

Chevron Environmental Management Company and King
County Metro Transit

Second Semi-Annual 2023 Groundwater Monitoring Report

**Former Chevron Bulk Terminal No. 100-1327
1602 North Northlake Way
Facilities North/King County (Metro)
Seattle, Washington**

May 10, 2024

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Prepared By:

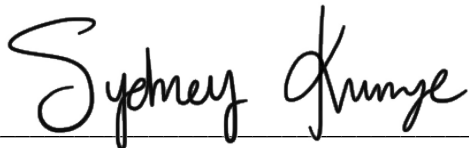
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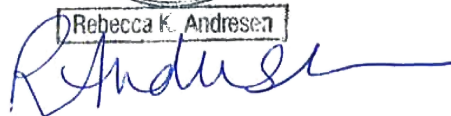
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1 Introduction

On behalf of Chevron Environmental Management Company (Chevron) and King County Department of Transportation (KCDOT) Metro Transit Division (Metro), Arcadis US, Inc. (Arcadis) has prepared this report to document the Second Semi-Annual 2023 groundwater gauging and sampling event for the former Chevron Bulk Terminal No. 100-1327 (site) conducted during the second half of 2023. Site Regulatory identifiers include Facility/Site identification 2217, and Cleanup Site identification 1275.

1.1 Site Description

The site is located at 1602 North Northlake Way along the north shore of Lake Union in a mixed-use residential and commercial neighborhood with industrial marine facilities located along the shoreline. This site is divided into two operable areas: the North Yard, located on the north side of North Northlake Way; and the South Yard, located adjacent to the north shore of Lake Union and south of North Northlake Way (**Figure 1**).

1.2 North Yard

The portion of the site that is located between North 34th Street to the north and North Northlake Place to the south, and between Woodlawn Avenue North to the west and Densmore Avenue North to the East is the North Yard. Touchstone NLU LLC Corporation (Touchstone) purchased this property in 2009 and has redeveloped the property.

1.2.1 Touchstone PPCD

In 2007, Touchstone entered into a Prospective Purchaser Consent Decree (PPCD) with the State of Washington, Department of Ecology (Ecology) that required Touchstone to remediate the North Yard to Model Toxics Control Act (MTCA) Method A soil cleanup levels for unrestricted use. Touchstone has completed remediation of the North Yard portion of the site as part of its redevelopment, called North Edge. According to the terms of the PPCD, Touchstone excavated and removed petroleum-contaminated soil within the Touchstone property line for treatment and/or offsite disposal. Soil outside the Touchstone property line and groundwater are part of the Metro Lake Union/former Chevron Bulk Terminal Site Consent Decree.

1.3 South Yard

The South Yard is bounded by Lake Union to the southeast, a private property (Northlake Shipyard) to the northwest, North Northlake Place to the northeast, and a property occupied by the Seattle Harbor Patrol to the southeast.

1.3.1 Metro Lake Union/Former Chevron Bulk Terminal Site Consent Decree

In 1999 Chevron and KCDOT entered into a Consent Decree (CD) with Ecology that required remediation of upland soil of the South Yard to MTCA Method A industrial soil cleanup levels for restricted use and MTCA

Method B groundwater cleanup levels for protection of Lake Union surface waters. Active cleanup work was divided into two phases. Phase 1 work was completed in 2000. Active Phase 2 work began in 1999 and was completed with Touchstone's PPCD site closure in 2016. All active remediation work required under the CD for the South Yard has been completed. Compliance groundwater monitoring continues.

2 Groundwater monitoring methodology

Groundwater monitoring has been conducted intermittently (one or more times per year) since 1999 and quarterly in 2012 and 2013. In 2014, Ecology approved a sampling schedule consisting of semi-annual compliance monitoring. This report documents groundwater gauging and sampling events conducted by Arcadis during the second half of 2023.

During this reporting period, depth to water readings and groundwater samples were collected at accessible monitoring wells by subcontractor Blaine Tech Services, Inc. (Blaine Tech), with direction from Arcadis, on November 28, 2023.

2.1 Groundwater Gauging Methods

Depth to water was measured using a static oil/water level indicator from the top of the monitoring well casing and recorded on field data sheets. The oil/water level indicators were decontaminated with an Alconox® and water scrub and rinsed between each measurement to prevent cross contamination. Non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water. Field notes taken during gauging activities are included in **Appendix A**.

2.2 LNAPL Recovery Methods

Manual removal of Light Non-Aqueous Phase Liquid (LNAPL) was completed at the site quarterly from 1997 to 2007, periodically from 2007 to 2013 and quarterly in 2014. LNAPL removal was conducted periodically if measurable LNAPL (more than approximately 0.01 ft) was detected in a monitoring well during gauging events. LNAPL removal from monitoring wells was performed using manual bailing methods. Removed LNAPL was stored onsite in properly labeled sealed drums for disposal. All of the monitoring wells which historically contained LNAPL at levels greater than 0.01 ft were destroyed as part of development activities conducted in the North Yard by Touchstone in 2015. No LNAPL was found in the remaining monitoring wells during gauging events and therefore, no manual removal of LNAPL was conducted during the second half of 2023. Groundwater elevation and LNAPL monitoring data are presented in **Table 1**.

2.3 Groundwater Sampling Methods

In total, 11 monitoring wells were sampled from the site monitoring well network during this reporting period. The wells sampled during this reporting period include MW-4, MW-7, MW-8A, MW-19, MW-20, MW-21, MW-25, MW-26, AGI-2, MLU-1, and MLU-3. Field notes taken during the groundwater sampling activities are included in **Appendix A**.

Sampling was conducted in accordance with low flow purge methodology, using a peristaltic pump and disposable tubing. The flow rate used during sampling was approximately 200 milliliters per minute (mL/min) thereby minimizing water level drawdown in the well. During low flow purging, water quality parameters including pH, specific conductivity and temperature were monitored using a Yellow Springs Instruments (YSI) 556 multi-parameter meter with a flow-through measurement cell. Groundwater was considered stabilized when pH readings remained within 0.1 unit, and specific conductivity and temperature readings remained within 3%. The flow-through measurement cell was then disconnected from the disposable tubing and sample containers were filled directly from the tubing.

After the samples were collected in appropriate laboratory bottles, they were labeled, stored in a cooler packed with ice, and submitted under proper chain-of-custody procedures to Pace Analytical Laboratory (Pace) of Mount Juliet, Tennessee. Groundwater samples were submitted to the analytical laboratory for the following analyses for site specific compounds of concern (COCs):

- Benzene, toluene, and ethylbenzene by Environmental Protection Agency (EPA) method 8260D.
- Polycyclic aromatic hydrocarbons (PAHs) including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene by EPA 8270E SIM.
- Dissolved lead and arsenic by EPA method 6020B.

A duplicate groundwater sample (DUP) was collected from MW-8A during the sampling event and submitted blind to the laboratory for the above analyses.

3 Groundwater monitoring Results

3.1 Groundwater Gauging Results

Groundwater monitoring wells were gauged at the site on November 28, 2023. Historically, groundwater elevations were adjusted for LNAPL solubility if present within a monitoring well. A solubility of 0.8 was used to adjust groundwater elevation for LNAPL if observed within onsite monitoring wells during the respective gauging events. No measurable LNAPL was detected during the November 2023 gauging event.

On November 28, 2023, groundwater monitoring wells MW-4, MW-7, MW-8A, MW-9R, MW-11, MW-14, MW-15, MW-19, MW-20, MW-21, MW-22, MW-24, MW-25, MW-26, MW-29, MW-30, AGI-2, EW-1, MLU-1, and MLU-3 were gauged by Blaine Tech to determine groundwater elevations. Depth to groundwater ranged between 12.38 feet below top of casing (btoc) in monitoring well MW-29 to 24.08 feet btoc in monitoring well MW-24.

Groundwater elevations ranged from 15.83 feet above the North American Vertical Datum of 1988 (NAVD 88) in monitoring well MW-14 to 45.69 feet above NAVD 88 in monitoring well MW-24.

The horizontal hydraulic gradient for the North Yard was calculated to be 0.07267 feet per foot (ft/ft) based on the groundwater elevations calculated at monitoring wells MW-24, MW-29, and MW-14 with a southwest flow direction. The groundwater flow direction has historically been to the southwest. A potentiometric groundwater elevation figure for November 28, 2023, monitoring well gauging data is included on **Figure 2**. Hydraulic Gradient Three Point Solution Worksheets are included as **Appendix B**.

3.2 Groundwater Analytical Results

Groundwater cleanup levels at the site were based on MTCA Method B surface water cleanup levels (CULs) established in the Ecology approved cleanup action plan (CAP) (Foster Wheeler, 1998). The MTCA Method B surface water CULs for specific COCs at the site include:

Constituent of Concern	Groundwater CUL (µg/L)
Benzene	43
Toluene	48,500
Ethylbenzene	6,910
Naphthalene	9,880
Benzo(a)anthracene	0.0296
Benzo(a)pyrene	0.0296
Benzo(b)fluoranthene	0.0296
Benzo(k)fluoranthene	0.0296
Chrysene	0.0296
Dibenz(a,h)anthracene	0.0296
Indeno(1,2,3-cd) pyrene	0.0296
Arsenic	0.0982
Lead	5

Note:

µg/L = microgram per liter

During the Second Semi-Annual 2023 sampling event conducted on November 28, 2023, groundwater was sampled and analyzed for benzene, toluene, ethylbenzene, cPAH, naphthalene, dissolved arsenic, and dissolved lead from monitoring wells MW-4, MW-7, MW-8A, MW-19, MW-20, MW-21, MW-25, MW-26, AGI-2, MLU-1, and MLU-3.

Dissolved arsenic was detected above the MTCA Method B surface water CUL of 0.0982 µg/L in the filtered groundwater samples from monitoring wells MW-4, MW-7, MW-8A, MW-19, MW-20, MW-21, MW-25, MW-26, MLU-1, MLU-3 and AGI-2 including duplicate sample collected from the well MW-8A at concentrations ranging from 0.206 J µg/L (where J indicates the concentration is an approximate value) in AGI-2 to 13.8 µg/L in AGI-2. Arsenic was detected at concentrations greater than the Ecology identified background value of 8 ug/L for the Puget Sound Basin in dissolved groundwater samples from wells AGI-2 and MW-2. No other COCs were detected at concentrations greater than the respective CULs.

Laboratory data from point of compliance wells will be reported in the Ecology Environmental Information Management (EIM) system under EIM identification number FS2217. The laboratory analytical report is included in **Appendix C** and the laboratory analytical results are presented on **Figure 3, 4 and 5**, and in **Table 2**. Historical groundwater analytical results are presented in **Appendix D**. Consecutive sampling events under the MTCA Method B surface water CULs in POC wells are presented in **Table 3**.

4 Conclusions

Groundwater currently complies with applicable CULs except for arsenic. Dissolved arsenic was detected greater than the PQL in wells MW-7, MW-20, and MW-21, AGI-2 and was detected above the laboratory MDL but below the PQL in wells MW-4, MW-8A, MLU-1, MLU-3, MW-19, MW-25, and MW-26. The detected arsenic concentrations were less than the Ecology identified background value of 8 µg/L for the Puget Sound Basin (Ecology 2022), with the exception of the concentrations detected in AGI-2 and MW-21. There were no exceedances of benzene, toluene, ethylbenzene, naphthalene, lead, and cPAHs during the second half of 2023 sampling activities. The groundwater elevation data collected during the November 2023 monitoring event indicate groundwater flow direction and horizontal hydraulic gradient to be generally consistent with historical data.

As of the most recent sampling event in November 2023, the 11 compliance wells have been in compliance with the site CULs for at least eight consecutive semiannual groundwater monitoring events for benzene, toluene, ethylbenzene, naphthalene, and cPAHs. Ten compliance wells have been in compliance with the site CULs for at least six consecutive semiannual groundwater monitoring events for lead. Arcadis recommends the groundwater sampling scope and frequency be reduced at the site. A formal proposal to modify the groundwater monitoring program at the site will be submitted to Ecology under separate cover.

5 Recommendations

Semi-annual groundwater sampling will continue in the First half of 2024, with the next event scheduled for the second quarter 2024.

6 References

- Arcadis. 2022. Five-Year Review Report. Former Chevron Bulk Plant No. 100-1327 1602 North Northlake Way Facilities North/King County (Metro) Seattle, Washington. May 9.
- Ecology. 2010. *Draft Revisions — MTCA Method A Groundwater Cleanup Levels*. November 16.
- Ecology. 2022. Natural Background Groundwater Arsenic Concentrations in Washington State Study Results. January. Available online: [Natural Background Groundwater Arsenic Concentrations in Washington State: Study Results](#)
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Tables

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-3	North Yard	08/11/99	104.07	--	--	--	--	No	--
MW-3	North Yard	10/22/99	104.07	--	--	--	--	No	--
MW-3	North Yard	05/24/01	104.07	10.25	9.99	0.26	--	No	94.03
MW-3	North Yard	06/27/01	104.07	--	--	--	--	No	--
MW-3	North Yard	03/18/02	104.07	9.28	8.59	0.69	--	No	95.34
MW-3	North Yard	12/31/02	104.07	--	--	--	--	No	--
MW-3	North Yard	03/26/03	104.07	7.02	--	0.00	--	No	97.05
MW-3	North Yard	06/26/03	104.07	11.49	10.49	1.00	2.75	No	93.38
MW-3	North Yard	07/21/03	104.07	--	--	--	2.50	No	--
MW-3	North Yard	08/28/03	104.07	--	--	--	3.00	No	--
MW-3	North Yard	10/16/03	104.07	13.89	11.55	2.34	1.75	No	92.05
MW-3	North Yard	11/21/03	104.07	--	--	--	3.50	No	--
MW-3	North Yard	12/17/03	104.07	11.02	10.27	0.75	2.00	No	93.65
MW-3	North Yard	01/29/04	104.07	10.59	9.82	0.77	1.75	No	94.10
MW-3	North Yard	02/18/04	104.07	10.32	9.77	0.55	0.75	No	94.19
MW-3	North Yard	03/30/04	104.07	9.93	9.28	0.65	0.75	No	94.66
MW-3	North Yard	09/22/04	104.07	11.35	10.61	0.74	1.50	No	93.31
MW-3	North Yard	03/15/05	104.07	12.98	10.82	2.16	3.00	No	92.82
MW-3	North Yard	9/28/05*	104.07	11.25	--	<3.0	3.50	No	--
MW-3	North Yard	03/29/06	104.07	12.40	8.76	3.64	6.50	No	94.58
MW-3	North Yard	03/21/07	104.07	10.67	9.13	1.54	2.00	No	94.63
MW-3	North Yard	03/25/08	104.07	10.38	9.73	0.65	1.00	No	94.21
MW-3	North Yard	09/08-09/08	104.07	11.02	10.55	0.47	1.50	Yes	93.43
MW-3	North Yard	12/11/08	104.07	12.10	10.79	1.31	2.50	Yes	93.02
MW-3	North Yard	03/30-31/09	104.07	9.70	--	0.00	0.00	Yes	94.37
MW-3	North Yard	06/15/09	104.07	10.97	9.79	1.18	2.50 ⁴	Yes	94.04
MW-3	North Yard	09/10-11/09	104.07	12.21	10.94	1.27	1.66 ⁴	Yes	92.88
MW-3	North Yard	02/23/10	104.07	11.25	8.75	2.50	1.75 ⁴	Yes	94.82
MW-3	North Yard	03/15/10	104.07	11.25	8.60	2.65	2.50 ⁵	Yes	94.94
MW-3	North Yard	03/23/12	104.07	12.00	11.90	0.10	0.50	Yes	92.15
MW-3	North Yard	06/01/12	104.07	--	--	--	--	Yes	--
MW-3	North Yard	04/22/13	104.07	--	--	--	--	Yes	--
MW-3	North Yard	06/26/13	104.07	--	--	--	--	Yes	--
MW-3	North Yard	09/18/13	104.07	--	--	--	--	Yes	--
MW-3	North Yard	10/14/13	104.07	--	--	--	--	Yes	--
MW-3	North Yard	03/27/14	104.07	22.78	--	0.00	--	Yes	81.29
MW-3	North Yard	06/10/14	104.07	11.88	6.97	4.91	5.00	Yes	96.12
MW-3	North Yard	07/22/14	104.07	10.52	9.83	0.69	--	Yes	94.10
MW-4	South Yard	08/10/99	--	--	--	--	--	--	--
MW-4	South Yard	10/20/99	--	--	--	--	--	--	--
MW-4	South Yard	07/26/01	--	15.46	--	0.00	--	--	--
MW-4	South Yard	10/11/02	--	--	--	--	--	--	--
MW-4	South Yard	12/31/02	--	16.88	--	0.00	--	--	--
MW-4	South Yard	02/27/03	--	16.22	--	0.00	--	--	--
MW-4	South Yard	03/26/03	--	15.38	--	0.00	--	--	--
MW-4	South Yard	04/28/03	--	15.12	--	0.00	--	--	--
MW-4	South Yard	05/30/03	--	15.02	--	0.00	--	--	--
MW-4	South Yard	06/25/03	--	15.39	--	0.00	--	--	--

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-4	South Yard	09/16/03	--	16.76	--	0.00	--	--	--
MW-4	South Yard	12/15/03	--	16.80	--	0.00	--	--	--
MW-4	South Yard	03/25/04	--	15.85	--	0.00	--	--	--
MW-4	South Yard	09/22/04	--	15.94	--	0.00	--	--	--
MW-4	South Yard	03/14/05	--	16.26	--	0.00	--	--	--
MW-4	South Yard	03/29/06	--	15.71	--	0.00	--	--	--
MW-4	South Yard	03/21/07	--	15.77	--	0.00	--	--	--
MW-4	South Yard	03/25/08	--	15.78	--	0.00	--	--	--
MW-4	South Yard	09/08-09/08	--	15.91	--	0.00	--	--	--
MW-4	South Yard	12/11/08	--	--	--	--	--	--	--
MW-4	South Yard	03/30-31/09	--	15.54	--	0.00	--	--	--
MW-4	South Yard	09/10-11/09	--	16.39	--	0.00	--	--	--
MW-4	South Yard	03/15/10	--	12.67	--	0.00	--	--	--
MW-4	South Yard	09/15/10	--	16.25	--	0.00	--	--	--
MW-4	South Yard	03/14/11	--	15.55	--	0.00	--	--	--
MW-4	South Yard	09/25/11	33.92	16.55	--	0.00	--	--	17.37
MW-4	South Yard	10/10/11	33.92	16.20	--	0.00	--	--	17.72
MW-4	South Yard	06/21/12	33.92	14.49	--	0.00	--	--	19.43
MW-4	South Yard	09/20/12	33.92	16.60	--	0.00	--	--	17.32
MW-4	South Yard	09/21/12	33.92	16.59	--	0.00	--	--	17.33
MW-4	South Yard	12/26/12	33.92	16.62	--	0.00	--	--	17.30
MW-4	South Yard	04/22/13	33.92	15.18	--	0.00	--	--	18.74
MW-4	South Yard	06/26/13	33.92	15.15	--	0.00	--	--	18.77
MW-4	South Yard	09/18/13	33.92	15.98	--	0.00	--	--	17.94
MW-4	South Yard	10/14/13	33.92	16.26	--	0.00	--	--	17.66
MW-4	South Yard	03/27/14	33.92	15.69	--	0.00	--	--	18.23
MW-4	South Yard	06/10/14	33.92	15.05	--	0.00	--	--	18.87
MW-4	South Yard	11/11/15	33.92	16.52	--	0.00	--	--	17.40
MW-4	South Yard	04/18/16	33.92	13.31	--	0.00	--	--	20.61
MW-4	South Yard	12/07/16	33.92	16.78	--	0.00	--	--	17.14
MW-4	South Yard	06/21/17	33.92	14.99	--	0.00	--	--	18.93
MW-4	South Yard	12/05/17	33.92	16.72	--	0.00	--	--	17.20
MW-4	South Yard	06/26/18	33.92	15.38	--	0.00	--	--	18.54
MW-4	South Yard	11/27/18	33.92	16.59	--	0.00	--	--	17.33
MW-4	South Yard	06/20/19	33.92	15.33	--	0.00	--	--	18.59
MW-4	South Yard	12/17/19	33.92	16.96	--	0.00	--	--	16.96
MW-4	South Yard	06/10/20	33.92	15.19	--	0.00	--	--	18.73
MW-4	South Yard	11/10/20	33.92	16.64	--	0.00	--	--	17.28
MW-4	South Yard	06/28/21	33.92	15.11	--	0.00	--	--	18.81
MW-4	South Yard	01/06/22	33.92	16.30	--	0.00	--	--	17.62
MW-4	South Yard	06/24/22	33.92	14.97	--	0.00	--	--	18.95
MW-4	South Yard	12/16/22	33.92	15.30	--	0.00	--	--	18.62
MW-4	South Yard	06/01/23	33.92	15.08	--	0.00	--	--	18.84
MW-4	South Yard	11/28/23	33.92	16.81	--	0.00	--	--	17.11
MW-7	South Yard	08/10/99	98.39	--	--	--	--	--	--
MW-7	South Yard	10/20/99	98.39	--	--	--	--	--	--
MW-7	South Yard	07/26/01	98.39	12.61	--	0.00	--	--	85.78
MW-7	South Yard	04/03/02	98.39	13.03	--	0.00	--	--	85.36

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-7	South Yard	07/02/02	98.39	12.13	--	0.00	--	--	86.26
MW-7	South Yard	09/03/02	98.39	13.76	--	0.00	--	--	84.63
MW-7	South Yard	10/11/02	98.39	14.87	--	0.00	--	--	83.52
MW-7	South Yard	03/26/03	98.39	13.12	--	0.00	--	--	85.27
MW-7	South Yard	04/28/03	98.39	12.33	--	0.00	--	--	86.06
MW-7	South Yard	05/30/03	98.39	11.76	--	0.00	--	--	86.63
MW-7	South Yard	06/25/03	98.39	13.14	--	0.00	--	--	85.25
MW-7	South Yard	09/16/03	98.39	13.93	--	0.00	--	--	84.46
MW-7	South Yard	12/15/03	98.39	13.96	--	0.00	--	--	84.43
MW-7	South Yard	03/21/07	98.39	--	--	--	--	--	--
MW-7	South Yard	03/25/08	98.39	--	--	--	--	--	--
MW-7	South Yard	09/08-09/08	98.39	--	--	--	--	--	--
MW-7	South Yard	12/11/08	98.39	--	--	--	--	--	--
MW-7	South Yard	03/30-31/09	98.39	--	--	--	--	--	--
MW-7	South Yard	09/10-11/09	98.39	--	--	--	--	--	--
MW-7	South Yard	03/15/1011	98.39	13.07	--	0.00	--	--	85.32
MW-7	South Yard	09/15/10	98.39	13.40	--	0.00	--	--	84.99
MW-7	South Yard	03/14/11	98.39	12.85	--	0.00	--	--	85.54
MW-7	South Yard	06/21/12	31.13	12.19	--	0.00	--	--	18.94
MW-7	South Yard	09/20/12	31.13	13.74	--	0.00	--	--	17.39
MW-7	South Yard	12/26/12	31.13	15.67	--	0.00	--	--	15.46
MW-7	South Yard	04/22/13	31.13	12.40	--	0.00	--	--	18.73
MW-7	South Yard	06/26/13	31.13	12.30	--	0.00	--	--	18.83
MW-7	South Yard	09/18/13	31.13	13.15	--	0.00	--	--	17.98
MW-7	South Yard	10/14/13	31.13	13.37	--	0.00	--	--	17.76
MW-7	South Yard	03/27/14	31.13	12.82	--	0.00	--	--	18.31
MW-7	South Yard	06/10/14	31.13	12.21	--	0.00	--	--	18.92
MW-7	South Yard	11/11/15	31.13	13.81	--	0.00	--	--	17.32
MW-7	South Yard	04/18/16	31.13	12.43	--	0.00	--	--	18.70
MW-7	South Yard	12/07/16	31.13	13.88	--	0.00	--	--	17.25
MW-7	South Yard	06/12/17	31.13	12.20	--	0.00	--	--	18.93
MW-7	South Yard	12/05/17	31.13	13.90	--	0.00	--	--	17.23
MW-7	South Yard	06/26/18	31.13	12.47	--	0.00	--	--	18.66
MW-7	South Yard	11/27/18	31.13	13.78	--	0.00	--	--	17.35
MW-7	South Yard	06/20/19	31.13	12.50	--	0.00	--	--	18.63
MW-7	South Yard	12/17/19	31.13	14.10	--	0.00	--	--	17.03
MW-7	South Yard	06/10/20	31.13	12.20	--	0.00	--	--	18.93
MW-7	South Yard	11/10/20	31.13	13.77	--	0.00	--	--	17.36
MW-7	South Yard	06/28/21	31.13	12.27	--	0.00	--	--	18.86
MW-7	South Yard	01/06/22	31.13	13.55	--	0.00	--	--	17.58
MW-7	South Yard	06/24/22	31.13	12.19	--	0.00	--	--	18.94
MW-7	South Yard	12/16/22	31.13	13.74	--	0.00	--	--	17.39
MW-7	South Yard	06/01/23	31.13	12.37	--	0.00	--	--	18.76
MW-7	South Yard	11/28/23	31.13	13.97	--	0.00	--	--	17.16
MW-8	South Yard	08/09/99	97.87	--	--	--	--	--	--
MW-8	South Yard	10/20/99	97.87	13.06	--	0.00	--	--	84.81
MW-8	South Yard	01/06/00	97.87	--	--	--	--	--	--
MW-8	South Yard	04/12/00	97.87	12.57	--	0.00	--	--	85.30

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-8	South Yard	06/27/00	97.87	12.61	--	0.00	--	--	85.26
MW-8	South Yard	09/28/00	97.87	12.88	--	0.00	--	--	84.99
MW-8	South Yard	01/15/01	97.87	13.70	--	0.00	--	--	84.17
MW-8	South Yard	06/21/01	97.87	11.77	--	0.00	--	--	86.10
MW-8	South Yard	07/26/01	97.87	12.18	--	0.00	--	--	85.69
MW-8	South Yard	03/19/02	97.87	12.84	--	0.00	--	--	85.03
MW-8	South Yard	04/03/02	97.87	12.48	--	0.00	--	--	85.39
MW-8	South Yard	05/07/02	97.87	11.86	--	0.00	--	--	86.01
MW-8	South Yard	06/06/02	97.87	12.39	--	0.00	--	--	85.48
MW-8	South Yard	07/02/02	97.87	11.79	--	0.00	--	--	86.08
MW-8	South Yard	09/03/02	97.87	13.24	--	0.00	--	--	84.63
MW-8	South Yard	10/11/02	97.87	14.04	--	0.00	--	--	83.83
MW-8	South Yard	12/31/02	97.87	13.69	--	0.00	--	--	84.18
MW-8	South Yard	03/26/03	97.87	12.23	--	0.00	--	--	85.64
MW-8	South Yard	04/28/03	97.87	12.87	--	0.00	--	--	85.00
MW-8	South Yard	05/30/03	97.87	11.80	--	0.00	--	--	86.07
MW-8	South Yard	06/25/03	97.87	12.20	--	0.00	--	--	85.67
MW-8	South Yard	09/15/03	97.87	13.45	--	0.00	--	--	84.42
MW-8A	South Yard	12/15/03	97.60	13.32	--	0.00	--	--	84.28
MW-8A	South Yard	03/25/04	97.60	12.24	--	0.00	--	--	85.36
MW-8A	South Yard	09/23/04	97.60	12.30	--	0.00	--	--	85.30
MW-8A	South Yard	03/14/05	97.60	12.68	--	0.00	--	--	84.92
MW-8A	South Yard	03/29/06	97.60	12.14	--	0.00	--	--	85.46
MW-8A	South Yard	03/21/07	97.60	12.21	--	0.00	--	--	85.39
MW-8A	South Yard	03/25/08	97.60	12.13	--	0.00	--	--	85.47
MW-8A	South Yard	09/08-09/08	97.60	12.32	--	0.00	--	--	85.28
MW-8A	South Yard	12/11/08	97.60	--	--	--	--	--	--
MW-8A	South Yard	03/30-31/09	97.60	12.04	--	0.00	--	--	85.56
MW-8A	South Yard	09/10-11/09	97.60	12.80	--	0.00	--	--	84.80
MW-8A	South Yard	03/15/10	97.60	12.23	--	0.00	--	--	85.37
MW-8A	South Yard	09/15/10	97.60	12.66	--	0.00	--	--	84.94
MW-8A	South Yard	03/14/11	97.60	12.19	--	0.00	--	--	85.41
MW-8A	South Yard	11/16/11	30.31	13.14	--	0.00	--	--	17.17
MW-8A	South Yard	06/21/12	30.31	11.45	--	0.00	--	--	18.86
MW-8A	South Yard	09/20/12	30.31	12.97	--	0.00	--	--	17.34
MW-8A	South Yard	09/21/12	30.31	12.97	--	0.00	--	--	17.34
MW-8A	South Yard	12/26/12	30.31	13.07	--	0.00	--	--	17.24
MW-8A	South Yard	04/23/13	30.31	11.70	--	0.00	--	--	18.61
MW-8A	South Yard	06/26/13	30.31	11.50	--	0.00	--	--	18.81
MW-8A	South Yard	09/18/13	30.31	12.37	--	0.00	--	--	17.94
MW-8A	South Yard	10/14/13	30.31	12.65	--	0.00	--	--	17.66
MW-8A	South Yard	03/27/14	30.31	12.21	--	0.00	--	--	18.10
MW-8A	South Yard	06/10/14	30.31	11.49	--	0.00	--	--	18.82
MW-8A	South Yard	11/11/15	30.31	12.41	--	0.00	--	--	17.90
MW-8A	South Yard	04/18/16	30.31	11.70	--	0.00	--	--	18.61
MW-8A	South Yard	12/07/16	30.31	13.26	--	0.00	--	--	17.05
MW-8A	South Yard	06/21/17	30.31	11.59	--	0.00	--	--	18.72
MW-8A	South Yard	12/05/17	30.31	12.60	--	0.00	--	--	17.71

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-8A	South Yard	06/26/18	30.31	11.89	--	0.00	--	--	18.42
MW-8A	South Yard	11/27/18	30.31	12.14	--	0.00	--	--	18.17
MW-8A	South Yard	06/20/19	30.31	11.69	--	0.00	--	--	18.62
MW-8A	South Yard	12/17/19	30.31	13.41	--	0.00	--	--	16.90
MW-8A	South Yard	06/10/20	30.31	11.48	--	0.00	--	--	18.83
MW-8A	South Yard	11/10/20	30.31	13.08	--	0.00	--	--	17.23
MW-8A	South Yard	06/28/21	30.31	11.70	--	0.00	--	--	18.61
MW-8A	South Yard	01/06/22	30.31	12.40	--	0.00	--	--	17.91
MW-8A	South Yard	06/24/22	30.31	11.75	--	0.00	--	--	18.56
MW-8A	South Yard	12/16/22	30.31	13.35	--	0.00	--	--	16.96
MW-8A	South Yard	06/01/23	30.31	11.83	--	0.00	--	--	18.48
MW-8A	South Yard	11/28/23	30.31	13.31	--	0.00	--	--	17.00
MW-9	ROW	08/11/99	103.67	--	--	--	--	No	--
MW-9	ROW	10/21/99	103.67	--	--	--	--	No	--
MW-9	ROW	05/24/01	103.67	14.07	14.02	0.05	--	No	89.64
MW-9	ROW	06/21/01	103.67	13.78	13.74	0.04	--	No	89.92
MW-9	ROW	06/27/01	103.67	13.79	--	0.00	--	No	89.88
MW-9	ROW	03/18/02	103.67	13.51	12.82	0.69	--	No	90.71
MW-9	ROW	10/16/02	103.67	--	--	0.54	--	No	--
MW-9	ROW	11/11/02	103.67	--	--	0.90	--	No	--
MW-9	ROW	12/31/02	103.67	--	--	0.91	--	No	--
MW-9	ROW	02/27/03	103.67	--	--	0.02	--	No	--
MW-9	ROW	03/26/03	103.67	--	--	0.09	--	No	--
MW-9	ROW	04/28/03	103.67	13.25	13.18	0.07	--	No	90.48
MW-9	ROW	05/30/03	103.67	13.52	13.43	0.09	--	No	90.22
MW-9	ROW	06/26/03	103.67	13.90	13.86	0.04	0.10	No	89.80
MW-9	ROW	07/21/03	103.67	--	--	0.21	2.00	No	--
MW-9	ROW	08/28/03	103.67	--	--	0.23	0.75	No	--
MW-9	ROW	10/16/03	103.67	15.98	15.41	0.57	2.00	No	88.15
MW-9	ROW	11/21/03	103.67	--	--	0.01	0.25	No	--
MW-9	ROW	12/17/03	103.67	--	--	0.00	0.00	No	--
MW-9	ROW	01/29/04	103.67	14.16	14.13	0.03	0.10	No	89.53
MW-9	ROW	02/18/04	103.67	11.11	10.94	0.17	0.25	No	92.70
MW-9	ROW	03/25/04	103.67	13.66	--	0.00	--	No	90.01
MW-9	ROW	03/30/04	103.67	13.80	13.69	0.11	0.25	No	89.96
MW-9	ROW	09/22/04	103.67	9.52	9.49	0.03	0.25	No	94.17
MW-9	ROW	03/15/05	103.67	14.81	14.52	0.29	0.25	No	89.09
MW-9	ROW	09/28/05	103.67	15.31	15.06	0.25	<0.01	No	88.56
MW-9	ROW	03/29/06	103.67	13.26	13.00	0.26	<0.5	No	90.62
MW-9	ROW	03/21/07	103.67	13.73	13.41	0.32	0.19	No	90.20
MW-9	ROW	03/25/08	103.67	13.93	--	0.00	<0.25	No	89.74
MW-9	ROW	09/08-09/08	103.67	14.23	14.22	0.01	0.00	Yes	89.45
MW-9	ROW	12/11/08	103.67	15.16	15.11	0.05	0.02	Yes	88.55
MW-9	ROW	03/30-31/09	103.67	14.06	--	0.00	--	Yes	89.61
MW-9	ROW	06/15/09	103.67	13.32	--	0.00	--	Yes	90.35
MW-9	ROW	09/10-11/09	103.67	14.80	--	0.00	--	Yes	88.87
MW-9	ROW	02/23/10	103.67	13.10	12.80	0.30	0.21 ⁴	Yes	90.81
MW-9	ROW	03/15/10	103.67	13.33	13.10	0.23	0.18 ⁴	Yes	90.52

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-9	ROW	09/15/10 ¹	103.67	15.05	14.50	0.55	0.20 ⁴	Yes	89.06
MW-9	ROW	12/04/10 ¹	103.67	14.50	14.37	0.13	0.20 ⁴	Yes	89.27
MW-9	ROW	3/14/2011 ¹	103.67	12.71	--	0.00	--	Yes	90.96
MW-9	ROW	9/24/2011 ¹	36.46	14.62	--	0.00	--	Yes	21.84
MW-9	ROW	12/08/2011 ¹	36.46	12.87	--	0.00	--	Yes	23.59
MW-9	ROW	03/23/12	36.46	10.55	10.35	0.20	0.50	Yes	26.07
MW-9	ROW	06/01/12	36.46	11.75	11.55	0.20	1.00	Yes	24.87
MW-9	ROW	09/20/12	36.46	14.47	13.95	0.52	--	Yes	22.41
MW-9	ROW	12/26/12	36.46	11.60	10.60	1.00	--	Yes	25.66
MW-9	ROW	04/22/13	36.46	11.07	10.40	0.67	--	Yes	25.93
MW-9	ROW	06/26/13	36.46	12.45	12.30	0.15	--	Yes	24.13
MW-9	ROW	09/18/13	36.46	14.51	14.20	0.31	--	Yes	22.20
MW-9	ROW	10/14/13	36.46	14.10	13.99	0.11	--	Yes	22.45
MW-9	ROW	03/27/14	36.46	11.93	11.76	0.17	--	Yes	24.67
MW-9	ROW	06/10/14	36.46	12.22	12.19	0.03	0.05	Yes	24.26
MW-9R	ROW	07/22/14	36.33	13.31	--	0.00	--	Yes	23.02
MW-9R	ROW	09/26/14	36.33	13.20	--	0.00	--	Yes	23.13
MW-9R	ROW	10/30/14	36.33	13.35	--	0.00	--	Yes	22.98
MW-9R	ROW	12/01/14	36.33	21.40	--	0.00	--	Yes	14.93
MW-9R	ROW	02/20/15	36.33	21.63	--	0.00	--	No	14.70
MW-9R	ROW	11/11/15	36.33	--	--	--	--	--	--
MW-9R	ROW	04/18/16	36.33	--	--	--	--	--	--
MW-9R	ROW	12/07/16	36.34	14.71	--	0.00	--	--	21.63
MW-9R	ROW	06/21/17	36.34	13.42	--	0.00	--	--	22.92
MW-9R	ROW	12/05/17	36.34	14.92	--	0.00	--	--	21.42
MW-9R	ROW	06/26/18	36.34	14.37	--	0.00	--	--	21.97
MW-9R	ROW	11/27/18	36.34	15.27	--	0.00	--	--	21.07
MW-9R	ROW	06/20/19	36.34	13.97	--	0.00	--	--	22.37
MW-9R	ROW	12/17/19	36.34	15.72	--	0.00	--	--	20.62
MW-9R	ROW	06/10/20	36.34	13.88	--	0.00	--	--	22.46
MW-9R	ROW	11/10/20	36.34	14.68	--	0.00	--	--	21.66
MW-9R	ROW	06/28/21	36.34	15.12	--	0.00	--	--	21.22
MW-9R	ROW	01/06/22	36.34	14.00	--	0.00	--	--	22.34
MW-9R	ROW	06/24/22	36.34	13.12	--	0.00	--	--	23.22
MW-9R	ROW	12/16/22	36.34	14.90	--	0.00	--	--	21.44
MW-9R	ROW	06/01/23	36.34	13.26	--	0.00	--	--	23.08
MW-9R	ROW	11/28/23	36.34	15.34	--	0.00	--	--	21.00
MW-10	North Yard	08/11/99	100.30	--	--	--	--	No	--
MW-10	North Yard	10/21/99	100.30	--	--	--	--	No	--
MW-10	North Yard	04/12/00	100.30	7.34	--	0.00	--	No	92.96
MW-10	North Yard	06/27/00	100.30	8.95	--	0.00	--	No	91.35
MW-10	North Yard	09/28/00	100.30	10.08	--	0.00	--	No	90.22
MW-10	North Yard	01/15/01	100.30	10.16	--	0.00	--	No	90.14
MW-10	North Yard	05/24/01	100.30	9.14	--	0.00	--	No	91.16
MW-10	North Yard	06/21/01	100.30	7.97	--	0.00	--	No	92.33
MW-10	North Yard	06/27/01	100.30	9.07	--	0.00	--	No	91.23
MW-10	North Yard	03/18/02	100.30	7.09	--	0.00	--	No	93.21
MW-10	North Yard	07/02/02	100.30	8.37	--	0.00	--	No	91.93

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-10	North Yard	09/28/02	100.30	10.08	--	0.00	--	No	90.22
MW-10	North Yard	12/31/02	100.30	--	--	0.96	--	No	--
MW-10	North Yard	02/27/03	100.30	--	--	0.17	--	No	--
MW-10	North Yard	03/26/03	100.30	--	--	0.04	--	No	--
MW-10	North Yard	04/28/03	100.30	8.80	--	0.00	--	No	91.50
MW-10	North Yard	05/30/03	100.30	8.76	--	0.00	--	No	91.54
MW-10	North Yard	06/26/03	100.30	8.99	8.69	0.30	6.00	No	91.55
MW-10	North Yard	07/21/03	100.30	--	--	0.06	1.00	No	--
MW-10	North Yard	08/28/03	100.30	--	--	0.14	6.00	No	--
MW-10	North Yard	10/16/03	100.30	11.56	10.54	1.02	18.50	No	89.56
MW-10	North Yard	11/21/03	100.30	--	--	1.33	7.00	No	--
MW-10	North Yard	12/17/03	100.30	--	--	0.15	0.75	No	--
MW-10	North Yard	01/29/04	100.30	8.61	8.61	0.00	--	No	91.69
MW-10	North Yard	02/18/04	100.30	8.72	8.58	0.14	0.25	No	91.69
MW-10	North Yard	03/30/04	100.30	8.47	8.41	0.06	0.25	No	91.88
MW-10	North Yard	09/22/04	100.30	9.64	9.56	0.08	0.50	No	90.72
MW-10	North Yard	03/15/05	100.30	10.20	9.83	0.37	0.25	No	90.40
MW-10	North Yard	10/04/05	100.30	11.20	10.39	0.81	1.75	No	89.75
MW-10	North Yard	03/29/06	100.30	8.35	7.63	0.72	2.00	No	92.53
MW-10	North Yard	03/21/07	100.30	7.95	7.49	0.46	0.44	No	92.72
MW-10	North Yard	03/25/08	100.30	8.68	8.68	0.00	0.00	No	91.62
MW-10	North Yard	09/08-09/08	100.30	9.39	9.34	0.05	0.20	Yes	90.95
MW-10	North Yard	12/11/08	100.30	9.90	9.59	0.31	1.00	Yes	90.65
MW-10	North Yard	03/30-31/09	100.30	8.44	8.20	0.24	1.11 ⁴	Yes	92.05
MW-10	North Yard	06/15/09	100.30	8.31	8.10	0.21	0.34 ⁴	Yes	92.16
MW-10	North Yard	09/10-11/09	100.30	10.14	10.12	0.02	0.00	Yes	90.18
MW-10	North Yard	02/23/10	100.30	7.14	7.13	0.01	0.00	Yes	93.17
MW-10	North Yard	03/15/10	100.30	7.24	--	0.00	--	Yes	93.06
MW-10	North Yard	09/15/10	100.30	9.48	Sheen	Sheen	--	Yes	90.82
MW-10	North Yard	12/04/10	100.30	--	--	--	--	Yes	--
MW-10	North Yard	03/27/14	33.09	8.28	--	0.00	--	Yes	24.81
MW-10	North Yard	06/10/14	33.09	7.42	--	0.00	--	Yes	25.67
MW-10	North Yard	07/22/14	33.09	8.81	--	0.00	--	Yes	24.28
MW-11	ROW	08/11/99	100.59	--	--	--	--	--	--
MW-11	ROW	10/22/99	100.59	--	--	--	--	--	--
MW-11	ROW	06/21/01	100.59	11.30	--	0.00	--	--	89.29
MW-11	ROW	03/18/02	100.59	10.96	--	0.00	--	--	89.63
MW-11	ROW	09/16/03	100.59	13.03	--	0.00	--	--	87.56
MW-11	ROW	12/15/03	100.59	13.92	--	0.00	--	--	86.67
MW-11	ROW	03/25/04	100.59	11.17	--	0.00	--	--	89.42
MW-11	ROW	09/22/04	100.59	12.05	--	0.00	--	--	88.54
MW-11	ROW	03/14/05	100.59	11.90	--	0.00	--	--	88.69
MW-11	ROW	03/29/06	100.59	10.32	--	0.00	--	--	90.27
MW-11	ROW	03/21/07	100.59	8.36	--	0.00	--	--	92.23
MW-11	ROW	03/25/08	100.59	9.38	--	0.00	--	--	91.21
MW-11	ROW	09/08-09/08	100.59	10.35	--	0.00	--	--	90.24
MW-11	ROW	12/11/08	100.59	10.63	--	0.00	--	--	89.96
MW-11	ROW	03/30-31/09	100.59	9.60	--	0.00	--	--	90.99

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-11	ROW	06/15/09	100.59	--	--	--	--	--	--
MW-11	ROW	09/10-11/09	100.61	8.07	--	0.00	--	--	92.54
MW-11	ROW	02/23/10	100.61	8.60	--	0.00	--	--	92.01
MW-11	ROW	03/15/10	100.61	8.75	--	0.00	--	--	91.86
MW-11	ROW	09/15/10	100.61	10.27	--	0.00	--	--	90.34
MW-11	ROW	12/04/10	100.61	10.37	--	0.00	--	--	90.24
MW-11	ROW	03/14/11	33.29	9.33	--	0.00	--	--	23.96
MW-11	ROW	10/14/13	33.29	11.04	--	0.00	--	--	22.25
MW-11	ROW	03/27/14	33.29	9.38	--	0.00	--	--	23.91
MW-11	ROW	06/10/14	33.29	9.53	--	0.00	--	--	23.76
MW-11	ROW	07/22/14	33.29	10.60	--	0.00	--	--	22.69
MW-11	ROW	02/20/15	33.29	15.79	--	0.00	--	--	17.50
MW-11	ROW	11/11/15	33.29	--	--	--	--	--	--
MW-11	ROW	04/18/16	33.29	11.82	--	0.00	--	--	21.47
MW-11	ROW	12/07/16	33.03	12.62	--	0.00	--	--	20.41
MW-11	ROW	06/21/17	33.03	11.32	--	0.00	--	--	21.71
MW-11	ROW	12/05/17	33.03	12.81	--	0.00	--	--	20.22
MW-11	ROW	06/26/18	33.03	12.24	--	0.00	--	--	20.79
MW-11	ROW	11/27/18	33.03	13.27	--	0.00	--	--	19.76
MW-11	ROW	06/20/19	33.03	11.98	--	0.00	--	--	21.05
MW-11	ROW	12/17/19	33.03	13.65	--	0.00	--	--	19.38
MW-11	ROW	06/10/20	33.03	11.60	--	0.00	--	--	21.43
MW-11	ROW	11/10/20	33.03	12.89	--	0.00	--	--	20.14
MW-11	ROW	06/28/21	33.03	10.69	--	0.00	--	--	22.34
MW-11	ROW	01/06/22	33.03	12.12	--	0.00	--	--	20.91
MW-11	ROW	06/24/22	33.03	11.89	--	0.00	--	--	21.14
MW-11	ROW	12/16/22	33.03	13.14	--	0.00	--	--	19.89
MW-11	ROW	06/01/23	33.03	11.96	--	0.00	--	--	21.07
MW-11	ROW	11/28/23	33.03	13.15	--	0.00	--	--	19.88
MW-12	North Yard	08/11/99	100.11	--	--	--	--	No	--
MW-12	North Yard	10/21/99	100.11	--	--	--	--	No	--
MW-12	North Yard	05/24/01	100.11	8.30	--	0.00	--	No	91.81
MW-12	North Yard	06/21/01	100.11	--	--	--	--	No	--
MW-12	North Yard	06/27/01	100.11	9.01	9.00	0.01	--	No	91.11
MW-12	North Yard	03/18/02	100.11	7.91	7.87	0.04	--	No	92.23
MW-12	North Yard	12/31/02	100.11	--	--	0.02	--	No	--
MW-12	North Yard	04/28/03	100.11	7.36	7.27	0.09	--	No	92.82
MW-12	North Yard	05/30/03	100.11	7.42	7.37	0.05	--	No	92.73
MW-12	North Yard	06/26/03	100.11	8.32	Sheen	Sheen	0.10	No	91.79
MW-12	North Yard	07/21/03	100.11	--	--	0.01	0.50	No	--
MW-12	North Yard	08/28/03	100.11	--	--	0.03	0.75	No	--
MW-12	North Yard	10/16/03	100.11	9.48	9.36	0.12	0.75	No	90.73
MW-12	North Yard	11/21/03	100.11	--	--	--	--	No	--
MW-12	North Yard	12/17/03	100.11	--	--	--	--	No	--
MW-12	North Yard	01/29/04	100.11	8.44	8.44	0.00	0.00	No	91.67
MW-12	North Yard	02/18/04	100.11	7.54	7.54	0.00	0.00	No	92.57
MW-12	North Yard	03/25/04	100.11	7.54	--	0.00	--	No	92.57
MW-12	North Yard	03/30/04	100.11	7.84	7.84	0.00	0.00	No	92.27

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-12	North Yard	09/22/04	100.11	8.69	8.65	0.04	0.25	No	91.45
MW-12	North Yard	03/15/05	100.11	8.79	8.78	0.01	0.00	No	91.33
MW-12	North Yard	10/04/05	100.11	13.67	13.65	0.02	<0.01	No	86.46
MW-12	North Yard	03/29/06	100.11	7.51	7.51	0.00	0.00	No	92.60
MW-12	North Yard	03/21/07	100.11	7.32	7.32	0.00	0.00	No	92.79
MW-12	North Yard	03/25/08	100.11	8.09	--	0.00	--	No	92.02
MW-12	North Yard	09/08-09/08	100.11	8.65	--	0.00	--	No	91.46
MW-12	North Yard	12/11/08	100.11	8.62	8.61	0.01	0.00	Yes	91.50
MW-12	North Yard	03/30-31/09	100.11	7.54	7.53	0.01	0.00	Yes	92.58
MW-12	North Yard	06/15/09	100.11	7.92	--	0.00	--	Yes	92.19
MW-12	North Yard	09/10-11/09	100.11	9.23	9.22	0.01	0.00	Yes	90.89
MW-12	North Yard	02/23/10	100.11	6.90	--	0.00	--	Yes	93.21
MW-12	North Yard	03/15/10	100.11	7.23	--	0.00	--	Yes	92.88
MW-12	North Yard	09/15/10	100.11	8.62	Sheen	Sheen	--	Yes	91.49
MW-12	North Yard	12/04/10	100.11	--	--	--	--	Yes	--
MW-12	North Yard	06/10/14	32.89	7.68	7.62	0.06	0.05	Yes	25.26
MW-12	North Yard	07/22/14	32.89	8.48	8.44	0.04	--	Yes	24.44
MW-14	ROW	07/26/01	98.87	13.05	--	0.00	--	--	85.82
MW-14	ROW	03/29/06	98.87	13.32	--	0.00	--	--	85.55
MW-14	ROW	03/21/07	98.87	13.33	--	0.00	--	--	85.54
MW-14	ROW	03/25/08	98.87	13.38	--	0.00	--	--	85.49
MW-14	ROW	09/08-09/08	98.87	13.50	--	0.00	--	--	85.37
MW-14	ROW	12/11/08	98.87	--	--	--	--	--	--
MW-14	ROW	03/30-31/09	98.87	13.10	--	0.00	--	--	85.77
MW-14	ROW	09/10-11/09	98.87	14.00	--	0.00	--	--	84.87
MW-14	ROW	03/15/10	98.87	13.49	--	0.00	--	--	85.38
MW-14	ROW	09/15/10	98.87	--	--	--	--	--	--
MW-14	ROW	03/27/14	31.61	--	--	--	--	--	--
MW-14	ROW	06/10/14	31.61	12.61	--	0.00	--	--	19.00
MW-14	ROW	11/11/15	31.61	14.24	--	0.00	--	--	17.37
MW-14	ROW	04/18/16	31.61	12.95	--	0.00	--	--	18.66
MW-14	ROW	12/07/16	31.60	14.72	--	0.00	--	--	16.88
MW-14	ROW	06/21/17	31.60	13.51	--	0.00	--	--	18.09
MW-14	ROW	12/05/17	31.60	14.01	--	0.00	--	--	17.59
MW-14	ROW	06/26/18	31.60	12.81	--	0.00	--	--	18.79
MW-14	ROW	11/27/18	31.60	15.23	--	0.00	--	--	16.37
MW-14	ROW	06/19/19	31.60	13.00	--	0.00	--	--	18.60
MW-14	ROW	12/17/19	31.60	14.60	--	0.00	--	--	17.00
MW-14	ROW	06/10/20	31.60	12.30	--	0.00	--	--	19.30
MW-14	ROW	11/10/20	31.60	14.24	--	0.00	--	--	17.36
MW-14	ROW	06/28/21	31.60	12.27	--	0.00	--	--	19.33
MW-14	ROW	01/06/22	31.60	13.73	--	0.00	--	--	17.87
MW-14	ROW	06/24/22	31.60	12.85	--	0.00	--	--	18.75
MW-14	ROW	12/16/22	31.60	14.17	--	0.00	--	--	17.43
MW-14	ROW	06/01/23	31.60	13.01	--	0.00	--	--	18.59
MW-14	ROW	11/28/23	31.60	15.77	--	0.00	--	--	15.83
MW-15	ROW	08/10/99	98.83	--	--	--	--	--	--
MW-15	ROW	10/20/99	98.83	13.96	--	0.00	--	--	84.87

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-15	ROW	07/26/01	98.83	13.04	--	0.00	--	--	85.79
MW-15	ROW	03/18/02	98.83	13.62	--	0.00	--	--	85.21
MW-15	ROW	06/26/03	98.83	13.05	--	0.00	--	--	85.78
MW-15	ROW	09/16/03	98.83	14.35	--	0.00	--	--	84.48
MW-15	ROW	03/29/06	98.83	13.00	--	0.00	--	--	85.83
MW-15	ROW	03/21/07	98.83	13.33	--	0.00	--	--	85.50
MW-15	ROW	03/25/08	98.83	13.36	--	0.00	--	--	85.47
MW-15	ROW	09/08-09/08	98.83	13.46	--	0.00	--	--	85.37
MW-15	ROW	12/11/08	98.83	--	--	--	--	--	--
MW-15	ROW	03/30-31/09	98.83	13.12	--	0.00	--	--	85.71
MW-15	ROW	09/10-11/09	98.83	13.97	--	0.00	--	--	84.86
MW-15	ROW	03/15/10	98.83	15.50	--	0.00	--	--	83.33
MW-15	ROW	09/15/10	98.83	15.87	--	0.00	--	--	82.96
MW-15	ROW	03/14/11	98.83	14.99	--	0.00	--	--	83.84
MW-15	ROW	03/27/14	31.60	--	--	--	--	--	--
MW-15	ROW	06/10/14	31.60	12.66	--	0.00	--	--	18.94
MW-15	ROW	11/11/15	31.60	14.29	--	0.00	--	--	17.31
MW-15	ROW	04/18/16	31.60	12.81	--	0.00	--	--	18.79
MW-15	ROW	12/07/16	31.60	14.58	--	0.00	--	--	17.02
MW-15	ROW	06/21/17	31.60	13.63	--	0.00	--	--	17.97
MW-15	ROW	12/05/17	31.60	13.92	--	0.00	--	--	17.68
MW-15	ROW	06/26/18	31.60	12.95	--	0.00	--	--	18.65
MW-15	ROW	11/27/18	31.60	14.11	--	0.00	--	--	17.49
MW-15	ROW	06/20/19	31.60	12.94	--	0.00	--	--	18.66
MW-15	ROW	12/17/19	31.60	14.55	--	0.00	--	--	17.05
MW-15	ROW	06/10/20	31.60	12.21	--	0.00	--	--	19.39
MW-15	ROW	11/10/20	31.60	14.23	--	0.00	--	--	17.37
MW-15	ROW	06/28/21	31.60	12.65	--	0.00	--	--	18.95
MW-15	ROW	01/06/22	31.60	13.91	--	0.00	--	--	17.69
MW-15	ROW	06/24/22	31.60	12.52	--	0.00	--	--	19.08
MW-15	ROW	12/16/22	31.60	14.02	--	0.00	--	--	17.58
MW-15	ROW	06/01/23	31.60	12.67	--	0.00	--	--	18.93
MW-15	ROW	11/28/23	31.60	14.94	--	0.00	--	--	16.66
MW-16	Offsite	03/21/07	--	14.49	--	0.00	--	--	--
MW-16	Offsite	03/25/08	--	15.25	--	0.00	--	--	--
MW-16	Offsite	09/08-09/08	--	18.51	--	0.00	--	--	--
MW-16	Offsite	12/11/08	--	--	--	--	--	--	--
MW-16	Offsite	03/30-31/09	--	16.11	--	0.00	--	--	--
MW-19	ROW	08/11/99	98.10	--	--	--	--	--	--
MW-19	ROW	10/20/99	98.10	--	--	--	--	--	--
MW-19	ROW	06/21/01	98.10	11.99	--	0.00	--	--	86.11
MW-19	ROW	06/26/03	98.10	12.02	--	0.00	--	--	86.08
MW-19	ROW	09/16/03	98.10	13.67	--	0.00	--	--	84.43
MW-19	ROW	12/15/03	98.10	13.60	--	0.00	--	--	84.50
MW-19	ROW	03/26/04	98.10	12.74	--	0.00	--	--	85.36
MW-19	ROW	09/23/04	98.10	12.82	--	0.00	--	--	85.28
MW-19	ROW	03/14/05	98.10	13.16	--	0.00	--	--	84.94
MW-19	ROW	03/29/06	98.10	12.63	--	0.00	--	--	85.47

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-19	ROW	03/21/07	98.10	12.71	--	0.00	--	--	85.39
MW-19	ROW	03/25/08	98.10	12.70	--	0.00	--	--	85.40
MW-19	ROW	09/08-09/08	98.10	12.81	--	0.00	--	--	85.29
MW-19	ROW	12/11/08	98.10	--	--	--	--	--	--
MW-19	ROW	03/30-31/09	98.10	12.57	--	0.00	--	--	85.53
MW-19	ROW	09/10-11/09	98.10	13.30	--	0.00	--	--	84.80
MW-19	ROW	03/15/10	98.10	12.85	--	0.00	--	--	85.25
MW-19	ROW	09/15/10	98.10	13.18	--	0.00	--	--	84.92
MW-19	ROW	11/16/11	30.87	13.62	--	0.00	--	--	17.25
MW-19	ROW	06/21/12	30.87	11.93	--	0.00	--	--	18.94
MW-19	ROW	09/20/12	30.87	13.50	--	0.00	--	--	17.37
MW-19	ROW	12/26/12	30.87	13.55	--	0.00	--	--	17.32
MW-19	ROW	04/24/13	30.87	12.18	--	0.00	--	--	18.69
MW-19	ROW	06/26/13	30.87	12.08	--	0.00	--	--	18.79
MW-19	ROW	09/18/13	30.87	12.91	--	0.00	--	--	17.96
MW-19	ROW	10/14/13	30.87	13.10	--	0.00	--	--	17.77
MW-19	ROW	03/27/14	30.87	12.63	--	0.00	--	--	18.24
MW-19	ROW	06/10/14	30.87	11.95	--	0.00	--	--	18.92
MW-19	ROW	07/22/14	30.87	12.73	--	0.00	--	--	18.14
MW-19	ROW	02/20/15	30.87	13.84	--	0.00	--	--	17.03
MW-19	ROW	11/11/15	30.87	13.68	--	0.00	--	--	17.19
MW-19	ROW	04/18/16	30.87	12.25	--	0.00	--	--	18.62
MW-19	ROW	12/07/16	30.91	13.85	--	0.00	--	--	17.06
MW-19	ROW	06/21/17	30.91	11.75	--	0.00	--	--	19.16
MW-19	ROW	12/05/17	30.91	13.31	--	0.00	--	--	17.60
MW-19	ROW	06/26/18	30.91	12.26	--	0.00	--	--	18.65
MW-19	ROW	11/27/18	30.91	13.68	--	0.00	--	--	17.23
MW-19	ROW	06/20/19	30.91	12.31	--	0.00	--	--	18.60
MW-19	ROW	12/17/19	30.91	13.88	--	0.00	--	--	17.03
MW-19	ROW	06/10/20	30.91	12.09	--	0.00	--	--	18.82
MW-19	ROW	11/10/20	30.91	13.57	--	0.00	--	--	17.34
MW-19	ROW	06/28/21	30.91	11.70	--	0.00	--	--	19.21
MW-19	ROW	01/06/22	30.91	14.48	--	0.00	--	--	16.43
MW-19	ROW	06/24/22	30.91	13.23	--	0.00	--	--	17.68
MW-19	ROW	12/16/22	30.91	14.35	--	0.00	--	--	16.56
MW-19	ROW	06/01/23	30.91	13.19	--	0.00	--	--	17.72
MW-19	ROW	11/28/23	30.91	13.66	--	0.00	--	--	17.25
MW-20	ROW	08/11/99	98.74	--	--	--	--	--	--
MW-20	ROW	10/20/99	98.74	13.99	--	0.00	--	--	84.75
MW-20	ROW	09/28/00	98.74	13.41	--	0.00	--	--	85.33
MW-20	ROW	06/21/01	98.74	12.61	--	0.00	--	--	86.13
MW-20	ROW	03/19/02	98.74	13.69	--	0.00	--	--	85.05
MW-20	ROW	06/26/03	98.74	12.92	--	0.00	--	--	85.82
MW-20	ROW	09/16/03	98.74	14.29	--	0.00	--	--	84.45
MW-20	ROW	12/15/03	98.74	14.34	--	0.00	--	--	84.40
MW-20	ROW	03/26/04	98.74	13.36	--	0.00	--	--	85.38
MW-20	ROW	03/14/05	98.74	13.80	--	0.00	--	--	84.94
MW-20	ROW	03/29/06	98.74	13.26	--	0.00	--	--	85.48

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-20	ROW	03/21/07	98.74	13.33	--	0.00	--	--	85.41
MW-20	ROW	03/25/08	98.74	13.33	--	0.00	--	--	85.41
MW-20	ROW	09/08-09/08	98.74	13.42	--	0.00	--	--	85.32
MW-20	ROW	12/11/08	98.74	--	--	--	--	--	--
MW-20	ROW	03/30-31/09	98.74	--	--	--	--	--	--
MW-20	ROW	09/10-11/09	98.74	13.92	--	0.00	--	--	84.82
MW-20	ROW	03/15/10	98.74	13.46	--	0.00	--	--	85.28
MW-20	ROW	09/15/10	98.74	13.79	--	0.00	--	--	84.95
MW-20	ROW	11/16/11	31.49	14.22	--	0.00	--	--	17.27
MW-20	ROW	06/21/12	31.49	12.53	--	0.00	--	--	18.96
MW-20	ROW	09/20/12	31.49	14.11	--	0.00	--	--	17.38
MW-20	ROW	12/26/12	31.49	14.20	--	0.00	--	--	17.29
MW-20	ROW	04/23/13	31.49	12.80	--	0.00	--	--	18.69
MW-20	ROW	06/26/13	31.49	12.70	--	0.00	--	--	18.79
MW-20	ROW	09/18/13	31.49	13.52	--	0.00	--	--	17.97
MW-20	ROW	10/14/13	31.49	13.72	--	0.00	--	--	17.77
MW-20	ROW	03/27/14	31.49	13.24	--	0.00	--	--	18.25
MW-20	ROW	06/10/14	31.49	12.51	--	0.00	--	--	18.98
MW-20	ROW	07/22/14	31.49	13.35	--	0.00	--	--	18.14
MW-20	ROW	02/20/15	31.49	14.46	--	0.00	--	--	17.03
MW-20	ROW	11/11/15	31.49	14.33	--	0.00	--	--	17.16
MW-20	ROW	04/18/16	31.49	12.75	--	0.00	--	--	18.74
MW-20	ROW	12/07/16	31.53	14.40	--	0.00	--	--	17.13
MW-20	ROW	06/21/17	31.53	12.55	--	0.00	--	--	18.98
MW-20	ROW	12/05/17	31.53	14.43	--	0.00	--	--	17.10
MW-20	ROW	06/26/18	31.53	12.89	--	0.00	--	--	18.64
MW-20	ROW	11/27/18	31.53	14.23	--	0.00	--	--	17.30
MW-20	ROW	06/20/19	31.53	12.88	--	0.00	--	--	18.65
MW-20	ROW	12/17/19	31.53	14.45	--	0.00	--	--	17.08
MW-20	ROW	06/10/20	31.53	12.51	--	0.00	--	--	19.02
MW-20	ROW	11/10/20	31.53	14.19	--	0.00	--	--	17.34
MW-20	ROW	06/28/21	31.53	12.70	--	0.00	--	--	18.83
MW-20	ROW	01/06/22	31.53	14.03	--	0.00	--	--	17.50
MW-20	ROW	06/24/22	31.53	13.07	--	0.00	--	--	18.46
MW-20	ROW	12/16/22	31.53	14.48	--	0.00	--	--	17.05
MW-20	ROW	06/01/23	31.53	13.11	--	0.00	--	--	18.42
MW-20	ROW	11/28/23	31.53	14.41	--	0.00	--	--	17.12
MW-21	ROW	08/10/99	98.52	--	--	--	--	--	--
MW-21	ROW	10/19/99	98.52	--	--	--	--	--	--
MW-21	ROW	06/21/01	98.52	12.31	--	0.00	--	--	86.21
MW-21	ROW	03/18/02	98.52	13.36	--	0.00	--	--	85.16
MW-21	ROW	06/26/03	98.52	12.66	--	0.00	--	--	85.86
MW-21	ROW	09/16/03	98.52	13.98	--	0.00	--	--	84.54
MW-21	ROW	12/15/03	98.52	14.05	--	0.00	--	--	84.47
MW-21	ROW	03/26/04	98.52	13.08	--	0.00	--	--	85.44
MW-21	ROW	09/23/04	98.52	13.19	--	0.00	--	--	85.33
MW-21	ROW	03/14/05	98.52	13.51	--	0.00	--	--	85.01
MW-21	ROW	03/29/06	98.52	12.98	--	0.00	--	--	85.54

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-21	ROW	03/21/07	98.52	13.00	--	0.00	--	--	85.52
MW-21	ROW	03/25/08	98.52	13.02	--	0.00	--	--	85.50
MW-21	ROW	09/08-09/08	98.52	13.14	--	0.00	--	--	85.38
MW-21	ROW	12/11/08	98.52	--	--	--	--	--	--
MW-21	ROW	03/30-31/09	98.52	12.86	--	0.00	--	--	85.66
MW-21	ROW	09/10-11/09	98.52	13.63	--	0.00	--	--	84.89
MW-21	ROW	03/15/10	98.52	13.15	--	0.00	--	--	85.37
MW-21	ROW	09/15/10	98.52	13.51	--	0.00	--	--	85.01
MW-21	ROW	03/14/11	98.52	13.05	--	0.00	--	--	85.47
MW-21	ROW	09/24/11	31.26	13.51	--	0.00	--	--	17.75
MW-21	ROW	10/10/11	31.26	13.83	--	0.00	--	--	17.43
MW-21	ROW	06/21/12	31.26	12.24	--	0.00	--	--	19.02
MW-21	ROW	09/20/12	31.26	13.82	--	0.00	--	--	17.44
MW-21	ROW	12/26/12	31.26	13.86	--	0.00	--	--	17.40
MW-21	ROW	04/23/13	31.26	12.47	--	0.00	--	--	18.79
MW-21	ROW	06/26/13	31.26	12.39	--	0.00	--	--	18.87
MW-21	ROW	09/18/13	31.26	13.25	--	0.00	--	--	18.01
MW-21	ROW	10/14/13	31.26	--	--	--	--	--	--
MW-21	ROW	03/27/14	31.26	12.98	--	0.00	--	--	18.28
MW-21	ROW	06/10/14	31.26	12.33	--	0.00	--	--	18.93
MW-21	ROW	07/22/14	31.26	13.05	--	0.00	--	--	18.21
MW-21	ROW	02/20/15	31.26	14.21	--	0.00	--	--	17.05
MW-21	ROW	11/11/15	31.26	14.19	--	0.00	--	--	17.07
MW-21	ROW	04/18/16	31.26	12.65	--	0.00	--	--	18.61
MW-21	ROW	12/07/16	31.30	14.20	--	0.00	--	--	17.10
MW-21	ROW	06/21/17	31.30	12.32	--	0.00	--	--	18.98
MW-21	ROW	12/05/17	31.30	14.11	--	0.00	--	--	17.19
MW-21	ROW	06/26/18	31.30	12.67	--	0.00	--	--	18.63
MW-21	ROW	11/27/18	31.30	13.97	--	0.00	--	--	17.33
MW-21	ROW	06/20/19	31.30	12.64	--	0.00	--	--	18.66
MW-21	ROW	12/17/19	31.30	14.22	--	0.00	--	--	17.08
MW-21	ROW	06/10/20	31.30	12.40	--	0.00	--	--	18.90
MW-21	ROW	11/10/20	31.30	13.93	--	0.00	--	--	17.37
MW-21	ROW	06/28/21	31.30	12.47	--	0.00	--	--	18.83
MW-21	ROW	01/06/22	31.30	13.81	--	0.00	--	--	17.49
MW-21	ROW	06/24/22	31.30	12.77	--	0.00	--	--	18.53
MW-21	ROW	12/16/22	31.30	14.55	--	0.00	--	--	16.75
MW-21	ROW	06/01/23	31.30	12.84	--	0.00	--	--	18.46
MW-21	ROW	11/28/23	31.30	13.79	--	0.00	--	--	17.51
MW-22	ROW	08/10/99	99.76	--	--	--	--	--	--
MW-22	ROW	10/22/99	99.76	--	--	--	--	--	--
MW-22	ROW	01/06/00	99.76	--	--	--	--	--	--
MW-22	ROW	01/15/01	99.76	--	--	--	--	--	--
MW-22	ROW	06/21/01	99.76	13.53	--	0.00	--	--	86.23
MW-22	ROW	03/18/02	99.76	14.41	--	0.00	--	--	85.35
MW-22	ROW	07/02/02	99.76	13.56	--	0.00	--	--	86.20
MW-22	ROW	09/03/02	99.76	14.95	--	0.00	--	--	84.81
MW-22	ROW	12/31/02	99.76	15.22	--	0.00	--	--	84.54

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-22	ROW	06/25/03	99.76	13.91	--	0.00	--	--	85.85
MW-22	ROW	09/16/03	99.76	15.15	--	0.00	--	--	84.61
MW-22	ROW	12/17/03	99.76	15.03	--	0.00	--	--	84.73
MW-22	ROW	03/25/04	99.76	14.20	--	0.00	--	--	85.56
MW-22	ROW	09/22/04	99.76	14.28	--	0.00	--	--	85.48
MW-22	ROW	03/14/05	99.76	14.70	--	0.00	--	--	85.06
MW-22	ROW	03/29/06	99.76	14.21	--	0.00	--	--	85.55
MW-22	ROW	03/21/07	99.76	14.31	--	0.00	--	--	85.45
MW-22	ROW	03/25/08	99.76	14.35	--	0.00	--	--	85.41
MW-22	ROW	09/08-09/08	99.76	14.47	--	0.00	--	--	85.29
MW-22	ROW	12/11/08	99.76	--	--	--	--	--	--
MW-22	ROW	03/30-31/09	99.76	14.09	--	0.00	--	--	85.67
MW-22	ROW	09/10-11/09	99.76	15.02	--	0.00	--	--	84.74
MW-22	ROW	03/15/10	99.76	14.46	--	0.00	--	--	85.30
MW-22	ROW	09/15/10	99.76	14.82	--	0.00	--	--	84.94
MW-22	ROW	03/14/11	99.76	14.25	--	0.00	--	--	85.51
MW-22	ROW	03/27/14	32.68	--	--	--	--	--	--
MW-22	ROW	06/10/14	32.68	13.65	--	0.00	--	--	19.03
MW-22	ROW	07/22/14	32.68	14.34	--	0.00	--	--	18.34
MW-22	ROW	11/11/15	32.68	15.31	--	0.00	--	--	17.37
MW-22	ROW	04/18/16	32.68	13.88	--	0.00	--	--	18.80
MW-22	ROW	12/07/16	32.68	13.98	--	0.00	--	--	18.70
MW-22	ROW	06/21/17	32.68	13.10	--	0.00	--	--	19.58
MW-22	ROW	12/05/17	32.68	15.19	--	0.00	--	--	17.49
MW-22	ROW	06/26/18	32.68	13.98	--	0.00	--	--	18.70
MW-22	ROW	11/27/18	32.68	15.23	--	0.00	--	--	17.45
MW-22	ROW	06/20/19	32.68	13.96	--	0.00	--	--	18.72
MW-22	ROW	12/17/19	32.68	15.52	--	0.00	--	--	17.16
MW-22	ROW	06/10/20	32.68	13.60	--	0.00	--	--	19.08
MW-22	ROW	11/10/20	32.68	15.23	--	0.00	--	--	17.45
MW-22	ROW	06/28/21	32.68	13.74	--	0.00	--	--	18.94
MW-22	ROW	01/06/22	32.68	14.42	--	0.00	--	--	18.26
MW-22	ROW	06/24/22	32.68	13.25	--	0.00	--	--	19.43
MW-22	ROW	12/16/22	32.68	14.70	--	0.00	--	--	17.98
MW-22	ROW	06/01/23	32.68	13.55	--	0.00	--	--	19.13
MW-22	ROW	11/28/23	32.68	16.51	--	0.00	--	--	16.17
MW-24	North Yard	03/21/07	--	23.01	--	0.00	--	--	--
MW-24	North Yard	03/25/08	--	23.35	--	0.00	--	--	--
MW-24	North Yard	09/08-09/08	--	23.84	--	0.00	--	--	--
MW-24	North Yard	12/11/08	--	--	--	--	--	--	--
MW-24	North Yard	03/30-31/09	--	23.60	--	0.00	--	--	--
MW-24	North Yard	09/10-11/09	--	24.13	--	0.00	--	--	--
MW-24	North Yard	03/15/10	--	22.76	--	0.00	--	--	--
MW-24	North Yard	09/15/10	--	23.71	--	0.00	--	--	--
MW-24	North Yard	03/14/11	--	22.39	--	0.00	--	--	--
MW-24	North Yard	12/26/12	69.77	22.42	--	0.00	--	--	47.35
MW-24	North Yard	03/27/14	69.77	23.06	--	0.00	--	--	46.71
MW-24	North Yard	06/10/14	69.77	22.85	--	0.00	--	--	46.92

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-24	North Yard	11/11/15	69.77	--	--	--	--	--	--
MW-24	North Yard	04/18/16	69.77	--	--	--	--	--	--
MW-24	North Yard	12/07/16	69.77	21.73	--	0.00	--	--	48.04
MW-24	North Yard	06/21/17	69.77	20.50	--	0.00	--	--	49.27
MW-24	North Yard	12/05/17	69.77	22.32	--	0.00	--	--	47.45
MW-24	North Yard	06/26/18	69.77	22.49	--	0.00	--	--	47.28
MW-24	North Yard	11/27/18	69.77	22.95	--	0.00	--	--	46.82
MW-24	North Yard	06/20/19	69.77	22.80	--	0.00	--	--	46.97
MW-24	North Yard	12/17/19	69.77	23.20	--	0.00	--	--	46.57
MW-24	North Yard	06/10/20	69.77	22.74	--	0.00	--	--	47.03
MW-24	North Yard	11/10/20	69.77	22.77	--	0.00	--	--	47.00
MW-24	North Yard	06/28/21	69.77	22.99	--	0.00	--	--	46.78
MW-24	North Yard	01/06/22	69.77	22.30	--	0.00	--	--	47.47
MW-24	North Yard	06/24/22	69.77	20.99	--	0.00	--	--	48.78
MW-24	North Yard	12/16/22	69.77	21.30	--	0.00	--	--	48.47
MW-24	North Yard	06/01/23	69.77	21.25	--	0.00	--	--	48.52
MW-24	North Yard	11/28/23	69.77	24.08	--	0.00	--	--	45.69
MW-25	South Yard	08/09/99	98.17	--	--	--	--	--	--
MW-25	South Yard	10/19/99	98.17	14.37	--	0.00	--	--	83.80
MW-25	South Yard	01/06/00	98.17	--	--	--	--	--	--
MW-25	South Yard	07/27/00	98.17	12.41	--	0.00	--	--	85.76
MW-25	South Yard	09/29/00	98.17	13.16	--	0.00	--	--	85.01
MW-25	South Yard	09/29/00	98.17	13.16	--	0.00	--	--	85.01
MW-25	South Yard	07/26/01	98.17	12.65	--	0.00	--	--	85.52
MW-25	South Yard	03/19/02	98.17	13.12	--	0.00	--	--	85.05
MW-25	South Yard	07/02/02	98.17	12.04	--	0.00	--	--	86.13
MW-25	South Yard	09/03/02	98.17	13.61	--	0.00	--	--	84.56
MW-25	South Yard	10/11/02	98.17	--	--	--	--	--	--
MW-25	South Yard	12/31/02	98.17	13.97	--	0.00	--	--	84.20
MW-25	South Yard	03/26/03	98.17	13.34	--	0.00	--	--	84.83
MW-25	South Yard	04/28/03	98.17	12.13	--	0.00	--	--	86.04
MW-25	South Yard	05/30/03	98.17	12.10	--	0.00	--	--	86.07
MW-25	South Yard	06/25/03	98.17	12.49	--	0.00	--	--	85.68
MW-25	South Yard	09/15/03	98.17	13.78	--	0.00	--	--	84.39
MW-25	South Yard	12/15/03	98.17	13.88	--	0.00	--	--	84.29
MW-25	South Yard	03/25/04	98.17	12.80	--	0.00	--	--	85.37
MW-25	South Yard	09/22/04	98.17	12.94	--	0.00	--	--	85.23
MW-25	South Yard	03/14/05	98.17	13.25	--	0.00	--	--	84.92
MW-25	South Yard	03/29/06	98.17	12.72	--	0.00	--	--	85.45
MW-25	South Yard	03/21/07	98.17	12.51	--	0.00	--	--	85.66
MW-25	South Yard	03/25/08	98.17	12.78	--	0.00	--	--	85.39
MW-25	South Yard	09/08-09/08	98.17	12.89	--	0.00	--	--	85.28
MW-25	South Yard	12/11/08	98.17	--	--	--	--	--	--
MW-25	South Yard	03/30-31/09	98.17	12.60	--	0.00	--	--	85.57
MW-25	South Yard	09/10-11/09	98.17	13.41	--	0.00	--	--	84.76
MW-25	South Yard	03/15/10	98.17	12.95	--	0.00	--	--	85.22
MW-25	South Yard	09/15/10	98.17	13.25	--	0.00	--	--	84.92
MW-25	South Yard	03/14/11	98.17	12.88	--	0.00	--	--	85.29

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-25	South Yard	09/25/11	30.91	13.50	--	0.00	--	--	17.41
MW-25	South Yard	10/10/11	30.91	13.30	--	0.00	--	--	17.61
MW-25	South Yard	06/21/12	30.91	12.01	--	0.00	--	--	18.90
MW-25	South Yard	09/20/12	30.91	13.56	--	0.00	--	--	17.35
MW-25	South Yard	12/26/12	30.91	13.76	--	0.00	--	--	17.15
MW-25	South Yard	04/22/13	30.91	12.30	--	0.00	--	--	18.61
MW-25	South Yard	06/26/13	30.91	12.26	--	0.00	--	--	18.65
MW-25	South Yard	09/18/13	30.91	12.97	--	0.00	--	--	17.94
MW-25	South Yard	10/14/13	30.91	13.22	--	0.00	--	--	17.69
MW-25	South Yard	03/27/14	30.91	12.72	--	0.00	--	--	18.19
MW-25	South Yard	06/10/14	30.91	12.05	--	0.00	--	--	18.86
MW-25	South Yard	11/11/15	30.91	13.61	--	0.00	--	--	17.30
MW-25	South Yard	04/18/16	30.91	12.28	--	0.00	--	--	18.63
MW-25	South Yard	12/07/16	30.91	13.81	--	0.00	--	--	17.10
MW-25	South Yard	06/21/17	30.91	12.01	--	0.00	--	--	18.90
MW-25	South Yard	12/05/17	30.91	13.84	--	0.00	--	--	17.07
MW-25	South Yard	06/26/18	30.91	12.31	--	0.00	--	--	18.60
MW-25	South Yard	11/27/18	30.91	13.76	--	0.00	--	--	17.15
MW-25	South Yard	06/20/19	30.91	12.31	--	0.00	--	--	18.60
MW-25	South Yard	12/17/19	30.91	13.95	--	0.00	--	--	16.96
MW-25	South Yard	06/10/20	30.91	12.00	--	0.00	--	--	18.91
MW-25	South Yard	11/10/20	30.91	13.65	--	0.00	--	--	17.26
MW-25	South Yard	06/28/21	30.91	12.10	--	0.00	--	--	18.81
MW-25	South Yard	01/06/22	30.91	14.42	--	0.00	--	--	16.49
MW-25	South Yard	06/24/22	30.91	12.17	--	0.00	--	--	18.74
MW-25	South Yard	12/16/22	30.91	13.52	--	0.00	--	--	17.39
MW-25	South Yard	06/01/23	30.91	12.36	--	0.00	--	--	18.55
MW-25	South Yard	11/28/23	30.91	13.83	--	0.00	--	--	17.08
MW-26	South Yard	08/09/99	97.87	--	--	--	--	--	--
MW-26	South Yard	10/19/99	97.87	--	--	--	--	--	--
MW-26	South Yard	01/06/00	97.87	13.78	--	0.00	--	--	84.09
MW-26	South Yard	04/12/00	97.87	12.12	--	0.00	--	--	85.75
MW-26	South Yard	06/27/00	97.87	12.55	--	0.00	--	--	85.32
MW-26	South Yard	07/26/01	97.87	12.15	--	0.00	--	--	85.72
MW-26	South Yard	03/19/02	97.87	12.79	--	0.00	--	--	85.08
MW-26	South Yard	12/31/02	97.87	13.97	--	0.00	--	--	83.90
MW-26	South Yard	02/27/03	97.87	12.88	--	0.00	--	--	84.99
MW-26	South Yard	03/26/03	97.87	13.12	--	0.00	--	--	84.75
MW-26	South Yard	04/28/03	97.87	11.78	--	0.00	--	--	86.09
MW-26	South Yard	05/30/03	97.87	11.73	--	0.00	--	--	86.14
MW-26	South Yard	06/25/03	97.87	12.09	--	0.00	--	--	85.78
MW-26	South Yard	09/15/03	97.87	13.49	--	0.00	--	--	84.38
MW-26	South Yard	12/15/03	97.87	13.48	--	0.00	--	--	84.39
MW-26	South Yard	09/22/04	97.87	12.55	--	0.00	--	--	85.32
MW-26	South Yard	03/14/05	97.87	12.94	--	0.00	--	--	84.93
MW-26	South Yard	03/29/06	97.87	12.37	--	0.00	--	--	85.50
MW-26	South Yard	03/21/07	97.87	--	--	--	--	--	--
MW-26	South Yard	03/25/08	97.87	12.46	--	0.00	--	--	85.41

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-26	South Yard	09/08-09/08	97.87	12.59	--	0.00	--	--	85.28
MW-26	South Yard	12/11/08	97.87	--	--	--	--	--	--
MW-26	South Yard	03/30-31/09	97.87	12.25	--	0.00	--	--	85.62
MW-26	South Yard	09/10-11/09	97.87	13.01	--	0.00	--	--	84.86
MW-26	South Yard	03/15/10	97.87	12.60	--	0.00	--	--	85.27
MW-26	South Yard	09/15/10	97.87	12.94	--	0.00	--	--	84.93
MW-26	South Yard	03/14/11	97.87	12.25	--	0.00	--	--	85.62
MW-26	South Yard	09/24/11	30.62	13.20	--	0.00	--	--	17.42
MW-26	South Yard	10/10/11	30.62	13.00	--	0.00	--	--	17.62
MW-26	South Yard	06/21/12	30.62	11.68	--	0.00	--	--	18.94
MW-26	South Yard	09/20/12	30.62	13.25	--	0.00	--	--	17.37
MW-26	South Yard	09/21/12	30.62	13.28	--	0.00	--	--	17.34
MW-26	South Yard	12/26/12	30.62	13.24	--	0.00	--	--	17.38
MW-26	South Yard	04/22/13	30.62	11.90	--	0.00	--	--	18.72
MW-26	South Yard	06/26/13	30.62	11.85	--	0.00	--	--	18.77
MW-26	South Yard	09/18/13	30.62	12.68	--	0.00	--	--	17.94
MW-26	South Yard	10/14/13	30.62	12.89	--	0.00	--	--	17.73
MW-26	South Yard	03/27/14	30.62	12.45	--	0.00	--	--	18.17
MW-26	South Yard	06/10/14	30.62	11.71	--	0.00	--	--	18.91
MW-26	South Yard	11/11/15	30.62	13.11	--	0.00	--	--	17.51
MW-26	South Yard	04/18/16	30.62	11.93	--	0.00	--	--	18.69
MW-26	South Yard	12/07/16	30.62	13.38	--	0.00	--	--	17.24
MW-26	South Yard	06/21/17	30.62	11.69	--	0.00	--	--	18.93
MW-26	South Yard	12/05/17	30.62	13.38	--	0.00	--	--	17.24
MW-26	South Yard	06/26/18	30.62	12.01	--	0.00	--	--	18.61
MW-26	South Yard	11/27/18	30.62	13.00	--	0.00	--	--	17.62
MW-26	South Yard	06/20/19	30.62	--	--	--	--	--	--
MW-26	South Yard	12/17/19	30.62	13.58	--	0.00	--	--	17.04
MW-26	South Yard	06/10/20	30.62	11.70	--	0.00	--	--	18.92
MW-26	South Yard	11/10/20	30.62	13.29	--	0.00	--	--	17.33
MW-26	South Yard	06/28/21	30.62	11.80	--	0.00	--	--	18.82
MW-26	South Yard	01/06/22	30.62	13.05	--	0.00	--	--	17.57
MW-26	South Yard	06/24/22	30.62	12.03	--	0.00	--	--	18.59
MW-26	South Yard	12/16/22	30.62	13.40	--	0.00	--	--	17.22
MW-26	South Yard	06/01/23	30.62	12.19	--	0.00	--	--	18.43
MW-26	South Yard	11/28/23	30.62	14.21	--	0.00	--	--	16.41
MW-27	North Yard	09/13/99	101.17	--	--	--	--	No	--
MW-27	North Yard	10/22/99	101.17	--	--	--	--	No	--
MW-27	North Yard	01/06/00	101.17	--	--	--	--	No	--
MW-27	North Yard	05/24/01	101.17	11.11	10.38	0.73	--	No	90.64
MW-27	North Yard	06/27/01	101.17	10.07	9.29	0.78	--	No	91.72
MW-27	North Yard	03/18/02	101.17	9.07	9.00	0.07	--	No	92.16
MW-27	North Yard	10/16/02	101.17	--	--	0.05	--	No	--
MW-27	North Yard	12/31/02	101.17	--	--	0.02	--	No	--
MW-27	North Yard	06/26/03	101.17	11.08	10.83	0.25	0.25	No	90.29
MW-27	North Yard	07/21/03	101.17	--	--	0.46	4.00	No	--
MW-27	North Yard	08/28/03	101.17	--	--	0.21	8.00	No	--
MW-27	North Yard	10/16/03	101.17	5.97	--	0.00	0.00	No	95.20

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-27	North Yard	11/21/03	101.17	--	--	--	0.00	No	--
MW-27	North Yard	12/17/03	101.17	--	--	--	0.00	No	--
MW-27	North Yard	01/29/04	101.17	10.23	9.71	0.52	2.00	No	91.36
MW-27	North Yard	02/18/04	101.17	10.59	9.97	0.62	1.75	No	91.08
MW-27	North Yard	03/30/04	101.17	10.54	9.77	0.77	3.00	No	91.25
MW-27	North Yard	09/22/04	101.17	9.98	9.91	0.07	0.70	No	91.25
MW-27	North Yard	03/15/05	101.17	11.76	11.21	0.55	0.50	No	89.85
MW-27	North Yard	03/29/06	101.17	9.14	--	0.00	0.00	No	92.03
MW-27	North Yard	03/21/07	101.17	7.91	7.90	0.01	<0.01	No	93.27
MW-27	North Yard	03/25/08	101.17	10.57	--	0.00	0.00	No	90.60
MW-27	North Yard	09/08-09/08	101.17	10.83	10.66	0.17	0.28	Yes	90.48
MW-27	North Yard	12/11/08	101.17	11.19	11.18	0.01	0.00	Yes	89.99
MW-27	North Yard	03/30-31/09	101.17	9.92	9.91	0.01	0.00	Yes	91.26
MW-27	North Yard	06/15/09	101.17	9.67	9.66	0.01	0.00	Yes	91.51
MW-27	North Yard	09/10-11/09	101.17	11.27	11.10	0.17	0.33 ⁴	Yes	90.04
MW-27	North Yard	02/23/10	101.17	9.37	--	0.00	--	Yes	91.80
MW-27	North Yard	03/15/10	101.17	9.48	9.47	0.01	0.00	Yes	91.70
MW-27	North Yard	3/14/2011 ¹	101.17	27.77	27.70	0.07	0.05 ⁴	Yes	73.46
MW-27	North Yard	11/16/11	34.01	11.27	--	0.00	--	Yes	22.74
MW-27	North Yard	12/08/11	34.01	9.78	9.69	0.09	0.05 ⁴	Yes	24.30
MW-27	North Yard	03/23/12	34.01	8.18	8.15	0.03	1.00	Yes	25.85
MW-27	North Yard	06/01/12	34.01	8.45	8.25	0.20	1.00	Yes	25.72
MW-27	North Yard	04/22/13	34.01	7.34	7.33	0.01	0.00	Yes	26.68
MW-27	North Yard	06/26/13	34.01	6.67	--	0.00	--	Yes	27.34
MW-27	North Yard	09/18/13	34.01	10.76	--	0.00	--	Yes	23.25
MW-27	North Yard	10/14/13	34.01	10.16	--	0.00	--	Yes	23.85
MW-27	North Yard	03/27/14	34.01	7.10	7.08	0.02	--	Yes	26.93
MW-27	North Yard	06/10/14	34.01	9.25	Sheen	Sheen	--	Yes	24.76
MW-27	North Yard	07/22/14	34.01	10.02	10.015	0.005	--	Yes	23.99
MW-28	North Yard	08/11/99	100.35	--	--	0.00	--	No	--
MW-28	North Yard	10/21/99	100.35	--	--	0.00	--	No	--
MW-28	North Yard	10/21/99	100.35	--	--	0.00	--	No	--
MW-28	North Yard	01/06/00	100.35	6.93	--	0.00	--	No	93.42
MW-28	North Yard	07/27/00	100.35	7.45	--	0.00	--	No	92.90
MW-28	North Yard	09/29/00	100.35	8.50	--	0.00	--	No	91.85
MW-28	North Yard	01/15/01	100.35	8.59	--	0.00	--	No	91.76
MW-28	North Yard	06/21/01	100.35	7.66	--	0.00	--	No	92.69
MW-28	North Yard	03/18/02	100.35	6.02	--	0.00	--	No	94.33
MW-28	North Yard	06/26/03	100.35	7.57	--	0.00	--	No	92.78
MW-28	North Yard	09/15/03	100.35	8.96	--	0.00	--	No	91.39
MW-28	North Yard	12/15/03	100.35	7.56	--	0.00	--	No	92.79
MW-28	North Yard	03/25/04	100.35	7.07	--	0.00	--	No	93.28
MW-28	North Yard	09/22/04	100.35	8.16	--	0.00	--	No	92.19
MW-28	North Yard	03/14/05	100.35	8.45	--	0.00	--	No	91.90
MW-28	North Yard	03/29/06	100.35	6.64	--	0.00	--	No	93.71
MW-28	North Yard	03/21/07	100.35	6.86	6.48	0.38	0.25	No	93.79
MW-28	North Yard	03/25/08	100.35	7.25	7.08	0.17	0.25	No	93.24
MW-28	North Yard	09/08-09/08	100.35	8.04	8.00	0.04	0.16	Yes	92.34

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-28	North Yard	12/11/08	100.35	8.15	8.14	0.01	0.00	Yes	92.21
MW-28	North Yard	03/30-31/09	100.35	6.84	6.83	0.01	0.00	Yes	93.52
MW-28	North Yard	06/15/09	100.35	7.21	7.20	0.01	0.00	Yes	93.15
MW-28	North Yard	09/10-11/09	100.35	8.16	8.13	0.03	0.00	Yes	92.21
MW-28	North Yard	02/23/10	100.35	6.39	6.38	0.01	0.00	Yes	93.97
MW-28	North Yard	03/15/10	100.35	6.05	--	0.00	--	Yes	94.30
MW-28	North Yard	9/15/101	100.35	7.76	7.75	0.01	--	Yes	92.60
MW-28	North Yard	12/04/10	100.35	--	--	--	--	Yes	--
MW-28	North Yard	03/14/11	100.35	5.30	--	0.00	--	Yes	95.05
MW-28	North Yard	07/22/14	33.13	7.24	--	0.00	--	No	25.89
MW-29	ROW	07/22/14	34.06	13.80	--	0.00	--	--	20.26
MW-29	ROW	09/26/14	34.06	14.27	--	0.00	--	--	19.79
MW-29	ROW	10/30/14	34.06	13.03	--	0.00	--	--	21.03
MW-29	ROW	12/01/14	34.06	17.80	--	0.00	--	--	16.26
MW-29	ROW	02/20/15	34.06	19.26	--	0.00	--	--	14.80
MW-29	ROW	11/11/15	34.06	16.61	--	0.00	--	--	17.45
MW-29	ROW	04/18/16	34.06	13.65	--	0.00	--	--	20.41
MW-29	ROW	12/07/16	34.08	14.82	--	0.00	--	--	19.26
MW-29	ROW	06/21/17	34.08	11.29	--	0.00	--	--	22.79
MW-29	ROW	12/05/17	34.08	12.99	--	0.00	--	--	21.09
MW-29	ROW	06/26/18	34.08	13.50	--	0.00	--	--	20.58
MW-29	ROW	11/27/18	34.08	11.37	--	0.00	--	--	22.71
MW-29	ROW	06/20/19	34.08	13.59	--	0.00	--	--	20.49
MW-29	ROW	12/17/19	34.08	14.65	--	0.00	--	--	19.43
MW-29	ROW	06/10/20	34.08	13.40	--	0.00	--	--	20.68
MW-29	ROW	11/10/20	34.08	14.59	--	0.00	--	--	19.49
MW-29	ROW	06/28/21	34.08	14.07	--	0.00	--	--	20.01
MW-29	ROW	01/06/22	34.08	10.29	--	0.00	--	--	23.79
MW-29	ROW	06/24/22	34.08	9.75	--	0.00	--	--	24.33
MW-29	ROW	12/16/22	34.08	10.88	--	0.00	--	--	23.20
MW-29	ROW	06/01/23	34.08	10.04	--	0.00	--	--	24.04
MW-29	ROW	11/28/23	34.08	12.38	--	0.00	--	--	21.70
MW-30	ROW	07/22/14	33.45	12.37	--	0.00	--	--	21.08
MW-30	ROW	09/26/14	33.45	12.87	--	0.00	--	--	20.58
MW-30	ROW	10/30/14	33.45	10.73	--	0.00	--	--	22.72
MW-30	ROW	12/01/14	33.45	17.04	--	0.00	--	--	16.41
MW-30	ROW	02/20/15	33.45	19.18	--	0.00	--	--	14.27
MW-30	ROW	11/11/15	33.45	15.61	--	0.00	--	--	17.84
MW-30	ROW	04/18/16	33.45	12.41	--	0.00	--	--	21.05
MW-30	ROW	12/07/16	33.46	14.01	--	0.00	--	--	19.45
MW-30	ROW	06/21/17	33.46	11.75	--	0.00	--	--	21.71
MW-30	ROW	12/05/17	33.46	12.79	--	0.00	--	--	20.67
MW-30	ROW	06/26/18	33.46	13.09	--	0.00	--	--	20.37
MW-30	ROW	11/27/18	33.46	13.95	--	0.00	--	--	19.51
MW-30	ROW	06/20/19	33.46	12.95	--	0.00	--	--	20.51
MW-30	ROW	12/17/19	33.46	14.40	--	0.00	--	--	19.06
MW-30	ROW	06/10/20	33.46	12.50	--	0.00	--	--	20.96
MW-30	ROW	11/10/20	33.46	13.70	--	0.00	--	--	19.76

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MW-30	ROW	06/28/21	33.46	13.13	--	0.00	--	--	20.33
MW-30	ROW	06/24/22	33.46	10.62	--	0.00	--	--	22.84
MW-30	ROW	12/16/22	33.46	12.05	--	0.00	--	--	21.41
MW-30	ROW	06/01/23	33.46	11.04	--	0.00	--	--	22.42
MW-30	ROW	11/28/23	33.46	13.96	--	0.00	--	--	19.50
AGI-2	South Yard	08/10/99	97.95	--	--	--	--	--	--
AGI-2	South Yard	10/20/99	97.95	--	--	--	--	--	--
AGI-2	South Yard	01/15/01	97.95	13.61	--	0.00	--	--	84.34
AGI-2	South Yard	06/21/01	97.95	11.83	--	0.00	--	--	86.12
AGI-2	South Yard	07/26/01	97.95	12.19	--	0.00	--	--	85.76
AGI-2	South Yard	03/18/02	97.95	12.91	--	0.00	--	--	85.04
AGI-2	South Yard	03/18/02	97.95	12.91	--	0.00	--	--	85.04
AGI-2	South Yard	05/07/02	97.95	11.95	--	0.00	--	--	86.00
AGI-2	South Yard	06/06/02	97.95	12.51	--	0.00	--	--	85.44
AGI-2	South Yard	07/02/02	97.95	11.90	--	0.00	--	--	86.05
AGI-2	South Yard	09/03/02	97.95	13.65	--	0.00	--	--	84.30
AGI-2	South Yard	12/31/02	97.95	13.75	--	0.00	--	--	84.20
AGI-2	South Yard	03/26/03	97.95	12.62	--	0.00	--	--	85.33
AGI-2	South Yard	04/28/03	97.95	12.98	--	0.00	--	--	84.97
AGI-2	South Yard	05/30/03	97.95	12.19	--	0.00	--	--	85.76
AGI-2	South Yard	06/25/03	97.95	12.66	--	0.00	--	--	85.29
AGI-2	South Yard	09/15/03	97.95	13.51	--	0.00	--	--	84.44
AGI-2	South Yard	12/15/03	97.95	13.59	--	0.00	--	--	84.36
AGI-2	South Yard	03/26/04	97.95	12.33	--	0.00	--	--	85.62
AGI-2	South Yard	09/22/04	97.95	12.67	--	0.00	--	--	85.28
AGI-2	South Yard	03/14/05	97.95	12.99	--	0.00	--	--	84.96
AGI-2	South Yard	03/29/06	97.95	12.45	--	0.00	--	--	85.50
AGI-2	South Yard	03/21/07	97.95	12.30	--	0.00	--	--	85.65
AGI-2	South Yard	03/25/08	97.95	12.53	--	0.00	--	--	85.42
AGI-2	South Yard	09/08-09/08	97.95	12.63	--	0.00	--	--	85.32
AGI-2	South Yard	12/11/08	97.95	--	--	--	--	--	--
AGI-2	South Yard	03/30-31/09	97.95	12.33	--	0.00	--	--	85.62
AGI-2	South Yard	09/10-11/09	97.95	13.11	--	0.00	--	--	84.84
AGI-2	South Yard	03/15/10	97.95	15.92	--	0.00	--	--	82.03
AGI-2	South Yard	09/15/10	97.95	12.99	--	0.00	--	--	84.96
AGI-2	South Yard	03/14/11	97.95	12.58	--	0.00	--	--	85.37
AGI-2	South Yard	06/21/12	30.68	11.69	--	0.00	--	--	18.99
AGI-2	South Yard	09/20/12	30.68	13.31	--	0.00	--	--	17.37
AGI-2	South Yard	12/26/12	30.68	13.41	--	0.00	--	--	17.27
AGI-2	South Yard	04/23/13	30.68	11.96	--	0.00	--	--	18.72
AGI-2	South Yard	06/26/13	30.68	11.90	--	0.00	--	--	18.78
AGI-2	South Yard	09/18/13	30.68	12.72	--	0.00	--	--	17.96
AGI-2	South Yard	10/14/13	30.68	12.94	--	0.00	--	--	17.74
AGI-2	South Yard	03/27/14	30.68	12.41	--	0.00	--	--	18.27
AGI-2	South Yard	06/10/14	30.68	11.85	--	0.00	--	--	18.83
AGI-2	South Yard	11/11/15	30.68	13.41	--	0.00	--	--	17.27
AGI-2	South Yard	04/18/16	30.68	11.98	--	0.00	--	--	18.70
AGI-2	South Yard	12/07/16	30.68	13.50	--	0.00	--	--	17.18

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
AGI-2	South Yard	06/21/17	30.68	11.80	--	0.00	--	--	18.88
AGI-2	South Yard	12/05/17	30.68	13.64	--	0.00	--	--	17.04
AGI-2	South Yard	06/26/18	30.68	12.06	--	0.00	--	--	18.62
AGI-2	South Yard	11/27/18	30.68	13.41	--	0.00	--	--	17.27
AGI-2	South Yard	06/20/19	30.68	12.10	--	0.00	--	--	18.58
AGI-2	South Yard	12/17/19	30.68	13.68	--	0.00	--	--	17.00
AGI-2	South Yard	06/10/20	30.68	11.80	--	0.00	--	--	18.88
AGI-2	South Yard	11/10/20	30.68	13.35	--	0.00	--	--	17.33
AGI-2	South Yard	06/28/21	30.68	11.90	--	0.00	--	--	18.78
AGI-2	South Yard	01/06/22	30.68	13.22	--	0.00	--	--	17.46
AGI-2	South Yard	06/24/22	30.68	12.64	--	0.00	--	--	18.04
AGI-2	South Yard	12/16/22	30.68	14.11	--	0.00	--	--	16.57
AGI-2	South Yard	06/01/23	30.68	13.02	--	0.00	--	--	17.66
AGI-2	South Yard	11/28/23	30.68	14.68	--	0.00	--	--	16.00
MLU-1	South Yard	10/20/99	100.18	15.33	--	0.00	--	--	84.85
MLU-1	South Yard	01/06/00	100.18	15.75	--	0.00	--	--	84.43
MLU-1	South Yard	04/12/00	100.18	14.35	--	0.00	--	--	85.83
MLU-1	South Yard	06/27/00	100.18	14.24	--	0.00	--	--	85.94
MLU-1	South Yard	09/29/00	100.18	15.12	--	0.00	--	--	85.06
MLU-1	South Yard	06/25/03	100.18	14.41	--	0.00	--	--	85.77
MLU-1	South Yard	09/15/03	100.18	15.72	--	0.00	--	--	84.46
MLU-1	South Yard	12/15/03	100.18	15.70	--	0.00	--	--	84.48
MLU-1	South Yard	03/25/04	100.18	14.75	--	0.00	--	--	85.43
MLU-1	South Yard	09/22/04	100.18	14.88	--	0.00	--	--	85.30
MLU-1	South Yard	03/14/05	100.18	15.21	--	0.00	--	--	84.97
MLU-1	South Yard	03/29/06	100.18	14.65	--	0.00	--	--	85.53
MLU-1	South Yard	03/21/07	100.18	14.64	--	0.00	--	--	85.54
MLU-1	South Yard	03/25/08	100.18	14.70	--	0.00	--	--	85.48
MLU-1	South Yard	09/08-09/08	100.18	--	--	--	--	--	--
MLU-1	South Yard	12/11/08	100.18	--	--	--	--	--	--
MLU-1	South Yard	03/30-31/09	100.18	--	--	--	--	--	--
MLU-1	South Yard	09/10-11/09	100.18	15.32	--	0.00	--	--	84.86
MLU-1	South Yard	03/15/10	100.18	14.82	--	0.00	--	--	85.36
MLU-1	South Yard	09/15/10	100.18	15.21	--	0.00	--	--	84.97
MLU-1	South Yard	03/14/11	100.18	14.19	--	0.00	--	--	85.99
MLU-1	South Yard	06/21/12	32.90	13.96	--	0.00	--	--	18.94
MLU-1	South Yard	09/20/12	32.90	15.51	--	0.00	--	--	17.39
MLU-1	South Yard	09/21/12	32.90	15.51	--	0.00	--	--	17.39
MLU-1	South Yard	12/26/12	32.90	15.31	--	0.00	--	--	17.59
MLU-1	South Yard	04/22/13	32.90	14.14	--	0.00	--	--	18.76
MLU-1	South Yard	06/26/13	32.90	14.05	--	0.00	--	--	18.85
MLU-1	South Yard	09/18/13	32.90	14.92	--	0.00	--	--	17.98
MLU-1	South Yard	10/14/13	32.90	15.50	--	0.00	--	--	17.40
MLU-1	South Yard	03/27/14	32.90	14.61	--	0.00	--	--	18.29
MLU-1	South Yard	06/10/14	32.90	13.97	--	0.00	--	--	18.93
MLU-1	South Yard	11/11/15	32.90	15.56	--	0.00	--	--	17.34
MLU-1	South Yard	04/18/16	32.90	14.26	--	0.00	--	--	18.64
MLU-1	South Yard	12/07/16	32.90	15.65	--	0.00	--	--	17.25

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
MLU-1	South Yard	06/21/17	32.90	15.01	--	0.00	--	--	17.89
MLU-1	South Yard	12/05/17	32.90	15.62	--	0.00	--	--	17.28
MLU-1	South Yard	06/26/18	32.90	14.33	--	0.00	--	--	18.57
MLU-1	South Yard	11/27/18	32.90	15.17	--	0.00	--	--	17.73
MLU-1	South Yard	06/20/19	32.90	14.26	--	0.00	--	--	18.64
MLU-1	South Yard	12/17/19	32.90	15.88	--	0.00	--	--	17.02
MLU-1	South Yard	06/10/20	32.90	13.94	--	0.00	--	--	18.96
MLU-1	South Yard	11/10/20	32.90	15.58	--	0.00	--	--	17.32
MLU-1	South Yard	06/28/21	32.90	14.08	--	0.00	--	--	18.82
MLU-1	South Yard	01/06/22	32.90	14.99	--	0.00	--	--	17.91
MLU-1	South Yard	06/24/22	32.90	13.78	--	0.00	--	--	19.12
MLU-1	South Yard	12/16/22	32.90	15.08	--	0.00	--	--	17.82
MLU-1	South Yard	06/01/23	32.90	13.84	--	0.00	--	--	19.06
MLU-1	South Yard	11/28/23	32.90	15.06	--	0.00	--	--	17.84
MLU-3	South Yard	08/20/99	97.62	--	--	--	--	--	--
MLU-3	South Yard	10/20/99	97.62	13.58	--	0.00	--	--	84.04
MLU-3	South Yard	07/26/01	97.62	12.05	--	0.00	--	--	85.57
MLU-3	South Yard	03/27/14	30.64	12.44	--	0.00	--	--	18.20
MLU-3	South Yard	06/10/14	30.64	11.68	--	0.00	--	--	18.96
MLU-3	South Yard	11/11/15	30.64	13.38	--	0.00	--	--	17.26
MLU-3	South Yard	04/18/16	30.64	12.09	--	0.00	--	--	18.55
MLU-3	South Yard	12/07/16	30.64	13.47	--	0.00	--	--	17.17
MLU-3	South Yard	06/21/17	30.64	11.70	--	0.00	--	--	18.94
MLU-3	South Yard	12/05/17	30.64	13.49	--	0.00	--	--	17.15
MLU-3	South Yard	06/26/18	30.64	12.11	--	0.00	--	--	18.53
MLU-3	South Yard	11/27/18	30.64	13.08	--	0.00	--	--	17.56
MLU-3	South Yard	06/20/19	30.64	12.01	--	0.00	--	--	18.63
MLU-3	South Yard	12/17/19	30.64	13.66	--	0.00	--	--	16.98
MLU-3	South Yard	06/10/20	30.64	11.71	--	0.00	--	--	18.93
MLU-3	South Yard	11/10/20	30.64	13.35	--	0.00	--	--	17.29
MLU-3	South Yard	06/28/21	30.64	11.80	--	0.00	--	--	18.84
MLU-3	South Yard	01/06/22	30.64	13.03	--	0.00	--	--	17.61
MLU-3	South Yard	06/24/22	30.64	12.10	--	0.00	--	--	18.54
MLU-3	South Yard	12/16/22	30.64	13.57	--	0.00	--	--	17.07
MLU-3	South Yard	06/01/23	30.64	12.29	--	0.00	--	--	18.35
MLU-3	South Yard	11/28/23	30.64	14.79	--	0.00	--	--	15.85
EW-1	ROW	07/22/14	35.05	12.25	--	0.00	--	--	22.80
EW-1	ROW	09/26/14	35.05	14.03	--	0.00	--	--	21.02
EW-1	ROW	10/30/14	35.05	11.86	--	0.00	--	--	23.19
EW-1	ROW	12/01/14	35.05	21.71	--	0.00	--	--	13.34
EW-1	ROW	02/20/15	35.05	21.71	--	0.00	--	--	13.34
EW-1	ROW	11/11/15	35.05	17.20	--	0.00	--	--	17.85
EW-1	ROW	04/18/16	35.05	--	--	--	--	--	--
EW-1	ROW	12/07/16	35.05	13.72	--	0.00	--	--	21.33
EW-1	ROW	06/21/17	35.05	12.20	--	0.00	--	--	22.85
EW-1	ROW	12/05/17	35.05	13.25	--	0.00	--	--	21.80
EW-1	ROW	06/26/18	35.05	13.33	--	0.00	--	--	21.72
EW-1	ROW	11/27/18	35.05	14.07	--	0.00	--	--	20.98

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
EW-1	ROW	06/20/19	35.05	12.20	--	0.00	--	--	22.85
EW-1	ROW	12/17/19	35.05	14.68	--	0.00	--	--	20.37
EW-1	ROW	06/10/20	35.05	12.68	--	0.00	--	--	22.37
EW-1	ROW	11/10/20	35.05	13.48	--	0.00	--	--	21.57
EW-1	ROW	06/28/21	35.05	13.96	--	0.00	--	--	21.09
EW-1	ROW	06/24/22	35.05	10.38	--	0.00	--	--	24.67
EW-1	ROW	12/16/22	35.05	11.38	--	0.00	--	--	23.67
EW-1	ROW	06/01/23	35.05	10.47	--	0.00	--	--	24.58
EW-1	ROW	11/28/23	35.05	14.10	--	0.00	--	--	20.95
SMPN-1	North Yard	03/15/05	--	11.23	Sheen	Sheen	0.00	No	--
SMPN-1	North Yard	10/04/05	--	11.96	11.72	0.24	<1/16	No	--
SMPN-1	North Yard	03/29/06	--	9.84	--	0.00	0.00	No	--
SMPN-1	North Yard	03/21/07	--	9.89	--	0.00	0.00	No	--
SMPN-1	North Yard	03/25/08	--	10.36	--	0.00	0.00	No	--
SMPN-1	North Yard	09/08-09/08	100.99	10.68	10.67	0.01	0.00	Yes	90.32
SMPN-1	North Yard	12/11/08	100.99	11.30	--	0.00	0.00	Yes	89.69
SMPN-1	North Yard	03/30-31/09	100.99	10.31	10.30	0.01	0.00	Yes	90.69
SMPN-1	North Yard	06/15/09	100.99	9.73	9.72	0.01	0.00	Yes	91.27
SMPN-1	North Yard	09/10-11/09	100.99	11.13	--	0.00	0.00	Yes	89.86
SMPN-1	North Yard	02/23/10	100.99	9.86	--	0.00	0.00	Yes	91.13
SMPN-1	North Yard	03/15/10	100.99	9.83	--	0.01	0.00	Yes	91.17
SMPN-1	North Yard	09/15/10	100.99	11.13	11.12	0.01	--	Yes	89.87
SMPN-1	North Yard	12/4/10	100.99	10.53	10.53	0.00	--	Yes	90.46
SMPN-1	North Yard	11/16/11	33.78	11.27	--	0.00	--	Yes	22.51
SMPN-1	North Yard	12/08/11	33.78	9.79	9.78	0.01	0.05 ⁴	Yes	24.00
SMPN-1	North Yard	03/23/12	33.78	8.27	8.25	0.02	0.50	Yes	25.53
SMPN-1	North Yard	06/01/12	33.78	8.85	--	0.00	--	Yes	24.93
SMPN-1	North Yard	09/20/12	33.78	11.14	10.96	0.18	--	Yes	22.78
SMPN-1	North Yard	12/26/12	33.78	8.50	--	0.00	--	Yes	25.28
SMPN-1	North Yard	04/22/13	33.78	8.75	--	0.00	--	Yes	25.03
SMPN-1	North Yard	06/26/13	33.78	9.54	--	0.00	--	Yes	24.24
SMPN-1	North Yard	09/18/13	33.78	11.29	--	0.00	--	Yes	22.49
SMPN-1	North Yard	10/14/13	33.78	10.49	--	0.00	--	Yes	23.29
SMPN-1	North Yard	03/27/14	33.78	9.46	--	0.00	--	Yes	24.32
SMPN-1	North Yard	06/10/14	33.78	9.23	--	0.00	--	Yes	24.55
SMPN-2	North Yard	03/15/05	101.24	11.21	11.20	0.01	0.00	No	--
SMPN-2	North Yard	03/29/06	101.24	9.48	--	0.00	0.00	No	--
SMPN-2	North Yard	03/21/07	101.24	9.20	9.15	0.05	<0.05	No	--
SMPN-2	North Yard	03/25/08	101.24	10.11	--	0.00	0.00	No	--
SMPN-2	North Yard	09/08-09/08	101.24	10.51	10.50	0.01	0.00	Yes	90.74
SMPN-2	North Yard	12/11/08	101.24	11.06	11.05	0.01	0.00	No	90.19
SMPN-2	North Yard	03/30-31/09	101.24	10.12	10.11	0.01	0.00	No	91.13
SMPN-2	North Yard	06/15/09	101.24	9.51	9.50	0.01	0.00	No	91.74
SMPN-2	North Yard	09/10-11/09	101.24	10.99	10.98	0.01	0.00	No	90.26
SMPN-2	North Yard	02/23/10	101.24	9.23	10.98	0.00	0.00	No	92.01
SMPN-2	North Yard	03/15/10	101.24	9.37	9.36	0.01	0.00	No	91.88
SMPN-2	North Yard	09/15/10	101.24	11.07	10.89	0.18	--	No	90.31
SMPN-2	North Yard	12/04/10	101.24	10.35	10.28	0.07	--	No	90.95

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
SMPN-2	North Yard	03/14/11	101.24	8.93	--	0.00	--	No	92.31
SMPN-2	North Yard	11/16/11	33.85	9.97	9.96	0.01	0.05 ⁴	No	23.89
SMPN-2	North Yard	12/08/11	33.85	9.61	--	0.00	--	No	24.24
SMPN-2	North Yard	03/23/12	33.85	8.12	8.10	0.02	0.50	No	25.75
SMPN-2	North Yard	06/01/12	33.85	8.40	8.30	0.10	1.00	No	25.53
SMPN-2	North Yard	09/20/12	33.85	11.11	10.95	0.16	--	No	22.87
SMPN-2	North Yard	12/26/12	33.85	8.51	--	0.00	--	No	25.34
SMPN-2	North Yard	04/22/13	33.85	7.88	--	0.00	--	No	25.97
SMPN-2	North Yard	06/26/13	33.85	8.70	--	0.00	--	No	25.15
SMPN-2	North Yard	09/18/13	33.85	10.82	10.81	0.01	--	Yes	23.04
SMPN-2	North Yard	10/14/13	33.85	10.50	--	0.00	--	Yes	23.35
SMPN-2	North Yard	03/27/14	33.85	9.39	--	0.00	--	Yes	24.46
SMPN-2	North Yard	06/10/14	33.85	3.74	--	0.00	--	Yes	30.11
SMPN-3	North Yard	03/15/05	--	11.46	--	0.00	--	No	--
SMPN-3	North Yard	03/29/06	--	9.56	--	0.00	--	No	--
SMPN-3	North Yard	03/21/07	--	9.03	--	0.00	--	No	--
SMPN-3	North Yard	03/25/08	--	10.30	--	0.00	--	No	--
SMPN-3	North Yard	09/08-09/08	101.02	10.67	10.66	0.01	0.00	Yes	90.36
SMPN-3	North Yard	12/11/08	101.02	11.26	--	0.00	--	No	89.76
SMPN-3	North Yard	03/30-31/09	101.02	10.28	10.27	0.01	0.00	No	90.75
SMPN-3	North Yard	06/15/09	101.02	9.59	--	0.00	--	No	91.43
SMPN-3	North Yard	09/10-11/09	101.02	11.08	--	0.01	--	No	89.95
SMPN-3	North Yard	02/23/10	101.02	9.44	--	0.00	--	No	91.58
SMPN-3	North Yard	03/15/10	101.02	9.51	--	0.01	--	No	91.52
SMPN-3	North Yard	09/15/10	101.02	11.14	--	0.00	--	No	89.88
SMPN-3	North Yard	12/04/10	101.02	10.49	--	0.00	--	No	90.53
SMPN-3	North Yard	03/14/11	101.02	9.12	--	0.00	--	No	91.90
SMPN-3	North Yard	11/16/11	33.81	11.06	10.94	0.12	0.05 ⁴	No	22.85
SMPN-3	North Yard	12/08/11	33.81	9.73	--	0.00	--	No	24.08
SMPN-3	North Yard	03/23/12	33.81	8.30	--	0.00	--	No	25.51
SMPN-3	North Yard	06/01/12	33.81	8.05	--	0.00	--	No	25.76
SMPN-3	North Yard	09/20/12	33.81	11.22	--	0.00	--	No	22.59
SMPN-3	North Yard	12/26/12	33.81	8.89	--	0.00	--	No	24.92
SMPN-3	North Yard	04/22/13	33.81	8.30	--	0.00	--	No	25.51
SMPN-3	North Yard	06/26/13	33.81	9.02	--	0.00	--	No	24.79
SMPN-3	North Yard	09/18/13	33.81	11.06	--	0.00	--	No	22.75
SMPN-3	North Yard	10/14/13	33.81	10.52	--	0.00	--	No	23.29
SMPN-3	North Yard	03/27/14	33.81	8.68	--	0.00	--	No	25.13
SMPN-3	North Yard	06/10/14	33.81	9.39	--	0.00	--	Yes	24.42

Well Number	Well Location	Date Measured	Well Casing Elevation ¹	Depth to Groundwater ² (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)	LNAPL Removed (gallons)	Absorbant Sock in Well (Yes / No)	Groundwater Elevation ³ (feet)
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Notes:

BOLD = Indicates data from current reporting period

Grey = Indicates the monitoring well is no longer present

Groundwater elevation corrected for the presence of LNAPL using a specific gravity of 0.80; Correction factor: $[(TOC-DTW)+(LNAPL \times 0.80)]$

¹Well casing elevations listed in feet above NAVD 88. Approximate monitoring well locations are shown in Figure 2.

²Below top of casing.

³Elevation referenced to Horizontal Datum NAD 83/98, State Plane Coordinates Washington North Zone and Vertical Datum NAVD 88

⁴LNAPL + water removed

⁵LNAPL only removed

Acronyms and Abbreviations:

LNAPL = Light Non Aqueous Phase Liquid

-- = not measured or not obtainable

* = Interface probe not recognizing LNAPL, bailer dropped in well, LNAPL thickness > 3 feet

Location	Sample Date	Benzene	Toluene	Ethylbenzene	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) Pyrene	Dissolved Arsenic	Dissolved Lead
Site Cleanup Level		43	48,500	6,910	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982¹	5
MW-4	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.259 J	<0.849
MW-7	11/28/2023	22.9	3.81	21.3	79.4	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	4.54	0.893 J
MW-8A	11/28/2023	<0.0941	0.386 J	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.455 J	<0.849
MW-8A-DUP	11/28/2023	<0.0941	1.12	0.180 J	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.418 J	<0.849
AGI-2	11/28/2023	2.81	1.26	11.9	0.914	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	13.8	<0.849
MLU-1	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.206 J	<0.849
MLU-3	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	1.15 J	0.860 J
MW-19	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.538 J	<0.849
MW-20	11/28/2023	<0.0941	<0.278	<0.137	0.100 J	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	2.44	<0.849
MW-21	11/28/2023	<0.0941	<0.278	<0.137	0.240 J	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	13.5	<0.849
MW-25	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	1.64 J	<0.849
MW-26	11/28/2023	<0.0941	<0.278	<0.137	<0.0917	<0.0203	<0.0184	<0.0168	<0.0202	<0.0179	<0.0160	<0.0158	0.307 J	<0.849

Notes:

BOLD = Detect values greater than the reporting limit MDL

BOLD and shaded = Concentrations are greater than their respective site cleanup levels

All samples were field filtered excluding benzene, ethylbenzene and toluene

All results are reported in µg/L

¹ The arsenic Site CUL is two orders of magnitude below the USEPA Method 6020B PQL (or RDL) for arsenic (2 µg/L) and one order of magnitude below the USEPA Method 6020B MDL for arsenic (0.18 µg/L). Therefore, any arsenic detection will exceed the arsenic Site CUL.

Acronyms and Abbreviations:

DUP = Duplicate sample collected from MW-8A

µg/L = Micrograms per liter

CUL = Cleanup Level

MDL = Method Detection Limit

RDL = Reported Detection Limit

PQL = Practicable Quantification Limit

QA = Quality Assurance/Trip Blank

RDL = Reported Detection Limit

USEPA = United States Environmental Protection Agency

Laboratory Qualifiers:

< = Indicates concentration is less than the Method Detection Limit (MDL).

J = The concentration is an approximate value

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

Laboratory Analytical Methods:

Benzene, toluene, and ethylbenzene by (EPA) method 8260D

Polyaromatic hydrocarbons - benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene and naphthalene - by EPA method 8270E SIM

Dissolved lead and arsenic by EPA method 6020B

Table 3
Point of Compliance Consecutive Clean Sampling Events as of Second Semi-Annual 2023
Former Chevron Bulk Plant -1001327
1602 North Northlake Way
Seattle, Washington

Monitoring Well	Petroleum Constituents: Benzene, Toluene, Ethylbenzene, Naphthalene		Carcinogenic Polycyclic Aromatic Hydrocarbons		Lead	
	Current Sampling Interval	Consecutive Sampling Events in Compliance ^{1,2}	Current Sampling Interval	Consecutive Sampling Events in Compliance ^{1,2}	Current Sampling Interval	Consecutive Sampling Events in Compliance ^{1,2}
North Yard						
MW-19	semi-annual	24 ³	semi-annual	16	semi-annual	23 ³
MW-20	semi-annual	25 ³	semi-annual	28 ³	semi-annual	24 ³
MW-21	semi-annual	26 ³	semi-annual	25 ³	semi-annual	26 ³
South Yard						
MW-4	semi-annual	27 ³	semi-annual	21 ³	semi-annual	27 ³
MW-7	semi-annual	16	semi-annual	16	semi-annual	21 ³
MW-8A	semi-annual	26 ³	semi-annual	25 ³	semi-annual	26 ³
AGI-2	semi-annual	8	semi-annual	22 ³	semi-annual	10 ³
MLU-1	semi-annual	25 ³	semi-annual	24 ³	semi-annual	25 ³
MLU-3 ⁴	semi-annual	18	semi-annual	18	semi-annual	4
MW-25	semi-annual	26 ³	semi-annual	26 ³	semi-annual	26 ³
MW-26	semi-annual	26 ³	semi-annual	26 ³	semi-annual	26 ³

Notes:

¹ "Consecutive events" are number of consecutive sampling events prior to and including the current reporting period that are in compliance with the groundwater Site Cleanup Levels (CULs). Events prior to 2010 are not counted. Refer to progress reports for results.

² Consecutive clean sampling events excludes arsenic values because laboratory limits are above the arsenic Site CUL. The arsenic Site CUL is two orders of magnitude below the USEPA Method 6020/6020A/6020B practical quantitation limit (PQL) (or reported detection limit [RDL]) for arsenic (2 µg/L) and one order of magnitude below the USEPA Method 6020/6020A/6020B Method Detection Limit (MDL) for arsenic (varying from 0.18 to 0.95 µg/L). Therefore, any arsenic detection will exceed the arsenic Site CUL.

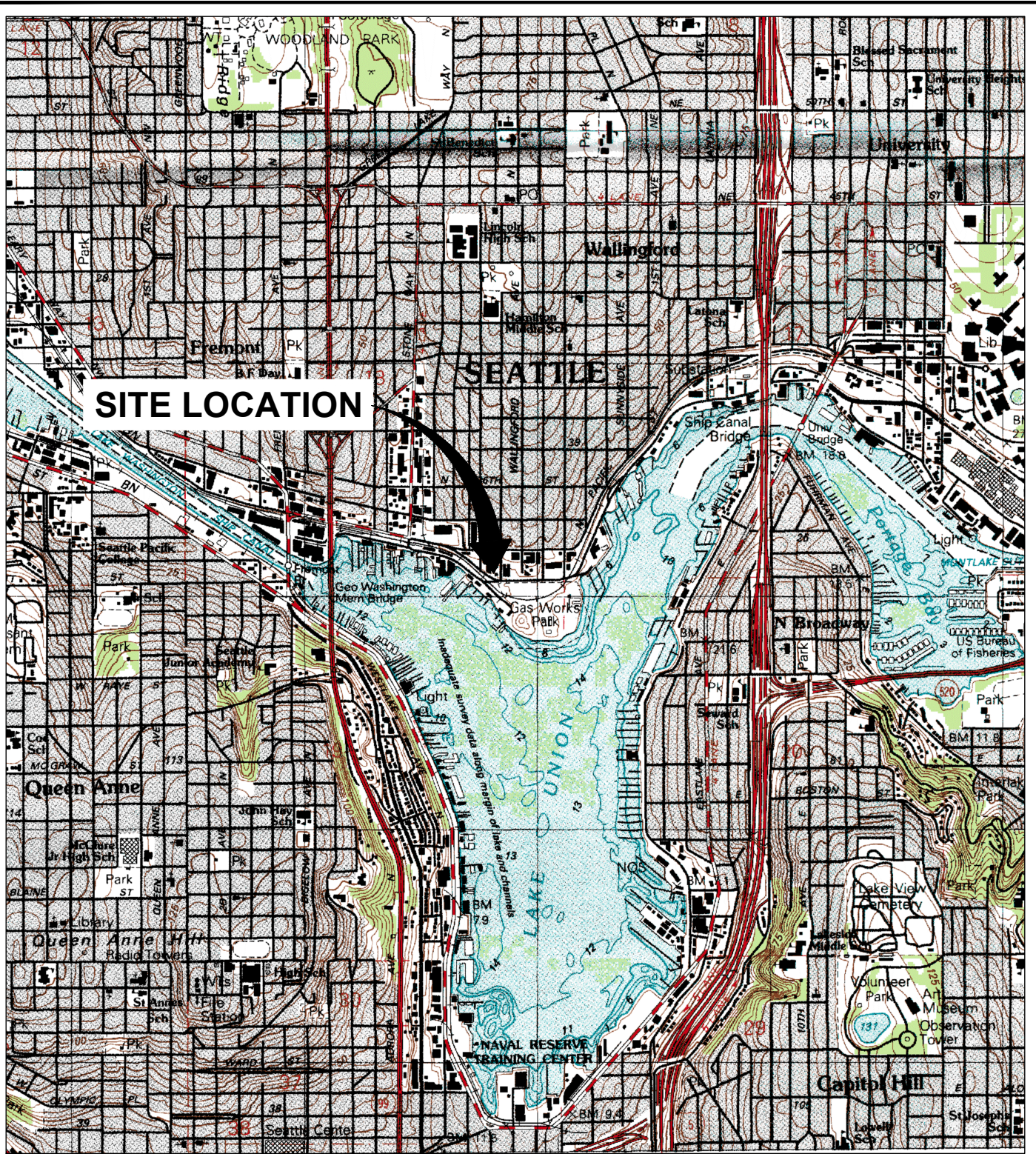
³ No exceedences, but constituent not analyzed consecutively every sampling event.

⁴ MLU-3 only sampled 18 times since 2010. MLU-3 was sampled annually in 2014 and 2015 and semi-annually since.

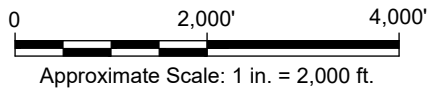
Acronyms and Abbreviations:

cPAHs = carcinogenic polycyclic aromatic hydrocarbons
USEPA = United States Environmental Protection Agency

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., SEATTLE NORTH, WA.



FORMER CHEVRON BULK PLANT No. 100-1327
FACILITIES NORTH / KING COUNTY (METRO)
SEATTLE, WASHINGTON
**SECOND SEMI-ANNUAL GROUNDWATER
MONITORING REPORT**

SITE LOCATION MAP








FIGURE

1



LEGEND:

-  PROPERTY BOUNDARY
-  FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
-  NORTH YARD
-  SOUTH YARD
-  PUBLIC RIGHT OF WAY

FORMER CHEVRON BULK PLANT No. 100-1327
FACILITIES NORTH / KING COUNTY (METRO)
SEATTLE, WASHINGTON
**SECOND SEMI-ANNUAL GROUNDWATER
MONITORING REPORT**

SITE AERIAL MAP


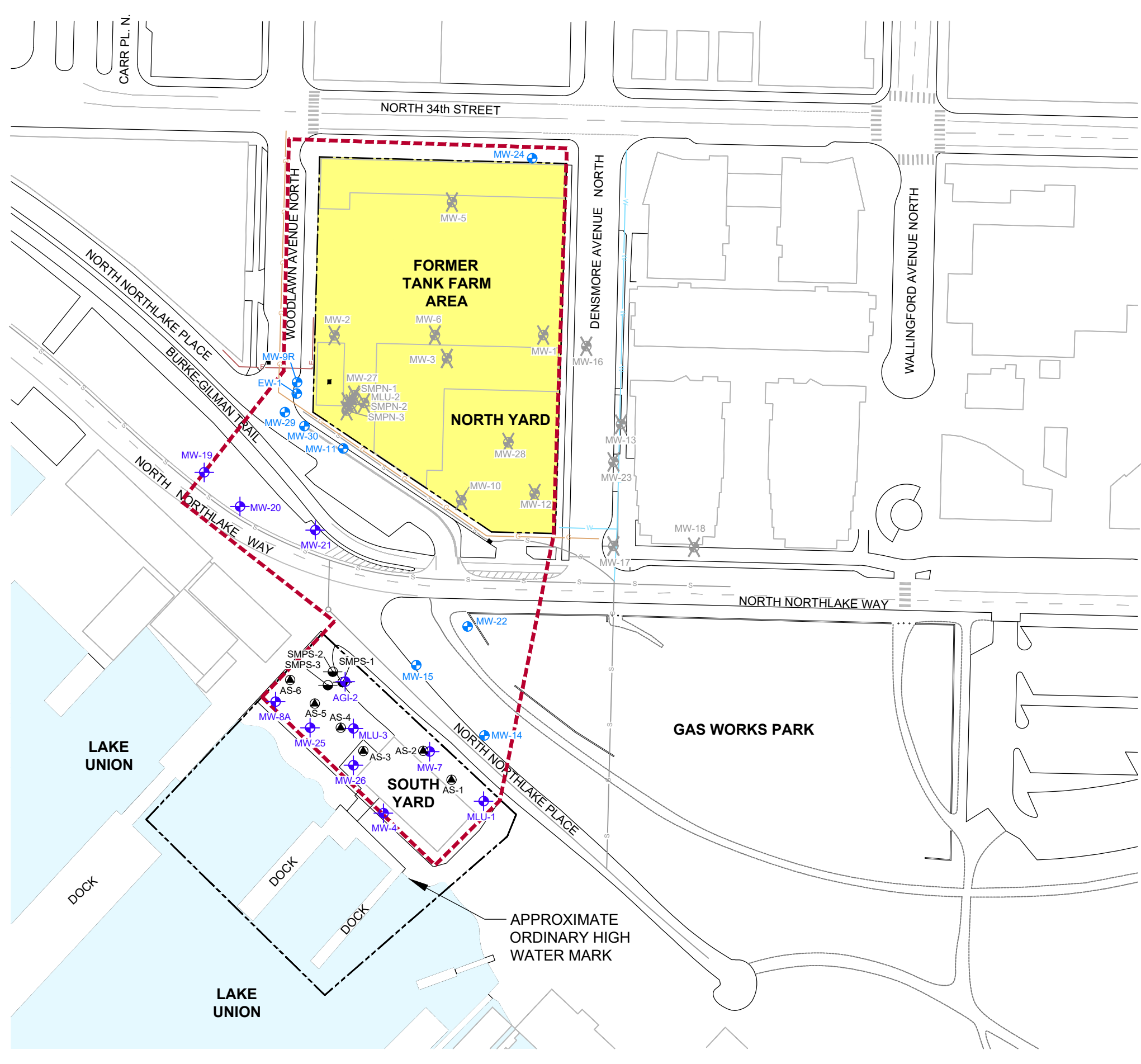


FIGURE
2



LEGEND:

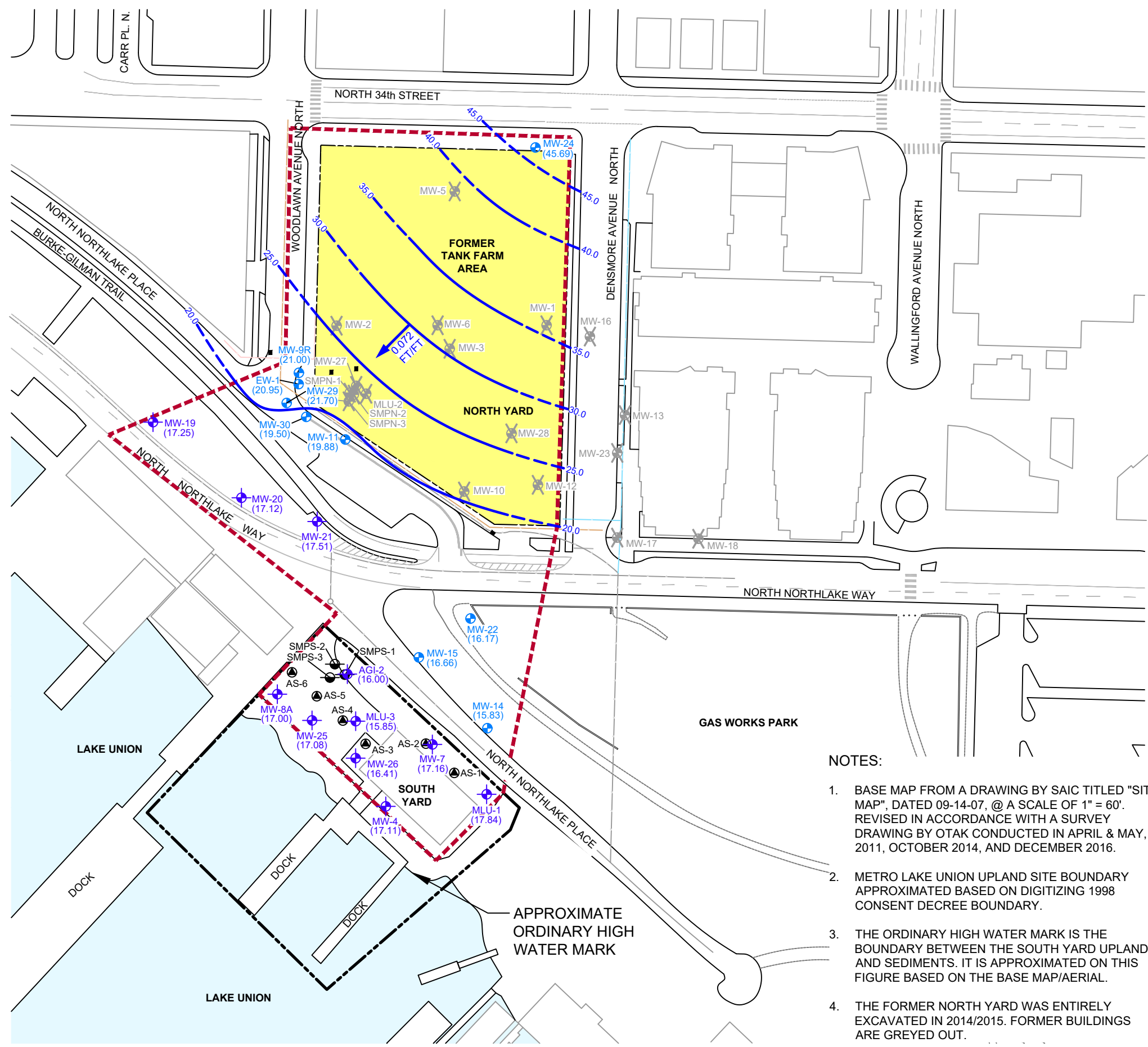
- PROPERTY BOUNDARY
- FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
- COMPLIANCE MONITORING WELL
- GROUNDWATER MONITORING WELL
- SUPPLEMENTARY MONITORING POINT
- BIOSPARGE INJECTION WELL
- ABANDONED MONITORING WELL
- CATCH BASIN
- NATURAL GAS LINE (APPROXIMATE)
- UNDERGROUND ELECTRIC LINE (APPROXIMATE)
- WATER LINE (APPROXIMATE)
- SEWER LINE (APPROXIMATE)
- TOUCHSTONE REDEVELOPMENT EXCAVATION BOUNDARY

NOTES:

1. BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011, OCTOBER 2014, AND DECEMBER 2016.
2. METRO LAKE UNION UPLAND SITE BOUNDARY APPROXIMATED BASED ON DIGITIZING 1998 CONSENT DECREE BOUNDARY.
3. THE ORDINARY HIGH WATER MARK IS THE BOUNDARY BETWEEN THE SOUTH YARD UPLANDS AND SEDIMENTS. IT IS APPROXIMATED ON THIS FIGURE BASED ON THE BASE MAP/AERIAL.
4. THE FORMER NORTH YARD WAS ENTIRELY EXCAVATED IN 2014/2015. FORMER BUILDINGS ARE GREYED OUT.
5. ALL LOCATIONS OTHER THAN CURRENT GROUNDWATER MONITORING WELLS AND COMPLIANCE MONITORING WELLS ARE APPROXIMATE



FORMER CHEVRON BULK PLANT No. 100-1327 FACILITIES NORTH / KING COUNTY (METRO) SEATTLE, WASHINGTON SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT	
SITE PLAN	
	FIGURE 3



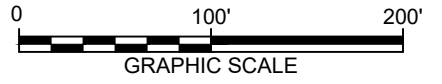
LEGEND:

- PROPERTY BOUNDARY
- FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
- COMPLIANCE MONITORING WELL
- GROUNDWATER MONITORING WELL
- SUPPLEMENTARY MONITORING POINT
- BIOSPARGE INJECTION WELL
- ABANDONED MONITORING WELL
- CATCH BASIN
- NATURAL GAS LINE (APPROX.)
- UNDERGROUND ELECTRIC LINE (APPROX.)
- WATER LINE (APPROX.)
- SEWER LINE (APPROX.)
- TOUCHSTONE REDEVELOPMENT EXCAVATION BOUNDARY
- 45.0 GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- (45.69) GROUNDWATER ELEVATION IN FEET ABOVE NAVD 88
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- 0.072 FT/FT APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)



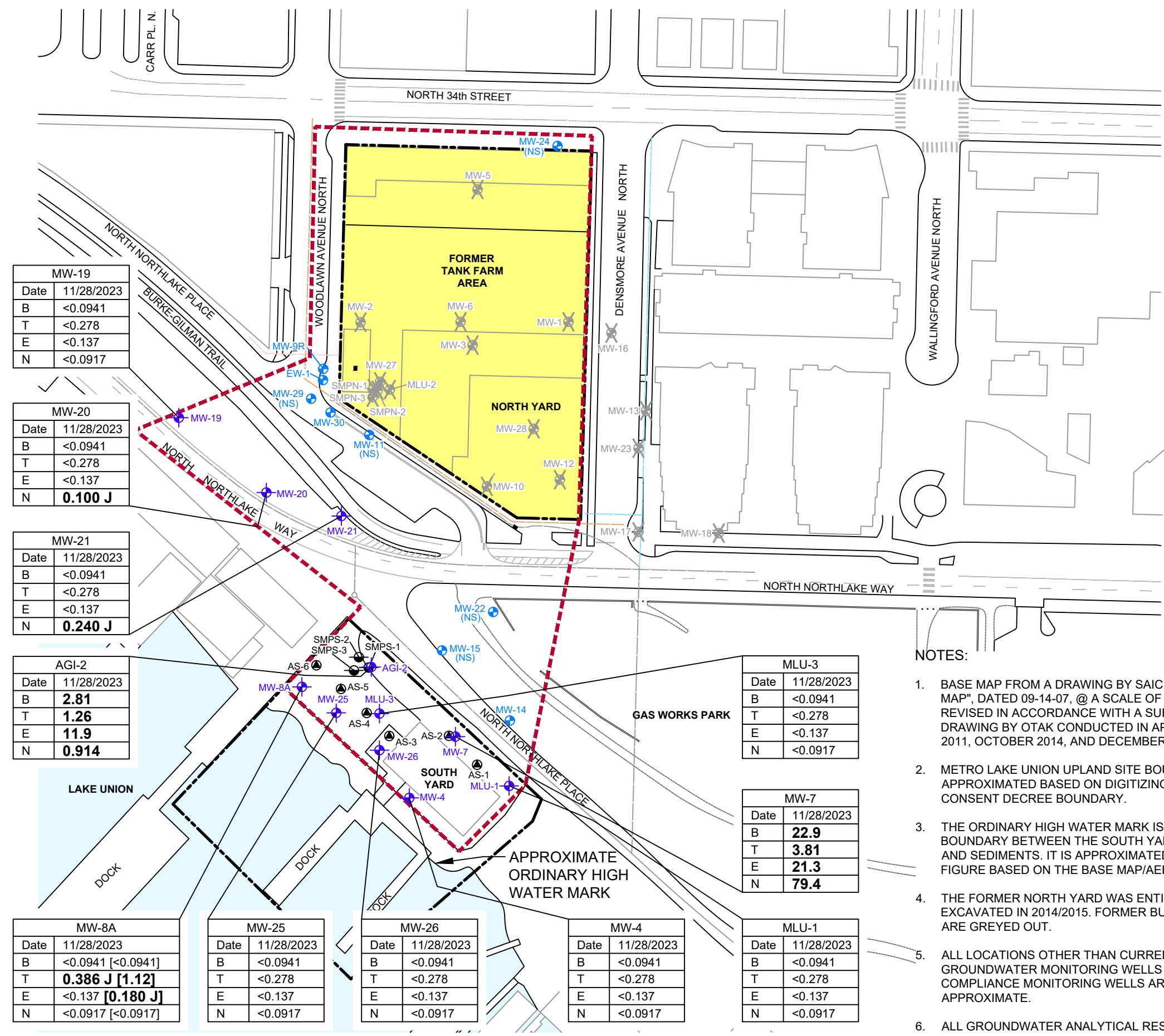
NOTES:

1. BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011, OCTOBER 2014, AND DECEMBER 2016.
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3. THE ORDINARY HIGH WATER MARK IS THE BOUNDARY BETWEEN THE SOUTH YARD UPLANDS AND SEDIMENTS. IT IS APPROXIMATED ON THIS FIGURE BASED ON THE BASE MAP/AERIAL.
4. THE FORMER NORTH YARD WAS ENTIRELY EXCAVATED IN 2014/2015. FORMER BUILDINGS ARE GREYED OUT.



FORMER CHEVRON BULK PLANT No. 100-1327
 FACILITIES NORTH / KING COUNTY (METRO)
 SEATTLE, WASHINGTON
**SECOND SEMI-ANNUAL GROUNDWATER
 MONITORING REPORT 2023**
**GROUNDWATER ELEVATION
 CONTOUR MAP
 NOVEMBER 28, 2023**



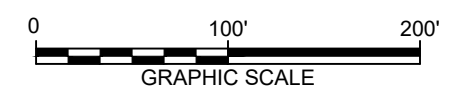


LEGEND:

- PROPERTY BOUNDARY
- - - - - FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
- ⊕ COMPLIANCE MONITORING WELL
- ⊕ GROUNDWATER MONITORING WELL
- SUPPLEMENTARY MONITORING POINT
- BIOSPARGE INJECTION WELL
- ⊗ ABANDONED MONITORING WELL
- CATCH BASIN
- NATURAL GAS LINE (APPROX.)
- UNDERGROUND ELECTRIC LINE (APPROX.)
- WATER LINE (APPROX.)
- SEWER LINE (APPROX.)
- TOUCHSTONE REDEVELOPMENT EXCAVATION BOUNDARY

- BOLD** DETECT VALUES GREATER THAN THE REPORTING LIMIT MDL
- < INDICATES CONCENTRATION IS LESS THAN THE METHOD DETECTION LIMIT (MDL).
- J RESULT IS LESS THAN THE RDL BUT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT AND THE CONCENTRATION IS AN APPROXIMATE VALUE
- [] DUPLICATE SAMPLE RESULTS
- (NS) NOT SAMPLED

Site Cleanup Levels		
B	Benzene	43
T	Toluene	48,500
E	Ethylbenzene	6,910
N	Naphthalene	9,880



- NOTES:**
- BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011, OCTOBER 2014, AND DECEMBER 2016.
 - METRO LAKE UNION UPLAND SITE BOUNDARY APPROXIMATED BASED ON DIGITIZING 1998 CONSENT DECREE BOUNDARY.
 - THE ORDINARY HIGH WATER MARK IS THE BOUNDARY BETWEEN THE SOUTH YARD UPLANDS AND SEDIMENTS. IT IS APPROXIMATED ON THIS FIGURE BASED ON THE BASE MAP/AERIAL.
 - THE FORMER NORTH YARD WAS ENTIRELY EXCAVATED IN 2014/2015. FORMER BUILDINGS ARE GREYED OUT.
 - ALL LOCATIONS OTHER THAN CURRENT GROUNDWATER MONITORING WELLS AND COMPLIANCE MONITORING WELLS ARE APPROXIMATE.
 - ALL GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L)

FORMER CHEVRON BULK PLANT No. 100-1327
 FACILITIES NORTH / KING COUNTY (METRO)
 SEATTLE, WASHINGTON
**SECOND SEMI-ANNUAL GROUNDWATER
 MONITORING REPORT 2023**
**GROUNDWATER ANALYTICAL RESULT
 MAP - PETROLEUM HYDROCARBONS
 NOVEMBER 28, 2023**

C:\Users\cm5224\OneDrive\Arcadis\ACC US\AUS-9999999-CHEV_1001327_SEATTLE_WA\Project\Files\10_WIP\107_ARC_ENV\202401-DWG\GNM-202304-F06-GROUNDWATER ANALYTICAL RESULTS.dwg LAYOUT: 6 SAVED: 3/18/2024 2:12 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---
 PLOTSTYLETABLE: --- PLOTTED: 4/8/2024 2:43 PM BY: C. MUNIRAJU
 XREFS: IMAGES: GEN-X-BASE\ARCADIS\arcadis logo.png
 GEN-X-D-TITLE-2SA23

MW-20	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-21	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-19	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

AGI-2	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-8A	
Date	11/28/2023
Benzo (a) anthracene	<0.0203 [<0.0203]
Benzo (a) pyrene	<0.0184 [<0.0184]
Benzo (b) fluoranthene	<0.0168 [<0.0168]
Benzo (k) fluoranthene	<0.0202 [<0.0202]
Chrysene	<0.0179 [<0.0179]
Dibenz (a, h) anthracene	<0.0160 [<0.0160]
Indeno (1,2,3-cd) Pyrene	<0.0158 [<0.0158]

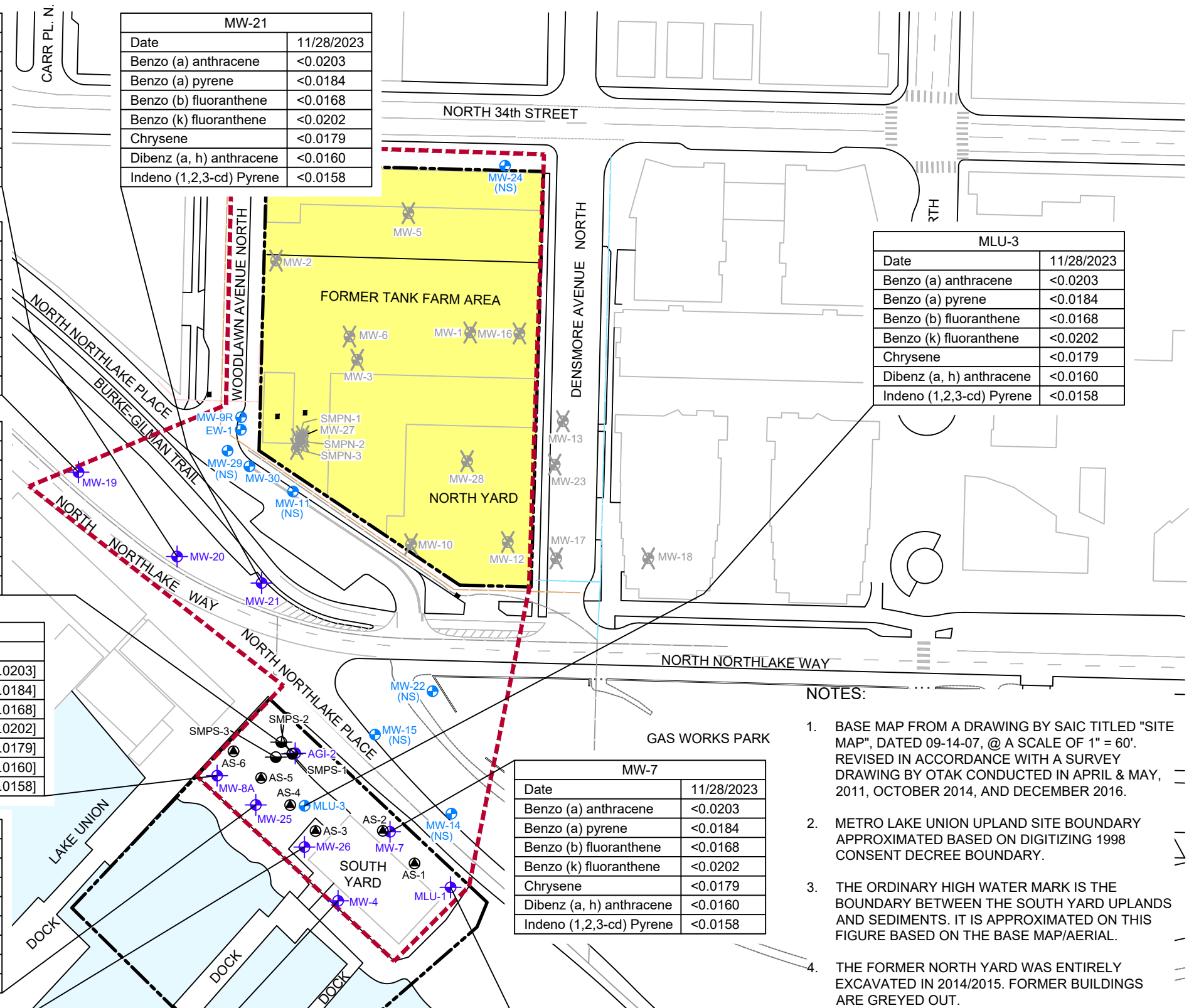
MW-25	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-26	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-4	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MW-7	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

MLU-3	
Date	11/28/2023
Benzo (a) anthracene	<0.0203
Benzo (a) pyrene	<0.0184
Benzo (b) fluoranthene	<0.0168
Benzo (k) fluoranthene	<0.0202
Chrysene	<0.0179
Dibenz (a, h) anthracene	<0.0160
Indeno (1,2,3-cd) Pyrene	<0.0158

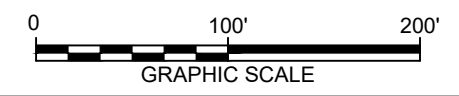


LEGEND:

- PROPERTY BOUNDARY
- FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
- GROUNDWATER MONITORING WELL
- ABANDONED MONITORING WELL
- COMPLIANCE MONITORING WELL
- SUPPLEMENTARY MONITORING POINT
- BIOSPARGE INJECTION WELL
- CATCH BASIN
- NATURAL GAS LINE (APPROX.)
- UNDERGROUND ELECTRIC LINE (APPROX.)
- WATER LINE (APPROX.)
- SEWER LINE (APPROX.)
- TOUCHSTONE REDEVELOPMENT EXCAVATION BOUNDARY
- $<$ INDICATES CONCENTRATION IS LESS THAN THE METHOD DETECTION LIMIT (MDL).
- [] DUPLICATE SAMPLE ($\mu\text{g/L}$)
- (NS) NOT SAMPLED

- NOTES:**
- BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011, OCTOBER 2014, AND DECEMBER 2016.
 - METRO LAKE UNION UPLAND SITE BOUNDARY APPROXIMATED BASED ON DIGITIZING 1998 CONSENT DECREE BOUNDARY.
 - THE ORDINARY HIGH WATER MARK IS THE BOUNDARY BETWEEN THE SOUTH YARD UPLANDS AND SEDIMENTS. IT IS APPROXIMATED ON THIS FIGURE BASED ON THE BASE MAP/AERIAL.
 - THE FORMER NORTH YARD WAS ENTIRELY EXCAVATED IN 2014/2015. FORMER BUILDINGS ARE GREYED OUT.
 - ALL LOCATIONS OTHER THAN CURRENT GROUNDWATER MONITORING WELLS AND COMPLIANCE MONITORING WELLS ARE APPROXIMATE.
 - ARSENIC AND LEAD SAMPLES WERE FIELD FILTERED WITH A DISPOSABLE 0.45 MICRON FILTER.
 - ALL GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER ($\mu\text{g/L}$)

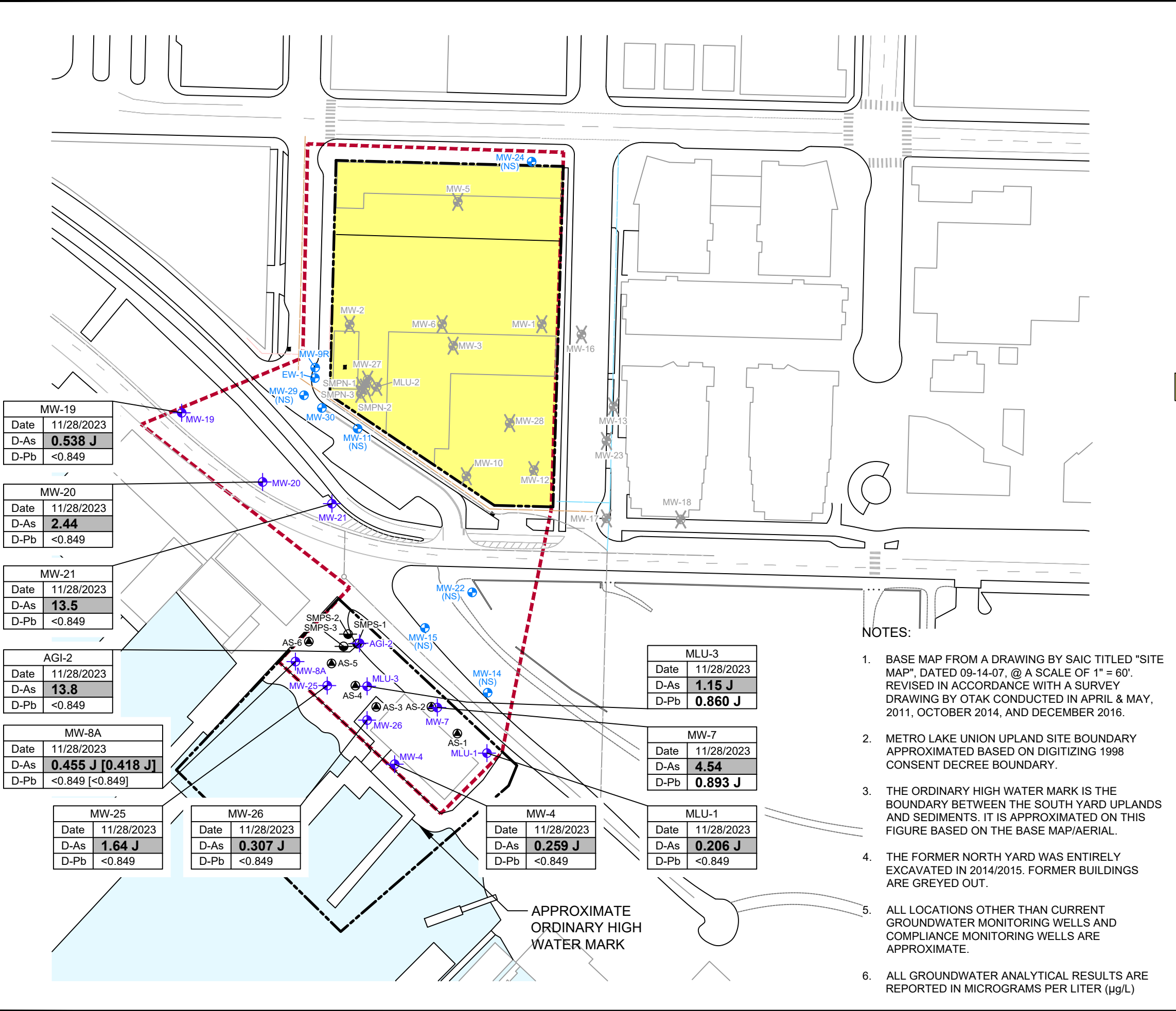
Site Cleanup Levels	
Benzo (a) anthracene	0.0296
Benzo (a) pyrene	0.0296
Benzo (b) fluoranthene	0.0296
Benzo (k) fluoranthene	0.0296
Chrysene	0.0296
Dibenz (a,h) anthracene	0.0296
Indeno (1,2,3-cd) Pyrene	0.0296



FORMER CHEVRON BULK PLANT No. 100-1327
 FACILITIES NORTH / KING COUNTY (METRO)
 SEATTLE, WASHINGTON
SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT 2023
GROUNDWATER ANALYTICAL RESULT MAP - cPAH ANALYTICAL RESULTS
NOVEMBER 28, 2023

FIGURE
6

XREFS:
 GEN-X-D-TITLETABLE.dwg
 GEN-X-BASEMAP



MW-19	
Date	11/28/2023
D-As	0.538 J
D-Pb	<0.849

MW-20	
Date	11/28/2023
D-As	2.44
D-Pb	<0.849

MW-21	
Date	11/28/2023
D-As	13.5
D-Pb	<0.849

AGI-2	
Date	11/28/2023
D-As	13.8
D-Pb	<0.849

MW-8A	
Date	11/28/2023
D-As	0.455 J [0.418 J]
D-Pb	<0.849 [<0.849]

MW-25	
Date	11/28/2023
D-As	1.64 J
D-Pb	<0.849

MW-26	
Date	11/28/2023
D-As	0.307 J
D-Pb	<0.849

MW-4	
Date	11/28/2023
D-As	0.259 J
D-Pb	<0.849

MLU-3	
Date	11/28/2023
D-As	1.15 J
D-Pb	0.860 J

MW-7	
Date	11/28/2023
D-As	4.54
D-Pb	0.893 J

MLU-1	
Date	11/28/2023
D-As	0.206 J
D-Pb	<0.849

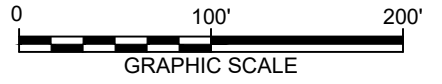
APPROXIMATE
 ORDINARY HIGH
 WATER MARK

LEGEND:

- PROPERTY BOUNDARY
- FORMER CHEVRON/METRO SITE CONSENT DECREE BOUNDARY
- COMPLIANCE MONITORING WELL
- GROUNDWATER MONITORING WELL
- SUPPLEMENTARY MONITORING POINT
- BIOSPARGE INJECTION WELL
- ABANDONED MONITORING WELL
- CATCH BASIN
- NATURAL GAS LINE (APPROX.)
- UNDERGROUND ELECTRIC LINE (APPROX.)
- WATER LINE (APPROX.)
- SEWER LINE (APPROX.)
- TOUCHSTONE REDEVELOPMENT EXCAVATION BOUNDARY

- BOLD** CONCENTRATIONS ARE GREATER THAN THEIR RESPECTIVE SITE CLEANUP LEVELS
- BOLD** DETECT VALUES GREATER THAN THE REPORTING LIMIT MDL
- < INDICATES CONCENTRATION IS LESS THAN THE METHOD DETECTION LIMIT (MDL)
- J RESULT IS LESS THAN THE RDL BUT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT AND THE CONCENTRATION IS AN APPROXIMATE VALUE
- [] DUPLICATE SAMPLE RESULTS
- (NS) NOT SAMPLED

Site Cleanup Levels		
D-As	Dissolved Arsenic	0.0982
D-Pb	Dissolved Lead	5



NOTES:

1. BASE MAP FROM A DRAWING BY SAIC TITLED "SITE MAP", DATED 09-14-07, @ A SCALE OF 1" = 60'. REVISED IN ACCORDANCE WITH A SURVEY DRAWING BY OTAK CONDUCTED IN APRIL & MAY, 2011, OCTOBER 2014, AND DECEMBER 2016.
2. METRO LAKE UNION UPLAND SITE BOUNDARY APPROXIMATED BASED ON DIGITIZING 1998 CONSENT DECREE BOUNDARY.
3. THE ORDINARY HIGH WATER MARK IS THE BOUNDARY BETWEEN THE SOUTH YARD UPLANDS AND SEDIMENTS. IT IS APPROXIMATED ON THIS FIGURE BASED ON THE BASE MAP/AERIAL.
4. THE FORMER NORTH YARD WAS ENTIRELY EXCAVATED IN 2014/2015. FORMER BUILDINGS ARE GREYED OUT.
5. ALL LOCATIONS OTHER THAN CURRENT GROUNDWATER MONITORING WELLS AND COMPLIANCE MONITORING WELLS ARE APPROXIMATE.
6. ALL GROUNDWATER ANALYTICAL RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L)

FORMER CHEVRON BULK PLANT No. 100-1327
 FACILITIES NORTH / KING COUNTY (METRO)
 SEATTLE, WASHINGTON

SECOND SEMI-ANNUAL GROUNDWATER MONITORING REPORT 2023

GROUNDWATER ANALYTICAL RESULTS MAP - DISSOLVED METALS NOVEMBER 28, 2023

ARCADIS

FIGURE 7

Appendix A

Field Notes



Groundwater Gauging Log

Project Number		30064328						
Client:		Chevron						
Site ID:		1001327						
Site Location:		Seattle, Washington						
Measuring Point:		Top of Casing						
Date(s):		11/28/2023						
Sampler(s):		Aimee Rike						
Gauging Equipment:		Water Level Meter						
Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
EW-1	11/28/2023	09:18	14.10	ND	21.79	--	--	--
MLU-1	11/28/2023	08:35	15.06	ND	22.50	--	--	--
AGI-2	11/28/2023	08:41	14.68	ND	22.48	--	--	--
MLU-3	11/28/2023	08:37	14.79	ND	20.75	--	--	--
MW-4	11/28/2023	08:39	16.81	ND	19.81	--	--	--
MW-7	11/28/2023	08:45	13.97	ND	16.40	--	--	--
MW-8A	11/28/2023	08:26	13.31	ND	24.42	--	--	--
MW-9R	11/28/2023	09:16	15.34	ND	21.72	--	--	--
MW-11	11/28/2023	09:30	13.15	ND	15.51	--	--	--
MW-14	11/28/2023	08:50	15.77	ND	19.03	--	--	--
MW-15	11/28/2023	08:54	14.94	ND	19.07	--	--	--
MW-19	11/28/2023	08:07	13.66	ND	16.48	--	--	--
MW-20	11/28/2023	08:11	14.41	ND	21.83	--	--	--
MW-21	11/28/2023	08:16	13.79	ND	19.79	--	--	--
MW-22	11/28/2023	08:56	16.51	ND	20.34	--	--	--
MW-24	11/28/2023	09:09	24.08	ND	27.81	--	--	--
MW-25	11/28/2023	08:29	13.83	ND	19.37	--	--	--
MW-26	11/28/2023	08:32	14.21	ND	20.00	--	--	--
MW-29	11/28/2023	09:21	12.38	ND	21.37	--	--	--
MW-30	11/28/2023	09:25	13.96	ND	20.51	--	--	--

ft-bmp = feet below measuring point

ND = Not Detected

PID = Photoionization Detector Reading

ppm = parts per million

-- = Not Recorded

Project Number	30064328	Well ID	MW-4	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	9.7 to 19.4	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	16.81	Total Depth (ft-bmp)	19.81	Water Column (ft)	3	Gallons in Well 0.49
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	13:23	Well Volumes Purged	0.81	Sample ID	MW-4-W-20231128	Purge Equipment Peristaltic
Purge Start	13:05	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment Peristaltic
Purge End	13:21	Total Purge Time (h:m)	0:16			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:08	100	16.99	6.35	0.117	21.0	1.28	12.23	32.1	--	--
13:11	100	17.07	6.23	0.119	16.0	1.69	11.57	38.2	--	--
13:14	100	17.15	6.19	0.115	14.0	1.62	11.62	38.9	--	--
13:17	100	17.22	6.17	0.115	13.0	1.65	11.59	39.3	--	--
13:20	100	17.26	6.18	0.116	13.0	1.67	11.63	40.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-4-W-20231128 Sample Time: 13:23 Sample Depth (ft-bmp) (e.g. pump intake): 18
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 17.25

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-7	Date	11/28/2023		
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Clear	Sampled by	Fonda DeSantos
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	6.5 to 16.5	Casing Diameter (in.)	2	Well Casing Material	
Static Water Level (ft-bmp)	13.97	Total Depth (ft-bmp)	16.4	Water Column (ft)	2.43	Gallons in Well	0.39
Water Quality Meter Make/Model	Hach 2100Q, Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab	
Sample Time	13:39	Well Volumes Purged	1.02	Sample ID	MW-7-W-20231128	Purge Equipment	Peristaltic
Purge Start	13:23	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic
Purge End	13:38	Total Purge Time (h:m)	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
13:26	100	14.01	5.91	0.207	34.0	1.15	12.09	38.2	--	--
13:29	100	14.04	5.88	0.204	27.0	0.67	12.12	41.7	--	--
13:29	100	14.04	5.85	0.205	22.0	0.45	12.28	45.7	--	--
13:32	100	14.04	5.84	0.206	23.0	0.48	12.27	44.1	--	--
13:32	100	14.04	5.85	0.203	21.0	0.45	12.31	47.3	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-7-W-20231128 Sample Time: 13:39 Sample Depth (ft-bmp) (e.g. pump intake): 15
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: _____

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-8A	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	13.31	Total Depth (ft-bmp)	24.42	Water Column (ft)	11.11	Gallons in Well 1.81
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	11:49	Well Volumes Purged	0.44	Sample ID	MW-8A-W-20231128	Purge Equipment Peristaltic
Purge Start	11:31	Gallons Purged	0.79	Duplicate ID	BD-W-20231128	Sample Equipment Peristaltic
Purge End	11:47	Total Purge Time (h:m)	0:16			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:34	200	14.67	6.91	0.093	178	1.79	8.22	-26.1	--	--
11:37	200	14.79	6.67	0.088	105	1.60	7.90	-26.1	--	--
11:40	200	14.89	6.51	0.081	77.0	1.46	7.84	-3.1	--	--
11:43	200	14.92	6.45	0.082	75.0	1.44	7.78	-2	--	--
11:46	200	14.97	6.43	0.081	71.0	1.39	7.79	-1.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID:	MW-8A-W-20231128	Sample Time:	11:49	Sample Depth (ft-bmp) (e.g. pump intake):	19.5
Analytes and Methods:	See Chain-of-Custody.	Depth to Water at Time of Sampling			14.97

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-19	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	13.66	Total Depth (ft-bmp)	16.48	Water Column (ft)	2.82	Gallons in Well 0.46
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	10:21	Well Volumes Purged	0.86	Sample ID	MW-19-W-20231128	Purge Equipment Peristaltic
Purge Start	10:03	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment Peristaltic
Purge End	10:20	Total Purge Time (h:m)	0:17			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:06	100	13.91	6.46	0.269	21.0	1.97	13.70	64.7	--	--
10:09	100	14.02	6.35	0.272	18.0	1.42	13.52	63.9	--	--
10:12	100	14.12	6.24	0.269	15.0	1.01	13.21	62.6	--	--
10:15	100	14.15	6.20	0.270	14.0	0.99	13.12	62.1	--	--
10:18	100	14.16	6.19	0.269	14.0	0.93	13.23	61.6	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-19-W-20231128 Sample Time: 10:21 Sample Depth (ft-bmp) (e.g. pump intake): 15
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 14.16

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-20	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	14.41	Total Depth (ft-bmp)	21.83	Water Column (ft)	7.42	Gallons in Well 1.21
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	10:55	Well Volumes Purged	0.65	Sample ID	MW-20-W-20231128	Purge Equipment Peristaltic
Purge Start	10:37	Gallons Purged	0.79	Duplicate ID	--	Sample Equipment Peristaltic
Purge End	10:54	Total Purge Time (h:m)	0:17			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
10:40	200	14.59	6.41	0.658	26.0	1.34	11.08	13.4	--	--
10:43	200	14.71	6.35	0.662	23.0	1.20	12.30	10.1	--	--
10:46	200	14.71	6.33	0.674	21.0	1.05	11.66	-9.9	--	--
10:49	200	14.71	6.32	0.674	21.0	1.04	11.84	-12.1	--	--
10:52	200	14.71	6.30	0.674	20.0	1.03	11.76	-15.4	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-20-W-20231128 Sample Time: 10:55 Sample Depth (ft-bmp) (e.g. pump intake): 18.5
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 14.71

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-21	Date	11/28/2023		
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Clear	Sampled by	Fonda DeSantos
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	
Static Water Level (ft-bmp)	13.79	Total Depth (ft-bmp)	19.79	Water Column (ft)	6	Gallons in Well	0.97
Water Quality Meter Make/Model	Hach 2100Q, Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab	
Sample Time	14:50	Well Volumes Purged	0.41	Sample ID	MW-21-W-20231130	Purge Equipment	Peristaltic
Purge Start	14:34	Gallons Purged	0.40	Duplicate ID	--	Sample Equipment	Peristaltic
Purge End	14:49	Total Purge Time (h:m)	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:37	100	13.82	5.81	0.219	64.0	0.74	13.07	-39.7	--	--
14:40	100	13.83	5.79	0.214	57.0	0.61	12.94	-43.6	--	--
14:43	100	13.83	5.77	0.211	31.0	0.50	12.77	-58.2	Clear	--
14:46	100	13.83	5.77	0.210	31.0	0.48	12.71	-60.2	--	--
14:49	100	13.83	5.75	0.211	29.0	0.47	12.67	-64.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-21-W-20231130 Sample Time: 14:50 Sample Depth (ft-bmp) (e.g. pump intake): 16
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: _____

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-25	Date	11/28/2023		
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by	Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	5 to 20	Casing Diameter (in.)	2	Well Casing Material	
Static Water Level (ft-bmp)	13.83	Total Depth (ft-bmp)	19.37	Water Column (ft)	5.54	Gallons in Well	0.9
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab	
Sample Time	12:38	Well Volumes Purged	0.88	Sample ID	MW-25-W-20231128	Purge Equipment	Peristaltic
Purge Start	12:20	Gallons Purged	0.79	Duplicate ID	--	Sample Equipment	Peristaltic
Purge End	12:36	Total Purge Time (h:m)	0:16				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:23	200	13.99	6.25	0.559	71.0	1.44	10.15	59.3	--	--
12:26	200	14.05	6.37	0.577	47.0	1.16	9.13	48.1	--	--
12:29	200	14.1	6.35	0.575	38.0	1.29	9.37	38.3	--	--
12:32	200	14.14	6.33	0.576	36.0	1.24	9.31	39.9	--	--
12:35	200	14.14	6.35	0.576	35.0	1.26	9.29	39.2	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-25-W-20231128 Sample Time: 12:38 Sample Depth (ft-bmp) (e.g. pump intake): 16.5
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 14.14

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MW-26	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Clear	Sampled by Fonda DeSantos
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	5 to 20	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	14.21	Total Depth (ft-bmp)	20	Water Column (ft)	5.79	Gallons in Well 0.94
Water Quality Meter Make/Model	Hach 2100Q, Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	11:54	Well Volumes Purged	0.84	Sample ID	MW-26-W-20231128	Purge Equipment Peristaltic
Purge Start	11:38	Gallons Purged	0.79	Duplicate ID	--	Sample Equipment Peristaltic
Purge End	11:50	Total Purge Time (h:m)	0:12			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
11:41	200	14.23	6.08	0.314	26.0	1.60	12.31	41.3	--	--
11:44	200	14.25	6.00	0.322	22.0	0.81	12.78	49.6	--	--
11:47	200	14.25	6.02	0.322	19.0	0.36	12.86	51.6	--	--
11:50	200	14.25	6.02	0.322	19.0	0.35	12.92	53.4	--	--
11:53	200	14.25	6.03	0.322	18.0	0.35	12.98	55.6	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MW-26-W-20231128 Sample Time: 11:54 Sample Depth (ft-bmp) (e.g. pump intake): 18
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: _____

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	AGI-2	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Cloudy	Sampled by Aimee Rike
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	14.68	Total Depth (ft-bmp)	22.48	Water Column (ft)	7.8	Gallons in Well 1.27
Water Quality Meter Make/Model	Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	14:38	Well Volumes Purged	0.62	Sample ID	AGI-2-W-20231128	Purge Equipment Peristaltic
Purge Start	14:20	Gallons Purged	0.79	Duplicate ID	--	Sample Equipment Peristaltic
Purge End	14:36	Total Purge Time (h:m)	0:16			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:23	200	14.86	6.36	0.434	26.0	1.37	11.69	39.1	--	--
14:26	200	14.97	6.43	0.430	22.0	1.23	12.21	43.5	--	--
14:29	200	15.06	6.32	0.423	19.0	1.12	12.29	45.9	--	--
14:32	200	15.15	6.31	0.425	18.0	1.09	12.32	47.9	--	--
14:35	200	15.21	6.30	0.424	18.0	1.08	12.38	49.9	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: AGI-2-W-20231128 Sample Time: 14:38 Sample Depth (ft-bmp) (e.g. pump intake): 18.5
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: 15.21

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MLU-1	Date	11/28/2023		
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Clear	Sampled by	Fonda DeSantos
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	10 to 20	Casing Diameter (in.)	2	Well Casing Material	
Static Water Level (ft-bmp)	15.06	Total Depth (ft-bmp)	22.5	Water Column (ft)	7.44	Gallons in Well	1.21
Water Quality Meter Make/Model	Hach 2100Q, Hanna HI 98129	Purge Method	Low-Flow	Collection Type		Grab	
Sample Time	12:27	Well Volumes Purged	0.65	Sample ID	MLU-1-W-20231128	Purge Equipment	Peristaltic
Purge Start	12:11	Gallons Purged	0.79	Duplicate ID	--	Sample Equipment	Peristaltic
Purge End	12:26	Total Purge Time (h:m)	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:14	200	15.09	5.89	0.258	42.0	1.06	10.21	98.3	--	--
12:17	200	15.11	5.75	0.224	37.0	0.52	10.06	115.7	--	--
12:20	200	15.11	5.61	0.191	30.0	0.20	9.85	118.5	--	--
12:23	200	15.11	5.59	0.189	31.0	0.17	9.78	120.1	--	--
12:26	200	15.11	5.59	0.186	29.0	0.15	9.77	122.8	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65

Sample Information

Sample ID: MLU-1-W-20231128 Sample Time: 12:27 Sample Depth (ft-bmp) (e.g. pump intake): 18
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: _____

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Project Number	30064328	Well ID	MLU-3	Date	11/28/2023	
Site Location	Seattle, Washington	Site ID	1001327	Weather (°F)	Clear	Sampled by Fonda DeSantos
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	11 to 21	Casing Diameter (in.)	2	Well Casing Material
Static Water Level (ft-bmp)	14.79	Total Depth (ft-bmp)	20.75	Water Column (ft)	5.96	Gallons in Well 0.97
Water Quality Meter Make/Model	Hach 2100Q, Hanna HI 98129	Purge Method	Low-Flow	Collection Type	Grab	
Sample Time	13:02	Well Volumes Purged	0.82	Sample ID	MLU-3-W-20231128	Purge Equipment Peristaltic
Purge Start	12:46	Gallons Purged	0.79	Duplicate ID	MS/MSD	Sample Equipment Peristaltic
Purge End	13:01	Total Purge Time (h:m)	0:15			

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
12:49	200	14.84	7.68	0.127	18.0	4.14	11.50	-105.9	--	--
12:52	200	14.85	7.07	0.129	12.0	3.07	11.94	-86.8	--	--
12:55	200	14.85	6.20	0.127	11.0	1.46	12.86	-39.6	Clear	--
12:58	200	14.85	6.18	0.125	11.0	1.48	12.92	-36.5	--	--
13:01	200	14.85	6.15	0.124	10.0	1.45	12.99	-34.1	Clear	--

Comments: None

Well Casing Volume Conversion

Well diameter (in.) = 1 = 0.04 1.5 = 0.09 2.5 = 0.26 3.5 = 0.50 6 = 1.47
gallons per foot 1.25 = 0.06 2 = 0.16 3 = 0.37 4 = 0.65


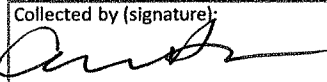
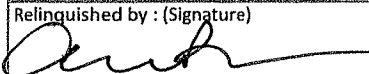
Sample Information

Sample ID: MLU-3-W-20231128 Sample Time: 13:02 Sample Depth (ft-bmp) (e.g. pump intake): 18
Analytes and Methods: See Chain-of-Custody. Depth to Water at Time of Sampling: _____

ft-bmp = feet below measuring point
in. = inches
ft = feet
mL/min = milliliters per minute

mS/cm = milliSiemens per centimeter
NTU = Nephelometric Turbidity Unit
mg/L = milligrams per liter
PVC = Polyvinyl Chloride

mV = millivolts
°F = degrees Fahrenheit
°C = degrees Celsius
-- = Not Recorded

Company Name/Address: Arcadis - Chevron - WA		Billing Information: Attn: Accounts Payable 630 Plaza Dr., Ste. 600 Highlands Ranch, CO 80129				Pres Chk	Analysis / Container / Preservative										Chain of Custody Page 1 of 2	
Report to: Samuel Miles		Email To: molly.whitcomb@arcadis.com; samuel.miles@ar															 MT JULIET, TN <small>12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf</small>	
Project Description: 1001327		City/State Collected:		Please Circle: PT MT CT ET														
Phone:		Client Project # 30064328.19.45		Lab Project # CHEVARCWA-1001327													SDG #	
Collected by (print): Aimee Rice		Site/Facility ID # 1602 N NORTHLAKE PL		P.O. #													Table #	
Collected by (signature): 		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #													Acctnum: CHEVARCWA Template: T242563 Prelogin: P1040773 PM: 110 - Brian Ford PB:	
Immediately Packed on Ice N <input type="checkbox"/> Y <input type="checkbox"/>				Date Results Needed		No. of Cntrs											Shipped Via:	
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time											Remarks	Sample # (lab only)
MW-4-W-20231128		G7	GW	-	11/28/23	1323	6	X	X	X								
MW-7-W-20231128			GW	-		1339	6	X	X	X								
MW-8A-W-20231128			GW	-		1149	6	X	X	X								
MW-19-W-20231128			GW	-		1021	6	X	X	X								
MW-20-W-20231128			GW	-		1055	6	X	X	X								
MW-21-W-20231128			GW	-		1450	6	X	X	X								
MW-25-W-20231128			GW	-		1238	6	X	X	X								
MW-26-W-20231128			GW	-		1154	6	X	X	X								
AGI-2-W-20231128			GW	-		1438	6	X	X	X								
MLU-1-W-20231128			GW	-		1227	6	X	X	X								
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____		Remarks:				pH _____ Temp _____ Flow _____ Other _____				<u>Sample Receipt Checklist</u> COC Seal Present/Intact: <input type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N <u>If Applicable</u> VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input type="checkbox"/> Y <input type="checkbox"/> N								
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #																
Relinquished by: (Signature) 		Date:	Time:	Received by: (Signature)		Trip Blank Received: Yes / No HCL / MeOH TBR												
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)		Temp: °C Bottles Received:		If preservation required by Login: Date/Time										
Relinquished by: (Signature)		Date:	Time:	Received for lab by: (Signature)		Date:		Time:	Hold:		Condition: NCF / OK							

Company Name/Address: Arcadis - Chevron - WA				Billing Information: Attn: Accounts Payable 630 Plaza Dr., Ste. 600 Highlands Ranch, CO 80129				Pres Chk		Analysis / Container / Preservative										Chain of Custody Page 2 of 2			
Report to: Samuel Miles				Email To: molly.whitcomb@arcadis.com;samuel.miles@ar																 MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pac-standard-terms.pdf			
Project Description: 1001327				City/State Collected:		Please Circle: PT MT CT ET																SDG #	
Phone:		Client Project # 30064328.19.45		Lab Project # CHEVARCWA-1001327																		Table #	
Collected by (print):		Site/Facility ID # 1602 N NORTHLAKE PL		P.O. #																Acctnum: CHEVARCWA			
Collected by (signature):		<i>Rush?</i> (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day		Quote #		Date Results Needed														Template: T242563			
Immediately Packed on Ice N ___ Y ___																				Prelogin: P1040773			
																				PM: 110 - Brian Ford			
																				PB:			
																				Shipped Via:			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs											Remarks	Sample # (lab only)				
MLV-3-W-20231128		G7	GW	—	11/28/23	1302	12	X	X	X											MS/MSD		
BD-W-20231128			GW	—		1200	6	X	X	X													
EQB-W-20231128			GW	—		1500	6	X	X	X													
TB-W-20231128			GW	—		0900	2	X															
			GW																				
			GW																				
			GW																				
			GW																				
			GW																				
			GW																				
			GW																				
			GW																				
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____				Remarks: * MS/MSD ON BTE ONLY				pH _____ Temp _____ Flow _____ Other _____				Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> Y <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input type="checkbox"/> Y <input type="checkbox"/> N											
Samples returned via: ___ UPS ___ FedEx ___ Courier _____				Tracking #																			
Relinquished by: (Signature) 		Date: 11/28/23		Time:		Received by: (Signature) Shipped via Fedex		Trip Blank Received: Yes / No HCL / MeoH TBR												COC Seal Present/Intact: <input type="checkbox"/> NP <input type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: °C Bottles Received:												If preservation required by Login: Date/Time			
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature)		Date: Time:						Hold:		Condition: NCF / OK							


CHEVRON-WASHINGTON/OREGON TYPE A BILL OF LADING

SOURCE RECORD BILL OF LADING
 FOR PURGEWATER RECOVERED FROM
 GROUNDWATER WELLS AT CHEVRON FACILITIES IN
 THE STATE OF WASHINGTON AND OREGON. THE
 PURGE-WATER WHICH HAS BEEN RECOVERED FROM
 GROUND-WATER WELLS IS COLLECTED BY THE
 CONTRACTOR AND HAULED TO THEIR FACILITY IN
 KENT, WASHINGTON FOR TEMPORARILY HOLDING
 PENDING TRANSPORT BY OTHERS TO FINAL
 DESTINATION.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BLAINE TECH), 22727 72ND Ave South, Suite D - 102, Kent, WA 98032. BLAINE TECH. is authorized by Chevron Environmental Management Company (CHEVRON EMC) to recover, collect, apportion into loads, and haul the purgewater that is drawn from wells at the CHEVRON EMC facility indicated below and to deliver that purgewater to BLAINE TECH for temporarily holding. Transport routing of the purgewater may be direct from one CHEVRON EMC facility to BLAINE TECH; from one CHEVRON EMC facility to BLAINE TECH via another CHEVRON EMC facility; or any combination thereof. The well purgewater is and remains the property of CHEVRON EMC.

This Source Record **BILL OF LADING** was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the Chevron facility described below:

CHEVRON # 1001327 Sam Miles
 Chevron Project Manager
11602 N Northlake place, Seattle, WA
 Street number street name city state

WELL I.D.	GALS.	WELL I.D.	GALS.
MW-4	1	MLU-3	1
MW-7	1		
MW-8A	1		
MW-19	1		
MW-20	1		
MW-21	1		
MW-25	1		
MW-26	1		
AG1-2	1		
MLU-1	1		
added equip.		any other	
rinse water	0.5	adjustments	
TOTAL GALS.		loaded onto	
RECOVERED	11	BTS vehicle #	1
BTS event #		time	date
231128-AR2		1730	11/28/23
signature			

Permit To Work

for Chevron EMC Sites

Client: Arcadis Date 11/28/23
 Site Address: 1102 N Northlake, Seattle, WA
 Job Number: 231128-ARZ Technician(s): AR, FD

Pre-Job Safety Review

1. JMP reviewed, site restrictions and parking/access issues addressed.	Reviewed: <input checked="" type="checkbox"/>
2. Special Permit Required Task Review	
Are there any conditions or tasks that would require:	
	Yes No
Confined space entry	<input type="checkbox"/> <input checked="" type="checkbox"/>
Working at height	<input type="checkbox"/> <input checked="" type="checkbox"/>
Lock-out/Tag-out	<input type="checkbox"/> <input checked="" type="checkbox"/>
Excavations greater than 4 feet deep	<input type="checkbox"/> <input checked="" type="checkbox"/>
Excavations within 3 feet of a buried active electrical line or product piping or within 10 feet of a high pressure gas line.	<input type="checkbox"/> <input checked="" type="checkbox"/>
Use of overhead equipment within 15 feet of an overhead electrical power line or pole supporting one	<input type="checkbox"/> <input checked="" type="checkbox"/>
Hot work	<input type="checkbox"/> <input checked="" type="checkbox"/>
<p>If "Yes" was the answer to any of the Special Permit Required Tasks above, the Project Manager will contact the client and arrange to modify the Scope of Work so that the Special Permit Required Tasks are not required to be performed by Blaine Tech Services employees.</p>	
3. Is a Traffic Control Permit required for today's work?	
	Yes No
	<input type="checkbox"/> <input checked="" type="checkbox"/>
If so is it in the folder?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Is it current?	<input type="checkbox"/> <input checked="" type="checkbox"/>
Do you understand the Traffic Control Plan and what equipment you will need?	<input type="checkbox"/> <input checked="" type="checkbox"/>

On site Pre-Job Safety Review

1. Reviewed and signed the site specific HASP.	<input checked="" type="checkbox"/>
2. Route to hospital understood.	<input checked="" type="checkbox"/>
3. Reviewed "Groundwater Monitoring Well Sampling General Job Safety Analysis included in the HASP.	<input checked="" type="checkbox"/>
4. Exceptional circumstances today that are not covered by the HASP, JSA or JMP have been addressed and mitigated.	<input checked="" type="checkbox"/>
5. Understands procedure to follow, if site circumstances change, to address new site hazards.	<input checked="" type="checkbox"/>
6. There are no unexpected conditions which would make your task a Special Permit Required Task. If there is, contact your Project Manager.	<input checked="" type="checkbox"/>
7. All site hazards have been communicated to all necessary onsite personnel during tailgate safety meeting.	<input checked="" type="checkbox"/>
8. After lunch tailgate safety meeting refresher conducted.	<input checked="" type="checkbox"/>
If Checklist Task cannot be completed, explain:	

Permit To Work Authority:

Name	Title	Date	Time
------	-------	------	------

Appendix B

Hydraulic Gradient Three Point Solution Worksheet

Hydraulic Gradient Three Point Solution Worksheet

Instructions to determine groundwater (GW) gradient and flow direction based on static water elevations (SWE) of 3 wells. Only enter values in the highlighted cells.

A. Record elevation difference between the wells:

Well	Well ID	SWE (ft)	Wells		HD (ft)
#1 (high)	MW-24	45.69	#1 to #2	=	23.99
#2 (int)	MW-29	21.7	#2 to #3	=	5.87
#3 (low)	MW-14	15.83	#3 to #1	=	29.86

choose this well

*make sure all wells used are not anomalous

B. Perform the following calculations:

1	Calculate the position between the High Static Water Elevation (HSWE) well and the Low Static Water Elevation (LSWE) well where the SWE is the same as the Intermediate Static Water Elevation (ISWE).
(a)	HSWE - LSWE = (a) $\frac{45.69 - 15.83}{29.86}$ (ft)
(b)	Horizontal distance between HSWE well and LSWE well $\frac{539.441}{\text{(a)}}$ =
(b)	$\frac{18.0657}{\text{(a)}}$ (ft/ft)
(c)	HSWE - ISWE = (c) $\frac{45.69 - 21.7}{23.99}$ (ft)
(d)	(b) x (c) = (d) $\frac{433.395499}{\text{(d)}}$ (ft)
(= the horizontal distance between the HSWE well and LSWE well that is equal to the ISWE).	
2	Measure the distance (d) from the HSWE well along the line between it and the LSWE well, and plot that position on the diagram.
3	Draw a straight line from the ISWE well to position (d) on the well location diagram. This represents the water level contour line along which the SWE is the same as the ISWE well.
4	Draw a line perpendicular to the ISWE contour line through the HSWE well location on the well location diagram.
This is the ground water flow direction (high to low). The distance along this groundwater flow line from the HSWE well to the ISWE contour line is (e).	
(e)	$\frac{330.107}{\text{(e)}}$

C. Calculate the Hydraulic Gradient (HG) of the groundwater by dividing (c) by (e).

(c) $\frac{23.99}{\text{(e) } 330.107} = \text{HG } 0.07267332$ (f/ft)

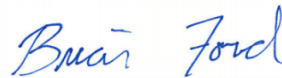
Appendix C

Laboratory Analytical Results

Arcadis - Chevron - WA

Sample Delivery Group: L1683355
Samples Received: 12/01/2023
Project Number: 30064328.19.45
Description: 1001327
Site: 1602 N NORTHLAKE PL SEATTLE
Report To: Samuel Miles

Entire Report Reviewed By:



Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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MW-20-W-20231128 L1683355-05	11
MW-21-W-20231128 L1683355-06	12
MW-25-W-20231128 L1683355-07	13
MW-26-W-20231128 L1683355-08	14
AGI-2-W-20231128 L1683355-09	15
MLV-1-W-20231128 L1683355-10	16
MLV-3-W-20231128 L1683355-11	17
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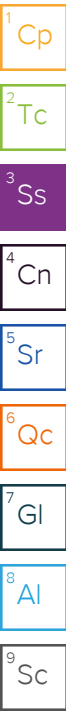
¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

SAMPLE SUMMARY

MW-4-W-20231128 L1683355-01 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 13:23
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 07:49	12/06/23 07:49	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 14:42	AED	Mt. Juliet, TN



MW-7-W-20231128 L1683355-02 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 13:39
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:33	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 08:13	12/06/23 08:13	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 15:01	AED	Mt. Juliet, TN

MW-8A-W-20231128 L1683355-03 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 11:49
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:36	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 08:36	12/06/23 08:36	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 15:21	AED	Mt. Juliet, TN

MW-19-W-20231128 L1683355-04 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 10:21
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:39	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 08:59	12/06/23 08:59	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 15:40	AED	Mt. Juliet, TN

MW-20-W-20231128 L1683355-05 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 10:55
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:53	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 09:23	12/06/23 09:23	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 16:00	AED	Mt. Juliet, TN

MW-21-W-20231128 L1683355-06 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 14:50
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:56	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 09:46	12/06/23 09:46	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181791	1	12/03/23 18:31	12/04/23 16:19	AED	Mt. Juliet, TN

SAMPLE SUMMARY

MW-25-W-20231128 L1683355-07 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 12:38
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:59	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 10:10	12/06/23 10:10	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/04/23 23:48	JCH	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-26-W-20231128 L1683355-08 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 11:54
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 16:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 10:33	12/06/23 10:33	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 00:07	JCH	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

AGI-2-W-20231128 L1683355-09 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 14:38
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 16:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 10:56	12/06/23 10:56	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 00:27	JCH	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MLV-1-W-20231128 L1683355-10 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 12:27
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 16:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 11:19	12/06/23 11:19	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 00:47	JCH	Mt. Juliet, TN

MLV-3-W-20231128 L1683355-11 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 13:02
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 15:16	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 11:42	12/06/23 11:42	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 01:08	AED	Mt. Juliet, TN

BD-W-20231128 L1683355-12 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 12:00
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 16:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 12:05	12/06/23 12:05	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 01:06	JCH	Mt. Juliet, TN

SAMPLE SUMMARY

EQB-W-20231128 L1683355-13 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 15:00
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2181582	1	12/06/23 07:42	12/06/23 16:16	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 05:53	12/06/23 05:53	DYW	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG2181794	1	12/04/23 08:22	12/05/23 01:26	JCH	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

TB-W-20231128 L1683355-14 GW

Collected by: Aimee Rike
 Collected date/time: 11/28/23 09:00
 Received date/time: 12/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2183446	1	12/06/23 05:30	12/06/23 05:30	DYW	Mt. Juliet, TN

CASE NARRATIVE

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



Brian Ford
Project Manager

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

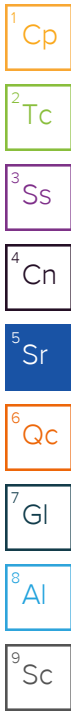
⁷ Gl

⁸ Al

⁹ Sc

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.259	J	0.180	2.00	1	12/06/2023 15:29	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:29	WG2181582



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 07:49	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 07:49	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 07:49	WG2183446
(S) Toluene-d8	103			80.0-120		12/06/2023 07:49	WG2183446
(S) 4-Bromofluorobenzene	97.6			77.0-126		12/06/2023 07:49	WG2183446
(S) 1,2-Dichloroethane-d4	98.2			70.0-130		12/06/2023 07:49	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 14:42	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 14:42	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 14:42	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 14:42	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 14:42	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 14:42	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 14:42	WG2181791
Naphthalene	U		0.0917	0.250	1	12/04/2023 14:42	WG2181791
1-Methylnaphthalene	U		0.0687	0.250	1	12/04/2023 14:42	WG2181791
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 14:42	WG2181791
(S) Nitrobenzene-d5	81.6			31.0-160		12/04/2023 14:42	WG2181791
(S) 2-Fluorobiphenyl	87.4			48.0-148		12/04/2023 14:42	WG2181791
(S) p-Terphenyl-d14	101			37.0-146		12/04/2023 14:42	WG2181791

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	4.54		0.180	2.00	1	12/06/2023 15:33	WG2181582
Lead,Dissolved	0.893	J	0.849	2.00	1	12/06/2023 15:33	WG2181582

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	22.9		0.0941	1.00	1	12/06/2023 08:13	WG2183446
Toluene	3.81		0.278	1.00	1	12/06/2023 08:13	WG2183446
Ethylbenzene	21.3		0.137	1.00	1	12/06/2023 08:13	WG2183446
(S) Toluene-d8	88.3			80.0-120		12/06/2023 08:13	WG2183446
(S) 4-Bromofluorobenzene	91.6			77.0-126		12/06/2023 08:13	WG2183446
(S) 1,2-Dichloroethane-d4	103			70.0-130		12/06/2023 08:13	WG2183446

4 Cn

5 Sr

6 Qc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 15:01	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 15:01	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 15:01	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 15:01	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 15:01	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 15:01	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 15:01	WG2181791
Naphthalene	79.4		0.0917	0.250	1	12/04/2023 15:01	WG2181791
1-Methylnaphthalene	55.5		0.0687	0.250	1	12/04/2023 15:01	WG2181791
2-Methylnaphthalene	71.7		0.0674	0.250	1	12/04/2023 15:01	WG2181791
(S) Nitrobenzene-d5	98.4			31.0-160		12/04/2023 15:01	WG2181791
(S) 2-Fluorobiphenyl	88.4			48.0-148		12/04/2023 15:01	WG2181791
(S) p-Terphenyl-d14	105			37.0-146		12/04/2023 15:01	WG2181791

7 Gl

8 Al

9 Sc

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.455	J	0.180	2.00	1	12/06/2023 15:36	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:36	WG2181582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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

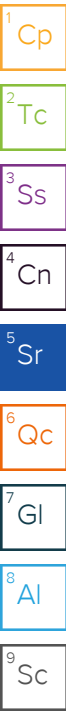
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 08:36	WG2183446
Toluene	0.386	J	0.278	1.00	1	12/06/2023 08:36	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 08:36	WG2183446
(S) Toluene-d8	103			80.0-120		12/06/2023 08:36	WG2183446
(S) 4-Bromofluorobenzene	99.2			77.0-126		12/06/2023 08:36	WG2183446
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		12/06/2023 08:36	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 15:21	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 15:21	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 15:21	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 15:21	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 15:21	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 15:21	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 15:21	WG2181791
Naphthalene	U		0.0917	0.250	1	12/04/2023 15:21	WG2181791
1-Methylnaphthalene	U		0.0687	0.250	1	12/04/2023 15:21	WG2181791
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 15:21	WG2181791
(S) Nitrobenzene-d5	83.7			31.0-160		12/04/2023 15:21	WG2181791
(S) 2-Fluorobiphenyl	90.0			48.0-148		12/04/2023 15:21	WG2181791
(S) p-Terphenyl-d14	102			37.0-146		12/04/2023 15:21	WG2181791

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.538	J	0.180	2.00	1	12/06/2023 15:39	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:39	WG2181582



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 08:59	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 08:59	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 08:59	WG2183446
(S) Toluene-d8	101			80.0-120		12/06/2023 08:59	WG2183446
(S) 4-Bromofluorobenzene	97.9			77.0-126		12/06/2023 08:59	WG2183446
(S) 1,2-Dichloroethane-d4	95.3			70.0-130		12/06/2023 08:59	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 15:40	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 15:40	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 15:40	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 15:40	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 15:40	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 15:40	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 15:40	WG2181791
Naphthalene	U		0.0917	0.250	1	12/04/2023 15:40	WG2181791
1-Methylnaphthalene	U		0.0687	0.250	1	12/04/2023 15:40	WG2181791
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 15:40	WG2181791
(S) Nitrobenzene-d5	87.4			31.0-160		12/04/2023 15:40	WG2181791
(S) 2-Fluorobiphenyl	91.1			48.0-148		12/04/2023 15:40	WG2181791
(S) p-Terphenyl-d14	108			37.0-146		12/04/2023 15:40	WG2181791

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	2.44		0.180	2.00	1	12/06/2023 15:53	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:53	WG2181582

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 09:23	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 09:23	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 09:23	WG2183446
(S) Toluene-d8	101			80.0-120		12/06/2023 09:23	WG2183446
(S) 4-Bromofluorobenzene	99.2			77.0-126		12/06/2023 09:23	WG2183446
(S) 1,2-Dichloroethane-d4	96.0			70.0-130		12/06/2023 09:23	WG2183446

4 Cn

5 Sr

6 Qc

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 16:00	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 16:00	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 16:00	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 16:00	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 16:00	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 16:00	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 16:00	WG2181791
Naphthalene	0.100	J	0.0917	0.250	1	12/04/2023 16:00	WG2181791
1-Methylnaphthalene	0.106	J	0.0687	0.250	1	12/04/2023 16:00	WG2181791
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 16:00	WG2181791
(S) Nitrobenzene-d5	86.3			31.0-160		12/04/2023 16:00	WG2181791
(S) 2-Fluorobiphenyl	90.5			48.0-148		12/04/2023 16:00	WG2181791
(S) p-Terphenyl-d14	104			37.0-146		12/04/2023 16:00	WG2181791

7 Gl

8 Al

9 Sc

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	13.5		0.180	2.00	1	12/06/2023 15:56	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:56	WG2181582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 09:46	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 09:46	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 09:46	WG2183446
(S) Toluene-d8	103			80.0-120		12/06/2023 09:46	WG2183446
(S) 4-Bromofluorobenzene	103			77.0-126		12/06/2023 09:46	WG2183446
(S) 1,2-Dichloroethane-d4	95.4			70.0-130		12/06/2023 09:46	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 16:19	WG2181791
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 16:19	WG2181791
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 16:19	WG2181791
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 16:19	WG2181791
Chrysene	U		0.0179	0.0500	1	12/04/2023 16:19	WG2181791
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 16:19	WG2181791
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 16:19	WG2181791
Naphthalene	0.240	J	0.0917	0.250	1	12/04/2023 16:19	WG2181791
1-Methylnaphthalene	1.81		0.0687	0.250	1	12/04/2023 16:19	WG2181791
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 16:19	WG2181791
(S) Nitrobenzene-d5	78.4			31.0-160		12/04/2023 16:19	WG2181791
(S) 2-Fluorobiphenyl	86.8			48.0-148		12/04/2023 16:19	WG2181791
(S) p-Terphenyl-d14	101			37.0-146		12/04/2023 16:19	WG2181791

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	1.64	J	0.180	2.00	1	12/06/2023 15:59	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 15:59	WG2181582

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 10:10	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 10:10	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 10:10	WG2183446
(S) Toluene-d8	102			80.0-120		12/06/2023 10:10	WG2183446
(S) 4-Bromofluorobenzene	101			77.0-126		12/06/2023 10:10	WG2183446
(S) 1,2-Dichloroethane-d4	94.7			70.0-130		12/06/2023 10:10	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/04/2023 23:48	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/04/2023 23:48	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/04/2023 23:48	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/04/2023 23:48	WG2181794
Chrysene	U		0.0179	0.0500	1	12/04/2023 23:48	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/04/2023 23:48	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/04/2023 23:48	WG2181794
Naphthalene	U		0.0917	0.250	1	12/04/2023 23:48	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/04/2023 23:48	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/04/2023 23:48	WG2181794
(S) Nitrobenzene-d5	76.8			31.0-160		12/04/2023 23:48	WG2181794
(S) 2-Fluorobiphenyl	94.2			48.0-148		12/04/2023 23:48	WG2181794
(S) p-Terphenyl-d14	94.7			37.0-146		12/04/2023 23:48	WG2181794

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.307	J	0.180	2.00	1	12/06/2023 16:03	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 16:03	WG2181582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 10:33	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 10:33	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 10:33	WG2183446
(S) Toluene-d8	102			80.0-120		12/06/2023 10:33	WG2183446
(S) 4-Bromofluorobenzene	99.8			77.0-126		12/06/2023 10:33	WG2183446
(S) 1,2-Dichloroethane-d4	97.5			70.0-130		12/06/2023 10:33	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 00:07	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 00:07	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 00:07	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 00:07	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 00:07	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 00:07	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 00:07	WG2181794
Naphthalene	U		0.0917	0.250	1	12/05/2023 00:07	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/05/2023 00:07	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/05/2023 00:07	WG2181794
(S) Nitrobenzene-d5	80.5			31.0-160		12/05/2023 00:07	WG2181794
(S) 2-Fluorobiphenyl	97.9			48.0-148		12/05/2023 00:07	WG2181794
(S) p-Terphenyl-d14	96.8			37.0-146		12/05/2023 00:07	WG2181794

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	13.8		0.180	2.00	1	12/06/2023 16:06	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 16:06	WG2181582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	2.81		0.0941	1.00	1	12/06/2023 10:56	WG2183446
Toluene	1.26		0.278	1.00	1	12/06/2023 10:56	WG2183446
Ethylbenzene	11.9		0.137	1.00	1	12/06/2023 10:56	WG2183446
(S) Toluene-d8	91.4			80.0-120		12/06/2023 10:56	WG2183446
(S) 4-Bromofluorobenzene	92.4			77.0-126		12/06/2023 10:56	WG2183446
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		12/06/2023 10:56	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 00:27	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 00:27	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 00:27	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 00:27	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 00:27	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 00:27	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 00:27	WG2181794
Naphthalene	0.914		0.0917	0.250	1	12/05/2023 00:27	WG2181794
1-Methylnaphthalene	0.699		0.0687	0.250	1	12/05/2023 00:27	WG2181794
2-Methylnaphthalene	0.898		0.0674	0.250	1	12/05/2023 00:27	WG2181794
(S) Nitrobenzene-d5	72.6			31.0-160		12/05/2023 00:27	WG2181794
(S) 2-Fluorobiphenyl	95.8			48.0-148		12/05/2023 00:27	WG2181794
(S) p-Terphenyl-d14	95.3			37.0-146		12/05/2023 00:27	WG2181794

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.206	J	0.180	2.00	1	12/06/2023 16:09	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 16:09	WG2181582

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 11:19	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 11:19	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 11:19	WG2183446
(S) Toluene-d8	102			80.0-120		12/06/2023 11:19	WG2183446
(S) 4-Bromofluorobenzene	98.6			77.0-126		12/06/2023 11:19	WG2183446
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		12/06/2023 11:19	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 00:47	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 00:47	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 00:47	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 00:47	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 00:47	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 00:47	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 00:47	WG2181794
Naphthalene	U		0.0917	0.250	1	12/05/2023 00:47	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/05/2023 00:47	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/05/2023 00:47	WG2181794
(S) Nitrobenzene-d5	78.9			31.0-160		12/05/2023 00:47	WG2181794
(S) 2-Fluorobiphenyl	99.5			48.0-148		12/05/2023 00:47	WG2181794
(S) p-Terphenyl-d14	101			37.0-146		12/05/2023 00:47	WG2181794

Metals (ICPMS) by Method 6020B

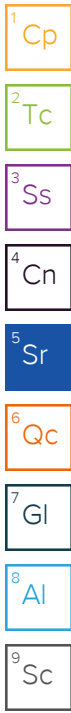
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	1.15	J	0.180	2.00	1	12/06/2023 15:16	WG2181582
Lead,Dissolved	0.860	J	0.849	2.00	1	12/06/2023 15:16	WG2181582

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 11:42	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 11:42	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 11:42	WG2183446
(S) Toluene-d8	101			80.0-120		12/06/2023 11:42	WG2183446
(S) 4-Bromofluorobenzene	100			77.0-126		12/06/2023 11:42	WG2183446
(S) 1,2-Dichloroethane-d4	97.6			70.0-130		12/06/2023 11:42	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 01:08	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 01:08	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 01:08	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 01:08	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 01:08	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 01:08	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 01:08	WG2181794
Naphthalene	U		0.0917	0.250	1	12/05/2023 01:08	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/05/2023 01:08	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/05/2023 01:08	WG2181794
(S) Nitrobenzene-d5	93.2			31.0-160		12/05/2023 01:08	WG2181794
(S) 2-Fluorobiphenyl	95.8			48.0-148		12/05/2023 01:08	WG2181794
(S) p-Terphenyl-d14	87.9			37.0-146		12/05/2023 01:08	WG2181794



Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	0.418	J	0.180	2.00	1	12/06/2023 16:13	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 16:13	WG2181582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 12:05	WG2183446
Toluene	1.12		0.278	1.00	1	12/06/2023 12:05	WG2183446
Ethylbenzene	0.180	J	0.137	1.00	1	12/06/2023 12:05	WG2183446
(S) Toluene-d8	102			80.0-120		12/06/2023 12:05	WG2183446
(S) 4-Bromofluorobenzene	100			77.0-126		12/06/2023 12:05	WG2183446
(S) 1,2-Dichloroethane-d4	96.4			70.0-130		12/06/2023 12:05	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 01:06	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 01:06	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 01:06	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 01:06	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 01:06	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 01:06	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 01:06	WG2181794
Naphthalene	U		0.0917	0.250	1	12/05/2023 01:06	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/05/2023 01:06	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/05/2023 01:06	WG2181794
(S) Nitrobenzene-d5	78.4			31.0-160		12/05/2023 01:06	WG2181794
(S) 2-Fluorobiphenyl	96.8			48.0-148		12/05/2023 01:06	WG2181794
(S) p-Terphenyl-d14	95.3			37.0-146		12/05/2023 01:06	WG2181794

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Arsenic,Dissolved	U		0.180	2.00	1	12/06/2023 16:16	WG2181582
Lead,Dissolved	U		0.849	2.00	1	12/06/2023 16:16	WG2181582

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 05:53	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 05:53	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 05:53	WG2183446
(S) Toluene-d8	102			80.0-120		12/06/2023 05:53	WG2183446
(S) 4-Bromofluorobenzene	98.1			77.0-126		12/06/2023 05:53	WG2183446
(S) 1,2-Dichloroethane-d4	97.2			70.0-130		12/06/2023 05:53	WG2183446

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzo(a)anthracene	U		0.0203	0.0500	1	12/05/2023 01:26	WG2181794
Benzo(a)pyrene	U		0.0184	0.0500	1	12/05/2023 01:26	WG2181794
Benzo(b)fluoranthene	U		0.0168	0.0500	1	12/05/2023 01:26	WG2181794
Benzo(k)fluoranthene	U		0.0202	0.0500	1	12/05/2023 01:26	WG2181794
Chrysene	U		0.0179	0.0500	1	12/05/2023 01:26	WG2181794
Dibenz(a,h)anthracene	U		0.0160	0.0500	1	12/05/2023 01:26	WG2181794
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500	1	12/05/2023 01:26	WG2181794
Naphthalene	U		0.0917	0.250	1	12/05/2023 01:26	WG2181794
1-Methylnaphthalene	U		0.0687	0.250	1	12/05/2023 01:26	WG2181794
2-Methylnaphthalene	U		0.0674	0.250	1	12/05/2023 01:26	WG2181794
(S) Nitrobenzene-d5	76.8			31.0-160		12/05/2023 01:26	WG2181794
(S) 2-Fluorobiphenyl	97.4			48.0-148		12/05/2023 01:26	WG2181794
(S) p-Terphenyl-d14	100			37.0-146		12/05/2023 01:26	WG2181794

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Benzene	U		0.0941	1.00	1	12/06/2023 05:30	WG2183446
Toluene	U		0.278	1.00	1	12/06/2023 05:30	WG2183446
Ethylbenzene	U		0.137	1.00	1	12/06/2023 05:30	WG2183446
(S) Toluene-d8	103			80.0-120		12/06/2023 05:30	WG2183446
(S) 4-Bromofluorobenzene	101			77.0-126		12/06/2023 05:30	WG2183446
(S) 1,2-Dichloroethane-d4	97.4			70.0-130		12/06/2023 05:30	WG2183446

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

Method Blank (MB)

(MB) R4008921-1 12/06/23 15:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Arsenic,Dissolved	U		0.180	2.00
Lead,Dissolved	U		0.849	2.00

Laboratory Control Sample (LCS)

(LCS) R4008921-2 12/06/23 15:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Arsenic,Dissolved	50.0	52.4	105	80.0-120	
Lead,Dissolved	50.0	47.7	95.4	80.0-120	

L1683355-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1683355-11 12/06/23 15:16 • (MS) R4008921-4 12/06/23 15:23 • (MSD) R4008921-5 12/06/23 15:26

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Arsenic,Dissolved	50.0	1.15	51.6	52.4	101	103	1	75.0-125			1.55	20
Lead,Dissolved	50.0	0.860	50.6	50.3	99.6	98.9	1	75.0-125			0.619	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R4008953-3 12/06/23 04:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzene	U		0.0941	1.00
Toluene	U		0.278	1.00
Ethylbenzene	U		0.137	1.00
(S) Toluene-d8	103			80.0-120
(S) 4-Bromofluorobenzene	99.9			77.0-126
(S) 1,2-Dichloroethane-d4	94.9			70.0-130

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

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

(LCS) R4008953-1 12/06/23 03:33 • (LCSD) R4008953-2 12/06/23 03:56

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzene	5.00	5.39	5.53	108	111	70.0-123			2.56	20
Toluene	5.00	5.02	5.24	100	105	79.0-120			4.29	20
Ethylbenzene	5.00	5.02	5.27	100	105	79.0-123			4.86	20
(S) Toluene-d8				97.2	102	80.0-120				
(S) 4-Bromofluorobenzene				99.3	102	77.0-126				
(S) 1,2-Dichloroethane-d4				97.2	94.7	70.0-130				

6 Qc

7 Gl

8 Al

9 Sc

L1683355-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1683355-11 12/06/23 11:42 • (MS) R4008953-4 12/06/23 12:52 • (MSD) R4008953-5 12/06/23 13:15

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Benzene	5.00	U	6.83	6.98	137	140	1	17.0-158			2.17	27
Toluene	5.00	U	6.24	6.46	125	129	1	26.0-154			3.46	28
Ethylbenzene	5.00	U	6.70	6.56	134	131	1	30.0-155			2.11	27
(S) Toluene-d8					99.6	101		80.0-120				
(S) 4-Bromofluorobenzene					103	102		77.0-126				
(S) 1,2-Dichloroethane-d4					95.6	95.4		70.0-130				

Method Blank (MB)

(MB) R4008151-3 12/04/23 09:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Benzo(a)anthracene	U		0.0203	0.0500
Benzo(a)pyrene	U		0.0184	0.0500
Benzo(b)fluoranthene	U		0.0168	0.0500
Benzo(k)fluoranthene	U		0.0202	0.0500
Chrysene	U		0.0179	0.0500
Dibenz(a,h)anthracene	U		0.0160	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500
Naphthalene	U		0.0917	0.250
1-Methylnaphthalene	U		0.0687	0.250
2-Methylnaphthalene	U		0.0674	0.250
(S) Nitrobenzene-d5	104			31.0-160
(S) 2-Fluorobiphenyl	106			48.0-148
(S) p-Terphenyl-d14	124			37.0-146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R4008151-1 12/04/23 09:11 • (LCSD) R4008151-2 12/04/23 09:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Benzo(a)anthracene	2.00	1.87	2.00	93.5	100	61.0-140			6.72	20
Benzo(a)pyrene	2.00	1.88	2.07	94.0	104	60.0-143			9.62	20
Benzo(b)fluoranthene	2.00	1.82	1.97	91.0	98.5	58.0-141			7.92	20
Benzo(k)fluoranthene	2.00	1.73	1.97	86.5	98.5	58.0-148			13.0	20
Chrysene	2.00	1.86	1.98	93.0	99.0	64.0-144			6.25	20
Dibenz(a,h)anthracene	2.00	1.77	1.91	88.5	95.5	52.0-155			7.61	20
Indeno(1,2,3-cd)pyrene	2.00	1.95	2.18	97.5	109	54.0-153			11.1	20
Naphthalene	2.00	1.72	1.79	86.0	89.5	61.0-137			3.99	20
1-Methylnaphthalene	2.00	1.87	1.96	93.5	98.0	66.0-142			4.70	20
2-Methylnaphthalene	2.00	1.77	1.83	88.5	91.5	62.0-136			3.33	20
(S) Nitrobenzene-d5				82.0	86.0	31.0-160				
(S) 2-Fluorobiphenyl				80.5	83.5	48.0-148				
(S) p-Terphenyl-d14				91.5	99.5	37.0-146				

Method Blank (MB)

(MB) R4008773-3 12/04/23 16:16

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzo(a)anthracene	U		0.0203	0.0500
Benzo(a)pyrene	U		0.0184	0.0500
Benzo(b)fluoranthene	U		0.0168	0.0500
Benzo(k)fluoranthene	U		0.0202	0.0500
Chrysene	U		0.0179	0.0500
Dibenz(a,h)anthracene	U		0.0160	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500
Naphthalene	U		0.0917	0.250
1-Methylnaphthalene	U		0.0687	0.250
2-Methylnaphthalene	U		0.0674	0.250
(S) Nitrobenzene-d5	75.0			31.0-160
(S) 2-Fluorobiphenyl	97.5			48.0-148
(S) p-Terphenyl-d14	99.5			37.0-146

Method Blank (MB)

(MB) R4009440-1 12/07/23 14:16

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzo(a)anthracene	U		0.0203	0.0500
Benzo(a)pyrene	U		0.0184	0.0500
Benzo(b)fluoranthene	U		0.0168	0.0500
Benzo(k)fluoranthene	U		0.0202	0.0500
Chrysene	U		0.0179	0.0500
Dibenz(a,h)anthracene	U		0.0160	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0158	0.0500
Naphthalene	U		0.0917	0.250
1-Methylnaphthalene	U		0.0687	0.250
2-Methylnaphthalene	U		0.0674	0.250
(S) Nitrobenzene-d5	86.5			31.0-160
(S) 2-Fluorobiphenyl	99.0			48.0-148
(S) p-Terphenyl-d14	89.5			37.0-146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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

(LCS) R4008773-1 12/04/23 15:36 • (LCSD) R4008773-2 12/04/23 15:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Benzo(a)anthracene	2.00	1.88	1.96	94.0	98.0	61.0-140			4.17	20
Benzo(a)pyrene	2.00	1.96	1.99	98.0	99.5	60.0-143			1.52	20
Benzo(b)fluoranthene	2.00	1.92	1.90	96.0	95.0	58.0-141			1.05	20
Benzo(k)fluoranthene	2.00	1.81	1.83	90.5	91.5	58.0-148			1.10	20
Chrysene	2.00	2.06	2.08	103	104	64.0-144			0.966	20
Dibenz(a,h)anthracene	2.00	1.92	2.00	96.0	100	52.0-155			4.08	20
Indeno(1,2,3-cd)pyrene	2.00	2.14	2.17	107	108	54.0-153			1.39	20
Naphthalene	2.00	1.57	1.61	78.5	80.5	61.0-137			2.52	20
1-Methylnaphthalene	2.00	1.78	1.85	89.0	92.5	66.0-142			3.86	20
2-Methylnaphthalene	2.00	1.71	1.74	85.5	87.0	62.0-136			1.74	20
<i>(S) Nitrobenzene-d5</i>				73.5	75.5	31.0-160				
<i>(S) 2-Fluorobiphenyl</i>				94.5	97.0	48.0-148				
<i>(S) p-Terphenyl-d14</i>				93.5	95.0	37.0-146				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

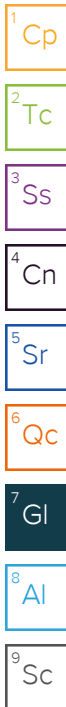
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
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ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

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

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address: **Arcadis - Chevron - WA**

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

Report to: **Samuel Miles**

Email To: **molly.whitcomb@arcadis.com; samuel.miles@ar**

Project Description: **1001327**

City/State Collected: _____

Please Circle: **PT MT CT ET**

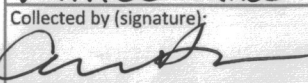
Phone: _____

Client Project # **30064328.19.45**

Lab Project # **CHEVARCWA-1001327**

Collected by (print): **Aimee Rixe**

Site/Facility ID # **1602 N NORTHLAKE PL**

Collected by (signature): 

Rush? (Lab MUST Be Notified)

___ Same Day ___ Five Day

___ Next Day ___ 5 Day (Rad Only)

___ Two Day ___ 10 Day (Rad Only)

___ Three Day

Quote # _____

Date Results Needed _____

Immediately

Packed on Ice N ___ Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	Analysis / Container / Preservative			Chain of Custody	
MW-4-W-20231128	G7	GW	—	11/28/23	1323	6	X	X	X	Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf SDG # 168 3355 H065 Acctnum: CHEVARCWA Template: T242563 Prelogin: P1040773 PM: 110 - Brian Ford PB: Shipped Via: Remarks Sample # (lab only)	
MW-7-W-20231128		GW	—		1339	6	X	X	X		-02
MW-8A-W-20231128		GW	—		1149	6	X	X	X		-03
MW-19-W-20231128		GW	—		1021	6	X	X	X		-04
MW-20-W-20231128		GW	—		1055	6	X	X	X		-09
MW-21-W-20231128		GW	—		1450	6	X	X	X		-06
MW-25-W-20231128		GW	—		1238	6	X	X	X		-07
MW-26-W-20231128		GW	—		1154	6	X	X	X		-08
AG1-2-W-20231128		GW	—		1438	6	X	X	X		-09
MLV-1-W-20231128		GW	—		1227	6	X	X	X		-10

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	Analysis / Container / Preservative			Chain of Custody	
MW-4-W-20231128	G7	GW	—	11/28/23	1323	6	X	X	X	Pace PEOPLE ADVANCING SCIENCE MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubs/pas-standard-terms.pdf SDG # 168 3355 H065 Acctnum: CHEVARCWA Template: T242563 Prelogin: P1040773 PM: 110 - Brian Ford PB: Shipped Via: Remarks Sample # (lab only)	
MW-7-W-20231128		GW	—		1339	6	X	X	X		-02
MW-8A-W-20231128		GW	—		1149	6	X	X	X		-03
MW-19-W-20231128		GW	—		1021	6	X	X	X		-04
MW-20-W-20231128		GW	—		1055	6	X	X	X		-09
MW-21-W-20231128		GW	—		1450	6	X	X	X		-06
MW-25-W-20231128		GW	—		1238	6	X	X	X		-07
MW-26-W-20231128		GW	—		1154	6	X	X	X		-08
AG1-2-W-20231128		GW	—		1438	6	X	X	X		-09
MLV-1-W-20231128		GW	—		1227	6	X	X	X		-10

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

Remarks: _____

Samples returned via: ___ UPS ___ FedEx ___ Courier _____

Tracking # **7c19 5685 4987**

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

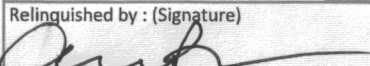
Sufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y N

Preservation Correct/Checked: Y N

RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature)  Date: **11/28/23** Time: _____

Received by: (Signature) **Shipped Via FedEx 2** Trip Blank Received: Yes No
 (HCLy MeOH TBR H2O)

Temp: **DPAB** °C Bottles Received: **2.2 to = 2.2 60**

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received for lab by: (Signature) **TJ...** Date: **12/11/23** Time: **0900**

Hold: _____ Condition: **NCF 1/OK**

Company Name/Address: **Arcadis - Chevron - WA**

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

Report to: **Samuel Miles**

Project Description: **1001327**

Client Project #: **30064328.19.45**

Lab Project #: **CHEVARCWA-1001327**

Site/Facility ID #: **1602 N NORTHLAKE PL**

Matrix #: **G7**

Depth: **11/28/23**

Date: **1302**

Time: **12**

Analysis / Container / Preservative: **BTE 8260 40mlAmb-HCl**

Chain of Custody Page **2** of **2**

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>

SDG #: **168-3355**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs												
MLV-3-W-20231128	G7	GW	—	11/28/23	1302	12	X	X	X									
BD-W-20231128	↓	GW	—	↓	1200	12	X	X	X									
EQB-W-20231128	↓	GW	—	↓	1500	12	X	X	X									
TB-W-20231128	↓	GW	—	↓	0900	2	X											
		GW																
		GW																
		GW																
		GW																
		GW																

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

Remarks: *** MS/MSD on BTE only ***

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: **UPS FedEx Courier**

Tracking #: **7019 5685 4987**

Relinquished by: (Signature) **[Signature]** Date: **11/28/23** Time: _____

Received by: (Signature) **Shipped via fedex 2** Trip Blank Received: **Yes/No** HCLy MeOH TBR H2O

Temp: **PPA8°C** Bottles Received: **2.240=2.2 24**

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received for lab by: (Signature) **TJ [Signature]** Date: **12/1/23** Time: **0900**

Sample Receipt Checklist

COC Seal Present/Intact: **NP** Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If Applicable

VOA Zero Headspace: Y N

Preservation Correct/Checked: Y N

RAD Screen <0.5 mR/hr: Y N

If prr PH-10BDH4321 TRC-2352362 Time _____
CR6-20221V
PH-10BDH4321 TRC-2352362

Condition: **NCF / OK**

Appendix D

Historical Groundwater Analytical Results

Appendix D
Historical Groundwater Analytical Results
 Former Chevron Bulk Plant -1001327
 1602 North Northlake Way
 Seattle, Washington



Monitoring Well ¹	Well Location	Comments	Date Sampled	LNAPL ²	Petroleum Constituents				Carcinogenic Polycyclic Aromatic Hydrocarbons						Metals		
					Benzene	Toluene	Ethylbenzene	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Site Cleanup Level					43	48,500	6,910	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982¹²	5
Field Blank	NA		10/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Blank	NA		10/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Blank	NA		10/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Blank	NA		10/26/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Field Blank	NA		06/21/01	--	<1.00	<1.00	2.49	1.88	--	--	--	--	--	--	--	--	--
Field Blank	NA		06/27/01	--	<1.00	<1.00	1.79	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		07/26/01	--	1.22	<1.00	4.26	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/19/02	--	<1.00	<1.00	<1.00	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		09/03/02	--	0.857	<0.500	3.84	--	--	--	--	--	--	--	--	--	--
Field Blank	NA		12/31/02	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		09/17/03	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		12/17/03	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/26/04	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		09/23/04	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/14/05	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/29/06	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/21/07	--	<0.500	<0.500	<0.500	<5.00	--	--	--	--	--	--	--	--	--
Field Blank	NA		03/25/08	--	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--	--	--
Field Blank	NA		09/08-09/08	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		03/30-31/09	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		09/10-11/09	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		03/15/10	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		09/15/10	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		09/24/11	--	<0.2	<0.2	<0.2	--	--	--	--	--	--	--	--	--	--
QA	NA		11/16/11	--	<0.2	<0.2	<0.2	--	--	--	--	--	--	--	--	--	--
QA	NA		06/10/14	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		11/11/15	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		04/18/16	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		12/07/16	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		06/21/17	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		12/05/17	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		06/26/18	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		11/27/18	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		06/21/19	--	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--
QA	NA		12/18/19	--	<0.2	<0.2	<0.4	--	--	--	--	--	--	--	--	--	--
QA	NA		06/10/20	--	<0.2	<0.2	<0.4	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.70	<0.073
QA	NA		11/10/20	--	<0.20	<0.20	<0.40	--	--	--	--	--	--	--	--	--	--

Monitoring Well ¹	Well Location	Comments	Date Sampled	LNAPL ²	Petroleum Constituents				Carcinogenic Polycyclic Aromatic Hydrocarbons						Metals		
					Benzene	Toluene	Ethylbenzene	Naphthalene	Benzo (a) anthracene	Benzo (a) pyrene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Chrysene	Dibenz (a,h) anthracene	Indeno (1,2,3-cd) pyrene	Arsenic	Lead
Site Cleanup Level					43	48,500	6,910	9,880	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0296	0.0982¹²	5

Notes:

BOLD = indicates data from current reporting period

BOLD and shaded = Concentrations are greater than their respective site cleanup levels

Grey = Indicates the monitoring well is no longer present

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

¹Monitoring well locations are shown in Figure 3.

²Laboratory report indicates concentration exceeds the instrument calibration range.

³Laboratory report indicates estimated value.

⁴Laboratory report indicates the reporting limits were raised because sample dilution was necessary to bring internal standard within QC limits

⁵Laboratory report indicates the surrogate data is outside the QC limits due to irresolvable matrix problems evident in the sample chromatogram.

⁷Laboratory report indicates due to the presence of an interferent near its retention time, the normal reporting limit was not attained for toluene. The presence or concentration of this compound cannot be determined due to the presence of this interferent.

⁸Laboratory report indicates due to the sample matrix an initial dilution was necessary to perform the analysis. Therefore, the reporting limits for the GC/MS semivolatile compounds were raised.

⁹Laboratory report indicates due to the presence of interferents near their retention time, normal reporting limits were not attained for benzene and toluene. The presence or concentrations of these compounds cannot be determined below the reporting limits due to the presence of these interferents.

¹¹ Carcinogenic polycyclic aromatic hydrocarbons, arsenic and lead samples were filtered in the field using a disposable 0.45 micron filter

¹² The arsenic Site Cleanup Level (CUL) is two orders of magnitude below the USEPA Method 6020/6020A/6020B practical quantitation limit (PQL) (or reported detection limit [RDL]) for arsenic (2 µg/L) and one order of magnitude below the USEPA Method 6020/6020A/6020B Method Detection Limit (MDL) for arsenic (varying from 0.18 to 0.95 µg/L). Therefore, any arsenic detection will exceed the arsenic Site CUL.

Acronyms and Abbreviations

LNAPL = Light nonaqueous phase liquid.

Sheen = sheen observed in water

-- = not measured or not obtainable

Laboratory Qualifiers:

< = Indicates concentration is less than the Method Detection Limit (MDL).

J = The concentration is an estimated value - the result is greater than the MDL and less than the PQL (or RDL)

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

Laboratory Analytical Methods:

Benzene, toluene, and ethylbenzene by (EPA) method 8260D

Since 2011. Polyaromatic hydrocarbons - benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene and naphthalene - by EPA method 8270C SIM, 8270D SIM or 8270E SIM. Naphthalene was also analysed by EPA method 8021B.

Since 2011. Dissolved lead and arsenic by EPA method 6020, 6020A or 6020B

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