FEBRUARY 2024 GROUNDWATER MONITORING REPORT

PACIFIC CITY PARK
600 THIRD AVENUE SOUTHEAST
PACIFIC, WASHINGTON

King County

River and Floodplain Management Section
Water and Land Resources Division

Note:
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FEBRUARY 2024 GROUNDWATER MONITORING REPORT

PACIFIC CITY PARK
600 THIRD AVENUE SOUTHEAST
PACIFIC, WASHINGTON

Prepared for

King County

River and Floodplain Management Section
King County Water and Land Resources Division
201 South Jackson Street, Suite 600
Seattle, Washington 98104

Prepared by
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July 22, 2024

Prepared by:

King County River and Floodplain Management Section
King County Water and Land Resources Division

Herrera Environmental Consultants, Inc.

For comments or questions contact:

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Alternate Formats Available.

Call 206-477-4812 **or TTY 711**

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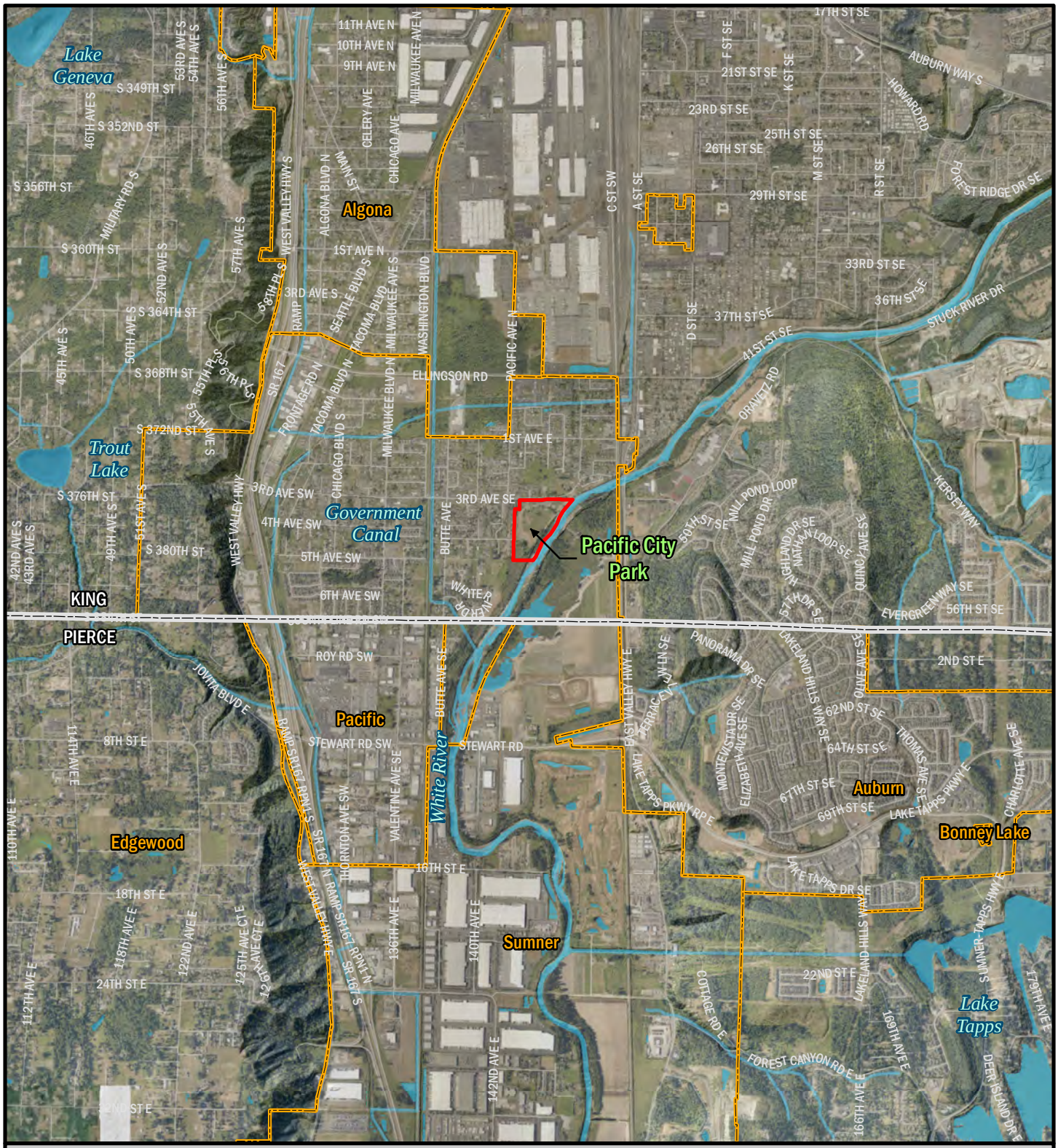
1. INTRODUCTION

This report documents the results of quarterly groundwater monitoring completed in February 2024 for Pacific City Park, located at 600 Third Avenue Southeast in Pacific, Washington (herein referred to as the Site; Figures 1 and 2). This report supplements the Remedial Investigation (RI) Report (Herrera 2019a), the Supplemental RI (SRI) Report and associated Monitoring Reports (Herrera 2019b, 2019c, 2019d, 2019e, 2023c, 2024), and the Sampling and Analysis Plan Addendum Memorandum (Herrera 2023a) submitted by King County to the Washington State Department of Ecology (Ecology). This monitoring report summarizes the fourth of four groundwater monitoring events as well as general data trends for the most recent four quarters of groundwater data.

The Site was an informal dumpsite and city dump between approximately 1921 and 1965. The Site is defined as any location where one or more of the contaminants of potential concern (COPCs) associated with the dumpsite are present in Site media at concentrations exceeding the screening levels developed for the RI.

The February 2024 monitoring was conducted to further evaluate the nature and extent of hazardous substances in groundwater at the Site and to support the development, selection, and implementation of a cleanup action. Since 2015, six quarters or more of groundwater monitoring have been completed for wells MW-1 through MW-12. The February 2024 groundwater monitoring was the fourth quarterly sampling event for wells MW-13 and MW-14, which were installed and sampled in May 2023 as part of a second Supplemental RI (Herrera 2023b).

King County is performing work at the Site to meet the requirements of the Model Toxics Control Act (MTCA) Cleanup Regulation, Chapter 173-340 WAC, for an RI and feasibility study (FS) and to select and implement a cleanup action alternative. The February 2024 quarterly monitoring was conducted to collect additional data and information on the seasonal variability of conditions at the Site and areas located adjacent to the west of the Site boundary.



Legend

- Study area
- County boundary
- City limits
- Waterbody
- Stream (King County)
- Roads

Figure 1.
Vicinity Map, Pacific City Park,Pacific, Washington.

0 1,500 3,000 6,000 Feet

King County

N

Aerial: King County (2017)
Prepared for King County by Herrera

K:\Projects\Y 2017\17-06520-000\Project\Report\R\Fig1_GWVicinityMap_letter.mxd (11/8/2019)

Figure 2.
Site Map,
Pacific City Park,
Pacific, Washington.

Legend

- Historical edge of river channel based on 1936 aerial photograph (source: King County)
- Pacific City Park MTCA site boundary
- Approximate lateral extent of fill at Pacific City Park
- Existing concrete revetment
- Existing stormwater pond
- Existing stormwater ditch
- Monitoring well location
- RM 6.0 River mile (10th)

0 75 150 300 Feet

N

King County

Aerial source: King County (2017)

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1.1. GENERAL SITE INFORMATION

Site Name	Pacific City Park
Site Address	600 Third Avenue Southeast
Facility Site Identification number (FSID)	2160
King County Assessor's Parcel No.	3621049040
Cleanup Site ID	21
VCP Project Number	NW3204
Ecology Site Manager	Michael Warfel

The project consultant is Mark Ewbank with Herrera Environmental Consultants, Inc. (Herrera), located at 2200 Sixth Avenue, Suite 1100, Seattle, Washington 98121. Telephone: 206-787-8217, and email: MEwbank@herrerainc.com.

Pacific City Park is owned by King County, with a portion, approximately 21 acres, leased to the City of Pacific for use as a city park. Mary Strazer, Senior Engineer with the River and Floodplain Management Section of the King County Water and Land Resources Division, is the Site contact. Her office is located at 201 South Jackson Street, Suite 600, Seattle, Washington 98104; telephone: 206-263-5817, and email: mstrazer@kingcounty.gov.

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2. METHODS

On February 15 and 16, 2024, Herrera staff collected groundwater samples from 13 monitoring wells across the Site: MW-1, MW-2, and MW-4 through MW-14. The well monument for MW-3 was under accumulated standing water during the sampling event and could not be accessed for sampling and water level measurements. The work was conducted in general accordance with the Sampling and Analysis Plan (SAP) (Herrera 2023b). The locations of all monitoring wells at the Site are depicted in Figure 2.

2.1. GROUNDWATER SAMPLING

On February 15, 2024, Herrera staff collected one round of static groundwater levels from monitoring wells MW-1, MW-2, and MW-4 through MW-14, as well as from boring B-03 (Table 1). The water level in MW-3 was not recorded due to standing water covering the monitoring well and surrounding area. On February 15 and 16, 2024, Herrera staff collected groundwater samples from the 13 accessible monitoring wells (MW-1, MW-2, and MW-4 through MW-14) and hand delivered the samples to OnSite Environmental, Inc. (OnSite) for laboratory analysis. All samples were submitted for analysis of volatile organic compounds (VOCs) by EPA Method 8260D. In addition, MW-4, and MW-9 through MW-14 were also submitted for analysis of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) by EPA Method 8270D/SIM and total and dissolved MTCA metals by EPA Methods 200.8/7470A. Analytical results are summarized in Table 2.

All samples were collected using the low-flow purge method described in the SAP (Herrera 2023b), and dissolved metals samples were field filtered.

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3. RESULTS

The analytical results for samples collected in February 2024 are compared to the Site Screening Levels (SSLs) developed in the RI Report based on current and potential future exposure pathways and receptors (Herrera 2019a).

3.1. GROUNDWATER CONDITIONS

3.1.1. February 2024

On February 15, 2024, static groundwater levels measured in MW-1, MW-2, MW-4 through MW-14, and B-03 ranged from at the top of the well monument (0.0 feet below the top of the well monument [btom]) in MW-8 to 5.81 feet btom in MW-9 (see Table 1—all tables appear in a separate section following the main report text). Groundwater levels rose from 0.28 to 2.20 feet higher than the November 2023 monitoring event.

3.1.2. May 2023 through February 2024

Water levels from MW-1 through MW-14 and B-03 were measured during four quarterly sampling events in May, August, and November 2023, and February 2024. The well monument for MW-3 was submerged under standing water and inaccessible during sampling events in May 2023 and February 2024, and B-03 was under a gravel pile and inaccessible in May 2023. Groundwater contour maps for the November 2023 and February 2024 events are shown in Figures 3 and 4, respectively, and the maps for the May and August 2023 events are presented in the previously prepared reports.

Groundwater elevations were lowest during the August 2023 monitoring event and were encountered from elevations of 74.02 feet in MW-12 to 79.74 feet in B-03. In general, groundwater elevations were highest during the February 2024 monitoring event and were encountered at 76.23 feet in MW-11 and at 81.55 feet in B-03. Groundwater elevations are generally the highest towards to northeast edge of the Site along the White River in B-03 and lowest to the southwest of the Site near MW-11 and MW-12.

During the past four quarters, groundwater flows generally trended to the west-southwest through the Park. Monitoring wells MW-13 and MW-14 were installed in May 2023 to further evaluate potential impacts from the stormwater ditch to the west of the Park. The impacts of the stormwater ditch to groundwater flow near MW-14 varies seasonally. During groundwater monitoring events, groundwater to the west of the stormwater ditch and near MW-14 flowed to the southeast in May 2023, to the west in August 2023, to the southwest in November 2023, and to the southeast in February 2024. Further south near MW-13, the effects of the stormwater ditch on groundwater flow is less pronounced, and, in general, groundwater near MW-13 flows parallel to the nearby White River.

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Monitoring Well

Stormwater Ditch

King County Tax Parcel

Groundwater Elevation (November 29, 2023)

Groundwater Flow Direction (November 29, 2023)

76.44 ft Groundwater Elevation (November 29, 2023)

State of Washington
Hydrogeologist
3268
Licensed Geologist
MATTHEW M. LEWIS

N

0 200 400 Feet

Water Level Contour Map November 29 2023

Pacific Park,
Pacific, Washington

Aspect CONSULTING	JUN-2024	BY: MML / HMD	FIGURE NO.
	PROJECT NO. 170307	REVISED BY: ---/---	3

Data source credits: None || Basemap Service Layer Credits: EagleView Technologies, Inc.

Monitoring Well

Stormwater Ditch

King County Tax Parcel

Groundwater Elevation Contour (February 15, 2024)

Groundwater Flow Direction (February 15, 2024)

76.44 ft Groundwater Elevation (February 15, 2024)

Note:
MW-3 was submerged and not accessible

State of Washington
Hydrogeologist
3268
Licensed Geologist
MATTHEW M. LEWIS

N

0 200 400 Feet

Water Level Contour Map
February 15 2024

Pacific Park,
Pacific, Washington

Aspect CONSULTING

JUN-2024	BY: MML / HMD	FIGURE NO. 4
PROJECT NO. 170307	REVISED BY: --- / ---	

Data source credits: None || Basemap Service Layer Credits: EagleView Technologies, Inc.

3.2. GROUNDWATER ANALYTICAL RESULTS

A summary of groundwater analytical results for samples collected from monitoring wells is presented in Table 2.

3.2.1. February 2024

During the February 2024 sampling event, VOCs were non-detect in groundwater samples collected in monitoring wells MW-1, MW-2, MW-5 through MW-7, and MW-12 through MW-14 (Figure 5). Vinyl chloride was detected in groundwater samples collected from MW-8 through MW-11. Detections of vinyl chloride were above the site screening level (SSL) of 0.02 µg/L and ranged from 0.042 µg/L in MW-11 to 0.21 µg/L in MW-10. Chlorobenzene, the only other VOC detected in groundwater during the February 2024 event, was detected at low concentrations and below the SSL (100 µg/L) at concentrations from 0.27 to 0.36 µg/L in groundwater from MW-4, MW-9, and MW-10.

Carcinogenic polyaromatic hydrocarbons (cPAHs) were not detected above their laboratory reporting levels in groundwater samples collected during the February 2024 sampling event (Figure 5).

Of the five MTCA metals (arsenic, cadmium, chromium, lead, and mercury), total and/or dissolved arsenic was detected above the SSL of 3.3 µg/L in groundwater from monitoring wells MW-4, MW-8, and MW-11 through MW-14 (Figure 6). Total arsenic ranged from 4.0 in MW-4 to 25 µg/L in MW-12. Dissolved arsenic ranged from 3.2 to 24 µg/L in MW-8 and MW-12, respectively (Table 2). No other metals were detected in groundwater samples collected during the February 2024 sampling event. These results are generally consistent with the results of previous groundwater sampling events at the Site.

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Figure 5.
Extent of Total and Dissolved Metals in Groundwater, Pacific City Park, Pacific, Washington.

MW-8

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
3/23/2018	ND (3.3)/ --	ND (1.1)/ --
6/21/2018	**3.9**/ --	ND (1.1)/ --
9/26/2018	ND (3.3)/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
5/12/2023	ND (3.3)/**3.3**	ND (1.1)/ND (1.0)
8/16/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
11/29/2023	**4.2**/ND (3.0)	ND (1.1)/ND (1.0)
2/16/2024	**4.1/3.2**	ND (1.1)/ND (1.0)

MW-2

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/5/2015	**5.7/5.1**	ND (1.0)/ND (1.0)
5/12/2017	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
3/23/2018	**3.4**/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	**4.9**/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /**6.1**	-- /ND (1.0)
6/18/2019	-- /**7.1**	-- /ND (1.0)
9/24/2019	-- /**14**	-- /ND (1.0)

MW-7

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
3/23/2018	ND (3.3)/ --	**1.9**/ --
6/21/2018	**4.6**/ --	**2**/ --
9/26/2018	**5.5**/ --	ND (1.1)/ --
12/21/2018	**4.5**/ --	ND (1.1)/ --

MW-4

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/5/2015	**13/9.8**	ND (1.0)/ND (1.0)
5/12/2017	**8.3/8.3**	ND (1.1)/ND (1.0)
3/23/2018	**6**/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	**14**/ --	ND (1.1)/ --
12/21/2018	**11**/ --	ND (1.1)/ --
3/29/2019	-- /**7.4**	-- /ND (1.0)
6/18/2019	-- /**11**	-- /ND (1.0)
9/24/2019	-- /**13**	-- /ND (1.0)
5/11/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
8/15/2023	**5.7/5.4**	ND (1.1)/ND (1.0)
11/30/2023	**4/3.8**	ND(1.1)/ND(1.0)
2/15/2024	**4/3.6**	ND(1.1)/ND(1.0)

MW-5

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/5/2015	**1.4**/ND (1.0)	ND (1.0)/ND (1.0)
5/12/2017	ND (3.3)/ND (3.0)	**4/3**
3/23/2018	ND (3.3)/ --	**3.2**/ --
6/21/2018	ND (3.3)/ --	**5.6**/ --
9/26/2018	ND (3.3)/ --	**1.9**/ --
12/21/2018	ND (3.3)/ --	**1.5**/ --
3/29/2019	-- /ND (3.0)	-- /ND (1.0)
6/18/2019	-- /ND (3.0)	-- /ND (1.0)
9/24/2019	-- /ND (3.0)	-- /ND (1.0)

MW-3

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/6/2015	**4.1/4.8**	ND (1.0)/ND (1.0)
5/12/2017	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
3/23/2018	ND (3.3)/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	ND (3.3)/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --

MW-1

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/6/2015	**1.1/1.2**	**1.1**/ND (1.0)
5/12/2017	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
3/23/2018	ND (3.3)/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	ND (3.3)/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --

MW-14

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
5/11/2023	**12/12**	ND (1.1)/ND (1.0)
8/15/2023	**17/17**	ND (1.1)/ND (1.0)
11/30/2023	**13/12**	ND (1.1)/ND (1.0)
2/15/2024	**10/9.3**	ND (1.1)/ND (1.0)

MW-9

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
3/23/2018	ND (3.3)/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	**3.6**/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /ND (3.0)	-- /ND (1.0)
6/18/2019	-- /ND (3.0)	-- /ND (1.0)
9/24/2019	-- /ND (3.0)	-- /ND (1.0)
5/11/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
8/15/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
11/30/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
2/15/2024	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)

MW-13

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
5/11/2023	**16/16**	ND (1.1)/ND (1.0)
8/15/2023	**24/26**	ND (1.1)/ND (1.0)
11/30/2023	**11/8.9**	ND (1.1)/ND (1.0)
2/15/2024	**13/9.8**	ND (1.1)/ND (1.0)

MW-10

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /ND (3.0)	-- /ND (1.0)
6/18/2019	-- /ND (3.0)	-- /ND (1.0)
9/24/2019	-- /ND (3.0)	-- /ND (1.0)
5/11/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
8/15/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
11/30/2023	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
2/15/2024	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)

MW-11

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /ND (3.0)	-- /ND (1.0)
6/18/2019	-- /**3.6**	-- /ND (1.0)
9/24/2019	-- /**3.6**	-- /ND (1.0)
5/11/2023	**16/12**	ND (1.1)/ND (1.0)
8/15/2023	**31/20**	ND (1.1)/ND (1.0)
11/30/2023	**29/13**	ND (1.1)/ND (1.0)
2/15/2024	**13/5.4**	ND (1.1)/ND (1.0)

MW-12

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /11	-- /ND (1.0)
6/18/2019	-- /14	-- /ND (1.0)
9/24/2019	-- /15	-- /ND (1.0)
5/11/2023	**22/20**	ND (1.1)/ND (1.0)
8/15/2023	**11/8.4**	ND (1.1)/ND (1.0)
11/30/2023	**29/29**	ND (1.1)/ND (1.0)
2/16/2024	**25/24**	ND (1.1)/ND (1.0)

MW-6

SAMPLE DATE	ARSENIC (T/D)	LEAD (T/D)
10/5/2015	**1.9/2.1**	**1.5**/ND (1.0)
5/12/2017	ND (3.3)/ND (3.0)	ND (1.1)/ND (1.0)
3/23/2018	ND (3.3)/ --	ND (1.1)/ --
6/21/2018	ND (3.3)/ --	ND (1.1)/ --
9/26/2018	**4.5**/ --	ND (1.1)/ --
12/21/2018	ND (3.3)/ --	ND (1.1)/ --
3/29/2019	-- /ND (3.0)	-- /ND (1.0)
6/18/2019	-- /ND (3.0)	-- /ND (1.0)
9/24/2019	-- /**3.1**	-- /ND (1.0)

3rd Ave SE
4th Ave SE
Pacific City Park
White River
RM 6.0
RM 5.9

Legend

- Historical edge of river channel based on 1936 aerial photograph (source: King County)
- Pacific City Park MTCA site boundary
- Approximate lateral extent of fill at Pacific City Park
- Existing concrete revetment
- Existing stormwater pond
- Existing stormwater ditch
- Monitoring well location
- Probe/well/test pit location (Shannon & Wilson, 9-2015)
- Geotech boring location (Aspect 2-2018, 3-2018)
- Probe location (Herrera 2-2018, 3-2018)
- RM 6.0 River mile (10th)
- 1.1 Sample detected above the reporting limit
- 1.1 Sample exceeds site screening level

Notes

1. Total and dissolved (T/D) metals values reported in micrograms per liter (µg/L)
2. ND = not detected above the laboratory reporting limit shown in parenthesis
3. -- = not analyzed
4. Groundwater sample results from temporary wells not shown on this figure.

0 75 150 300 Feet

N

King County

Aerial source: King County (2017)

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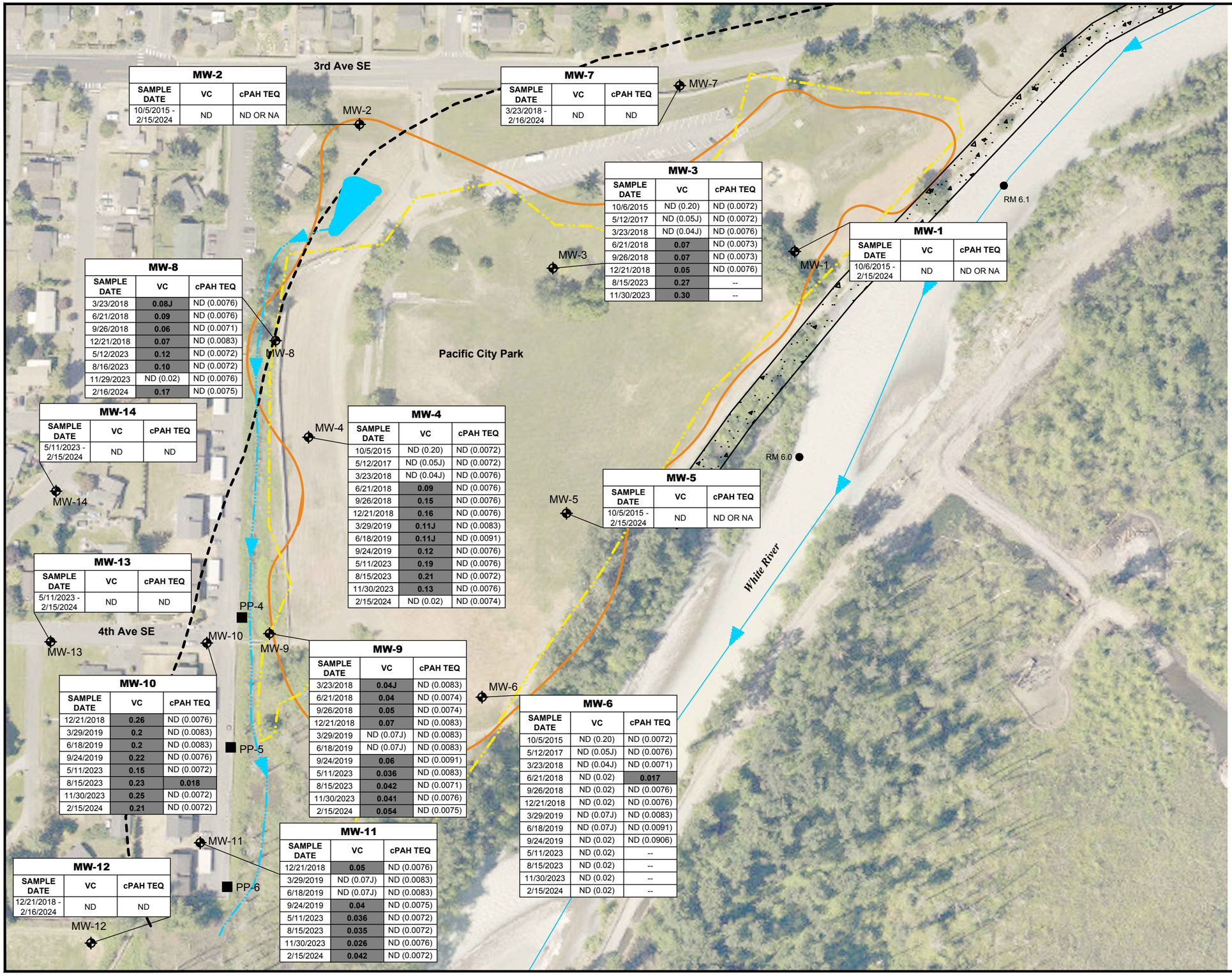

MW-2

SAMPLE DATE	VC	cPAH TEQ
10/5/2015 - 2/15/2024	ND	ND OR NA

MW-7

SAMPLE DATE	VC	cPAH TEQ
3/23/2018 - 2/16/2024	ND	ND

MW-3

SAMPLE DATE	VC	cPAH TEQ
10/6/2015	ND (0.20)	ND (0.0072)
5/12/2017	ND (0.05J)	ND (0.0072)
3/23/2018	ND (0.04J)	ND (0.0076)
6/21/2018	**0.07**	ND (0.0073)
9/26/2018	**0.07**	ND (0.0073)
12/21/2018	**0.05**	ND (0.0076)
8/15/2023	**0.27**	--
11/30/2023	**0.30**	--

MW-1

SAMPLE DATE	VC	cPAH TEQ
10/6/2015 - 2/15/2024	ND	ND OR NA

MW-8

SAMPLE DATE	VC	cPAH TEQ
3/23/2018	**0.08J**	ND (0.0076)
6/21/2018	**0.09**	ND (0.0076)
9/26/2018	**0.06**	ND (0.0071)
12/21/2018	**0.07**	ND (0.0083)
5/12/2023	**0.12**	ND (0.0072)
8/16/2023	**0.10**	ND (0.0072)
11/29/2023	ND (0.02)	ND (0.0076)
2/16/2024	**0.17**	ND (0.0075)

MW-14

SAMPLE DATE	VC	cPAH TEQ
5/11/2023 - 2/15/2024	ND	ND

MW-4

SAMPLE DATE	VC	cPAH TEQ
10/5/2015	ND (0.20)	ND (0.0072)
5/12/2017	ND (0.05J)	ND (0.0072)
3/23/2018	ND (0.04J)	ND (0.0076)
6/21/2018	**0.09**	ND (0.0076)
9/26/2018	**0.15**	ND (0.0076)
12/21/2018	**0.16**	ND (0.0076)
3/29/2019	**0.11J**	ND (0.0083)
6/18/2019	**0.11J**	ND (0.0091)
9/24/2019	**0.12**	ND (0.0076)
5/11/2023	**0.19**	ND (0.0076)
8/15/2023	**0.21**	ND (0.0072)
11/30/2023	**0.13**	ND (0.0076)
2/15/2024	ND (0.02)	ND (0.0074)

MW-5

SAMPLE DATE	VC	cPAH TEQ
10/5/2015 - 2/15/2024	ND	ND OR NA

MW-13

SAMPLE DATE	VC	cPAH TEQ
5/11/2023 - 2/15/2024	ND	ND

MW-9

SAMPLE DATE	VC	cPAH TEQ
3/23/2018	**0.04J**	ND (0.0083)
6/21/2018	**0.04**	ND (0.0074)
9/26/2018	**0.05**	ND (0.0074)
12/21/2018	**0.07**	ND (0.0083)
3/29/2019	ND (0.07J)	ND (0.0083)
6/18/2019	ND (0.07J)	ND (0.0083)
9/24/2019	**0.06**	ND (0.0091)
5/11/2023	**0.036**	ND (0.0083)
8/15/2023	**0.042**	ND (0.0071)
11/30/2023	**0.041**	ND (0.0076)
2/15/2024	**0.054**	ND (0.0075)

MW-10

SAMPLE DATE	VC	cPAH TEQ
12/21/2018	**0.26**	ND (0.0076)
3/29/2019	**0.2**	ND (0.0083)
6/18/2019	**0.2**	ND (0.0083)
9/24/2019	**0.22**	ND (0.0076)
5/11/2023	**0.15**	ND (0.0072)
8/15/2023	**0.23**	**0.018**
11/30/2023	**0.25**	ND (0.0072)
2/15/2024	**0.21**	ND (0.0072)

MW-6

SAMPLE DATE	VC	cPAH TEQ
10/5/2015	ND (0.20)	ND (0.0072)
5/12/2017	ND (0.05J)	ND (0.0076)
3/23/2018	ND (0.04J)	ND (0.0071)
6/21/2018	ND (0.02)	**0.017**
9/26/2018	ND (0.02)	ND (0.0076)
12/21/2018	ND (0.02)	ND (0.0076)
3/29/2019	ND (0.07J)	ND (0.0083)
6/18/2019	ND (0.07J)	ND (0.0091)
9/24/2019	ND (0.02)	ND (0.0906)
5/11/2023	ND (0.02)	--
8/15/2023	ND (0.02)	--
11/30/2023	ND (0.02)	--
2/15/2024	ND (0.02)	--

MW-11

SAMPLE DATE	VC	cPAH TEQ
12/21/2018	**0.05**	ND (0.0076)
3/29/2019	ND (0.07J)	ND (0.0083)
6/18/2019	ND (0.07J)	ND (0.0083)
9/24/2019	**0.04**	ND (0.0075)
5/11/2023	**0.036**	ND (0.0072)
8/15/2023	**0.035**	ND (0.0072)
11/30/2023	**0.026**	ND (0.0076)
2/15/2024	**0.042**	ND (0.0072)

MW-12

SAMPLE DATE	VC	cPAH TEQ
12/21/2018 - 2/16/2024	ND	ND

Figure 6.
Non-metals Contaminants of Concern in Groundwater, Pacific City Park, Pacific, Washington.

Legend

- Historical edge of river channel based on 1936 aerial photograph (source: King County)
- Pacific City Park MTCA site boundary
- Approximate lateral extent of fill at Pacific City Park
- Existing concrete revetment
- Existing stormwater pond
- Existing stormwater ditch
- Monitoring well location
- Probe location (Herrera, 5-2017)
- RM 6.0 River mile (10th)
- 1.1 Sample exceeds site screening level

Notes

1. Results reported in micrograms per liter (µg/L)
2. ND = not detected above the laboratory reporting limit shown in parenthesis
3. NA or -- = not analyzed
4. Groundwater sample results from temporary wells not shown on this figure

0 75 150 300 Feet

N

King County

Aerial source: King County (2017)

O:\proj\Y2017\17-06520-000\CAD\Dwg\2024 Q1 GW monitoring report\Fig_non-metals_GW.dwg

3.2.2. May 2023 through February 2024

During the most recent four quarterly groundwater sampling events, VOCs were non-detect in groundwater samples collected in monitoring wells MW-1, MW-2, MW-5 through MW-7, and MW-12 through MW-14 (Figure 5). Vinyl chloride was consistently detected and above the SSL in groundwater samples collected from MW-3, MW-9, MW-10, and MW-11. Vinyl chloride was detected quarterly in groundwater from MW-4 with the exception of the February 2024 groundwater sample, and in MW-8 with the exception of the November 2023 groundwater sample. Detections of vinyl chloride ranged from 0.026 µg/L (MW-11, November 2023) to 0.30 µg/L (MW-3, November 2023).

Other detected VOCs during the past four quarters of groundwater sampling includes cis-1,2-dichloroethene (cDCE) and chlorobenzene. cDCE has been detected in groundwater samples collected from MW-3 during the August and November 2023 sampling events. MW-3 was inaccessible and could not be sampled during the May 2023 and February 2024 sampling events. Detections of cDCE in MW-3 were 0.23 and 0.27 µg/L, respectively, during the August and November 2023 sampling events. These detections of cDCE are well below the SSL for cDCE in groundwater (16 µg/L). During the past four quarters, chlorobenzene has been consistently detected in groundwater samples collected from MW-4, MW-9, and MW-10. Chlorobenzene was detected in one of the past four quarters, in groundwater collected from MW-11. Detections of chlorobenzene have ranged from 0.22 µg/L (MW-10, May 2023) to 0.96 µg/L (MW-4, August 2023). Detections of chlorobenzene are well below the SSL of 100 µg/L. When sampled for, cDCE and chlorobenzene have never exceeded their respective SSLs and have never been detected in any other monitoring wells at the Site.

During the past four quarters of groundwater sampling, cPAHs were only detected in MW-10 during the August 2023 sampling event. The cPAH toxicity equivalent concentration (TEQ) in MW-10 was slightly above the SSL of 0.015 µg/L, at 0.018 µg/L. cPAHs have not been detected above their laboratory reporting levels in any other wells during the past four quarters of groundwater sampling (Figure 5).

During the past four quarters, total and dissolved metals have been sampled for in the western portion of the Site. Total and/or dissolved arsenic is the only MTCA metal that has been detected in groundwater during the past four quarters of groundwater sampling at the Site. Arsenic has been detected in groundwater from MW-4, MW-8, MW-11, MW-12, MW-13, and MW-14 (Figure 6). From May 2023 through February 2024, detections of total arsenic in groundwater ranged from 4 to 31 µg/L (in MW-4 and MW-11, respectively). Detections of dissolved arsenic ranged from 3.2 to 29 µg/L (in MW-8 and MW-12, respectively). In general, detections of total and dissolved arsenic in groundwater were above the SSL of 3.3 µg/L. Detections of total and dissolved arsenic have been highest in monitoring wells located to the southwest of the Park in groundwater from MW-11 and MW-12. From May 2023 through February 2024, total and dissolved arsenic has not been detected in groundwater from MW-9, in the southwestern portion of the Park, and immediately across the stormwater ditch from MW-9 in MW-10.

3.3. LAB ANALYSIS

Laboratory analyses for the February 2024 investigation were performed by OnSite, of Redmond, Washington, an Ecology-accredited laboratory. Laboratory reports and chain-of-custody forms are included in Appendix A. Laboratory reports for previous sampling events are included in the previous quarterly monitoring reports (Herrera 2023a; Herrera 2023c; Herrera 2024).

3.4. DATA QUALITY ANALYSIS

Laboratory analyses for the May 2023 through February 2024 quarterly groundwater sampling events were performed by OnSite, of Redmond, Washington, an Ecology-accredited laboratory. Laboratory reports, chain-of-custody forms, and data quality assurance review completed by Herrera are included in Appendix A.

A data quality assurance review was performed for all laboratory data. The data quality assurance review for groundwater data collected during the May 2023 sampling event is provided in the Sampling Results and Conclusions/Sampling and Analysis Plan Addendum dated July 25, 2023 (Herrera, 2023a). The data quality assurance review for the August 2023 through February 2024 sampling events is provided in Appendix A. The data quality for all parameters was considered to be acceptable, as reported by the laboratory, based on the following criteria:

- Holding time
- Reporting limits
- Method blanks
- Trip blanks
- Laboratory control standard recovery
- Surrogate recovery
- Matrix spike rec
- Laboratory duplicate relative percent differences

4. CONCLUSIONS

This monitoring report presents groundwater monitoring data that supplements information previously presented in the RI report (Herrera 2019a), Supplemental RI report (Herrera 2019b), previous monitoring reports (Herrera 2019c, 2019d, 2019e, 2023c, and 2024), and Sampling and Analysis Plan Addendum (Herrera 2023b) prepared for the Site.

In general, groundwater at the Site flows to the west in the northern portion of the Site and to the southwest in the southern portion of the Site. Groundwater flow exhibits some seasonal variability in the western portion of the Site, likely due to impacts from the stormwater ditch along the western edge of the Park.

Analytical results for this sampling event are consistent with previous sampling events performed at the Site. During the past four sampling quarters, vinyl chloride is the only VOC that has been detected in groundwater above the applicable SSL. The western extent of VC in groundwater remains between the west side of the stormwater ditch and the east side of the Fourth Avenue Southeast apartments, near MW-10 and MW-11.

cPAHs in groundwater collected from May 2023 through February 2024 at the Site are generally non-detect, with the exception of groundwater collected from MW-10 in August 2023. Total cPAHs in groundwater from MW-10 were slightly above the applicable SSL.

Of the five MTCA metals, total and/or dissolved arsenic was the only metal detected in groundwater from samples collected during the past four sampling quarters. Detections and associated SSL exceedances of arsenic in groundwater at the Site have been variable with no apparent seasonal fluctuations. In general, the highest detections of total and dissolved arsenic in groundwater have been detected outside the Park in MW-11 through MW-14. Arsenic has been detected in groundwater samples collected from across the Site. Arsenic is naturally occurring in soil and groundwater in Washington state (San Juan, 2022), and it is not present at concentrations that warrant remedial action.

The VOC, metals, and cPAH groundwater data reinforce the conclusions from the RI and SRI that leaching of contaminants from the dumpsite is not affecting groundwater quality at concentrations that pose a risk to human health or the environment.

As described in the April 2023 SAP, the February 2024 sampling event concludes the four additional round of quarterly groundwater sampling from all 14 monitoring wells located on and near the Park.

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5. REFERENCES

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TABLES

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Table 1. Summary of Water Level Elevation Data. Pacific City Park, Pacific, Washington.

Monitoring Well Location	Measurement Date	Measuring Point Elevation	Depth to Water From Top of Protective Casing	Water Level Elevation
MW-1	5/12/2017	83.16	2.33	80.83
	3/23/2018	83.16	2.84	80.32
	6/21/2018	83.16	3.12	80.04
	9/26/2018	83.16	5.80	77.36
	12/21/2019	83.16	2.73	80.43
	3/29/2019	83.16	3.20	79.96
	6/18/2019	83.16	3.20	79.96
	9/24/2019	83.16	5.01	78.15
	5/11/2023	83.46	1.82	81.64
	8/15/2023	83.46	3.79	79.67
	11/29/2023	83.46	3.51	79.95
	2/15/2024	83.46	2.09	81.37
MW-2	5/12/2017	79.85	2	77.85
	3/23/2018	79.85	1.81	78.04
	6/21/2018	79.85	2.32	77.53
	9/26/2018	79.85	3.68	76.17
	12/21/2019	79.85	2.07	77.78
	3/29/2019	79.85	2.07	77.78
	6/18/2019	79.85	2.52	77.33
	9/24/2019	79.85	3.31	76.54
	5/11/2023	80.15	1.49	78.66
	8/15/2023	80.15	2.84	77.31
	11/29/2023	80.15	2.18	77.97
	2/15/2024	80.15	0.74	79.41
MW-3	5/12/2017	80.01	0.4	79.61
	3/23/2018	80.01	0.55	79.46
	6/21/2018	80.01	1.27	78.74
	9/26/2018	80.01	3.01	77.00
	12/21/2019	80.01	0.68	79.33
	3/29/2019	80.01	1.10	78.91
	6/18/2019	80.01	1.13	78.88
	9/24/2019	80.01	2.36	77.65
	5/11/2023	80.31	NA	NA
	8/15/2023	80.31	1.55	78.76
	11/29/2023	80.31	1.18	79.13
	2/15/2024	80.31	NA	NA
MW-4	5/12/2017	80.14	2.73	77.41
	3/23/2018	80.14	3.09	77.05
	6/21/2018	80.14	3.53	76.61
	9/26/2018	80.14	4.54	75.60
	12/21/2019	80.14	3.16	76.98
	3/29/2019	80.14	3.40	76.74
	6/18/2019	80.14	3.40	76.74
	9/24/2019	80.14	4.11	76.03
	5/11/2023	80.44	2.59	77.85
	8/15/2023	80.44	3.57	76.87
	11/29/2023	80.44	3.11	77.33
	2/15/2024	80.44	2.19	78.25
MW-5	5/12/2017	81.4	1.6	79.80
	3/23/2018	81.4	2.26	79.14
	6/21/2018	81.4	2.38	79.02
	9/26/2018	81.4	4.8	76.60
	12/21/2019	81.4	2.04	79.36
	3/29/2019	81.4	2.42	78.98
	6/18/2019	81.4	2.42	78.98

Table 1. Summary of Water Level Elevation Data. Pacific City Park, Pacific, Washington.

MW-5 (continued)	9/24/2019	81.4	4.07	77.33
	5/11/2023	81.69	1.26	80.43
	8/15/2023	81.69	2.79	78.90
	11/29/2023	81.69	2.55	79.14
	2/15/2024	81.69	1.49	80.20
MW-6	5/12/2017	83.81	5.71	78.10
	3/23/2018	83.81	6.65	77.16
	6/21/2018	83.81	6.6	77.21
	9/26/2018	83.81	8.53	75.28
	12/21/2019	83.81	6.42	77.39
	3/29/2019	83.81	6.76	77.05
	6/18/2019	83.81	6.64	77.17
	9/24/2019	83.81	7.95	75.86
	5/11/2023	84.11	5.32	78.79
	8/15/2023	84.11	6.60	77.51
	11/29/2023	84.11	6.43	77.68
	2/14/2024	84.11	5.74	78.37
MW-7 (B-06)	3/23/2018	79.82	0.32	79.50
	6/21/2018	79.82	0.78	79.04
	9/26/2018	79.82	2.68	77.14
	12/21/2019	79.82	0.84	78.98
	3/29/2019	79.82	0.69	79.13
	6/18/2019	79.82	1.02	78.80
	9/24/2019	79.82	2.06	77.76
	5/11/2023	80.48	0.68	79.80
	8/15/2023	80.48	1.47	79.01
	11/29/2023	80.48	1.20	79.28
	2/15/2024	80.48	0.00	80.48
MW-8 (B-09)	3/23/2018	79.95	2.63	77.32
	6/21/2018	79.95	3.12	76.83
	9/26/2018	79.95	4.20	75.75
	10/9/2019	79.95	4.03	75.92
	12/21/2019	79.95	3.05	76.90
	3/29/2019	79.95	3.27	76.68
	6/18/2019	79.95	3.24	76.71
	9/24/2019	79.95	3.76	76.19
	5/11/2023	80.56	2.51	78.05
	8/16/2023	80.56	4.95	75.61
	11/29/2023	80.56	2.60	77.96
	2/15/2024	80.56	2.08	78.48
MW-9 (B-11)	3/23/2018	82.59	5.85	76.74
	6/21/2018	82.59	6.02	76.57
	9/26/2018	82.59	6.98	75.61
	12/21/2019	82.59	6.20	76.39
	3/29/2019	82.59	6.40	76.19
	6/18/2019	82.59	6.35	76.24
	9/24/2019	82.59	7.03	75.56
	5/11/2023	83.26	5.83	77.43
	8/15/2023	83.26	6.59	76.67
	11/29/2023	83.26	6.09	77.17
	2/15/2024	83.26	5.81	77.45
MW-10	12/21/2019	79.14	2.71	76.43
	3/29/2019	79.14	2.87	76.27
	6/18/2019	79.14	2.87	76.27
	9/24/2019	79.14	3.35	75.79
	5/11/2023	79.44	2.48	76.96
	8/15/2023	79.44	3.02	76.42
	11/29/2023	79.44	2.64	76.80

Table 1. Summary of Water Level Elevation Data. Pacific City Park, Pacific, Washington.

MW-10 (cont'd)	2/15/2024	79.44	2.21	77.23
MW-11	12/21/2019	79.52	4.05	75.47
	3/29/2019	79.52	4.35	75.17
	6/18/2019	79.52	4.34	75.18
	9/24/2019	79.52	4.72	74.80
	5/11/2023	79.82	3.80	76.02
	8/15/2023	79.82	4.38	75.44
	11/29/2023	79.82	3.98	75.84
	2/15/2024	79.82	3.59	76.23
MW-12	12/21/2019	78.11	2.51	75.60
	3/29/2019	78.11	3.12	74.99
	6/18/2019	78.11	4.02	74.09
	9/24/2019	78.11	4.39	73.72
	5/11/2023	78.51	2.90	75.61
	8/16/2023	78.51	4.49	74.02
	11/29/2023	78.51	3.01	75.50
	2/16/2024	78.51	2.07	76.44
MW-13	5/11/2023	80.84	4.12	76.72
	8/15/2023	80.84	5.83	75.01
	11/29/2023	80.84	4.55	76.29
	2/15/2024	80.84	2.81	78.03
MW-14	5/11/2023	81.78	3.76	78.02
	8/15/2023	81.78	5.96	75.82
	11/29/2023	81.78	4.60	77.18
	2/15/2024	81.78	2.40	79.38
B-03	3/23/2018	86.12	5.52	80.60
	6/21/2018	86.12	5.41	80.71
	9/26/2018	86.12	8.30	77.82
	12/21/2019	86.12	5.05	81.07
	3/29/2019	86.12	5.51	80.61
	6/18/2019	86.12	5.47	80.65
	9/24/2019	86.12	7.46	78.66
	5/11/2023	86.12	NA	NM
	8/15/2023	86.12	6.38	79.74
	11/29/2023	86.12	6.10	80.02
	2/15/2024	86.12	4.57	81.55
Staff Gage 1 by MW-8	9/26/2018	75.29	0.46	75.75
	10/9/2019	75.29	0.62	75.91
	12/20/2019	75.29	1.47	76.76
	12/21/2019	75.29	1.44	76.73
	3/29/2019	75.29	1.175	76.47
	6/18/2019	75.29	1.27	76.56
	9/24/2019	75.29	0.89	76.18
	11/29/2023	75.29	2.12	77.41
	2/15/2024	75.29	2.42	77.71
Staff Gage 2 by MW-11	3/29/2019	73.4	1.195	74.60
	6/18/2019	73.4	1.19	74.59
	9/24/2019	73.4	1.1	74.50

Measuring point is the lid of the well monument.
Measuring point elevation is realtive to NAVD88.

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Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington.

Sample Location	Sample Date	Petroleum Hydrocarbons (µg/L)			Volatile Organic Compounds by EPA Method 8260D (µg/L)								Total Metals by EPA Method 200.8 (µg/L)					Dissolved Metals by EPA Method 200.8 (µg/L)				
		GRO	DRO	Lube Oil	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	cDCE	1,4-Dichloro benzene	Chloro benzene	Vinyl Chloride	Arsenic	Cadmium	Chromium	Lead	Mercury	Arsenic	Cadmium	Chromium	Lead	Mercury
Site Screening Level		***1,000***	***500***	***500***	***0.44***	***57***	***29***	***1,000***	***16***		***100***	***0.02***	***3.3***	***4.4***	***50***	***2.5***	***0.5***	***3.3***	***4.4***	***50***	***2.5***	***0.5***
	GW SL for VI				***2.4***	***15,000***	***2,800***	***0.33***	***180***	***5***	***340***	***0.33***	–	–	–	–	–	–	–	–	–	–
MW-1	10/6/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	ND (1.0)	ND (0.20)	**1.1**	ND (0.20)	ND (0.50)	**1.1**	ND (0.10)	**1.2**	ND (0.20)	ND (0.50)	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.05J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	3/23/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.04J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	8/19/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	–	–	–	–	–	–	–	–	–	–
MW-2	10/5/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	ND (1.0)	ND (0.20)	**5.7**	ND (0.20)	**2.3**	ND (1.0)	ND (0.10)	**5.1**	ND (0.20)	**1.6**	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (270)	ND (440)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.05J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	3/23/2018	ND (110)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.04J)[a]	**3.4**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	**4.9**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	**6.1**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20	ND (0.07J)[a]	–	–	–	–	–	**7.1**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20	ND (0.02)[b]	–	–	–	–	–	**14**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/12/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	8/16/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	**–**	–	–	–	–
	11/29/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	2/16/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	–	–	–	–	–	–	–	–	–	–
MW-3	10/6/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	ND (1.0)	ND (0.20)	**4.1**	ND (0.20)	**2.8**	ND (1.0)	ND (0.10)	**4.8**	ND (0.20)	**1.5**	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.05J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	3/23/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	**0.22**	ND (0.20)	ND (0.20)	ND (0.04J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.070**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	**0.35**	ND (0.20)	ND (0.20)	**0.070**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	**0.30**	ND (0.20)	ND (0.20)	**0.050**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	**0.23**	ND (0.20)	ND (0.20)	**0.27**	–	–	–	–	–	–	–	–	–	–
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	**0.27**	ND (0.20)	ND (0.20)	**0.30**	–	–	–	–	–	–	–	–	–	–
MW-4	10/5/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	**5.7**	ND (0.20)	**13**	ND (0.20)	**2.7**	ND (1.0)	ND (0.10)	**9.8**	ND (0.20)	**1.5**	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**1.5**	ND (0.05J)a	**8.3**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**8.3**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	3/23/2018	ND (110)	ND (270)	ND (440)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**1.1**	ND (0.04J)a	**6**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.09**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (250)	ND (410)	**0.22**	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**4.6**	**0.15**[b]	**14**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**3.7**	**0.16**[b]	**11**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**2.6**	**0.11J**[a]	–	–	–	–	–	**7.4**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20	ND (0.40	ND (0.20)	ND (0.20)	**0.33**	**0.11J**[a]	–	–	–	–	–	**11**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**5.2**	**0.12**[b]	–	–	–	–	–	**13**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.24**	**0.19**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.96**	**0.21**	**5.7**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**5.4**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.39**	**0.13**	**4.0**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**3.8**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.36**	ND (0.02)[b]	**4.0**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**3.6**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-5	10/5/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	ND (1.0)	ND (0.20)	**1.4**	ND (0.20)	**0.52**	ND (1.0)	ND (0.10)	ND (1.0)	ND (0.20)	ND (0.50)	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.05J)[a]	ND (3.3)	ND (4.4)	ND (11)	**4**	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	**3**	ND (0.50)
	3/23/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.04J)[a]	ND (3.3)	ND (4.4)	ND (11)	**3.2**	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	**5.6**	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	**1.9**	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	**1.5**	ND (0.50)	–	–	–	–	–
	3/29/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20	ND (0.02)[b]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)

Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington (continued).

Sample Location	Sample Date	Petroleum Hydrocarbons (µg/L)			Volatile Organic Compounds by EPA Method 8260D (µg/L)								Total Metals by EPA Method 200.8 (µg/L)					Dissolved Metals by EPA Method 200.8 (µg/L)				
		GRO	DRO	Lube Oil	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	cDCE	1,4-Dichloro benzene	Chloro benzene	Vinyl Chloride	Arsenic	Cadmium	Chromium	Lead	Mercury	Arsenic	Cadmium	Chromium	Lead	Mercury
Site Screening Level		***1,000***	***500***	***500***	***0.44***	***57***	***29***	***1,000***	***16***		***100***	***0.02***	***3.3***	***4.4***	***50***	***2.5***	***0.5***	***3.3***	***4.4***	***50***	***2.5***	***0.5***
MW-5 (continued)	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	–	–	–	–	–	–	–	–	–	–
MW-6	10/5/2015	ND (50)	ND (50)	ND (100)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (0.20)	ND (1.0)	ND (0.20)	**1.9**	ND (0.20)	**0.74**	**1.5**	ND (0.10)	**2.1**	ND (0.20)	ND (0.50)	ND (1.0)	ND (0.10)
	5/12/2017	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.05J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	3/23/2018	ND (110)	ND (280)	ND (450)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.04J)[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	**0.2**	ND (0.20)	ND (0.02)[b]	**4.5**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20	ND (0.02)[b]	–	–	–	–	–	**3.1**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	–	–	–	–	–	–	–	–	–	–
MW-7	3/23/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.04J)[a]	ND (3.3)	ND (4.4)	ND (11)	**1.9**	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	**4.6**	ND (4.4)	ND (11)	**2**	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	**5.5**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (270)	ND (440)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	**4.5**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	5/12/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	–	–	–	–	–	–	–	–	–	–
	2/16/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	–	–	–	–	–	–	–	–	–	–
MW-8	3/23/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.08J**[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (1.1)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.09**[b]	**3.9**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.06**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.07**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	5/12/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.12**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**3.3**	ND (4)	ND (10)	ND (1.0)	ND (0.50)
	8/16/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.10**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/29/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**4.2**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/16/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.17**	**4.1**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**3.2**	ND (4)	ND (10)	ND (1.0)	ND (0.50)
MW-9	3/23/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.04J**[a]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	6/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.04**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	9/26/2018	ND (100)	ND (250)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.38**	**0.05**[b]	**3.6**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	12/21/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.43**	**0.07**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.41**	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.34**	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.38**	**0.06**[b]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.27**	**0.036**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.29**	**0.042**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.25**	**0.041**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.27**	**0.054**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-10	12/21/2018	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.26**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	ND (100)	ND (250)	ND (400)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.20**[b]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20	ND (0.20)	**0.20**[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40	ND (0.20)	ND (0.20)	**0.27**	**0.22**[b]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.22**	**0.15**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.27**	**0.23**	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.25**	**0.25**	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.31**	**0.21**	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-11	12/21/2018	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.05**[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	ND (100)	ND (290)	ND (470)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.24**	ND (0.07J)[a]	–	–	–	–	–	ND (3.0)	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)

Table 2 (continued). Summary of Groundwater Sample Results from Monitoring Wells, Pacific City Park Remedial Investigation, Pacific, Washington.

Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington (continued).

Sample Location	Sample Date	Petroleum Hydrocarbons (µg/L)			Volatile Organic Compounds by EPA Method 8260D (µg/L)								Total Metals by EPA Method 200.8 (µg/L)					Dissolved Metals by EPA Method 200.8 (µg/L)				
		GRO	DRO	Lube Oil	Benzene	Toluene	Ethyl-benzene	Xylenes, Total	cDCE	1,4-Dichloro benzene	Chloro benzene	Vinyl Chloride	Arsenic	Cadmium	Chromium	Lead	Mercury	Arsenic	Cadmium	Chromium	Lead	Mercury
Site Screening Level		***1,000***	***500***	***500***	***0.44***	***57***	***29***	***1,000***	***16***		***100***	***0.02***	***3.3***	***4.4***	***50***	***2.5***	***0.5***	***3.3***	***4.4***	***50***	***2.5***	***0.5***
MW-11 (continued)	6/18/2019	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.33**	ND (0.07J)[a]	–	–	–	–	–	**3.6**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40	ND (0.20)	ND (0.20)	**0.36**	**0.04**[b]	–	–	–	–	–	**3.6**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.036**[b]	**16**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**12**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	**0.34**	**0.035**[b]	**31**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**20**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.026**[b]	**29**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**13**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	**0.042**	**13**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**5.4**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-12	12/21/2018	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.02)[b]	ND (3.3)	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	–	–	–	–	–
	3/29/2019	ND (100)	ND (260)	ND (420)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	**11**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	6/18/2019	ND (100)	ND (260)	ND (410)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.07J)[a]	–	–	–	–	–	**14**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	9/24/2019	ND (100)	ND (270)	ND (430)	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20	ND (0.02)[b]	–	–	–	–	–	**15**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**22**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**20**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	8/16/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**11**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**8.4**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**29**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**29**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/16/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	**25**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**24**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-13	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**16**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**16**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**24**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**26**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**11**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**8.9**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	**13**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**9.8**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
MW-14	5/11/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**12**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**12**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	8/15/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**17**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**17**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	11/30/2023	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)[b]	**13**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**12**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)
	2/15/2024	–	–	–	ND (0.20)	ND (1.0)	ND (0.20)	ND (0.40)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.020)b	**10**	ND (4.4)	ND (11)	ND (1.1)	ND (0.50)	**9.3**	ND (4.0)	ND (10)	ND (1.0)	ND (0.50)

Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington (continued).

Sample Location	Sample Date	Total PCBs	Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA Method 8270E SIM (µg/L)								Field Parameters				
			Benzo(a)-anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(j,k) fluoranthene	Benzo(a) pyrene	Indeno(1,2,3-cd) pyrene	Dibenz(a,h) anthracene	Total cPAHs (TEQ)	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (std units)	Turbidity (NTU)
Site Screening Level		***0.05***	***0.01***	***0.016***	***0.01***	***0.01***	***0.01***	***0.01***	***0.01***	***0.015***	–	–	–	–	–
	GW SL for VI		–	–	–	–	–	–	–	–	–	–	–	–	–
MW-1	10/6/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.076)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	9.0	3.28	98	6.84	Clear
	3/23/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	6.9	4.67	97	6.94	Clear
	6/21/2018	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	11.3	1.69	77	6.79	Clear
	9/26/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	14.2	2.76	113	6.64	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	7.9	4.35	93	4.45	1.0
	5/11/2023	–	–	–	–	–	–	–	–	–	9.2	3.48	79	6.22	2.2
	8/19/2023	–	–	–	–	–	–	–	–	–	16.6	0.80	88	6.35	3.8
	11/30/2023	–	–	–	–	–	–	–	–	–	10.0	2.66	95	6.46	29.3
	2/15/2024	–	–	–	–	–	–	–	–	–	5.9	5.87	81	6.49	4.1
MW-2	10/5/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.0072)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0075)	11.9	2.47	296	6.58	Clear
	3/23/2018	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	9.8	0.66	328	6.54	Clear
	6/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.7	3.28	270	6.33	Clear
	9/26/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	15.8	0.23	276	6.30	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.5	0.38	314	4.38	30.4
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	10.1	0.21	269	6.40	1.8
	6/18/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.1	0.20	367	6.30	42.3
	9/24/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	15.9	0.64	296	6.35	Clear
	5/12/2023	–	–	–	–	–	–	–	–	–	11.6	0.47	330	6.50	4.4
	8/16/2023	–	–	–	–	–	–	–	–	–	15.3	0.16	192	6.63	42.7
	11/29/2023	–	–	–	–	–	–	–	–	–	12.3	0.14	285	6.32	45.3
	2/16/2024	–	–	–	–	–	–	–	–	–	10.1	0.47	273	6.54	6.9
MW-3	10/6/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.0072)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	10.9	0.69	332	7.08	Clear
	3/23/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	8.1	0.50	332	7.01	Clear
	6/21/2018	–	ND (0.0097)	ND (0.0097)	ND (0.0097)	ND (0.0097)	ND (0.0097)	ND (0.0097)	ND (0.0097)	ND (0.0073)	12.8	0.11	281	7.08	Clear
	9/26/2018	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	14.5	0.12	322	6.65	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	10.1	0.09	414	4.75	85.6
	8/15/2023	–	–	–	–	–	–	–	–	–	14.3	0.34	194	6.85	2.0
	11/30/2023	–	–	–	–	–	–	–	–	–	10.4	0.14	217	6.78	11.8
MW-4	10/5/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.0072)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	11.5	0.19	348	6.60	Clear
	3/23/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	9.1	0.55	307	6.15	Clear
	6/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	15.4	2.05	309	6.62	Clear
	9/26/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	20.4	1.47	325	6.10	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.8	0.21	351	4.55	9.4
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	9.3	0.25	341	6.64	14.4
	6/18/2019	–	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.0091)	14.6	0.44	313	6.61	95.5
	9/24/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	19.0	0.63	324	6.47	Clear
	5/11/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.2	0.87	292	6.25	17.5
	8/15/2023	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	19.6	0.31	4	6.41	12.0
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.1	0.15	264	6.49	48.4
	2/15/2024	–	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0074)	8.1	0.91	260	6.56	3.2
MW-5	10/5/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.0072)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	9.5	1.06	156	7.08	Clear
	3/23/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	6.7	0.47	129	6.69	Clear
	6/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.6	0.08	126	7.44	Clear
	9/26/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	15.3	0.26	193	6.90	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	10.0	0.45	182	5.14	5.4
	3/29/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	7.1	0.04	143	7.32	1.7
	6/18/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	11.6	0.31	125	7.20	1.3
	9/24/2019	–	ND (0.013)	ND (0.013)	ND (0.013)	ND (0.013)	ND (0.013)	ND (0.013)	ND (0.013)	ND (0.0098)	15.5	0.64	189	6.78	Clear

Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington (continued).

Sample Location	Sample Date	Total PCBs	Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA Method 8270E SIM (µg/L)								Field Parameters				
			Benzo(a)-anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(j,k) fluoranthene	Benzo(a) pyrene	Indeno(1,2,3-cd) pyrene	Dibenz(a,h) anthracene	Total cPAHs (TEQ)	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (std units)	Turbidity (NTU)
Site Screening Level		***0.05***	***0.01***	***0.016***	***0.01***	***0.01***	***0.01***	***0.01***	***0.01***	***0.015***	–	–	–	–	–
MW-5 (continued)	5/11/2023	–	–	–	–	–	–	–	–	–	8.1	0.27	141	6.97	3.4
	8/15/2023	–	–	–	–	–	–	–	–	–	13.8	0.47	144	7.11	3.6
	11/30/2023	–	–	–	–	–	–	–	–	–	11.8	0.29	201	7.13	4.0
	2/15/2024	–	–	–	–	–	–	–	–	–	7.5	0.84	150	6.93	4.6
MW-6	10/5/2015	–	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.100)	ND (0.0072)	NR	NR	NR	NR	NR
	5/12/2017	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	10.2	0.25	132	6.25	Clear
	3/23/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	6.9	0.73	161	5.95	Clear
	6/21/2018	–	**0.014**	**0.014**	**0.012**	**0.012**	**0.011**	**0.012**	**0.011**	**0.017**	12.4	0.14	154	6.69	Clear
	9/26/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	15.1	0.44	341	6.25	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.0	0.17	206	3.90	3.2
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	6.9	0.24	176	6.64	1.4
	6/18/2019	–	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.0091)	12.1	0.35	164	6.62	3.5
	9/24/2019	–	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.0906)	15.5	0.67	294	6.71	Clear
	5/11/2023	–	–	–	–	–	–	–	–	–	9.9	0.30	170	6.18	7.3
	8/15/2023	–	–	–	–	–	–	–	–	–	14.4	0.42	197	6.98	6.7
	11/30/2023	–	–	–	–	–	–	–	–	–	10.7	0.30	215	6.55	68.4
	2/15/2024	–	–	–	–	–	–	–	–	–	6.6	0.80	181	6.59	34.5
MW-7	3/23/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	6.9	0.52	127	6.94	Clear
	6/21/2018	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	16.2	0.12	137	6.59	Clear
	9/26/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	16.2	0.49	151	6.47	Clear
	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	8.8	0.23	188	4.41	9.7
	5/12/2023	–	–	–	–	–	–	–	–	–	13.8	0.37	157	6.65	3.1
	8/15/2023	–	–	–	–	–	–	–	–	–	19.4	0.37	130	6.66	10.1
	11/30/2023	–	–	–	–	–	–	–	–	–	10.0	0.30	179	6.70	7.1
	2/16/2024	–	–	–	–	–	–	–	–	–	7.0	1.11	134	6.61	3.0
MW-8	3/23/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	10.8	0.45	400	6.62	Clear
	6/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.4	2.44	384	6.24	Clear
	9/26/2018	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	16.4	0.61	325	6.56	Clear
	12/21/2018	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	11.8	0.72	340	6.66	59.0
	5/12/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	11.4	0.08	301	6.47	67.3
	8/16/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	15.0	0.16	228	6.79	4.6
	11/29/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	12.6	0.15	381	6.47	107.2
	2/16/2024	–	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0075)	9.4	0.92	307	6.47	55.1
MW-9	3/23/2018	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	10.5	0.42	294	6.22	Clear
	6/21/2018	–	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0074)	11.5	2.65	240	6.58	Clear
	9/26/2018	–	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0074)	14.5	0.60	249	6.41	Clear
	12/21/2018	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	12.3	0.33	323	6.74	23.0
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	10.9	0.27	292	6.74	38.0
	6/18/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	11.3	0.31	248	6.75	26.2
	9/24/2019	–	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.012)	ND (0.0091)	14.2	0.72	228	6.65	Clear
	5/11/2023	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	10.7	0.26	237	6.57	27.9
	8/15/2023	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	13.4	0.09	137	6.91	7.5
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.6	0.30	247	6.45	12.1
	2/15/2024	–	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0075)	9.9	0.58	257	6.55	8.0
MW-10	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	12.9	0.29	291	6.83	24.0
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	11.8	0.21	287	6.72	20.5
	6/18/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	14.5	0.91	287	NR	54.0
	9/24/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	17.6	0.71	285	7.16	Slight
	5/11/2023	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	13.2	0.45	236	6.64	53.9
	8/15/2023	–	**0.024**	**0.022**	**0.019**	ND (0.0095)	**0.012**	ND (0.0095)	ND (0.0095)	**0.018**	18.4	0.10	191	6.77	120.0
	11/30/2023	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	13.3	0.88	232	6.55	12.6
	2/15/2024	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	11.3	0.62	213	6.67	17.5
MW-11	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	11.6	2.01	409	6.81	8.5
	3/29/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	10.3	1.05	355	6.39	51.0

Table 2. Summary of Groundwater Sample Results. Pacific City Park, Pacific Washington (continued).

Sample Location	Sample Date	Total PCBs	Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA Method 8270E SIM (µg/L)								Field Parameters				
			Benzo(a)-anthracene	Chrysene	Benzo(b) fluoranthene	Benzo(j,k) fluoranthene	Benzo(a) pyrene	Indeno(1,2,3-cd) pyrene	Dibenz(a,h) anthracene	Total cPAHs (TEQ)	Temp (°C)	DO (mg/L)	Cond (µS/cm)	pH (std units)	Turbidity (NTU)
Site Screening Level		***0.05***	***0.01***	***0.016***	***0.01***	***0.01***	***0.01***	***0.01***	***0.01***	***0.015***	–	–	–	–	–
MW-11 (continued)	6/18/2019	–	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.011)	ND (0.0083)	12.4	0.38	307	7.08	37.0
	9/24/2019	–	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0099)	ND (0.0075)	15.8	0.69	278	6.93	Clear
	5/11/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	11.9	0.45	404	6.72	39.4
	8/15/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	16.0	0.09	195	6.84	4.4
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.0	1.02	449	6.58	368.0
	2/15/2024	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	9.7	1.04	348	6.67	81.2
MW-12	12/21/2018	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	8.3	2.26	265	6.34	9.0
	3/29/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	8.3	0.92	240	6.06	50.0
	6/18/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	10.7	0.64	322	6.67	Clear
	9/24/2019	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	13.0	0.64	378	6.52	Slight
	5/11/2023	–	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0098)	ND (0.0074)	10.3	0.31	356	6.28	105.2
	8/16/2023	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0071)	14.3	0.11	274	6.39	68.1
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	9.8	1.13	402	6.08	26.5
	2/16/2024	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	8.7	0.85	326	6.52	23.3
MW-13	5/11/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	14.2	0.30	281	6.30	15.5
	8/15/2023	–	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0094)	ND (0.0072)	20.5	0.13	271	6.45	19.9
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	15.5	0.93	245	6.09	103.8
	2/15/2024		ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	11.5	0.47	247	6.30	38.8
MW-14	5/11/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	13.8	0.39	343	6.25	73.1
	8/15/2023	–	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0095)	ND (0.0072)	20.8	0.15	307	6.39	279.0
	11/30/2023	–	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.0076)	15.2	0.81	365	6.10	20.9
	2/15/2024	–	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0096)	ND (0.0072)	11.7	0.57	319	6.33	72.0

All results shown in micrograms per liter (µg/L).
GRO = Gasoline range organics. Analyzed by NWTPH-Gx.
DRO = Diesel range organics. DRO and Lube Oil analyzed by NWTPH-Dx.
Site Screening Levels from Remedial Investigation Report, 2019.
Groundwater Screening Level for Vapor Intrusion from MTCA Method B Vapor Intrusion Groundwater Screening Level, Non-Cancer or Cancer (whichever is lower) from Department of Ecolog
Values shown in **bold** are detected above the laboratory reporting limit.
Values shown in **bold and shaded** are detected at or above the Site Screening Level.
ND = Not detected at or above the laboratory reporting limits (RL) (shown in parentheses).
J = The value reported was below the practical quantitation limit. The value is an estimate.
a = Vinyl chloride concentration reported based on theoretical calculated method detection limit (MDL).
b = Vinyl chloride concentration reported based on laboratory review of available SIM (Specific Ion Monitoring) data with lower detection limit of 0.02 ug/L.
TEQ = Toxicity equivalent concentration. The total TEQ concentration for cPAHs is calculated using one-half the reporting limit for compounds that were not detected above the reporting lin
DO = Dissolved oxygen
mg/L = Milligrams per liter
µS/cm = MicroSiemens per centimeter
– = Not analyzed or not applicable.
NR = Not reported.

APPENDIX A

Laboratory Analytical Data

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OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

March 6, 2024

George Iftner
Herrera Environmental Consultants, Inc.
2200 6th Avenue, Suite 1100
Seattle, WA 98121

Re: Analytical Data for Project 17-06520-000
Laboratory Reference No. 2402-224

Dear George:

Enclosed are the analytical results and associated quality control data for samples submitted on February 16, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

Case Narrative

Samples were collected on February 15 and 16, 2024 and received by the laboratory on February 16, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Volatiles EPA 8260D Analysis

The percent recovery for Acetone, 1,3-Dichloropropane and Bromoform is outside the control limits in the Spike Blank and/or Spike Blank Duplicate. The method allows for a percentage of the compounds to fall outside of the control limits due to the large number of analytes being spiked.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWDUP**					
Laboratory ID:	02-224-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride	0.21	0.20	EPA 8260D	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

Date of Report: March 6, 2024
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Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWDUP**					
Laboratory ID:	02-224-01					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	0.37	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*82*	*75-127*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	02-224-02					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-1**					
Laboratory ID:	02-224-02					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*76*	*75-127*				
Toluene-d8	*98*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14**					
Laboratory ID:	02-224-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-14**					
Laboratory ID:	02-224-03					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*91*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

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Laboratory Reference: 2402-224
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	02-224-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-5**					
Laboratory ID:	02-224-04					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*82*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*100*	*78-125*				

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Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13**					
Laboratory ID:	02-224-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13**					
Laboratory ID:	02-224-05					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*94*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-6**					
Laboratory ID:	02-224-06					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-6**					
Laboratory ID:	02-224-06					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*104*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-4**					
Laboratory ID:	02-224-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-4**					
Laboratory ID:	02-224-07					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	0.36	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*88*	*75-127*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11**					
Laboratory ID:	02-224-08					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	0.042	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11**					
Laboratory ID:	02-224-08					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*84*	*75-127*				
Toluene-d8	*96*	*80-127*				
4-Bromofluorobenzene	*103*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9**					
Laboratory ID:	02-224-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	0.054	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

Date of Report: March 6, 2024
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Laboratory Reference: 2402-224
Project: 17-06520-000

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-9**					
Laboratory ID:	02-224-09					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	0.27	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*81*	*75-127*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*101*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10**					
Laboratory ID:	02-224-10					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride	0.21	0.20	EPA 8260D	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10**					
Laboratory ID:	02-224-10					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	0.31	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*83*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*100*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-8**					
Laboratory ID:	02-224-11					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	0.17	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-8**					
Laboratory ID:	02-224-11					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*84*	*75-127*				
Toluene-d8	*91*	*80-127*				
4-Bromofluorobenzene	*99*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2**					
Laboratory ID:	02-224-12					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-2**					
Laboratory ID:	02-224-12					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*75*	*75-127*				
Toluene-d8	*98*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7**					
Laboratory ID:	02-224-13					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-7**					
Laboratory ID:	02-224-13					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*83*	*75-127*				
Toluene-d8	*99*	*80-127*				
4-Bromofluorobenzene	*101*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12**					
Laboratory ID:	02-224-14					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12**					
Laboratory ID:	02-224-14					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*78*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*101*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0223W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloromethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-23-24	2-23-24	
Bromomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Chloroethane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Acetone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Iodomethane	ND	1.3	EPA 8260D	2-23-24	2-23-24	
Carbon Disulfide	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-23-24	2-23-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-23-24	2-23-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Butanone	ND	5.0	EPA 8260D	2-23-24	2-23-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chloroform	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Benzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Trichloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Dibromomethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Toluene	ND	1.0	EPA 8260D	2-23-24	2-23-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0223W1					
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Hexanone	ND	2.0	EPA 8260D	2-23-24	2-23-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-23-24	2-23-24	
o-Xylene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Styrene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromoform	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Bromobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-23-24	2-23-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Naphthalene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-23-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*90*	*75-127*				
Toluene-d8	*100*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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QUALITY CONTROL
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloromethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Vinyl Chloride (SIM)	ND	0.020	EPA 8260D/SIM	2-24-24	2-24-24	
Bromomethane	ND	1.6	EPA 8260D	2-24-24	2-24-24	
Chloroethane	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Trichlorofluoromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Acetone	ND	6.3	EPA 8260D	2-24-24	2-24-24	
Iodomethane	ND	1.5	EPA 8260D	2-24-24	2-24-24	
Carbon Disulfide	ND	0.27	EPA 8260D	2-24-24	2-24-24	
Methylene Chloride	ND	1.0	EPA 8260D	2-24-24	2-24-24	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl t-Butyl Ether	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Vinyl Acetate	ND	1.0	EPA 8260D	2-24-24	2-24-24	
2,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Butanone	ND	5.0	EPA 8260D	2-24-24	2-24-24	
Bromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chloroform	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Carbon Tetrachloride	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Benzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Trichloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Dibromomethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromodichloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Methyl Isobutyl Ketone	ND	2.0	EPA 8260D	2-24-24	2-24-24	
Toluene	ND	1.0	EPA 8260D	2-24-24	2-24-24	

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Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

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QUALITY CONTROL
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0224W1					
(trans) 1,3-Dichloropropene	ND	0.25	EPA 8260D	2-24-24	2-24-24	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Tetrachloroethene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Hexanone	ND	2.6	EPA 8260D	2-24-24	2-24-24	
Dibromochloromethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromoethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Chlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Ethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
m,p-Xylene	ND	0.40	EPA 8260D	2-24-24	2-24-24	
o-Xylene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Styrene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromoform	ND	1.3	EPA 8260D	2-24-24	2-24-24	
Isopropylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Bromobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Propylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
2-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
4-Chlorotoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3,5-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
tert-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trimethylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
sec-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
p-Isopropyltoluene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
n-Butylbenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
1,2-Dibromo-3-chloropropane	ND	1.3	EPA 8260D	2-24-24	2-24-24	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	2-24-24	2-24-24	
Hexachlorobutadiene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Naphthalene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	2-24-24	2-24-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*82*	*75-127*				
Toluene-d8	*98*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0223W1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorodifluoromethane	**8.19**	**8.34**	10.0	10.0	82	83	34-166	2	21	
Chloromethane	**8.10**	**8.41**	10.0	10.0	81	84	63-138	4	18	
Vinyl Chloride	**9.19**	**9.62**	10.0	10.0	92	96	71-135	5	20	
Bromomethane	**7.51**	**8.60**	10.0	10.0	75	86	20-151	14	36	
Chloroethane	**9.47**	**9.72**	10.0	10.0	95	97	76-125	3	20	
Trichlorofluoromethane	**10.8**	**11.0**	10.0	10.0	108	110	75-131	2	19	
1,1-Dichloroethene	**10.4**	**10.6**	10.0	10.0	104	106	78-125	2	19	
Acetone	**9.25**	**9.53**	10.0	10.0	93	95	76-125	3	18	
Iodomethane	**7.78**	**7.75**	10.0	10.0	78	78	10-155	0	40	
Carbon Disulfide	**11.6**	**11.4**	10.0	10.0	116	114	58-129	2	17	
Methylene Chloride	**9.73**	**9.85**	10.0	10.0	97	99	80-120	1	15	
(trans) 1,2-Dichloroethene	**10.6**	**10.6**	10.0	10.0	106	106	80-125	0	17	
Methyl t-Butyl Ether	**10.6**	**10.3**	10.0	10.0	106	103	80-122	3	15	
1,1-Dichloroethane	**10.5**	**10.7**	10.0	10.0	105	107	80-125	2	17	
Vinyl Acetate	**11.2**	**10.9**	10.0	10.0	112	109	80-131	3	15	
2,2-Dichloropropane	**11.9**	**12.0**	10.0	10.0	119	120	80-146	1	21	
(cis) 1,2-Dichloroethene	**10.7**	**10.9**	10.0	10.0	107	109	80-129	2	17	
2-Butanone	**10.2**	**10.0**	10.0	10.0	102	100	80-129	2	16	
Bromochloromethane	**10.2**	**9.67**	10.0	10.0	102	97	80-125	5	18	
Chloroform	**10.3**	**10.3**	10.0	10.0	103	103	80-123	0	16	
1,1,1-Trichloroethane	**10.7**	**10.9**	10.0	10.0	107	109	80-123	2	18	
Carbon Tetrachloride	**10.8**	**10.8**	10.0	10.0	108	108	80-126	0	17	
1,1-Dichloropropene	**10.6**	**10.9**	10.0	10.0	106	109	80-126	3	18	
Benzene	**10.4**	**10.6**	10.0	10.0	104	106	80-121	2	16	
1,2-Dichloroethane	**10.5**	**10.2**	10.0	10.0	105	102	80-124	3	15	
Trichloroethene	**11.2**	**11.5**	10.0	10.0	112	115	80-122	3	18	
1,2-Dichloropropane	**11.1**	**11.2**	10.0	10.0	111	112	80-123	1	15	
Dibromomethane	**10.8**	**10.5**	10.0	10.0	108	105	80-123	3	15	
Bromodichloromethane	**11.1**	**11.4**	10.0	10.0	111	114	80-125	3	15	
(cis) 1,3-Dichloropropene	**9.78**	**9.64**	10.0	10.0	98	96	80-129	1	15	
Methyl Isobutyl Ketone	**10.3**	**10.2**	10.0	10.0	103	102	80-124	1	15	
Toluene	**10.9**	**11.1**	10.0	10.0	109	111	80-120	2	18	
(trans) 1,3-Dichloropropene	**10.6**	**10.6**	10.0	10.0	106	106	80-134	0	17	

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Project: 17-06520-000

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QUALITY CONTROL
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Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0223W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1,2-Trichloroethane	**11.3**	**11.1**	10.0	10.0	113	111	77-126	2	20	
Tetrachloroethene	**11.5**	**11.5**	10.0	10.0	115	115	80-124	0	18	
1,3-Dichloropropane	**12.2**	**12.3**	10.0	10.0	122	123	80-120	1	15	I,I
2-Hexanone	**10.3**	**10.9**	10.0	10.0	103	109	80-130	6	16	
Dibromochloromethane	**11.6**	**11.6**	10.0	10.0	116	116	80-128	0	15	
1,2-Dibromoethane	**11.4**	**11.7**	10.0	10.0	114	117	80-127	3	15	
Chlorobenzene	**11.1**	**11.2**	10.0	10.0	111	112	80-120	1	17	
1,1,1,2-Tetrachloroethane	**11.8**	**11.9**	10.0	10.0	118	119	80-125	1	17	
Ethylbenzene	**11.3**	**11.6**	10.0	10.0	113	116	80-125	3	18	
m,p-Xylene	**22.8**	**23.4**	20.0	20.0	114	117	80-127	3	18	
o-Xylene	**11.2**	**11.5**	10.0	10.0	112	115	80-126	3	18	
Styrene	**11.7**	**11.9**	10.0	10.0	117	119	80-130	2	17	
Bromoform	**9.46**	**9.40**	10.0	10.0	95	94	80-130	1	15	
Isopropylbenzene	**11.8**	**12.1**	10.0	10.0	118	121	80-129	3	18	
Bromobenzene	**10.8**	**11.1**	10.0	10.0	108	111	76-128	3	16	
1,1,2,2-Tetrachloroethane	**11.3**	**10.8**	10.0	10.0	113	108	74-130	5	15	
1,2,3-Trichloropropane	**9.13**	**8.60**	10.0	10.0	91	86	71-129	6	25	
n-Propylbenzene	**11.4**	**11.6**	10.0	10.0	114	116	80-129	2	19	
2-Chlorotoluene	**11.1**	**11.3**	10.0	10.0	111	113	80-128	2	18	
4-Chlorotoluene	**11.8**	**11.9**	10.0	10.0	118	119	80-130	1	19	
1,3,5-Trimethylbenzene	**11.4**	**11.4**	10.0	10.0	114	114	80-131	0	18	
tert-Butylbenzene	**11.4**	**11.5**	10.0	10.0	114	115	80-130	1	18	
1,2,4-Trimethylbenzene	**11.4**	**11.6**	10.0	10.0	114	116	80-130	2	18	
sec-Butylbenzene	**11.7**	**11.8**	10.0	10.0	117	118	80-130	1	18	
1,3-Dichlorobenzene	**11.2**	**11.0**	10.0	10.0	112	110	80-126	2	17	
p-Isopropyltoluene	**11.9**	**12.1**	10.0	10.0	119	121	80-132	2	18	
1,4-Dichlorobenzene	**11.0**	**10.9**	10.0	10.0	110	109	80-121	1	17	
1,2-Dichlorobenzene	**10.9**	**10.9**	10.0	10.0	109	109	79-125	0	15	
n-Butylbenzene	**12.2**	**12.3**	10.0	10.0	122	123	80-138	1	19	
1,2-Dibromo-3-chloropropane	**10.2**	**10.7**	10.0	10.0	102	107	73-133	5	15	
1,2,4-Trichlorobenzene	**11.2**	**11.2**	10.0	10.0	112	112	80-139	0	18	
Hexachlorobutadiene	**11.9**	**11.8**	10.0	10.0	119	118	80-151	1	18	
Naphthalene	**9.40**	**9.18**	10.0	10.0	94	92	68-144	2	25	
1,2,3-Trichlorobenzene	**11.5**	**11.3**	10.0	10.0	115	113	75-146	2	28	
Surrogate:										
Dibromofluoromethane					*92*	*92*	*75-127*			
Toluene-d8					*100*	*99*	*80-127*			
4-Bromofluorobenzene					*100*	*100*	*78-125*			

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0224W1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorodifluoromethane	**9.98**	**9.47**	10.0	10.0	100	95	34-166	5	21	
Chloromethane	**8.19**	**7.84**	10.0	10.0	82	78	63-138	4	18	
Vinyl Chloride	**10.2**	**10.1**	10.0	10.0	102	101	71-135	1	20	
Bromomethane	**6.37**	**6.29**	10.0	10.0	64	63	20-151	1	36	
Chloroethane	**8.93**	**8.83**	10.0	10.0	89	88	76-125	1	20	
Trichlorofluoromethane	**10.3**	**10.3**	10.0	10.0	103	103	75-131	0	19	
1,1-Dichloroethene	**9.19**	**9.04**	10.0	10.0	92	90	78-125	2	19	
Acetone	**7.92**	**7.41**	10.0	10.0	79	74	76-125	7	18	I
Iodomethane	**6.77**	**6.79**	10.0	10.0	68	68	10-155	0	40	
Carbon Disulfide	**7.49**	**7.70**	10.0	10.0	75	77	58-129	3	17	
Methylene Chloride	**8.83**	**8.77**	10.0	10.0	88	88	80-120	1	15	
(trans) 1,2-Dichloroethene	**8.93**	**9.06**	10.0	10.0	89	91	80-125	1	17	
Methyl t-Butyl Ether	**9.46**	**9.59**	10.0	10.0	95	96	80-122	1	15	
1,1-Dichloroethane	**8.97**	**9.15**	10.0	10.0	90	92	80-125	2	17	
Vinyl Acetate	**8.28**	**8.39**	10.0	10.0	83	84	80-131	1	15	
2,2-Dichloropropane	**9.14**	**9.24**	10.0	10.0	91	92	80-146	1	21	
(cis) 1,2-Dichloroethene	**9.21**	**9.39**	10.0	10.0	92	94	80-129	2	17	
2-Butanone	**8.99**	**9.58**	10.0	10.0	90	96	80-129	6	16	
Bromochloromethane	**9.89**	**10.2**	10.0	10.0	99	102	80-125	3	18	
Chloroform	**9.35**	**9.48**	10.0	10.0	94	95	80-123	1	16	
1,1,1-Trichloroethane	**8.78**	**8.82**	10.0	10.0	88	88	80-123	0	18	
Carbon Tetrachloride	**9.18**	**9.38**	10.0	10.0	92	94	80-126	2	17	
1,1-Dichloropropene	**9.55**	**9.54**	10.0	10.0	96	95	80-126	0	18	
Benzene	**9.34**	**9.31**	10.0	10.0	93	93	80-121	0	16	
1,2-Dichloroethane	**9.13**	**9.09**	10.0	10.0	91	91	80-124	0	15	
Trichloroethene	**10.2**	**10.4**	10.0	10.0	102	104	80-122	2	18	
1,2-Dichloropropane	**9.34**	**9.59**	10.0	10.0	93	96	80-123	3	15	
Dibromomethane	**10.1**	**10.0**	10.0	10.0	101	100	80-123	1	15	
Bromodichloromethane	**9.45**	**9.42**	10.0	10.0	95	94	80-125	0	15	
(cis) 1,3-Dichloropropene	**9.42**	**9.80**	10.0	10.0	94	98	80-129	4	15	
Methyl Isobutyl Ketone	**8.74**	**8.87**	10.0	10.0	87	89	80-124	1	15	
Toluene	**9.91**	**10.1**	10.0	10.0	99	101	80-120	2	18	
(trans) 1,3-Dichloropropene	**7.95**	**8.12**	10.0	10.0	80	81	80-134	2	17	

Date of Report: March 6, 2024
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Laboratory Reference: 2402-224
Project: 17-06520-000

VOLATILE ORGANICS EPA 8260D/SIM
QUALITY CONTROL
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Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0224W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1,2-Trichloroethane	**8.52**	**8.34**	10.0	10.0	85	83	77-126	2	20	
Tetrachloroethene	**9.80**	**9.69**	10.0	10.0	98	97	80-124	1	18	
1,3-Dichloropropane	**8.87**	**9.01**	10.0	10.0	89	90	80-120	2	15	
2-Hexanone	**7.67**	**7.48**	10.0	10.0	77	75	80-130	3	16	I,I
Dibromochloromethane	**8.75**	**8.55**	10.0	10.0	88	86	80-128	2	15	
1,2-Dibromoethane	**9.01**	**9.14**	10.0	10.0	90	91	80-127	1	15	
Chlorobenzene	**9.25**	**9.35**	10.0	10.0	93	94	80-120	1	17	
1,1,1,2-Tetrachloroethane	**8.98**	**9.20**	10.0	10.0	90	92	80-125	2	17	
Ethylbenzene	**9.40**	**9.48**	10.0	10.0	94	95	80-125	1	18	
m,p-Xylene	**19.3**	**19.3**	20.0	20.0	97	97	80-127	0	18	
o-Xylene	**9.36**	**9.61**	10.0	10.0	94	96	80-126	3	18	
Styrene	**10.1**	**10.3**	10.0	10.0	101	103	80-130	2	17	
Bromoform	**7.80**	**8.39**	10.0	10.0	78	84	80-130	7	15	I
Isopropylbenzene	**9.95**	**9.97**	10.0	10.0	100	100	80-129	0	18	
Bromobenzene	**9.57**	**9.23**	10.0	10.0	96	92	76-128	4	16	
1,1,2,2-Tetrachloroethane	**8.49**	**8.44**	10.0	10.0	85	84	74-130	1	15	
1,2,3-Trichloropropane	**8.39**	**8.20**	10.0	10.0	84	82	71-129	2	25	
n-Propylbenzene	**9.70**	**9.15**	10.0	10.0	97	92	80-129	6	19	
2-Chlorotoluene	**9.94**	**9.59**	10.0	10.0	99	96	80-128	4	18	
4-Chlorotoluene	**9.79**	**9.71**	10.0	10.0	98	97	80-130	1	19	
1,3,5-Trimethylbenzene	**9.36**	**9.16**	10.0	10.0	94	92	80-131	2	18	
tert-Butylbenzene	**9.61**	**9.25**	10.0	10.0	96	93	80-130	4	18	
1,2,4-Trimethylbenzene	**9.05**	**8.86**	10.0	10.0	91	89	80-130	2	18	
sec-Butylbenzene	**9.83**	**9.57**	10.0	10.0	98	96	80-130	3	18	
1,3-Dichlorobenzene	**10.1**	**9.90**	10.0	10.0	101	99	80-126	2	17	
p-Isopropyltoluene	**9.71**	**9.44**	10.0	10.0	97	94	80-132	3	18	
1,4-Dichlorobenzene	**9.47**	**9.41**	10.0	10.0	95	94	80-121	1	17	
1,2-Dichlorobenzene	**9.99**	**9.86**	10.0	10.0	100	99	79-125	1	15	
n-Butylbenzene	**9.96**	**9.58**	10.0	10.0	100	96	80-138	4	19	
1,2-Dibromo-3-chloropropane	**7.46**	**8.05**	10.0	10.0	75	81	73-133	8	15	
1,2,4-Trichlorobenzene	**9.63**	**9.54**	10.0	10.0	96	95	80-139	1	18	
Hexachlorobutadiene	**11.3**	**10.5**	10.0	10.0	113	105	80-151	7	18	
Naphthalene	**8.71**	**8.52**	10.0	10.0	87	85	68-144	2	25	
1,2,3-Trichlorobenzene	**10.8**	**10.6**	10.0	10.0	108	106	75-146	2	28	
Surrogate:										
Dibromofluoromethane					*89*	*90*	*75-127*			
Toluene-d8					*101*	*101*	*80-127*			
4-Bromofluorobenzene					*103*	*106*	*78-125*			

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PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWDUP**					
Laboratory ID:	02-224-01					
Benzo[a]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Chrysene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Benzo[b]fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Benzo(j,k)fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Benzo[a]pyrene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Dibenz[a,h]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-23-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*59*	*26-106*				
Pyrene-d10	*71*	*45-104*				
Terphenyl-d14	*73*	*43-114*				
Client ID:	**MW-14**					
Laboratory ID:	02-224-03					
Benzo[a]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Chrysene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[a]pyrene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-22-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*43*	*26-106*				
Pyrene-d10	*88*	*45-104*				
Terphenyl-d14	*99*	*43-114*				

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PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-13**					
Laboratory ID:	02-224-05					
Benzo[a]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Chrysene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[b]fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo(j,k)fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[a]pyrene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Dibenz[a,h]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-21-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*59*	*26-106*				
Pyrene-d10	*68*	*45-104*				
Terphenyl-d14	*72*	*43-114*				
Client ID:	**MW-4**					
Laboratory ID:	02-224-07					
Benzo[a]anthracene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Chrysene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[b]fluoranthene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo(j,k)fluoranthene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[a]pyrene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Dibenz[a,h]anthracene	**ND**	0.0098	EPA 8270E/SIM	2-21-24	2-21-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*36*	*26-106*				
Pyrene-d10	*51*	*45-104*				
Terphenyl-d14	*51*	*43-114*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11**					
Laboratory ID:	02-224-08					
Benzo[a]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Chrysene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[a]pyrene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-22-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*70*	*26-106*				
Pyrene-d10	*80*	*45-104*				
Terphenyl-d14	*82*	*43-114*				

Client ID:	**MW-9**					
Laboratory ID:	02-224-09					
Benzo[a]anthracene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Chrysene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[b]fluoranthene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo(j,k)fluoranthene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Benzo[a]pyrene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Dibenz[a,h]anthracene	**ND**	0.0099	EPA 8270E/SIM	2-21-24	2-21-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*59*	*26-106*				
Pyrene-d10	*73*	*45-104*				
Terphenyl-d14	*73*	*43-114*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-10**					
Laboratory ID:	02-224-10					
Benzo[a]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Chrysene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[a]pyrene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.0096	EPA 8270E/SIM	2-21-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*59*	*26-106*				
Pyrene-d10	*69*	*45-104*				
Terphenyl-d14	*70*	*43-114*				
Client ID:	**MW-8**					
Laboratory ID:	02-224-11					
Benzo[a]anthracene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Chrysene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[a]pyrene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.0099	EPA 8270E/SIM	2-22-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*58*	*26-106*				
Pyrene-d10	*88*	*45-104*				
Terphenyl-d14	*89*	*43-114*				

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PAHs EPA 8270E/SIM

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12**					
Laboratory ID:	02-224-14					
Benzo[a]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Chrysene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[a]pyrene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.0095	EPA 8270E/SIM	2-21-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*53*	*26-106*				
Pyrene-d10	*54*	*45-104*				
Terphenyl-d14	*53*	*43-114*				

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PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0221W1					
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Chrysene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	2-21-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*37*	*26-106*				
Pyrene-d10	*45*	*45-104*				
Terphenyl-d14	*45*	*43-114*				
Laboratory ID:	MB0222W1					
Benzo[a]anthracene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Chrysene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[b]fluoranthene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo(j,k)fluoranthene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Benzo[a]pyrene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Indeno(1,2,3-c,d)pyrene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Dibenz[a,h]anthracene	**ND**	0.010	EPA 8270E/SIM	2-22-24	2-22-24	
Surrogate:	*Percent Recovery*	*Control Limits*				
2-Fluorobiphenyl	*56*	*26-106*				
Pyrene-d10	*78*	*45-104*				
Terphenyl-d14	*81*	*43-114*				

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PAHs EPA 8270E/SIM
QUALITY CONTROL

Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB0221W1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	**0.306**	**0.353**	0.500	0.500	61	71	51 - 119	14	20	
Chrysene	**0.325**	**0.350**	0.500	0.500	65	70	52 - 113	7	21	
Benzo[b]fluoranthene	**0.380**	**0.425**	0.500	0.500	76	85	50 - 116	11	24	
Benzo(j,k)fluoranthene	**0.301**	**0.322**	0.500	0.500	60	64	54 - 113	7	22	
Benzo[a]pyrene	**0.341**	**0.381**	0.500	0.500	68	76	52 - 110	11	21	
Indeno(1,2,3-c,d)pyrene	**0.355**	**0.432**	0.500	0.500	71	86	55 - 114	20	21	
Dibenz[a,h]anthracene	**0.343**	**0.403**	0.500	0.500	69	81	55 - 111	16	19	
Surrogate:										
2-Fluorobiphenyl					*60*	*69*	*26-106*			
Pyrene-d10					*72*	*72*	*45-104*			
Terphenyl-d14					*72*	*74*	*43-114*			
Laboratory ID:	SB0222W1									
	SB	SBD	SB	SBD	SB	SBD				
Benzo[a]anthracene	**0.443**	**0.407**	0.500	0.500	89	81	51 - 119	8	20	
Chrysene	**0.404**	**0.471**	0.500	0.500	81	94	52 - 113	15	21	
Benzo[b]fluoranthene	**0.458**	**0.493**	0.500	0.500	92	99	50 - 116	7	24	
Benzo(j,k)fluoranthene	**0.455**	**0.445**	0.500	0.500	91	89	54 - 113	2	22	
Benzo[a]pyrene	**0.472**	**0.472**	0.500	0.500	94	94	52 - 110	0	21	
Indeno(1,2,3-c,d)pyrene	**0.432**	**0.458**	0.500	0.500	86	92	55 - 114	6	21	
Dibenz[a,h]anthracene	**0.446**	**0.473**	0.500	0.500	89	95	55 - 111	6	19	
Surrogate:										
2-Fluorobiphenyl					*65*	*72*	*26-106*			
Pyrene-d10					*84*	*88*	*45-104*			
Terphenyl-d14					*87*	*90*	*43-114*			

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWDUP**					
Laboratory ID:	02-224-01					
Arsenic	**ND**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-14**					
Laboratory ID:	02-224-03					
Arsenic	**10**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-13**					
Laboratory ID:	02-224-05					
Arsenic	**13**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-4**					
Laboratory ID:	02-224-07					
Arsenic	**4.0**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11**					
Laboratory ID:	02-224-08					
Arsenic	**13**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-9**					
Laboratory ID:	02-224-09					
Arsenic	**ND**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-10**					
Laboratory ID:	02-224-10					
Arsenic	**ND**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	
Client ID:	**MW-8**					
Laboratory ID:	02-224-11					
Arsenic	**4.1**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

TOTAL METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12**					
Laboratory ID:	02-224-14					
Arsenic	**25**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

TOTAL METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0305WM1					
Arsenic	**ND**	3.3	EPA 200.8	3-5-24	3-5-24	
Cadmium	**ND**	4.4	EPA 200.8	3-5-24	3-5-24	
Chromium	**ND**	11	EPA 200.8	3-5-24	3-5-24	
Lead	**ND**	1.1	EPA 200.8	3-5-24	3-5-24	
Laboratory ID:	MB0305W1					
Mercury	**ND**	0.50	EPA 7470A	3-5-24	3-5-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE										
Laboratory ID:	01-243-08									
	ORIG	DUP								
Arsenic	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Cadmium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA	NA	NA	20	
Laboratory ID:	02-334-01									
Mercury	**ND**	**ND**	NA	NA		NA	NA	NA	20	
MATRIX SPIKES										
Laboratory ID:	01-243-08									
	MS	MSD	MS	MSD		MS	MSD			
Arsenic	**109**	**106**	111	111	ND	**98**	**96**	75-125	3	20
Cadmium	**108**	**106**	111	111	ND	**98**	**96**	75-125	2	20
Chromium	**108**	**105**	111	111	ND	**98**	**95**	75-125	3	20
Lead	**102**	**98.2**	111	111	ND	**92**	**89**	75-125	3	20
Laboratory ID:	02-334-01									
Mercury	**6.55**	**6.50**	6.25	6.25	ND	**105**	**104**	75-125	1	20

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWDUP**					
Laboratory ID:	02-224-01					
Arsenic	**ND**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-14**					
Laboratory ID:	02-224-03					
Arsenic	**9.3**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-13**					
Laboratory ID:	02-224-05					
Arsenic	**9.8**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-4**					
Laboratory ID:	02-224-07					
Arsenic	**3.6**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-11**					
Laboratory ID:	02-224-08					
Arsenic	**5.4**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-9**					
Laboratory ID:	02-224-09					
Arsenic	**ND**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-10**					
Laboratory ID:	02-224-10					
Arsenic	**ND**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	
Client ID:	**MW-8**					
Laboratory ID:	02-224-11					
Arsenic	**3.2**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

DISSOLVED METALS
EPA 200.8/7470A

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW-12**					
Laboratory ID:	02-224-14					
Arsenic	**24**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Mercury	**ND**	0.50	EPA 7470A		3-5-24	

Date of Report: March 6, 2024
Samples Submitted: February 16, 2024
Laboratory Reference: 2402-224
Project: 17-06520-000

DISSOLVED METALS
EPA 200.8/7470A
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0305D1					
Arsenic	**ND**	3.0	EPA 200.8		3-5-24	
Cadmium	**ND**	4.0	EPA 200.8		3-5-24	
Chromium	**ND**	10	EPA 200.8		3-5-24	
Lead	**ND**	1.0	EPA 200.8		3-5-24	
Laboratory ID:	MB0305D1					
Mercury	**ND**	0.50	EPA 7470A		3-5-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	02-045-02										
	ORIG	DUP									
Arsenic	**6.78**	**6.36**	NA	NA		NA		NA	6	20	
Cadmium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Chromium	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	02-223-06										
Mercury	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	02-045-02										
	MS	MSD	MS	MSD		MS	MSD				
Arsenic	**89.6**	**90.8**	80.0	80.0	6.78	**104**	**105**	75-125	1	20	
Cadmium	**76.2**	**77.2**	80.0	80.0	ND	**95**	**97**	75-125	1	20	
Chromium	**80.4**	**79.8**	80.0	80.0	ND	**101**	**100**	75-125	1	20	
Lead	**63.2**	**64.4**	80.0	80.0	ND	**79**	**81**	75-125	2	20	
Laboratory ID:	02-223-06										
Mercury	**6.03**	**6.10**	6.25	6.25	ND	**96**	**98**	75-125	1	20	

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: HERRERA ENVIRONMENTAL
Project Number: 17-06520-000
Project Name: PACIFIC CITY PARK
Project Manager: G. IFTNER
Sampled by: SEM/KSJ

Turnaround Request (in working days)
(Check One)
☐ Same Day ☐ 1 Day
☐ 2 Days ☐ 3 Days
☒ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 02-224

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	MWDUP	2/15/24	0800	GW	7
2	MW-1		1125		3
3	MW-14		1125		7
4	MW-5		1210		3
5	MW-13		1240		7
6	MW-6		1255		3
7	MW-4		1435		7
8	MW-11		1450		7
9	MW-9		1540		7
10	MW-10		1610		7

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260 (2) SIM*	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level) cPAHs ONLY	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	DISSOLVED MTCA METALS (1)				% Moisture
1					X				X						X			X				
2					X																	
3					X				X						X			X				
4					X																	
5					X				X						X			X				
6					X																	
7					X				X						X			X				
8					X				X						X			X				
9					X				X						X			X				
10					X				X						X			X				

	Signature	Company	Date	Time
Relinquished		HEC	2/16/24	1347
Received		CORE	2/16/24	1347
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
(1) DISSOLVED METALS FIELD FILTERED
(2)* RL OF 0.02 ug/L FOR VINYL CHLORIDE

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

Page 2 of 2

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: HERRERA
Project Number: 17-06520-000
Project Name: PACIFIC CITY PARK
Project Manager: G. IFTNER
Sampled by: SEM/KST

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☐ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☒ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 02-224

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
11	MW-8	2/16/24	0927	GW	7
12	MW-2	↓	0935	↓	3
13	MW-7	↓	1102	↓	3
14	MW-12	↓	1125	↓	7
				SW	

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260 (2) SIM	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level) cPAHs ONLY	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	DISSOLVED MTCA METALS (1)			% Moisture
11					X				X						X			X			
12					X																
13					X																
14					X				X						X			X			

	Signature	Company	Date	Time
Relinquished		HEC	2/16/24	1347
Received		CORE	2/16/24	1347
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

① DISSOLVED METALS FIELD FILTERED.
② *RL OF 0.02 ug/L FOR VINYL CHLORIDE

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

HERRERA
Science + Planning + Design

TECHNICAL MEMORANDUM

Date: June 13, 2024

To: Project File

From: Jess Brown, Herrera Environmental Consultants

Subject: Data Quality Assurance Review of the Pacific City Park Groundwater Data – August 2023 through February 2024

Data Quality Assurance Review

This memorandum presents a review of data quality for 44 groundwater samples (including 3 field duplicates) collected for the Pacific City Park project between August 15, 2023 and February 15, 2024. The laboratory's performance was reviewed in accordance with quality control (QC) criteria established in *Sampling and Analysis Plan* (SAP; Herrera 2023a), by the laboratory, and in the specified methods. This memorandum includes three of the four quarterly sampling events specified in the SAP (Table 1); data validation findings for the first quarterly sampling event, as well as trip blanks and filter blanks, are provided in a separate report (Herrera 2023b). Each quarterly sampling event was conducted over 2 consecutive days, and the samples are collectively referred to as August 2023, November 2023, and February 2024 samples throughout this document.

OnSite Environmental, Inc., of Redmond, Washington, analyzed the samples for:

- Volatile Organic Compounds (VOCs) by EPA Method 8260D (EPA Method 8260D-SIM for Vinyl Chloride)
- Carcinogenic Polycyclic Aromatic Hydrocarbons (cPAHs) by EPA Method 8270E-SIM
- Metals Toxics Control Act (MCTA) Total and Dissolved Metals by EPA Method 200.8 and 7470A

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Table 1. Sample Summary.				
Sampling Event	**Dates Collected**	**Lab SDG**	**Samples Collected**	**QC Samples Collected**
August 2023	8/15/23 & 8/16/23	2308-180	14	1
November 2023	11/29/23 & 11/30/23	2311-301	14	1
February 2024	2/15/24 & 2/16/23	2402-224	13[1]	1

[1] Monitoring station MW-3 was inaccessible during the February 2024 sampling event.

Quality control data summaries submitted by the laboratory were reviewed; raw data were not submitted by the laboratory. Data qualifiers (flags) were added to the sample results in the laboratory reports. Data validation results are summarized below, followed by definitions of data qualifiers.

Custody, Preservation, Holding Times, and Completeness – Acceptable

The samples were properly preserved, and sample custody was maintained from sample collection to receipt at the laboratory. The laboratory reports were complete and contained results for all samples and tests requested on the chain-of-custody (COC) forms.

All samples were analyzed within the extraction and analysis holding times specified in the SAP.

Laboratory Reporting Limits – Acceptable with Discussion

The laboratory reporting limits established in the SAP were always met for cPAHs, always exceeded metals (total and dissolved), and exceeded for three VOC parameters. No data were qualified due to elevated reporting limits, but the elevated reporting limits should be considered when comparing the affected undetected data to the dangerous waste criteria listed in Table 3 of the SAP.

With the exception of arsenic, total and dissolved metals were always undetected in the samples at elevated reporting limits. The elevated reporting limits exceeded the dangerous waste criteria levels for cadmium, chromium, and mercury, which are listed in Table 3 of the SAP.

For VOCs, all samples were undetected for methylene chloride and toluene at an elevated reporting limit that was below the comparison levels listed in Table 3 of the SAP. While 20 percent of vinyl chloride samples had an elevated reporting limit of 0.2 micrograms per liter (ug/L), data quality was unaffected because the parameters were all detected above the reporting limit.

Table 2 provides summary of parameters with undetected values at elevated reporting limits.

Table 2. Summary of Elevated Reporting Limits.			
Parameter	**SAP Reporting Limit**	**Laboratory Reporting Limit**	**Percent of Samples Undetected**
Arsenic, dissolved	0.5	3.0	41
Cadmium, dissolved	0.05	4.0	100
Chromium, dissolved	0.33	10	100
Lead, dissolved	0.15	1.0	100
Mercury, dissolved	0.009	0.5	100
Arsenic, total	0.5	3.3	37
Cadmium, total	0.05	4.4	100
Chromium, total	0.33	11	100
Lead, total	0.15	1.1	100
Mercury, total	0.009	0.5	100
Methylene Chloride	0.2	1.0	100
Toluene	0.2	1.0	100

Method Blank Analysis – Acceptable

Method blanks were analyzed at the required frequency. Method blanks did not contain levels of target analytes above the laboratory reporting limits.

Laboratory Control Sample Analysis – Acceptable with Discussion

Laboratory control samples (LCS) were analyzed with project samples for VOCs and cPAHs at the required frequency. LCS samples were specified in the SAP for metals but not analyzed; however, accuracy for this parameter group was adequately evaluated through matrix spike samples, and no data were qualified.

With the exceptions noted below, the LCS and laboratory control sample duplicate (LCSD) percent recovery values for all parameters met the criteria established in the SAP and laboratory. No data were qualified due to LCS results.

- The LCS and LCSD analyzed for chloromethane samples from November 2023 were qualified by the laboratory for exceeding the laboratory lower limit (59 and 61 percent versus 63 to 138 percent criterion). Data was not qualified, because SAP criterion (53 to 132 percent) was met, the exceedance was less than 5 percent, and the other LCS samples for this parameter met laboratory and SAP control limits.
- The LCS and LCSD analyzed for acetone samples from November 2023 were qualified by the laboratory for exceeding the laboratory lower limit (73 and 75 percent versus 76 to 125 percent criterion). Data was not qualified because SAP criteria (53 to 132 percent) was met, the exceedance was slight, and the other LCS samples for this parameter met laboratory and SAP control limits.

- The LCS analyzed for 2-hexanone samples from November 2023 was qualified by the laboratory for exceeding the laboratory lower limit (79 percent versus 80 to 130 percent criterion). Data was not qualified because SAP criterion (53 to 132 percent) was met, the exceedance was slight, and the other LCS samples for this parameter met laboratory and SAP control limits.
- The LCS and/or LCSD analyzed for bromomethane and iodomethane samples from November 2023 had LCS recoveries below the 53 to 132 percent SAP criterion (46 percent for bromomethane; 36 and 45 percent for iodomethane). Data were not qualified because the data met laboratory control limits, and because at least 50 percent of LCS recoveries for these parameters met SAP criterion.
- The LCS and LCSD analyzed for 1,3-dichloropropane samples from February 2024 were qualified by the laboratory for exceeding the laboratory upper limit (122 and 123 percent versus 80 to 120 percent criterion). Data was not qualified because SAP criterion (53 to 132 percent) was met, the exceedance was slight, and the other LCS samples for this parameter met laboratory and SAP control limits.
- The LCSD analyzed for acetone sample from February 2024 was qualified by the laboratory slightly low recovery (74 percent versus 76 to 125 percent criterion). Data was not qualified because SAP criterion (53 to 132 percent) was met, the exceedance was slight, and the other LCS sample for this parameter met laboratory and SAP control limits.
- The LCS and LCSD analyzed for 2-hexanone samples from February 2024 were qualified by the laboratory due to recoveries slightly below laboratory criterion (77 and 75 percent versus 80 to 120 percent criterion). Data was not qualified because SAP criterion (53 to 132 percent) was met, the exceedance was slight, and the other LCS samples for this parameter met laboratory and SAP control limits.
- The LCS analyzed for bromoform sample from February 2024 was qualified by the laboratory slightly low recovery (78 percent versus 80-130 percent criterion). Data was not qualified because SAP criterion (53 to 132 percent) was met, the exceedance was slight, and the other LCS samples for this parameter met laboratory and SAP control limits.

Matrix Spike Analysis – Acceptable with Discussion

Matrix spike (MS) samples were analyzed with project samples for metals at the required frequency. MS samples were specified in the SAP for VOCs and cPAHs but not analyzed; however, accuracy and potential matrix interference for these parameter groups were adequately evaluated through surrogate standards and no data were qualified. With one exception noted below, the MS and matrix spike duplicate (MSD) percent recovery values for all parameters met the criterion established in the SAP and laboratory. No data were qualified due to MS results.

- The MS sample analyzed for total chromium from August 2023 had a slightly low MS recovery (74 percent versus the 75 to 125 percent criterion). No data were not qualified because the exceedance was marginal.

Surrogate Standard Analysis – Acceptable with Discussion

Surrogate standards were analyzed with project samples for VOCs and cPAHs. With the exception noted below, the percent recovery values for all parameters met laboratory control criteria.

- The surrogate standard (pyrene-d10) analyzed for MW-11 and MW-9 for November 2023 samples exceeded the lower limit (32 and 40 percent, respectively, versus the 45 to 104 percent criterion). The data were not qualified, because the other two surrogate standards were in control for both samples and the recoveries for pyrene-d10 were greater than 10 percent.

Laboratory Duplicate Analysis – Acceptable with Discussion

Laboratory duplicates were analyzed for dissolved and total metals at the required frequency specified in the SAP. In addition, MS/MSD samples were analyzed for metals. Laboratory duplicates were specified in the SAP for cPAHs, but not analyzed; however, LCS/LCSD analysis were included and are an acceptable measure of precision. For VOCs, LCS/LCSD samples were analyzed at the required frequency specified in the SAP.

For project samples, the relative percent difference (RPD) was calculated for each analyte where both duplicate values were greater than five times the reporting limit (RL). The difference between duplicate values was calculated if the detected compound concentration was less than five times the RL in either the sample or the duplicate. The RPD values or difference values met the control limits established by the laboratory or specified method, with one exception noted below.

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- The LCS/LCSD percent RPD for 1,2-dibromo-3-chloropropane for the sample from November 2023 was slightly above the laboratory limit (17 versus 15 percent) but within SAP criterion of 31 percent. The other LCS/LCSD RPD for this parameter was within laboratory limits and no data were qualified.

Field Duplicate Analysis – Acceptable

One field duplicate sample was collected during each sampling event. For project samples, the relative percent difference (RPD) was calculated for each analyte where both duplicate values were greater than five times the reporting limit (RL). The difference between duplicate values was calculated if the detected compound concentration was less than five times the RL in either the sample or the duplicate.

The RPD values or difference values met the control limits established by the laboratory or specified method for all duplicate samples.

Definition of Data Qualifiers

The following are data qualifier definitions (Table 3) applied for this project.

Table 3. Data Qualifier Definitions.

Data Qualifier	Definition
J	Value is an estimate based on analytical results
R	Value is rejected based on analytical results
U	Value is below the reporting limit
UJ	Value is below the reporting limit and is an estimate based on analytical results

References

Herrera. 2023a. Sampling and Analysis Plan. Vapor Intrusion and Groundwater Exploration, Pacific Park/Dumpsite, Pacific, Washington. Prepared by Herrera Environmental Consultants, Inc., Seattle, Washington. Updated April 24.

Herrera. 2023b. Sampling and Analysis Plan, Vapor Intrusion and Groundwater Exploration, Pacific Park/Dumpsite, Pacific, Washington. Prepared for the River and Floodplain Management Section, King County Water and Land Resources Division by Herrera Environmental Consultants, Inc., Seattle, Washington. August 3, 2022. Updated April 24, 2023.