPH = Northwest Total Petroleum Hydrocarbon

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

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

Job ID: 580-120537-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-120537-1	MW-2_20221129	Water	11/29/22 15:00	11/30/22 10:19
580-120537-2	MW-3_20221129	Water	11/29/22 09:30	11/30/22 10:19
580-120537-3	MW-6_20221129	Water	11/29/22 08:20	11/30/22 10:19
580-120537-4	MW-9_20221129	Water	11/29/22 13:50	11/30/22 10:19
580-120537-5	MW-11_20221129	Water	11/29/22 11:00	11/30/22 10:19
580-120537-6	MW-12_20221129	Water	11/29/22 11:50	11/30/22 10:19
580-120537-7	GMW-1_20221129	Water	11/29/22 12:40	11/30/22 10:19
580-120537-8	Trip Blank_20221129	Water	11/29/22 00:00	11/30/22 10:19



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

BP Site Node Path:

Former BP 11060

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT Yes No X

BP/RM Facility No:

Former BP Facility No. 11060

Lab Work Order Number:

Page 1 of 2

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: Elaine Walker	Lead Regulatory Agency: Washington State Department of Ecology	Address: 4006 148th Ave NE, Redmond, WA 98052
Lab Phone: 253.248.4972	California Global ID No.: NA	Consultant/Contractor PM: Lonnie Dent
Lab Shipping Acct:	Enfos Proposal No: WR1027162/00C87-0002	Phone: 303-807-3627 Email: lonnie.dent@anteagroup.us
Lab Bottle Order No:	Accounting Mode: Provision X OOC-BU OOC-RM	Send/Submit EDD to: lonnie.dent@anteagroup.us
Other Info: M.Elaine.Walker@Eurofinsus.com	Stage Commercial-Site Activities (70) Activity Contracts Management (116)	Invoice To: BP-RM BP/ARC X

BP/RM PM: Wade Melton	Sample Details	Requested Analyses	Report Type & QC Level
PM Phone: 360-594-7978			Limited (Standard) Package
PM Email: wade.melton@bp.com			Limited Plus Package
			Full Package

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	BTX by EPA 8260B	MTBE by EPA 8260B	NWTPH-Gx	NWTPH-Dx	Total Lead by EPA 6000/7000	Dissolved Lead by EPA 6000/7000	Nitrate, Nitrite, and Sulfate by EPA 8000	Total dissolved solids (TDS) using Standard Method SM2540	Comments
MW-1				W				G			X	X	X	X	X	X	X	X	
MW-2 - 2022/12/9		11/29/22	1500	W				G	12		X	X	X	X	X	X	X	X	
MW-3 - 2022/12/9		11/29/22	0930	W				G	12		X	X	X	X	X	X	X	X	
MW-4				W				G			X	X	X	X	X	X	X	X	
MW-5				W				G			X	X	X	X	X	X	X	X	
MW-6 - 2022/12/9		11/29/22	0820	W				G	12		X	X	X	X	X	X	X	X	

Sampler's Name: Nathan Hart + Samantha Hince	Relinquished By / Affiliation: OREN SAGNER / JAC	Date: 11/30/22	Time: 1019	Accepted By / Affiliation: Stephanie LaMey	Date: 11/30/22	Time: 1019
Sampler's Company: Antea Group						
Ship Method: Courier	Ship Date: 11/30/22					
Shipment Tracking No:						

Special Instructions:

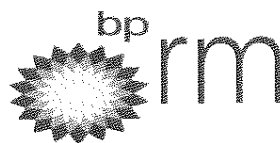
THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp



580-120537 Chain of Custody

MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018



Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

Page 2 of 2

BP Site Node Path:

Former BP 11060

Req Due Date (mm/dd/yy): Standard TAT

Rush TAT Yes ☐ No ☒

BP/RM Facility No:

Former BP Facility No. 11060

Lab Work Order Number:

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: Elaine Walker		Lead Regulatory Agency: Washington State Department of Ecology		Address: 4006 148th Ave NE, Redmond, WA 98052																	
Lab Phone: 253.248.4972		California Global ID No.: NA		Consultant/Contractor PM: Lonnie Dent																	
Lab Shipping Acct:		Enfos Proposal No: WR1027162/00C87-0002		Phone: 303-807-3627 Email: lonnie.dent@anteagroup.us																	
Lab Bottle Order No:		Accounting Mode: Provision ☒ OOC-BU ☐ OOC-RM ☐		Send/Submit EDD to: lonnie.dent@anteagroup.us																	
Other Info: M.Elaine.Walker@Eurofinsus.com		Stage Commercial-Site Activities (70) Activity Contracts Management (116)		Invoice To: BP-RM ☐ BP/ARC ☒																	
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 ☐																	
				Limited Plus Package ☐																	
				Full Package ☐																	
Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	BTX by EPA 8260B	MTBE by EPA 8260B	NWTPH-Gx	NWTPH-Dx	Pb-T by EPA 6020	Pb-D by EPA 6020	Total Lead by EPA 6000/7000	Dissolved Lead by EPA 6000/7000	Nitrite, Nitrate, and Sulfate by EPA 8000	Total dissolved solids (TDS) using Standard Method SM2540	Comments
	MW-9-2022/1/29	11/29/22	1350	W				G	12		X	X	X	X	X	X	X	X	X	X	
	MW-11-2022/1/29	11/29/22	1100	W				G	12		X	X	X	X	X	X	X	X	X	X	
	MW-12-2022/1/29	11/29/22	1150	W				G	12		X	X	X	X	X	X	X	X	X	X	
	GMW-1-2022/1/29	11/29/22	1240	W				G	12		X	X	X	X	X	X	X	X	X	X	
	Dep-1			W				G			X	X	X	X	X	X	X	X	X	X	
	Trip Blank-2022/1/29	11/29/22	0000	W				G	2		X	X	X	X	X	X	X	X	X	X	
Sampler's Name: Nathan Hunt + Samantha Hinte		Relinquished By / Affiliation		Date	Time	Accepted By / Affiliation		Date	Time												
Sampler's Company: Antea Group		Drew JASPER / AC		11/30/22	10:19	Sydney Lawm		11/30/22	10:19												
Ship Method: Carrier		Ship Date: 11/30/22																			
Shipment Tracking No:																					
Special Instructions:																					
THIS LINE - LAB USE ONLY: Custody Seals in Place: Yes / No Temp Blank: Yes / No Cooler Temp on Receipt: _____ °F/C Trip Blank: Yes / No MS/MSD Sample Submitted: Yes / No																					

BP LaMP Soil/H2O COC July 2018

Therm. ID: 1610 Cov: 0.1 ° Unc: 0.1 °
Cooler Desc: Bub FedEx: _____
Packing: Bub UPS: _____
Cust. Seal: Yes No ☒ Lab Cour: ✓
Blue Ice ☒ Wet, Dry, None Other: _____

Therm. ID: 1610 Cov: 1.5 ° Unc: 1.7 °
Cooler Desc: Bub FedEx: _____
Packing: Bub UPS: _____
Cust. Seal: Yes No ☒ Lab Cour: ✓
Blue Ice ☒ Wet, Dry, None Other: _____



Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-120537-1

Login Number: 120537

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.	False	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-120537-1

Login Number: 120537

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 12/03/22 02:13 PM

Creator: McBeth, Jessica

Question	Answer	Comment
The cooler's custody seal is 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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	True	

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-120537-1

SDG No.: _____

Batch Number: 411715Batch Start Date: 12/02/22 09:58Batch Analyst: Whelan, Katja LBatch Method: 3510CBatch End Date: 12/02/22 16:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-411715/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-411715/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-411715/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-120537-G-1	MW-2_20221129	3510C, NWTPH-Dx	T	00413.74 g	00167.62 g	246.1 mL	2 mL	2 SU	n/a SU
580-120537-H-2	MW-3_20221129	3510C, NWTPH-Dx	T	00414.09 g	00165.64 g	248.5 mL	2 mL	2 SU	n/a SU
580-120537-G-3	MW-6_20221129	3510C, NWTPH-Dx	T	00414.84 g	00167.16 g	247.7 mL	2 mL	2 SU	n/a SU
580-120537-H-4	MW-9_20221129	3510C, NWTPH-Dx	T	00403.71 g	00166.14 g	237.6 mL	2 mL	2 SU	n/a SU
580-120537-H-5	MW-11_20221129	3510C, NWTPH-Dx	T	00403.79 g	00167.09 g	236.7 mL	2 mL	2 SU	n/a SU
580-120537-H-6	MW-12_20221129	3510C, NWTPH-Dx	T	00412.86 g	00165.60 g	247.3 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00035	TPH_WaterSurr 00092			
MB 580-411715/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-411715/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-411715/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-120537-G-1	MW-2_20221129	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-120537-H-2	MW-3_20221129	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-120537-G-3	MW-6_20221129	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-120537-H-4	MW-9_20221129	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-120537-H-5	MW-11_20221129	3510C, NWTPH-Dx	T	n/a SU		100 uL			
580-120537-H-6	MW-12_20221129	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

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411715 Batch Start Date: 12/02/22 09:58 Batch Analyst: Whelan, Katja LBatch Method: 3510C Batch End Date: 12/02/22 16:45

Batch Notes	
Method/Fraction	3510C_LVI/NWTPH_Dx
Balance ID	SEA225
pH Indicator ID	6107003/6007004/6105009
Pipette/Syringe/Dispenser ID	MP5
Analyst ID - Extraction	KW/CS/TO
Reagent Water ID	DI
Analyst ID - Spike Analyst	CS
Analyst ID - Spike Witness Analyst	KW
Sufficient Volume for Batch QC	no
Acid Used for pH Adjustment ID	3213801
Prep Solvent ID	22G1962005
Prep Solvent Volume Used	100 mL
Na2SO4 ID	Baked Na2SO4_00450
Analyst ID - Concentration	CS
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	DIGITALREADOUT
Concentration 2 Uncorrected Temperature	30 Degrees C
Concentration 2 Corrected Temperature	31.7 Degrees C
Vial Lot Number	22042037/70403126135
Analyst ID - Clean Up	KW
Silica Gel ID	3304818
Batch Comment	Vialed by:KW

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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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411891 Batch Start Date: 12/05/22 10:46 Batch Analyst: Whelan, Katja LBatch Method: 3510C Batch End Date: 12/05/22 17:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-411891/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-411891/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-411891/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-120537-H-7	GMW-1_20221129	3510C, NWTPH-Dx	T	00412.78 g	00166.97 g	245.8 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00035	TPH_WaterSurr 00092			
MB 580-411891/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-411891/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-411891/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-120537-H-7	GMW-1_20221129	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

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411891 Batch Start Date: 12/05/22 10:46 Batch Analyst: Whelan, Katja LBatch Method: 3510C Batch End Date: 12/05/22 17:00

Batch Notes	
Method/Fraction	3510C_LVI/8015D_DRO_DOD5/8015D_DRO/NWTPH_Dx
Balance ID	SEA225
pH Indicator ID	6107003/6007004/6105009
Pipette/Syringe/Dispenser ID	MP5
Analyst ID - Extraction	KW/CS
Reagent Water ID	DI
Analyst ID - Spike Analyst	KW
Analyst ID - Spike Witness Analyst	CS
Sufficient Volume for Batch QC	yes
Acid Used for pH Adjustment ID	3213801
Prep Solvent ID	22G1962005/22E1362002
Prep Solvent Volume Used	100 mL
Na2SO4 ID	Baked Na2SO4_00450
Analyst ID - Concentration	KW
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	DIGITALREADOUT
Concentration 2 Uncorrected Temperature	30 Degrees C
Concentration 2 Corrected Temperature	31.7 Degrees C
Vial Lot Number	22042037/70403126135
Analyst ID - Clean Up	KW
Silica Gel ID	3304818
Batch Comment	Vialed by: KW

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 SeattleJob No.: 580-120537-1

SDG No.: _____

Batch Number: 411679Batch Start Date: 12/01/22 20:32Batch Analyst: Hua, Tammy MBatch Method: FILTRATIONBatch End Date: 12/02/22 14:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
580-120537-J-1	MW-2_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-2	MW-3_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-3	MW-6_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-4	MW-9_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-5	MW-11_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-6	MW-12_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
580-120537-J-7	GMW-1_20221129	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
MB 580-411679/18		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCS 580-411679/19		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCSD 580-411679/20		FILTRATION, 3005A, 6020B		250 mL	250 mL				

Batch Notes

Filter ID	1370979
Nitric Acid ID	3277869

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.: 580-120537-1

SDG No.: _____

Batch Number: 411987Batch Start Date: 12/05/22 19:40Batch Analyst: Hua, Tammy MBatch Method: 3005ABatch End Date: 12/05/22 23:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00021	ICP CAL 2 00019	MET Spike 3C 00040	
580-120537-J-1-A	MW-2_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-1-A DU	MW-2_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-1-A MS	MW-2_20221129	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-120537-J-1-A MSD	MW-2_20221129	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-120537-J-2-A	MW-3_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-2-A MS	MW-3_20221129	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-120537-J-2-A MSD	MW-3_20221129	3005A, 6020B	D	50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-120537-J-3-A	MW-6_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-4-A	MW-9_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-5-A	MW-11_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-6-A	MW-12_20221129	3005A, 6020B	D	50 mL	50 mL				
580-120537-J-7-A	GMW-1_20221129	3005A, 6020B	D	50 mL	50 mL				
MB		3005A, 6020B		50 mL	50 mL				
580-411679/18-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCS		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-411679/19-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
580-411679/20-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.

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METALS BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411987 Batch Start Date: 12/05/22 19:40 Batch Analyst: Hua, Tammy MBatch Method: 3005A Batch End Date: 12/05/22 23:40

Batch Notes	
Hot Block ID	block A
Thermometer ID	1108438
Thermometer Location ID	A33
Uncorrected Temperature	94.5 Celsius
Oven, Bath or Block Temperature 1	94.1 Degrees C
Uncorrected Temperature 2	94.5 Celsius
Oven, Bath or Block Temperature 2	94.1 Degrees C
Lot # of hydrochloric acid	3317075
Lot # of Nitric Acid	3318212
Pipette ID	metals prep 2
Digestion Tube/Cup ID	3238697
First Start time	see above
First End time	see above
Analyst ID - Spike Witness Analyst	JL - NJ

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.: 580-120537-1

SDG No.: _____

Batch Number: 412680Batch Start Date: 12/12/22 17:31Batch Analyst: Sloan, Joshua LBatch Method: 3005ABatch End Date: 12/12/22 23:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00021	ICP CAL 2 00021	MET Spike 3C 00040	
580-120537-I-1	MW-2_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-2	MW-3_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-3	MW-6_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-4	MW-9_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-5	MW-11_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-6	MW-12_20221129	3005A, 6020B	R	50 mL	50 mL				
580-120537-I-7	GMW-1_20221129	3005A, 6020B	R	50 mL	50 mL				
MB 580-412680/22		3005A, 6020B		50 mL	50 mL				
ICS 580-412680/23		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-412680/24		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes

Digestion Tube/Cup ID	3238696
Pipette/Syringe/Dispenser ID	metals prep 2
Analyst ID - Spike Analyst	JLS
Analyst ID - Spike Witness Analyst	JL
Sufficient Volume for Batch QC	yes
Hydrochloric Acid ID	3317076
Nitric Acid ID	3097391
Digestion Unit ID	BLOCK B
Thermometer ID	74261
Thermometer Location ID	B31
Temperature - Uncorrected - Start	92.0 Degrees C
Temperature - Corrected - Start	92.0 Degrees C
Digestion Start Time	12/12/2022 19:00
Digestion End Time	12/12/2022 23:00
Temperature - Uncorrected - End	92.0 Degrees C
Temperature - Corrected - End	92.0 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.: 580-120537-1

SDG No.: _____

Batch Number: 412680 Batch Start Date: 12/12/22 17:31 Batch Analyst: Sloan, Joshua L

Batch Method: 3005A Batch End Date: 12/12/22 23:00

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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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-120537-1

SDG No.: _____

Batch Number: 412054Batch Start Date: 11/30/22 16:22Batch Analyst: Roberts, Jacob HBatch Method: 300.0Batch End Date: 11/30/22 21:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC-Custom-EE 00030			
MB 580-412054/4		300.0		5 mL	5 mL				
LCS 580-412054/5		300.0		5 mL	5 mL	0.25 mL			
LCSD 580-412054/6		300.0		5 mL	5 mL	0.25 mL			
580-120537-K-1	MW-2_20221129	300.0	T	5 mL	5 mL				
580-120537-K-1 ^5	MW-2_20221129	300.0	T	5 mL	5 mL				
580-120537-K-2	MW-3_20221129	300.0	T	5 mL	5 mL				
580-120537-K-3	MW-6_20221129	300.0	T	5 mL	5 mL				
580-120537-K-4	MW-9_20221129	300.0	T	5 mL	5 mL				
580-120537-K-5	MW-11_20221129	300.0	T	5 mL	5 mL				
580-120537-K-5 ^5	MW-11_20221129	300.0	T	5 mL	5 mL				
580-120537-K-6	MW-12_20221129	300.0	T	5 mL	5 mL				
580-120537-K-7	GMW-1_20221129	300.0	T	5 mL	5 mL				
580-120537-K-7 MS	GMW-1_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-7 MSD	GMW-1_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-6 ^5	MW-12_20221129	300.0	T	5 mL	5 mL				

Batch Notes

Filter ID	17607577
Pipette/Syringe/Dispenser ID	WC 10 C / WC 5 D / WC 2 C
Sufficient Volume for Batch QC	yes
Eluent 1 ID	220622

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.

300.0

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 412055 Batch Start Date: 11/30/22 16:22 Batch Analyst: Roberts, Jacob HBatch Method: 300.0 Batch End Date: 11/30/22 21:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC-Custom-EE 00030			
MB 580-412055/4		300.0		5 mL	5 mL				
LCS 580-412055/5		300.0		5 mL	5 mL	0.25 mL			
LCSD 580-412055/6		300.0		5 mL	5 mL	0.25 mL			
580-120537-K-1	MW-2_20221129	300.0	T	5 mL	5 mL				
580-120537-K-1 ^5	MW-2_20221129	300.0	T	5 mL	5 mL				
580-120537-K-2	MW-3_20221129	300.0	T	5 mL	5 mL				
580-120537-K-3	MW-6_20221129	300.0	T	5 mL	5 mL				
580-120537-K-4	MW-9_20221129	300.0	T	5 mL	5 mL				
580-120537-K-5	MW-11_20221129	300.0	T	5 mL	5 mL				
580-120537-K-5 ^5	MW-11_20221129	300.0	T	5 mL	5 mL				
580-120537-K-6	MW-12_20221129	300.0	T	5 mL	5 mL				
580-120537-K-6 MS	MW-12_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-6 MSD	MW-12_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-7	GMW-1_20221129	300.0	T	5 mL	5 mL				
580-120537-K-7 MS	GMW-1_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-7 MSD	GMW-1_20221129	300.0	T	5 mL	5 mL	0.25 mL			
580-120537-K-6 ^5	MW-12_20221129	300.0	T	5 mL	5 mL				

Batch Notes

Filter ID	17607577
Pipette/Syringe/Dispenser ID	WC 10 C / WC 5 D / WC 2 C
Sufficient Volume for Batch QC	yes
Eluent 1 ID	220622

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.

300.0

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411989 Batch Start Date: 12/05/22 15:52 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/08/22 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	CrucibleID	InitialAmount	TareWeight	Weight1	Weight2
MB 580-411989/1		SM 2540C			B0752731	100 mL	3.7321 g	3.7276 g	3.7278 g
LCS 580-411989/2		SM 2540C			B0752729	50 mL	3.7649 g	3.8129 g	3.8132 g
580-120537-L-1	MW-2_20221129	SM 2540C	T	430 umhos/cm	B0752829	100 mL	3.9106 g	3.9430 g	3.9426 g
580-120537-L-2	MW-3_20221129	SM 2540C	T	203.1 umhos/cm	B0752851	100 mL	3.8089 g	3.8211 g	3.8209 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	WeightTwo%Diff	Weight40K	Residue	Residue2	Residue3
MB 580-411989/1		SM 2540C		Pass	N/A	N/A	-0.0045 g	-0.0043 g	N/A g
LCS 580-411989/2		SM 2540C		Pass	N/A	N/A	0.048 g	0.0483 g	N/A g
580-120537-L-1	MW-2_20221129	SM 2540C	T	Pass	N/A	N/A	0.0324 g	0.032 g	N/A g
580-120537-L-2	MW-3_20221129	SM 2540C	T	Pass	N/A	N/A	0.0122 g	0.012 g	N/A g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue4	FinalAmount	CalcMsg	TDS Std. 00086		
MB 580-411989/1		SM 2540C		N/A g	100 mL	OK			
LCS 580-411989/2		SM 2540C		N/A g	100 mL	OK	50 mL		
580-120537-L-1	MW-2_20221129	SM 2540C	T	N/A g	100 mL	OK			
580-120537-L-2	MW-3_20221129	SM 2540C	T	N/A g	100 mL	OK			

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.

SM 2540C

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411989 Batch Start Date: 12/05/22 15:52 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/08/22 17:48

Batch Notes	
Nominal Amount Used	100.0 mL
Conductivity Meter ID	TAC 132
Filter ID	17485654
Balance ID	SEA 227
Vessel Lot ID	202228001-2313-MJ
Oven ID - Low Temperature	TDS-TSS2
Thermometer ID - Low Temperature	Digital Readout
Date/Time - In	12/05/2022 17:58
Temperature - Start - Uncorrected	174.0 Celsius
Temperature - Start - Corrected	170.5 Celsius
Date/Time - Out	12/06/2022 16:40
Temperature - End - Uncorrected	174.0 Celsius
Temperature - End - Corrected	170.5 Celsius
Oven ID	TDS-TSS2
Thermometer ID	Digital Readout
Weight(WT1) Start Date/Time	12/06/2022 16:41
Uncorrected Weight(WT1) Start Temp	178.0 Celsius
Weight(WT1) Start Temp	180.6 Celsius
Weight(WT1) Date/Time Out	12/08/2022 10:45
Uncorrected Weight(WT1) Temp Out	178.0 Celsius
Weight(WT1) Temp Out	180.6 Celsius
Date/Time - In - CW (WT2)	12/08/2022 15:30
Temperature - Start-CW(WT2) -Uncorrected	178.0 Celsius
Temperature - Start - CW (WT2) - Correct	180.6 Celsius
Date/Time - Out - CW (WT2)	12/08/2022 17:00
Temperature - End-CW(WT2) -Uncorrected	178.0 Celsius
Temperature - End - CW (WT2) - Correct	180.6 Celsius
Batch Comment	Graduated container lot: 20210801 Alum Dish: 20190925

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.

SM 2540C

Page 2 of 3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 411989 Batch Start Date: 12/05/22 15:52 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/08/22 17:48

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.

SM 2540C

Page 3 of 3

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-120537-1

SDG No.: _____

Batch Number: 412127Batch Start Date: 12/06/22 15:10Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540CBatch End Date: 12/08/22 23:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	CrucibleID	InitialAmount	TareWeight	Weight1	Weight2
MB 580-412127/1		SM 2540C			B0752847	100 mL	3.6796 g	3.6796 g	3.6801 g
LCS 580-412127/2		SM 2540C			B0752702	50 mL	4.3040 g	4.3600 g	4.3602 g
580-120537-L-3	MW-6_20221129	SM 2540C	T	256 umhos/cm	B0752704	100 mL	3.8413 g	3.8642 g	3.8638 g
580-120537-L-4	MW-9_20221129	SM 2540C	T	350 umhos/cm	B0752835	100 mL	3.6976 g	3.7045 g	3.7045 g
580-120537-L-5	MW-11_20221129	SM 2540C	T	1133 umhos/cm	B0752834	100 mL	3.7614 g	3.8423 g	3.8418 g
580-120537-L-6	MW-12_20221129	SM 2540C	T	988 umhos/cm	B0752833	100 mL	3.7947 g	3.8732 g	3.8729 g
580-120537-L-7	GMW-1_20221129	SM 2540C	T	345 umhos/cm	B0752832	100 mL	3.7029 g	3.7180 g	3.7176 g
580-120537-L-3 DU	MW-6_20221129	SM 2540C	T	256 umhos/cm	B0752831	100 mL	3.6867 g	3.7053 g	3.7051 g
580-120537-L-6 DU	MW-12_20221129	SM 2540C	T	988 umhos/cm	B0752830	100 mL	3.6899 g	3.7575 g	3.7575 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	WeightTwo%Diff	Weight40K	Residue	Residue2	Residue3
MB 580-412127/1		SM 2540C		Pass	N/A	N/A	0 g	0.0005 g	N/A g
LCS 580-412127/2		SM 2540C		Pass	N/A	N/A	0.056 g	0.0562 g	N/A g
580-120537-L-3	MW-6_20221129	SM 2540C	T	Pass	N/A	N/A	0.0229 g	0.0225 g	N/A g
580-120537-L-4	MW-9_20221129	SM 2540C	T	Pass	N/A	N/A	0.0069 g	0.0069 g	N/A g
580-120537-L-5	MW-11_20221129	SM 2540C	T	Pass	N/A	N/A	0.0809 g	0.0804 g	N/A g
580-120537-L-6	MW-12_20221129	SM 2540C	T	Pass	N/A	N/A	0.0785 g	0.0782 g	N/A g
580-120537-L-7	GMW-1_20221129	SM 2540C	T	Pass	N/A	N/A	0.0151 g	0.0147 g	N/A g
580-120537-L-3 DU	MW-6_20221129	SM 2540C	T	Pass	N/A	N/A	0.0186 g	0.0184 g	N/A g
580-120537-L-6 DU	MW-12_20221129	SM 2540C	T	Pass	N/A	N/A	0.0676 g	0.0676 g	N/A g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue4	FinalAmount	CalcMsg	TDS Std. 00086	
MB 580-412127/1		SM 2540C		N/A g	100 mL	OK		
LCS 580-412127/2		SM 2540C		N/A g	100 mL	OK	50 mL	
580-120537-L-3	MW-6_20221129	SM 2540C	T	N/A g	100 mL	OK		
580-120537-L-4	MW-9_20221129	SM 2540C	T	N/A g	100 mL	OK		
580-120537-L-5	MW-11_20221129	SM 2540C	T	N/A g	100 mL	OK		

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.

SM 2540C

Page 1 of 4

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 412127 Batch Start Date: 12/06/22 15:10 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/08/22 23:52

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue4	FinalAmount	CalcMsg	TDS Std. 00086		
580-120537-L-6	MW-12_20221129	SM 2540C	T	N/A g	100 mL	OK			
580-120537-L-7	GMW-1_20221129	SM 2540C	T	N/A g	100 mL	OK			
580-120537-L-3 DU	MW-6_20221129	SM 2540C	T	N/A g	100 mL	OK			
580-120537-L-6 DU	MW-12_20221129	SM 2540C	T	N/A g	100 mL	OK			

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.

SM 2540C

Page 2 of 4

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-120537-1

SDG No.: _____

Batch Number: 412127 Batch Start Date: 12/06/22 15:10 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/08/22 23:52

Batch Notes	
Nominal Amount Used	100.0 mL
Conductivity Meter ID	TAC 132
Filter ID	17485654
Balance ID	SEA 227
Vessel Lot ID	202228001-2313-MJ
Oven ID - Low Temperature	TDS-TSS2
Thermometer ID - Low Temperature	Digital Readout
Date/Time - In	12/06/2022 19:00
Temperature - Start - Uncorrected	174.0 Celsius
Temperature - Start - Corrected	170.5 Celsius
Date/Time - Out	12/08/2022 16:03
Temperature - End - Uncorrected	174.0 Celsius
Temperature - End - Corrected	170.5 Celsius
Oven ID	TDS-TSS2
Thermometer ID	Digital Readout
Weight(WT1) Start Date/Time	12/08/2022 16:05
Uncorrected Weight(WT1) Start Temp	178.0 Celsius
Weight(WT1) Start Temp	180.6 Celsius
Weight(WT1) Date/Time Out	12/08/2022 17:05
Uncorrected Weight(WT1) Temp Out	178.0 Celsius
Weight(WT1) Temp Out	180.6 Celsius
Date/Time - In - CW (WT2)	12/08/2022 19:30
Temperature - Start-CW(WT2) -Uncorrected	178.0 Celsius
Temperature - Start - CW (WT2) - Correct	180.6 Celsius
Date/Time - Out - CW (WT2)	12/08/2022 20:45
Temperature - End-CW(WT2) -Uncorrected	178.0 Celsius
Temperature - End - CW (WT2) - Correct	180.6 Celsius
Batch Comment	Graduated container lot: 20210801 Alum Dish: 20190925

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.

SM 2540C

Page 3 of 4

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins SeattleJob No.: 580-120537-1

SDG No.: _____

Batch Number: 412127Batch Start Date: 12/06/22 15:10Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540CBatch End Date: 12/08/22 23:52

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.

SM 2540C

Page 4 of 4

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 580-120537-1

SDG No.: _____

Batch Number: 324465Batch Start Date: 12/07/22 08:32Batch Analyst: Johnson, Sara EBatch Method: 8260D

Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	ResidualChloChe ck	Headspace	Lot#Vial
LCS 410-324465/4		8260D		5 mL	5 mL				2663
MB 410-324465/6		8260D		5 mL	5 mL				2663
580-120537-A-8	Trip Blank 20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-1	MW-2_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-B-1	MW-2_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-C-1 MS	MW-2_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-2	MW-3_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-3	MW-6_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-4	MW-9_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-5	MW-11_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-6	MW-12_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	
580-120537-A-7	GMW-1_20221129	8260D	T	5 mL	5 mL	<2 SU	N	N	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MSV_Cent_ISSS 00011	MSV_LCS_2CEVE 00090	MSV_LCS_ACROL 00087	MSV_LCS_Gases 00117	MSV_LCS_VOC#1 00085	
LCS 410-324465/4		8260D		5 uL	50 uL	50 uL	50 uL	50 uL	
MB 410-324465/6		8260D		5 uL					
580-120537-A-8	Trip Blank 20221129	8260D	T	5 uL					
580-120537-A-1	MW-2_20221129	8260D	T	5 uL					
580-120537-B-1	MW-2_20221129	8260D	T	5 uL	21.5 uL	21.5 uL	21.5 uL	21.5 uL	
580-120537-C-1 MS	MW-2_20221129	8260D	T	5 uL	21.5 uL	21.5 uL	21.5 uL	21.5 uL	
580-120537-A-2	MW-3_20221129	8260D	T	5 uL					
580-120537-A-3	MW-6_20221129	8260D	T	5 uL					
580-120537-A-4	MW-9_20221129	8260D	T	5 uL					
580-120537-A-5	MW-11_20221129	8260D	T	5 uL					
580-120537-A-6	MW-12_20221129	8260D	T	5 uL					
580-120537-A-7	GMW-1_20221129	8260D	T	5 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.

8260D

Page 1 of 2

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 580-120537-1

SDG No.: _____

Batch Number: 324465 Batch Start Date: 12/07/22 08:32 Batch Analyst: Johnson, Sara EBatch Method: 8260D Batch End Date: _____

Batch Notes	

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 2 of 2

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 580-120537-1

SDG No.: _____

Batch Number: 323842Batch Start Date: 12/05/22 17:35Batch Analyst: Serago, RyanBatch Method: NWTPH-Gx

Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	Headspace	Lot#Vial	GCV Q GRO 00037
MB 410-323842/4		NWTPH-Gx		5 mL	5 mL			2663	
LCS 410-323842/5		NWTPH-Gx		5 mL	5 mL			2663	55 uL
LCS 410-323842/6		NWTPH-Gx		5 mL	5 mL			2663	55 uL
580-120537-B-8	Trip Blank 20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-1	MW-2_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-2	MW-3_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-3	MW-6_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-4	MW-9_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-5	MW-11_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-6	MW-12_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		
580-120537-D-7	GMW-1_20221129	NWTPH-Gx	T	5 mL	5 mL	<2 SU	N		

Lab Sample ID	Client Sample ID	Method Chain	Basis	GCV_W_TFT 00008					
MB 410-323842/4		NWTPH-Gx		1 uL					
LCS 410-323842/5		NWTPH-Gx		1 uL					
LCS 410-323842/6		NWTPH-Gx		1 uL					
580-120537-B-8	Trip Blank 20221129	NWTPH-Gx	T	1 uL					
580-120537-D-1	MW-2_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-2	MW-3_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-3	MW-6_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-4	MW-9_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-5	MW-11_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-6	MW-12_20221129	NWTPH-Gx	T	1 uL					
580-120537-D-7	GMW-1_20221129	NWTPH-Gx	T	1 uL					

Batch Notes

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 2

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 580-120537-1

SDG No.: _____

Batch Number: 323842 Batch Start Date: 12/05/22 17:35 Batch Analyst: Serago, RyanBatch Method: NWTPH-Gx Batch End Date: _____

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 2 of 2



ANALYTICAL REPORT

PREPARED FOR

Attn: Lonnie Dent
Antea USA Inc.
3855 Precision Drive
Suite 160
Loveland, Colorado 80538
Generated 2/21/2023 1:01:22 PM Revision 1

JOB DESCRIPTION

BP - ARCO 11060

JOB NUMBER

580-121302-1

Eurofins Seattle

Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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Revision 1

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Definitions/Glossary

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

Job ID: 580-121302-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
H3	Sample was received and analyzed past holding time.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: 580-121302-1

Job ID: 580-121302-1

Laboratory: Eurofins Seattle

Narrative

Job Narrative 580-121302-1

Revision:

Client added arsenic. A narration was added to the metals section.

Comments

No additional comments.

Receipt

The samples were received on 12/15/2022 11:07 AM. 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 1.5° C.

Receipt Exceptions

The number of samples listed on the COC do not match the number of samples provided in the cooler. Some VOA samples were received frozen with bulging septas and are not usable.

GC/MS VOA

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW4 _ 20221212 (580-121302-1). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

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).

Method NWTPH-Dx: 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.

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

Metals

Method 6020B A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: Client requested analysis on the following sample but did not provide the proper container (nitric acid preserved poly): MW5 - _20221212 (580-121302-2) . A hydrochloric acid preserved VOA vial was used. Method proceeded as usual otherwise.

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

General Chemistry

Method 300.0: The following samples were received (12/15/2022) outside of holding time (12/14/2022) : MW4 _ 20221212 (580-121302-1), (580-121302-A-1 MS ^10) and (580-121302-A-1 MSD ^10).

No additional analytical or quality issues were noted, other than those described above or 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: 580-121302-1

Client Sample ID: MW4 _ 20221212

Lab Sample ID: 580-121302-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	66		10	5.0	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	640		20	5.3	ug/L	10		8260D	Total/NA
o-Xylene	190		10	3.9	ug/L	10		8260D	Total/NA
Toluene	11		10	3.9	ug/L	10		8260D	Total/NA
Xylenes, Total	830		20	5.3	ug/L	10		8260D	Total/NA
Gasoline	5800		500	140	ug/L	10		NWTPH-Gx	Total/NA
#2 Diesel (C10-C24)	2500		120	70	ug/L	1		NWTPH-Dx	Total/NA
Motor Oil (>C24-C36)	750		380	100	ug/L	1		NWTPH-Dx	Total/NA
Lead	67		2.0	0.20	ug/L	5		6020B	Total Recoverable
Lead	41		2.0	0.20	ug/L	5		6020B	Dissolved
Sulfate	300		15	8.0	mg/L	10		300.0	Total/NA
Total Dissolved Solids	610		10	10	mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW5 - 20221212

Lab Sample ID: 580-121302-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	38		5.0	1.0	ug/L	5		6020B	Total Recoverable

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: 580-121302-1

Client Sample ID: MW4 _ 20221212

Lab Sample ID: 580-121302-1

Date Collected: 12/12/22 12:00

Matrix: Water

Date Received: 12/15/22 11:07

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		10	2.4	ug/L			12/21/22 07:06	10
Ethylbenzene	66		10	5.0	ug/L			12/21/22 07:06	10
Methyl tert-butyl ether	ND		10	4.4	ug/L			12/21/22 07:06	10
m-Xylene & p-Xylene	640		20	5.3	ug/L			12/21/22 07:06	10
o-Xylene	190		10	3.9	ug/L			12/21/22 07:06	10
Toluene	11		10	3.9	ug/L			12/21/22 07:06	10
Xylenes, Total	830		20	5.3	ug/L			12/21/22 07:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		80 - 120		12/21/22 07:06	10
4-Bromofluorobenzene (Surr)	95		80 - 120		12/21/22 07:06	10
Dibromofluoromethane (Surr)	93		80 - 120		12/21/22 07:06	10
Toluene-d8 (Surr)	109		80 - 120		12/21/22 07:06	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	5800		500	140	ug/L			12/21/22 07:06	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		77 - 123		12/21/22 07:06	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	2500		120	70	ug/L		12/22/22 10:32	12/23/22 03:17	1
Motor Oil (>C24-C36)	750		380	100	ug/L		12/22/22 10:32	12/23/22 03:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150	12/22/22 10:32	12/23/22 03:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	67		2.0	0.20	ug/L		12/22/22 22:20	12/28/22 13:39	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	41		2.0	0.20	ug/L		12/16/22 17:42	12/20/22 17:41	5
Arsenic	ND		5.0	1.0	ug/L		12/16/22 17:42	12/20/22 17:41	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N (EPA 300.0)	ND	H H3	0.40	0.070	mg/L			12/15/22 18:36	1
Sulfate (EPA 300.0)	300		15	8.0	mg/L			12/15/22 19:35	10
Nitrate as N (EPA 300.0)	ND	H H3	0.20	0.030	mg/L			12/15/22 18:36	1
Nitrate Nitrite as N (EPA 300.0)	ND	H H3	0.40	0.070	mg/L			12/15/22 18:36	1
Total Dissolved Solids (SM 2540C)	610		10	10	mg/L			12/19/22 15:08	1

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Client Sample Results

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

Job ID: 580-121302-1

Client Sample ID: MW5 - 20221212

Lab Sample ID: 580-121302-2

Date Collected: 12/12/22 13:45

Matrix: Water

Date Received: 12/15/22 11:07

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			12/21/22 07:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/21/22 07:31	1
Methyl tert-butyl ether	ND		1.0	0.44	ug/L			12/21/22 07:31	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/21/22 07:31	1
o-Xylene	ND		1.0	0.39	ug/L			12/21/22 07:31	1
Toluene	ND		1.0	0.39	ug/L			12/21/22 07:31	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/21/22 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		12/21/22 07:31	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/21/22 07:31	1
Dibromofluoromethane (Surr)	98		80 - 120		12/21/22 07:31	1
Toluene-d8 (Surr)	107		80 - 120		12/21/22 07:31	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			12/21/22 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		77 - 123		12/21/22 07:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	38		5.0	1.0	ug/L		02/17/23 17:16	02/20/23 11:54	5

Surrogate Summary

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

Job ID: 580-121302-1

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)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
580-121302-1	MW4 _ 20221212	90	95	93	109
580-121302-2	MW5 - _ 20221212	96	93	98	107
LCS 580-413443/7	Lab Control Sample	94	99	97	106
LCSD 580-413443/8	Lab Control Sample Dup	95	94	95	111
MB 580-413443/6	Method Blank	100	93	98	108

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (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)			
580-121302-1	MW4 _ 20221212	96			
580-121302-2	MW5 - _ 20221212	94			
LCS 580-413438/9	Lab Control Sample	99			
LCSD 580-413438/10	Lab Control Sample Dup	96			
MB 580-413438/6	Method Blank	94			

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)			
580-121302-1	MW4 _ 20221212	81			
LCS 580-413630/2-A	Lab Control Sample	90			
LCS 580-413921/2-A	Lab Control Sample	106			
LCSD 580-413630/3-A	Lab Control Sample Dup	95			
LCSD 580-413921/3-A	Lab Control Sample Dup	59			
MB 580-413630/1-A	Method Blank	46 S1-			
MB 580-413921/1-A	Method Blank	69			

Surrogate Legend

OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 580-121302-1

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

Lab Sample ID: MB 580-413443/6

Matrix: Water

Analysis Batch: 413443

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			12/20/22 23:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			12/20/22 23:51	1
Methyl tert-butyl ether	ND		1.0	0.44	ug/L			12/20/22 23:51	1
m-Xylene & p-Xylene	ND		2.0	0.53	ug/L			12/20/22 23:51	1
o-Xylene	ND		1.0	0.39	ug/L			12/20/22 23:51	1
Toluene	ND		1.0	0.39	ug/L			12/20/22 23:51	1
Xylenes, Total	ND		2.0	0.53	ug/L			12/20/22 23:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/20/22 23:51	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/20/22 23:51	1
Dibromofluoromethane (Surr)	98		80 - 120		12/20/22 23:51	1
Toluene-d8 (Surr)	108		80 - 120		12/20/22 23:51	1

Lab Sample ID: LCS 580-413443/7

Matrix: Water

Analysis Batch: 413443

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	10.1		ug/L		101	80 - 122
Ethylbenzene	10.0	10.7		ug/L		107	80 - 120
Methyl tert-butyl ether	10.0	8.57		ug/L		86	72 - 120
m-Xylene & p-Xylene	10.0	10.7		ug/L		107	80 - 120
o-Xylene	10.0	10.8		ug/L		108	80 - 120
Toluene	10.0	10.7		ug/L		107	80 - 120
Xylenes, Total	20.0	21.5		ug/L		108	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	94		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	97		80 - 120
Toluene-d8 (Surr)	106		80 - 120

Lab Sample ID: LCSD 580-413443/8

Matrix: Water

Analysis Batch: 413443

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	10.7		ug/L		107	80 - 122	6	14
Ethylbenzene	10.0	10.9		ug/L		109	80 - 120	1	14
Methyl tert-butyl ether	10.0	8.49		ug/L		85	72 - 120	1	18
m-Xylene & p-Xylene	10.0	10.7		ug/L		107	80 - 120	0	14
o-Xylene	10.0	10.6		ug/L		106	80 - 120	2	16
Toluene	10.0	11.3		ug/L		113	80 - 120	5	13
Xylenes, Total	20.0	21.3		ug/L		107	80 - 120	1	16

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QC Sample Results

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

Job ID: 580-121302-1

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

Lab Sample ID: LCSD 580-413443/8

Matrix: Water

Analysis Batch: 413443

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		80 - 120
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	95		80 - 120
Toluene-d8 (Surr)	111		80 - 120

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

Lab Sample ID: MB 580-413438/6

Matrix: Water

Analysis Batch: 413438

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			12/20/22 23:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		77 - 123					12/20/22 23:51	1

Lab Sample ID: LCS 580-413438/9

Matrix: Water

Analysis Batch: 413438

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline	1000	953		ug/L		95	55 - 148		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		77 - 123						

Lab Sample ID: LCSD 580-413438/10

Matrix: Water

Analysis Batch: 413438

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	968		ug/L		97	55 - 148	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	96		77 - 123						

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

Lab Sample ID: MB 580-413630/1-A

Matrix: Water

Analysis Batch: 413701

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 413630

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		12/22/22 10:32	12/22/22 22:55	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		12/22/22 10:32	12/22/22 22:55	1

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QC Sample Results

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

Job ID: 580-121302-1

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

Lab Sample ID: MB 580-413630/1-A

Matrix: Water

Analysis Batch: 413701

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 413630

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	46	S1-	50 - 150	12/22/22 10:32	12/22/22 22:55	1

Lab Sample ID: LCS 580-413630/2-A

Matrix: Water

Analysis Batch: 413701

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 413630

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
#2 Diesel (C10-C24)			4000	3720		ug/L		93	50 - 120		
Motor Oil (>C24-C36)			4000	3800		ug/L		95	64 - 120		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
<i>o</i> -Terphenyl	90		50 - 150								

Lab Sample ID: LCSD 580-413630/3-A

Matrix: Water

Analysis Batch: 413701

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 413630

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
#2 Diesel (C10-C24)			4000	3830		ug/L		96	50 - 120	3	26
Motor Oil (>C24-C36)			4000	4010		ug/L		100	64 - 120	5	24
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	95		50 - 150								

Lab Sample ID: MB 580-413921/1-A

Matrix: Water

Analysis Batch: 414023

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 413921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		110	65	ug/L		12/28/22 10:48	12/29/22 04:50	1
Motor Oil (>C24-C36)	ND		350	96	ug/L		12/28/22 10:48	12/29/22 04:50	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150				12/28/22 10:48	12/29/22 04:50	1

Lab Sample ID: LCS 580-413921/2-A

Matrix: Water

Analysis Batch: 414023

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 413921

			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
#2 Diesel (C10-C24)			4000	3770		ug/L		94	50 - 120
Motor Oil (>C24-C36)			4000	4600		ug/L		115	64 - 120
			</						

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QC Sample Results

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

Job ID: 580-121302-1

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

Lab Sample ID: LCSD 580-413921/3-A

Matrix: Water

Analysis Batch: 414023

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 413921

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
#2 Diesel (C10-C24)	4000	2620	*1	ug/L		66	50 - 120	36	26
Motor Oil (>C24-C36)	4000	3130	*1	ug/L		78	64 - 120	38	24
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
o-Terphenyl	59		50 - 150						

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 580-413715/24-A

Matrix: Water

Analysis Batch: 414038

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 413715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40	0.040	ug/L		12/22/22 22:20	12/28/22 12:27	1

Lab Sample ID: LCS 580-413715/25-A

Matrix: Water

Analysis Batch: 414038

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 413715

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Lead	1000	998		ug/L		100	80 - 120		

Lab Sample ID: LCSD 580-413715/26-A

Matrix: Water

Analysis Batch: 414038

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 413715

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	987		ug/L		99	80 - 120	1	20

Lab Sample ID: MB 580-418317/8-A

Matrix: Water

Analysis Batch: 418486

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 418317

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.0	0.20	ug/L		02/17/23 17:16	02/20/23 11:20	1

Lab Sample ID: LCS 580-418317/9-A

Matrix: Water

Analysis Batch: 418486

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 418317

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Arsenic	1000	1100		ug/L		110	80 - 120		

Lab Sample ID: LCSD 580-418317/10-A

Matrix: Water

Analysis Batch: 418486

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 418317

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Arsenic	1000	1090		ug/L		109	80 - 120	1	20

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QC Sample Results

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

Job ID: 580-121302-1

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

Lab Sample ID: MB 580-413080/19-B

Matrix: Water

Analysis Batch: 413517

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 413202

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.40	0.040	ug/L		12/16/22 17:42	12/20/22 12:49	1
Arsenic	ND		1.0	0.20	ug/L		12/16/22 17:42	12/20/22 12:49	1

Lab Sample ID: LCS 580-413080/20-B

Matrix: Water

Analysis Batch: 413517

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 413202

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	1000	1030		ug/L		103	80 - 120
Arsenic	1000	1020		ug/L		102	80 - 120

Lab Sample ID: LCSD 580-413080/21-B

Matrix: Water

Analysis Batch: 413517

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 413202

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	1000	1040		ug/L		104	80 - 120	1	20
Arsenic	1000	987		ug/L		99	80 - 120	4	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-413208/7

Matrix: Water

Analysis Batch: 413208

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	ND		0.40	0.070	mg/L			12/15/22 17:26	1
Nitrate as N	ND		0.20	0.030	mg/L			12/15/22 17:26	1
Nitrate Nitrite as N	ND		0.40	0.070	mg/L			12/15/22 17:26	1

Lab Sample ID: LCS 580-413208/8

Matrix: Water

Analysis Batch: 413208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	5.00	4.96		mg/L		99	90 - 110
Nitrate as N	5.00	4.90		mg/L		98	90 - 110
Nitrate Nitrite as N	10.0	9.85		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-413208/9

Matrix: Water

Analysis Batch: 413208

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
Nitrite as N	5.00	4.96		mg/L		99	90 - 110	0	15
Nitrate as N	5.00	4.90		mg/L		98	90 - 110	0	15
Nitrate Nitrite as N	10.0	9.86		mg/L		99	90 - 110	0	15

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QC Sample Results

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

Job ID: 580-121302-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-121302-1 MS

Matrix: Water

Analysis Batch: 413208

Client Sample ID: MW4 _ 20221212

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrite as N	ND	H H3	50.0	49.2		mg/L		98	90 - 110
Nitrate as N	ND	H H3	50.0	48.5		mg/L		97	90 - 110
Nitrate Nitrite as N	ND	H H3	100	97.7		mg/L		98	90 - 110

Lab Sample ID: 580-121302-1 MSD

Matrix: Water

Analysis Batch: 413208

Client Sample ID: MW4 _ 20221212

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrite as N	ND	H H3	50.0	49.2		mg/L		98	90 - 110	0	15
Nitrate as N	ND	H H3	50.0	48.5		mg/L		97	90 - 110	0	15
Nitrate Nitrite as N	ND	H H3	100	97.8		mg/L		98	90 - 110	0	15

Lab Sample ID: MB 580-413209/7

Matrix: Water

Analysis Batch: 413209

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		1.5	0.80	mg/L			12/15/22 17:26	1

Lab Sample ID: LCS 580-413209/8

Matrix: Water

Analysis Batch: 413209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	49.6		mg/L		99	90 - 110

Lab Sample ID: LCSD 580-413209/9

Matrix: Water

Analysis Batch: 413209

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
Sulfate	50.0	49.6		mg/L		99	90 - 110	0	15

Lab Sample ID: 580-121302-1 MS

Matrix: Water

Analysis Batch: 413209

Client Sample ID: MW4 _ 20221212

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	300		500	775		mg/L		96	90 - 110

Lab Sample ID: 580-121302-1 MSD

Matrix: Water

Analysis Batch: 413209

Client Sample ID: MW4 _ 20221212

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	300		500	776		mg/L		96	90 - 110	0	15

Eurofins Seattle

QC Sample Results

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

Job ID: 580-121302-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 580-413311/1

Matrix: Water

Analysis Batch: 413311

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			12/19/22 13:46	1

Lab Sample ID: LCS 580-413311/2

Matrix: Water

Analysis Batch: 413311

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1020		mg/L		102	80 - 120

QC Association Summary

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

Job ID: 580-121302-1

GC/MS VOA

Analysis Batch: 413438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	NWTPH-Gx	
580-121302-2	MW5 _ 20221212	Total/NA	Water	NWTPH-Gx	
MB 580-413438/6	Method Blank	Total/NA	Water	NWTPH-Gx	
LCS 580-413438/9	Lab Control Sample	Total/NA	Water	NWTPH-Gx	
LCSD 580-413438/10	Lab Control Sample Dup	Total/NA	Water	NWTPH-Gx	

Analysis Batch: 413443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	8260D	
580-121302-2	MW5 _ 20221212	Total/NA	Water	8260D	
MB 580-413443/6	Method Blank	Total/NA	Water	8260D	
LCS 580-413443/7	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-413443/8	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 413630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	3510C	
MB 580-413630/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-413630/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-413630/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 413701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	NWTPH-Dx	413630
MB 580-413630/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	413630
LCS 580-413630/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	413630
LCSD 580-413630/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	413630

Prep Batch: 413921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1 - RE	MW4 _ 20221212	Total/NA	Water	3510C	
MB 580-413921/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-413921/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-413921/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 414023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1 - RE	MW4 _ 20221212	Total/NA	Water	NWTPH-Dx	413921
MB 580-413921/1-A	Method Blank	Total/NA	Water	NWTPH-Dx	413921
LCS 580-413921/2-A	Lab Control Sample	Total/NA	Water	NWTPH-Dx	413921
LCSD 580-413921/3-A	Lab Control Sample Dup	Total/NA	Water	NWTPH-Dx	413921

Metals

Filtration Batch: 413080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Dissolved	Water	FILTRATION	
MB 580-413080/19-B	Method Blank	Dissolved	Water	FILTRATION	
LCS 580-413080/20-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 580-413080/21-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	

Eurofins Seattle

QC Association Summary

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

Job ID: 580-121302-1

Metals

Prep Batch: 413202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Dissolved	Water	3005A	413080
MB 580-413080/19-B	Method Blank	Dissolved	Water	3005A	413080
LCS 580-413080/20-B	Lab Control Sample	Dissolved	Water	3005A	413080
LCSD 580-413080/21-B	Lab Control Sample Dup	Dissolved	Water	3005A	413080

Analysis Batch: 413517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Dissolved	Water	6020B	413202
MB 580-413080/19-B	Method Blank	Dissolved	Water	6020B	413202
LCS 580-413080/20-B	Lab Control Sample	Dissolved	Water	6020B	413202
LCSD 580-413080/21-B	Lab Control Sample Dup	Dissolved	Water	6020B	413202

Prep Batch: 413715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total Recoverable	Water	3005A	
MB 580-413715/24-A	Method Blank	Total Recoverable	Water	3005A	
LCS 580-413715/25-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 580-413715/26-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Analysis Batch: 414038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total Recoverable	Water	6020B	413715
MB 580-413715/24-A	Method Blank	Total Recoverable	Water	6020B	413715
LCS 580-413715/25-A	Lab Control Sample	Total Recoverable	Water	6020B	413715
LCSD 580-413715/26-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	413715

Prep Batch: 418317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-2	MW5 _ 20221212	Total Recoverable	Water	3005A	
MB 580-418317/8-A	Method Blank	Total Recoverable	Water	3005A	
LCS 580-418317/9-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 580-418317/10-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Analysis Batch: 418486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-2	MW5 - _ 20221212	Total Recoverable	Water	6020B	418317
MB 580-418317/8-A	Method Blank	Total Recoverable	Water	6020B	418317
LCS 580-418317/9-A	Lab Control Sample	Total Recoverable	Water	6020B	418317
LCSD 580-418317/10-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	418317

General Chemistry

Analysis Batch: 413208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	300.0	
MB 580-413208/7	Method Blank	Total/NA	Water	300.0	
LCS 580-413208/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-413208/9	Lab Control Sample Dup	Total/NA	Water	300.0	
580-121302-1 MS	MW4 _ 20221212	Total/NA	Water	300.0	
580-121302-1 MSD	MW4 _ 20221212	Total/NA	Water	300.0	

Eurofins Seattle

QC Association Summary

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

Job ID: 580-121302-1

General Chemistry

Analysis Batch: 413209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	300.0	
MB 580-413209/7	Method Blank	Total/NA	Water	300.0	
LCS 580-413209/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-413209/9	Lab Control Sample Dup	Total/NA	Water	300.0	
580-121302-1 MS	MW4 _ 20221212	Total/NA	Water	300.0	
580-121302-1 MSD	MW4 _ 20221212	Total/NA	Water	300.0	

Analysis Batch: 413311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-121302-1	MW4 _ 20221212	Total/NA	Water	SM 2540C	
MB 580-413311/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 580-413311/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Lab Chronicle

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

Job ID: 580-121302-1

Client Sample ID: MW4 _ 20221212

Lab Sample ID: 580-121302-1

Date Collected: 12/12/22 12:00

Matrix: Water

Date Received: 12/15/22 11:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		10	413443	BNM	EET SEA	12/21/22 07:06
Total/NA	Analysis	NWTPH-Gx		10	413438	BNM	EET SEA	12/21/22 07:06
Total/NA	Prep	3510C			413630	CSS	EET SEA	12/22/22 10:32
Total/NA	Analysis	NWTPH-Dx		1	413701	DH	EET SEA	12/23/22 03:17
Total/NA	Prep	3510C	RE		413921	CSS	EET SEA	12/28/22 10:48
Total/NA	Analysis	NWTPH-Dx	RE	1	414023	DH	EET SEA	12/29/22 09:50
Dissolved	Filtration	FILTRATION			413080	CA	EET SEA	12/15/22 16:52
Dissolved	Prep	3005A			413202	JL	EET SEA	12/16/22 17:42
Dissolved	Analysis	6020B		5	413517	FCW	EET SEA	12/20/22 17:41
Total Recoverable	Prep	3005A			413715	TMH	EET SEA	12/22/22 22:20
Total Recoverable	Analysis	6020B		5	414038	FCW	EET SEA	12/28/22 13:39
Total/NA	Analysis	300.0		1	413208	JHR	EET SEA	12/15/22 18:36
Total/NA	Analysis	300.0		10	413209	JHR	EET SEA	12/15/22 19:35
Total/NA	Analysis	SM 2540C		1	413311	AUA	EET SEA	12/19/22 15:08

Client Sample ID: MW5 - _20221212

Lab Sample ID: 580-121302-2

Date Collected: 12/12/22 13:45

Matrix: Water

Date Received: 12/15/22 11:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	413443	BNM	EET SEA	12/21/22 07:31
Total/NA	Analysis	NWTPH-Gx		1	413438	BNM	EET SEA	12/21/22 07:31
Total Recoverable	Prep	3005A			418317	JL	EET SEA	02/17/23 17:16
Total Recoverable	Analysis	6020B		5	418486	FCW	EET SEA	02/20/23 11:54

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: 580-121302-1

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
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Method Summary

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

Job ID: 580-121302-1

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
300.0	Anions, Ion Chromatography	EPA	EET SEA
SM 2540C	Solids, Total Dissolved (TDS)	SM	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:

EPA = US Environmental Protection Agency

None = None

NWTPH = Northwest Total Petroleum Hydrocarbon

SM = "Standard Methods For The Examination Of Water And Wastewater"

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: 580-121302-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-121302-1	MW4 _ 20221212	Water	12/12/22 12:00	12/15/22 11:07
580-121302-2	MW5 - _20221212	Water	12/12/22 13:45	12/15/22 11:07

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

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BP Site Node Path:

Former BP 11060

Req Due Date (mm/dd/yy): Standard TAT

Standard TAT

Rush TAT Yes No X

BP/RM Facility No:

Former BP Facility No. 11060

Lab Work Order Number:

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:	Elaine Walker	Lead Regulatory Agency:	Washington State Department of Ecology	Address:	4006 148th Ave NE, Redmond, WA 98052
Lab Phone:	253.248.4972	California Global ID No.:	NA	Consultant/Contractor PM:	Lonnie Dent
Lab Shipping Acct:		Enfos Proposal No:	WR1027162/00C87-0002	Phone:	303-807-3627
Lab Bottle Order No:		Accounting Mode:	Provision ☒ X _____ OOC-BU _____ OOC-RM _____	Email:	lonnie.dent@anteagroup.us
Other Info:	M.Elaine.Walker@Eurofinsus.com	Send/Submit EDD to:	lonnie.dent@anteagroup.us		
		Stage	Commercial-Site Activities (70)	Activity	Contracts Management (116)
		Invoice To:	BP-RM	BP/ARC	X

[illegible][illegible]

Sampler's Name: <u>Donna Lequinto Sam Hine</u>	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: <u>Antea Group</u>	<u>Salvatore Flus / AG</u>	<u>12/15/12</u>	<u>1107</u>	<u>Rhosley</u>	<u>12/15/12</u>	<u>1107</u>
Ship Method: <u>Courier</u> Ship Date: <u>12/15/12</u>						
Shipment Tracking No:						

Special Instructions: Please dispose extra bottles/wine

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp



580-121302 Chain of Custody

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Therm. ID: IR9 Cor: 1.5 ° Unc: 1.1 °
Cooler Desc: 123 No _____
Packing: Bulk FedEx: _____ IMP Soil/H2O COC July 2018
Cust. Seal: Yes _____ No X UPS: _____
Blue Ice, Wet, Dry, None Lab Cour: _____
Other: Change

2/21/2023 (Rev. 1)

Login Sample Receipt Checklist

Client: Antea USA Inc.

Job Number: 580-121302-1

Login Number: 121302

List Source: Eurofins Seattle

List Number: 1

Creator: Groves, Elizabeth

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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
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.: 580-121302-1

SDG No.: _____

Batch Number: 413443 Batch Start Date: 12/20/22 22:15 Batch Analyst: Mautz, Brady NBatch Method: 8260D Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00024	VOAMasterMix 00097	VOASTDGASweek 00134
MB 580-413443/6		8260D		5 mL	5 mL		1 uL		
LCS 580-413443/7		8260D		5 mL	5 mL		1 uL	10 uL	10 uL
LCSD 580-413443/8		8260D		5 mL	5 mL		1 uL	10 uL	10 uL
580-121302-J-1	MW4 _ 20221212	8260D	T	5 mL	5 mL	<2 SU	1 uL		
580-121302-C-2	MW5 -_20221212	8260D	T	5 mL	5 mL	<2 SU	1 uL		

Batch Notes	
pH Indicator ID	HC293085
Vial Lot Number	0110901H

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.: 580-121302-1

SDG No.: _____

Batch Number: 413438 Batch Start Date: 12/20/22 22:15 Batch Analyst: Mautz, Brady NBatch Method: NWTPH-Gx Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	5X SUR/IS 00024	GRO_LCS 00082	
MB 580-413438/6		NWTPH-Gx		5 mL	5 mL		1 uL		
LCS 580-413438/9		NWTPH-Gx		5 mL	5 mL		1 uL	25 uL	
LCSD 580-413438/10		NWTPH-Gx		5 mL	5 mL		1 uL	25 uL	
580-121302-J-1	MW4 _ 20221212	NWTPH-Gx	T	5 mL	5 mL	<2 SU	1 uL		
580-121302-C-2	MW5 -_20221212	NWTPH-Gx	T	5 mL	5 mL	<2 SU	1 uL		

Batch Notes	
pH Indicator ID	HC293085
Vial Lot Number	0110901H

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

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413630 Batch Start Date: 12/22/22 10:31 Batch Analyst: Sergeant, Cory SBatch Method: 3510C Batch End Date: 12/22/22 19:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-413630/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-413630/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-413630/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-121302-E-1	MW4 _ 20221212	3510C, NWTPH-Dx	T	00398.73 g	00166.75 g	232 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00035	TPH_WaterSurr 00093			
MB 580-413630/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-413630/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-413630/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-121302-E-1	MW4 _ 20221212	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.: 580-121302-1

SDG No.: _____

Batch Number: 413630 Batch Start Date: 12/22/22 10:31 Batch Analyst: Sergeant, Cory SBatch Method: 3510C Batch End Date: 12/22/22 19:40

Batch Notes	
Method/Fraction	3510C_LVI/8015D_DRO_DOD5/AK102_103/NWTPH_Dx
Balance ID	SEA225
pH Indicator ID	6107003/6007004/6105009
Pipette/Syringe/Dispenser ID	MP5
Analyst ID - Extraction	CS/TO
Reagent Water ID	DI
Analyst ID - Spike Analyst	TO
Analyst ID - Spike Witness Analyst	CS
Sufficient Volume for Batch QC	no
Acid Used for pH Adjustment ID	3213801
Prep Solvent ID	22G1962005
Prep Solvent Volume Used	100 mL
Filter ID	+H13809795F3W
Na2SO4 ID	Baked Na2SO4_00452
Analyst ID - Concentration	TA
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	DIGITALREADOUT
Concentration 2 Uncorrected Temperature	30 Degrees C
Concentration 2 Corrected Temperature	29.8 Degrees C
Vial Lot Number	22042037/70403126135
Analyst ID - Clean Up	TA
Silica Gel ID	3304818
Batch Comment	Vialed by: TA

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

GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413921 Batch Start Date: 12/28/22 10:47 Batch Analyst: Sergeant, Cory SBatch Method: 3510C Batch End Date: 12/28/22 21:43

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH
MB 580-413921/1		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCS 580-413921/2		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
LCSD 580-413921/3		3510C, NWTPH-Dx				250 mL	2 mL	7 SU	2 SU
580-121302-D-1	MW4 _ 20221212	3510C, NWTPH-Dx	T	00396.55 g	00167.17 g	229.4 mL	2 mL	2 SU	n/a SU

Lab Sample ID	Client Sample ID	Method Chain	Basis	SecondAdjustpH	TPH_Water_Spk 00035	TPH_WaterSurr 00093			
MB 580-413921/1		3510C, NWTPH-Dx		n/a SU		100 uL			
LCS 580-413921/2		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
LCSD 580-413921/3		3510C, NWTPH-Dx		n/a SU	100 uL	100 uL			
580-121302-D-1	MW4 _ 20221212	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

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GC SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413921 Batch Start Date: 12/28/22 10:47 Batch Analyst: Sergeant, Cory SBatch Method: 3510C Batch End Date: 12/28/22 21:43

Batch Notes	
Method/Fraction	3510C_LVI/8015D_DRO_DOD5/AK102_103/NWTPH_Dx
Balance ID	SEA225
pH Indicator ID	6107003/6007004/6105009
Pipette/Syringe/Dispenser ID	MP5
Analyst ID - Extraction	CS/TO
Reagent Water ID	DI
Analyst ID - Spike Analyst	TO
Analyst ID - Spike Witness Analyst	CS
Sufficient Volume for Batch QC	yes
Acid Used for pH Adjustment ID	3213801
Prep Solvent ID	22G1962005
Prep Solvent Volume Used	100 mL
Filter ID	+H13809795F3W
Na2SO4 ID	Baked Na2SO4_00452
Analyst ID - Concentration	CS
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
Thermometer ID - Concentration 2	DIGITALREADOUT
Concentration 2 Uncorrected Temperature	30 Degrees C
Concentration 2 Corrected Temperature	29.8 Degrees C
Vial Lot Number	22042037/70403126135
Silica Gel ID	3304818
Batch Comment	Vialed by: TA

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.: 580-121302-1

SDG No.: _____

Batch Number: 413080 Batch Start Date: 12/15/22 16:50 Batch Analyst: Anderson, ChelseyBatch Method: FILTRATION Batch End Date: 12/15/22 18:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
580-121302-B-1	MW4 _ 20221212	FILTRATION, 3005A, 6020B	D	250 mL	250 mL				
MB 580-413080/19		FILTRATION, 3005A, 6020B		250 mL	250 mL				
LCS 580-413080/20		FILTRATION, 3005A, 6020B		250 mL	250 mL				
ICSD 580-413080/21		FILTRATION, 3005A, 6020B		250 mL	250 mL				

Batch Notes	
Filter ID	1370979
Nitric Acid ID	3097391

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 Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413202 Batch Start Date: 12/16/22 20:00 Batch Analyst: Lees, JensenBatch Method: 3005A Batch End Date: 12/17/22 00:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00021	ICP CAL 2 00021	MET Spike 3C 00040	
580-121302-B-1-A	MW4 _ 20221212	3005A, 6020B	D	50 mL	50 mL				
MB 580-413080/19-A		3005A, 6020B		50 mL	50 mL				
LCS 580-413080/20-A		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-413080/21-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	74261
Thermometer Location ID	b1
Uncorrected Temperature	94.0 Celsius
Oven, Bath or Block Temperature 1	94.0 Degrees C
Uncorrected Temperature 2	94.0 Celsius
Oven, Bath or Block Temperature 2	94.0 Degrees C
Lot # of hydrochloric acid	3282366
Lot # of Nitric Acid	3244516
Pipette ID	metals prep 2
Digestion Tube/Cup ID	3238695
First Start time	see above
First End time	see above
Analyst ID - Spike Witness Analyst	JL - AUA

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.: 580-121302-1

SDG No.: _____

Batch Number: 413715Batch Start Date: 12/22/22 22:20Batch Analyst: Hua, Tammy MBatch Method: 3005ABatch End Date: 12/23/22 04:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00022	ICP CAL 2 00021	MET Spike 3C 00040	
580-121302-C-1	MW4 _ 20221212	3005A, 6020B	R	50 mL	50 mL				
MB 580-413715/24		3005A, 6020B		50 mL	50 mL				
LCS 580-413715/25		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
ICSD 580-413715/26		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes

Digestion Tube/Cup ID	3238695
Pipette/Syringe/Dispenser ID	metals prep 2
Analyst ID - Spike Analyst	FCG
Analyst ID - Spike Witness Analyst	MT
Sufficient Volume for Batch QC	yes
Hydrochloric Acid ID	3155455
Nitric Acid ID	3318208
Digestion Unit ID	block a
Thermometer ID	1108438
Thermometer Location ID	A48
Temperature - Uncorrected - Start	92.0 Degrees C
Temperature - Corrected - Start	91.6 Degrees C
Digestion Start Time	12/23/2022 00:10
Digestion End Time	12/23/2022 04:10
Temperature - Uncorrected - End	92.0 Degrees C
Temperature - Corrected - End	91.6 Degrees C

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 SeattleJob No.: 580-121302-1

SDG No.: _____

Batch Number: 418317Batch Start Date: 02/17/23 17:16Batch Analyst: Lees, JensenBatch Method: 3005ABatch End Date: 02/17/23 23:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP CAL 1 00022	ICP CAL 2 00018	MET Spike 3C 00041	
580-121302-A-2	MW5 - _20221212	3005A, 6020B	R	44 mL	44 mL				
MB 580-418317/8		3005A, 6020B		50 mL	50 mL				
LCS 580-418317/9		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	
LCSD 580-418317/10		3005A, 6020B		50 mL	50 mL	0.5 mL	0.5 mL	0.5 mL	

Batch Notes

pH Indicator ID	pH Strip
Digestion Tube/Cup ID	3331634
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	3383914
Nitric Acid ID	3378152
Digestion Unit ID	block a
Thermometer ID	1108438
Thermometer Location ID	a42
Temperature - Uncorrected - Start	90.5 Degrees C
Temperature - Corrected - Start	90.1 Degrees C
Digestion Start Time	02/17/2023 19:30
Digestion End Time	02/17/2023 23:30
Temperature - Uncorrected - End	90.5 Degrees C
Temperature - Corrected - End	90.1 Degrees C

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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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413208 Batch Start Date: 12/15/22 14:18 Batch Analyst: Roberts, Jacob HBatch Method: 300.0 Batch End Date: 12/15/22 20:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC-Custom-EE 00030			
MB 580-413208/7		300.0		5 mL	5 mL				
LCS 580-413208/8		300.0		5 mL	5 mL	0.25 mL			
LCSD 580-413208/9		300.0		5 mL	5 mL	0.25 mL			
580-121302-A-1	MW4 _ 20221212	300.0	T	5 mL	5 mL				
580-121302-A-1 ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL				
580-121302-A-1 MS ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL	0.25 mL			
580-121302-A-1 MSD ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL	0.25 mL			

Batch Notes	
Filter ID	17607577
Pipette/Syringe/Dispenser ID	WC10 C / WC 5 D / WC 2 C / WC 0.1 D
Sufficient Volume for Batch QC	yes
Eluent 1 ID	220622

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.

300.0

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413209 Batch Start Date: 12/15/22 14:18 Batch Analyst: Roberts, Jacob HBatch Method: 300.0 Batch End Date: 12/15/22 20:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IC-Custom-EE 00030			
MB 580-413209/7		300.0		5 mL	5 mL				
LCS 580-413209/8		300.0		5 mL	5 mL	0.25 mL			
LCSD 580-413209/9		300.0		5 mL	5 mL	0.25 mL			
580-121302-A-1	MW4 _ 20221212	300.0	T	5 mL	5 mL				
580-121302-A-1 ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL				
580-121302-A-1 MS ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL	0.25 mL			
580-121302-A-1 MSD ^10	MW4 _ 20221212	300.0	T	5 mL	5 mL	0.25 mL			

Batch Notes	
Filter ID	17607577
Pipette/Syringe/Dispenser ID	WC 10 C / WC 5 D / WC 2 C / WC 0.1 D
Sufficient Volume for Batch QC	yes
Eluent 1 ID	220622

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.

300.0

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413311 Batch Start Date: 12/19/22 13:45 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/28/22 22:29

Lab Sample ID	Client Sample ID	Method Chain	Basis	Conductivity	CrucibleID	InitialAmount	TareWeight	Weight1	Weight2
MB 580-413311/1		SM 2540C			B0756120	100 mL	3.8051 g	3.8050 g	3.8052 g
LCS 580-413311/2		SM 2540C			B0756033	50 mL	3.8668 g	3.9181 g	3.9178 g
580-121302-A-1	MW4 _ 20221212	SM 2540C	T	913 umhos/cm	B0756092	100 mL	3.7977 g	3.8588 g	3.8589 g

Lab Sample ID	Client Sample ID	Method Chain	Basis	WeightOne%Diff	WeightTwo%Diff	Weight40K	Residue	Residue2	Residue3
MB 580-413311/1		SM 2540C		Pass	N/A	N/A	-0.0001 g	0.0001 g	N/A g
LCS 580-413311/2		SM 2540C		Pass	N/A	N/A	0.0513 g	0.051 g	N/A g
580-121302-A-1	MW4 _ 20221212	SM 2540C	T	Pass	N/A	N/A	0.0611 g	0.0612 g	N/A g

Lab Sample ID	Client Sample ID	Method Chain	Basis	Residue4	FinalAmount	CalcMsg	TDS Std. 00087		
MB 580-413311/1		SM 2540C		N/A g	100 mL	OK			
LCS 580-413311/2		SM 2540C		N/A g	100 mL	OK	50 mL		
580-121302-A-1	MW4 _ 20221212	SM 2540C	T	N/A g	100 mL	OK			

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SM 2540C

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413311 Batch Start Date: 12/19/22 13:45 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/28/22 22:29

Batch Notes	
Nominal Amount Used	100.0 mL
Conductivity Meter ID	TAC 132
Filter ID	17485654
Balance ID	SEA 227
Vessel Lot ID	202228001-2313-MR
Oven ID - Low Temperature	TDS-TSS2
Thermometer ID - Low Temperature	Digital Readout
Date/Time - In	12/19/2022 18:54
Temperature - Start - Uncorrected	170 Celsius
Temperature - Start - Corrected	169.8 Celsius
Date/Time - Out	12/21/2022 13:51
Temperature - End - Uncorrected	170 Celsius
Temperature - End - Corrected	169.8 Celsius
Oven ID	TDS-TSS2
Thermometer ID	Digital Readout
Weight(WT1) Start Date/Time	12/21/2022 13:52
Uncorrected Weight(WT1) Start Temp	180 Celsius
Weight(WT1) Start Temp	180.6 Celsius
Weight(WT1) Date/Time Out	12/27/2022 17:51
Uncorrected Weight(WT1) Temp Out	180 Celsius
Weight(WT1) Temp Out	180.6 Celsius
Date/Time - In - CW (WT2)	12/28/2022 13:32
Temperature - Start-CW(WT2) -Uncorrected	180 Celsius
Temperature - Start - CW (WT2) - Correct	180.6 Celsius
Date/Time - Out - CW (WT2)	12/28/2022 18:19
Temperature - End-CW(WT2) -Uncorrected	180 Celsius
Temperature - End - CW (WT2) - Correct	180.6 Celsius
Batch Comment	Graduated container lot: 20210801 Alum Dish: 20190925

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.

SM 2540C

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GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Seattle Job No.: 580-121302-1

SDG No.: _____

Batch Number: 413311 Batch Start Date: 12/19/22 13:45 Batch Analyst: Ulloa Aguilar, AshleyBatch Method: SM 2540C Batch End Date: 12/28/22 22:29

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.

SM 2540C

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