MONTROSE ENVIRONMENTAL
1631 E. Saint Andrew Place
Santa Ana, CA 92705
t 714.919.6500

May 23, 2025

Mrs. Nancy Sawka
Oregon Department of Environmental Quality
Western Region Eugene Office
165 East Seventh Avenue, Suite 1000
Eugene, Oregon 97401

DEQ Tanks File No.: 20-20-0844

First Quarter 2025 Groundwater Monitoring Report
United Pacific #5468
5720 Main Street
Springfield, Oregon

Dear Mrs. Sawka:

On behalf of United Pacific (UP), Montrose Environmental Services, Inc. (Montrose) is pleased to provide the *First Quarter 2025 Groundwater Monitoring Report* (Report) for the above referenced Site (**Figure 1**). This Report presents a summary of the liquid-phase hydrocarbon (LPH) removal activities conducted during the first quarter of 2025 and a summary of the results for groundwater monitoring performed on March 18 through March 20, 2025.

Groundwater monitoring results indicate that liquid phase hydrocarbons (LPH) is present in several onsite wells and concentrations of dissolved-phase petroleum hydrocarbons exceeding the Oregon Department of Environmental Quality's (DEQ's) Risk Based Concentrations (RBCs) for the Ingestion and Inhalation from Tapwater for the occupational receptor scenario are present in groundwater beneath the Site. Monthly LPH removal and quarterly groundwater monitoring are recommended while remedial actions are implemented for the Site. Should you have questions regarding this report, the LPH removal activities, or the groundwater monitoring results, please contact the undersigned at (714) 919-6500.

Sincerely,

Montrose Environmental

Laura Skow, RG
Project Manager

REGISTERED
OREGON
LAURA B. SKOW
G2643
GEOLOGIST
exp. 5/1/26

c: Mr. Tom Robins, United Pacific

REPORT CONTENTS: **Page No.**

ATTACHMENTS:

SITE INFORMATION

Monitoring and Sampling Date:	March 18-20, 2025
Site Location:	United Pacific #5468 5720 Main Street Springfield, Oregon 97478
United Pacific Contact:	Mr. Tom Robins
Montrose Contact:	Mrs. Laura Skow
Regulatory Agency:	Oregon Department of Environmental Quality Western Region Eugene Office DEQ Tanks File No.: 20-20-0844

WORK PERFORMED

During the first quarter 2025, Montrose scheduled field activities for the remediation system installation and conducted monthly LPH removal and quarterly groundwater monitoring.

On January 6 through 16, 2025, Montrose and Anderson Environmental Contracting, LLC, installed underground remedial piping, a sewer pipe line from the compound to the main sewer line, and the remediation compound slab and system manifold. A new gas meter was installed by NW Natural. A secondary inspection for electrical service was completed with the Springfield Utility Board (SUB), electrical subcontractor and Montrose for installation of the temporary power pole originally planned for the site. SUB determined upon site inspection that underground connection and a subpanel will be required, which is being coordinated with SUB.

On January 23, February 17, and March 20, 2025, Montrose performed LPH removal from select site wells using passive skimmers and manual bailing methods. Measurable LPH was present in Wells MW-6 and EW-1R during the reporting period. However, nominal LPH accumulation was observed in the skimmer reservoirs and may be attributed to water table fluctuation beyond the skimmer's float range (submerged). Manual bailing of the wells was performed, and the skimmers were adjusted to improve product recovery. Approximately, 21.75 gallons of LPH sheen and hydrocarbon impacted groundwater were removed from Wells EW-1R, MW-5, and MW-6. LPH removal data for the reporting period are summarized in **Table 1**.

On March 18 through 20, 2025, Montrose performed well gauging, LPH removal and sampling activities. Site wells not containing measurable LPH or sheen were sampled using DEQ approved low-flow purge and sampling techniques. LPH removal and well gauging field data sheets for the first quarter of 2025 are included as **Appendix A**.

Groundwater samples were transported to a State approved environmental laboratory (Libby Environmental, Inc. of Olympia, Washington and analyzed for the presence of total petroleum hydrocarbons quantified as gasoline (TPH-Gx) by Method NWTPH-Gx, benzene, toluene,

ethylbenzene, total xylenes (BTEX collectively), methyl tert-butyl ether (MTBE), naphthalene, 1-methyl naphthalene, 2-methyl naphthalene, 1,2-dibromoethane (EDB), and 1,2-dichloroethane (EDC) by Environmental Protection Agency (EPA) Method 8260D. Note that as approved by the DEQ, the analysis plan was temporarily reduced from full scan volatile organic carbons (VOCs) to short list VOCs since the wells are known to be impacted and remediation is planned for the site. Additionally, lead was removed from the analysis plan as it has not been detected in soil or groundwater samples collected at the site. Full scan VOC analysis may be reinstated for future monitoring if directed by the DEQ, for compliance monitoring once remediation is initiated, or for initial screening of new wells installed at the Site.

Water quality parameters were measured in the field during sampling and are included in **Table 2**. Field-measured water quality parameters included dissolved oxygen (DO), oxidation reduction potential (ORP), temperature, potential hydrogen level (pH), electrical conductivity, and turbidity. Current and historical groundwater analytical results are presented in **Table 2** and **Table 3**, respectively. An area plan showing the Site and surrounding areas is presented as **Figure 2** and a site plan showing the detailed site configuration and monitoring well locations is presented as **Figure 3**. Site background information is included as **Appendix B**.

SUMMARY DATA

Monitoring Details

Monitoring Wells:	Onsite: 9	Offsite: 4
	Wells gauged: 13	Wells sampled: 13
Extraction Wells:	Onsite: 3	Offsite: 0
	Wells gauged: 3	Wells sampled: 3
Observation Wells:	Onsite: 4	Offsite: 0
	Wells gauged: 0	Wells sampled: 0
Purging Method:	Low-flow with submersible pump/dedicated tubing	
Sampling Method:	Grab	
Purge Water Disposal:	Onsite drum, pending disposal (20.3 gallons)	
Wells with LPH:	3	
LPH Thickness:	Sheen to 0.04 feet	
Current Remediation Method:	Passive skimming and manual bailing	

Hydrological Parameters

Depth to Groundwater (below TOC):	Range: 6.69 to 10.55 feet
Groundwater Elevation:	Range: 500.69 to 503.20 feet amsl
Groundwater Flow Direction:	West-southwest
Groundwater Gradient:	0.005 ft/ft
Average Groundwater Level Change:	0.77 feet increase

Select Analytical Results (Table 2)

Wells with TPH-Gx: 7	Maximum: 94,000 D µg/L (EW-2R)
Wells with Benzene: 7	Maximum: 2,000 D µg/L (EW-4)

FIRST QUARTER 2025 GROUNDWATER MONITORING RESULTS

Groundwater analytical results and field measurements for the first quarter 2025 sampling event are presented in **Tables 2**, **3**, and **4**. **Figure 4** shows the monitoring well locations with the corresponding analytical results for TPH-Gx, benzene, and MTBE. Note that groundwater analytical results are compared to the DEQ RBCs for the Ingestion and Inhalation from Tapwater for the occupational worker scenario. Groundwater monitoring results are summarized below:

- The static groundwater level increased an average of 0.77 feet since the previous monitoring event on December 27, 2024.
- As shown in **Table 2**, groundwater elevations ranged from 500.69 to 503.20 feet above mean sea level (amsl). The groundwater flow direction and gradient were calculated for the Site using data from Wells MW-3, MW-8, and MW-12. The flow direction is toward the west-southwest at an approximate gradient of 0.005 feet per foot (ft/ft), which is the first time it is noted in that direction. The groundwater gradient, flow direction, and groundwater elevation contours are shown on **Figure 5**. A summary of historical groundwater flow direction and gradient data is presented in **Table 5** and a rose diagram showing all measured groundwater flow directions and gradients measured to date is presented as **Figure 6**.
- Measurable LPH was detected in two site wells, MW-6 and EW-1R. In MW-6, an LPH thickness of 0.04 feet was measured and EW-1R had an LPH thickness of 0.03 feet, both on March 20th. Additionally, an LPH sheen was observed in Well MW-5 (**Figure 4**).
- Dissolved-phase TPH-Gx was detected in seven (7) of the thirteen (13) wells sampled at concentrations ranging from 660 micrograms per Liter (µg/L, MW-3) to 94,000 D µg/L (EW-2R), TPH-Gx concentrations in all seven (7) wells exceed the applicable DEQ RBC of 450 µg/L. The "D" designation indicates that sample dilution was used during laboratory analysis. TPH-Gx was not detected in any of the remaining wells sampled at concentrations greater than the laboratory RL (<100 µg/L).
- Benzene was detected in seven (7) of the thirteen (13) wells sampled at concentrations ranging from 20 µg/L (MW-2) to 2,000 D µg/L (EW-4), all of which exceed the applicable DEQ RBC of 2.1 µg/L. Benzene was not detected in the remaining wells sampled at concentrations greater than the laboratory RL (<1.0 µg/L).
- Toluene was detected in seven (7) wells at concentrations ranging from 3.9 µg/L (MW-3) to 10,000 D µg/L (EW-4), one of which were above the DEQ RBC concentration of 6,300 µg/L (EW-4). The remaining six wells contained toluene concentrations below the DEQ RBC concentration of 6,300 µg/L.
- Ethylbenzene was detected in seven (7) wells at concentrations ranging from 34 µg/L (MW-2) to 1,900 D µg/L (EW-4), all of which exceed the DEQ RBC of 6.4 µg/L for ethylbenzene.

- Total xylenes were detected in seven (7) wells at concentrations ranging from 7.8 μg/L (MW-3) to 19,000 D μg/L (EW-2R). The concentrations of total xylenes in three (3) of the seven (7) wells exceed the applicable DEQ RBC of 830 μg/L. Total xylenes were not detected in the remaining wells sampled at concentrations greater than laboratory RL (<2.0 μg/L).
- MTBE was not detected in any of the wells sampled at concentrations greater than the laboratory RL. Note that the laboratory RL for MTBE is 5.0 μg/L.
- Naphthalene was detected in six (6) wells at concentrations ranging from 7.1 μg/L (MW-2) to 230 D μg/L (EW-4 and EW-2R), all of which exceed the DEQ RBC of 0.72 μg/L. 2-methyl naphthalene and 1-methyl naphthalene and were detected in several wells at concentrations ranging from 8.9 μg/L to 200 μg/L and 9.0 μg/L to 140 μg/L, respectively; DEQ RBCs are not specified for 2-methyl naphthalene and 1 -methyl naphthalene. EDB was not detected in any of the wells sampled at concentrations greater than the laboratory RL (<0.010 μg/L). EDC was not detected in any of the wells sampled at concentrations greater than the laboratory RL (<1.0 μg/L).
- Contaminants of concern (COCs) were not detected in the trip blank sample (TB-1). Low concentration of total xylenes (10 μg/L) were detected in the equipment blank sample (EB-1). Low concentrations of benzene (1.7 μg/L), toluene (5.0 μg/L), and total xylenes (3.8 μg/L) were reported in the equipment blank sample (EB-2), which may indicate potential field, transport, or lab contamination; other COCs were not detected in EB-2. The detected COCs are greater in most well samples than the equipment blank, therefore the sample results are considered valid and the data usable for its intended purpose.

Field measurements of DO levels ranged from 0.42 milligrams per liter (mg/L) at Well MW-2 to 10.08 mg/L at Well MW-10. ORP levels ranged from -167.1 millivolts (mV) measured at Well MW-2 to 174.8 mV at MW-10.

A copy of the laboratory analytical report is provided as **Appendix C**. Groundwater monitoring field forms are provided as **Appendix D**. Montrose's Monitoring Well Sampling Protocols are included as **Appendix E**. Purge water generated during the groundwater monitoring event was placed into a 55-gallon drum and staged on site. When the drum is full arrangements will be made to have it transported to an appropriate disposal/recycling facility under manifest.

LPH REMOVAL

LPH removal activities were conducted on January 23, February 17, and March 20, 2025. During each LPH removal event, skimmers were removed from the wells, emptied, and volumes of LPH and groundwater recorded (**Appendix A** and **Appendix D**). The wells were then gauged and depths to LPH and groundwater recorded. For remaining wells containing measurable LPH, manual LPH removal was conducted using disposable polyethylene bailers.

The well gauging and LPH removal activities will continue on a periodic basis as long as measurable amounts of LPH are detected in wells at the Site. To date, approximately 361.66 gallons of LPH and 3,794.9 gallons of impacted groundwater have been removed from site wells during the LPH removal activities (**Table 1**).

HYDROCARBON TREND AND DISTRIBUTION ANALYSIS

A summary of current and historical groundwater sample analytical results is provided in **Tables 2** and **3**, respectively. A summary of additional VOCs in groundwater is attached as **Table 4**. Groundwater elevation and LPH thickness trends are shown on **Chart 1** and TPH-Gx and benzene concentration trends are shown in **Charts 2** and **3**, respectively.

The average groundwater elevation beneath the Site has increased approximately 0.77 feet since December 27, 2024 (previous monitoring event). **Chart 1** shows a groundwater elevation low occurring between July and September 2023; with a similar drop in groundwater elevations occurring around the same time in 2022 and 2021. The annual fluctuation in groundwater elevation is well documented since late 2020, the beginning of the current data set.

Measurable LPH was present in Well EW-1R on March 20, 2025; and MW-6 on January 23, February 17, and March 20, 2025. A hydrocarbon sheen was present in Well MW-5 on January 23, February 18, and March 20, 2025. In addition, there was also sheen present in Well EW-1R on January 23, 2025. The distribution of LPH is currently centered near the USTs (confirmed source, historically) and LPH thicknesses exhibit a fluctuating but generally decreasing trend over the period of record (**Chart 1**). For example, the LPH thickness in Well MW-6 has fluctuated but has decreased from a maximum thickness of 1.65 feet in March 2021 to 0.04 in March 2025. Similarly, the LPH thickness in Well MW-5 has fluctuated but has decreased from a maximum thickness of 0.23 feet in August 2021 to a sheen in March 2025 (**Table 1**). Further changes in the distribution and thickness of LPH beneath the Site is expected over time and LPH recovery efforts will continue as long as LPH is detectable in site wells.

TPH-Gx concentrations in the routinely sampled Site monitoring wells have exhibited fluctuating trends but generally increased since the previous monitoring event. For example, the TPH-Gx concentration in Well MW-4 decreased from a maximum concentration of 190,000 μg/L on March 30, 2021 to 4,000 μg/L on June 29, 2023, rebounded to 19,000 μg/L on September 19, 2023, then decreased to 970 μg/L on September 24, 2024, and has since rebounded to 6,800 D μg/L (March 19, 2025, **Table 3**). The TPH-Gx concentration in Well MW-7 decreased from a maximum concentration of 24,000 μg/L on October 12, 2022, to 3,900 μg/L (December 12, 2023), rebounded to 6,100 μg/L (March 27, 2024), decreased to 710 μg/L (September 24, 2024) and then increased to 3,800 D μg/L (March 20, 2025). The fluctuations in COC concentrations appear to be following a trend of seasonal fluctuations where lows are typically seen during the winter months and highs are typically seen during the summer months. This trend is expected to

continue with overall slight decreases until active remediation is implemented at the Site, at which time significant and permanent decreases in COC concentrations are expected.

Current LPH thicknesses and TPH-Gx, BTEX and MTBE concentrations are shown in **Figure 4** to illustrate the distribution of dissolved-phase hydrocarbons. As shown in **Figure 4**, LPH was present in Well EW-1R and MW-6 and LPH sheen was present in Well MW-5, located downgradient of the UST cavity. Elevated COC concentrations are also present in Wells MW-2, EW-2R, MW-3, MW-4, and EW-4, located south of the USTs. The extent of the groundwater plume is defined to the west, northwest, north, east, and southeast by perimeter Wells MW-8, MW-9, MW-10, MW-11 and MW-12, where COC concentrations were reported at non-detectible levels.

CONCLUSION AND RECOMMENDATIONS

Based on the first quarter 2025 groundwater monitoring results, measurable LPH was present in Wells EW-1R and MW-6 and an LPH sheen is present in Wells MW-5. Dissolved-phase hydrocarbon concentrations in groundwater samples collected from Wells MW-2, MW-3, MW-4, MW-7, MW-13, EW-2R, and EW-4 exceed applicable DEQ RBCs for the Ingestion and Inhalation from Tapwater for the occupational worker scenario. The groundwater plume is defined to the west, northwest, north, east, and southeast by perimeter Wells MW-8, MW-9, MW-10, MW-11, and MW-12.

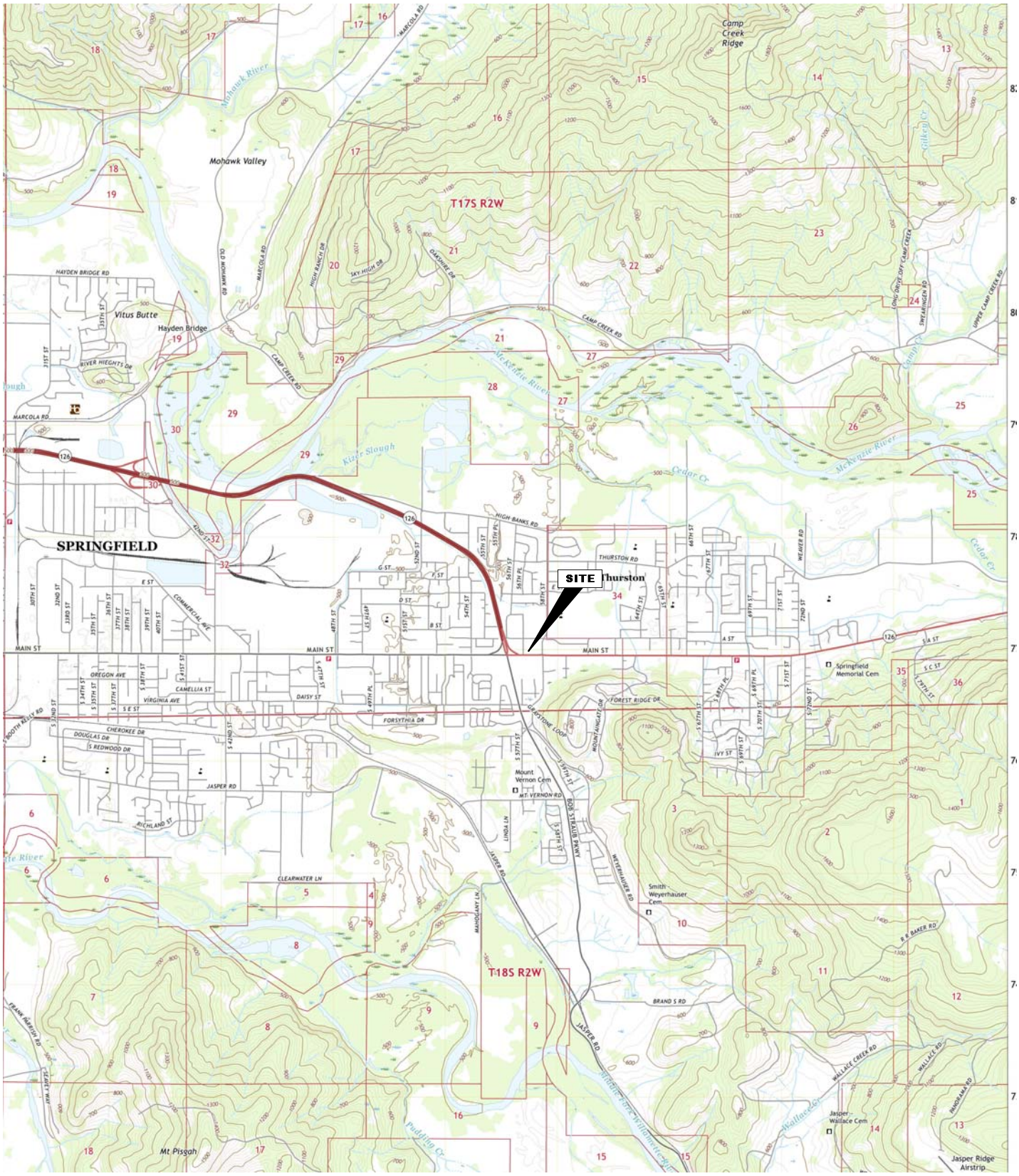
Natural gas line and remedial trenching and piping installations were completed in the first quarter 2025, and Montrose and the electrical contractor are coordinating with SUB for installation of electrical service and meters necessary to implement the two phase extraction (TPE) remediation system pilot test as proposed in the Workplan for Remedial Pilot Testing (December 5, 2022). The proposed electrical design is under review by SUB, and installation of the electrical service is tentatively scheduled for July 2025 along with remediation system equipment installation. Montrose will update the DEQ on the construction progress and anticipated schedule for the pilot testing activities. Montrose recommends continuing monthly LPH gauging and removal activities to recover LPH from Site wells and quarterly groundwater monitoring to evaluate groundwater quality beneath the Site. The next groundwater monitoring event is planned for the second quarter of 2025 (June 2025).

Montrose is pleased to be of service to UP and the DEQ. If there are questions regarding this report or if additional site information is required, please do not hesitate to contact Montrose at (714) 919-6500.

ACRONYMS:

amsl:	above mean sea level
bgs:	below ground surface
BTEX:	benzene, toluene, ethylbenzene, and total xylenes
btoc:	below top of casing
°C:	degrees Celsius
D:	dilution was required
DEQ:	Oregon Department of Environmental Quality
DO:	dissolved oxygen
DTW:	depth to water
EW:	extraction well
GW Δ:	change (difference) in water elevation since last measurement
Fe^{2+}:	ferrous iron
ft:	feet
ft/ft:	feet per foot
GW:	groundwater
µg/L:	micrograms per Liter
µs/cm:	microsiemens per centimeter
LPH:	liquid phase hydrocarbons
mg/L	milligrams per Liter
MTBE:	methyl tert-butyl ether
mV:	millivolts
MW:	monitoring well
na:	not applicable/not analyzed
nm:	not measured
ns:	not sampled
NTU:	Nephelometric Turbidity Unit
ORP:	oxidation reduction potential
pH:	potential hydrogen
ppm:	parts per million
PQL:	practical quantitation limit
RBC:	Risk based concentration
RL:	reporting limit
TPH-Dx:	total diesel-range petroleum hydrocarbons
TPH-Gx:	total gasoline-range petroleum hydrocarbons
TPH-Ox:	total lube oil-range petroleum hydrocarbons
UST:	underground storage tank
VOCs:	volatile organic compounds

FIGURES



Map Information:
U.S. GEOLOGICAL SURVEY
SPRINGFIELD QUADRANGLE
44°02'46.0"N 122°55'43.0"W

MONTROSE ENVIRONMENTAL
1631 E. Saint Andrew Place, Santa Ana, CA 92705 | t 714.919.6500

N

0 4000

APPROX. SCALE: 1" = 4000'

FIGURE 1

SITE LOCATION MAP

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN
11/10/2022

PROJECT NO.
006811

FILE NO.
006811F1-SLM

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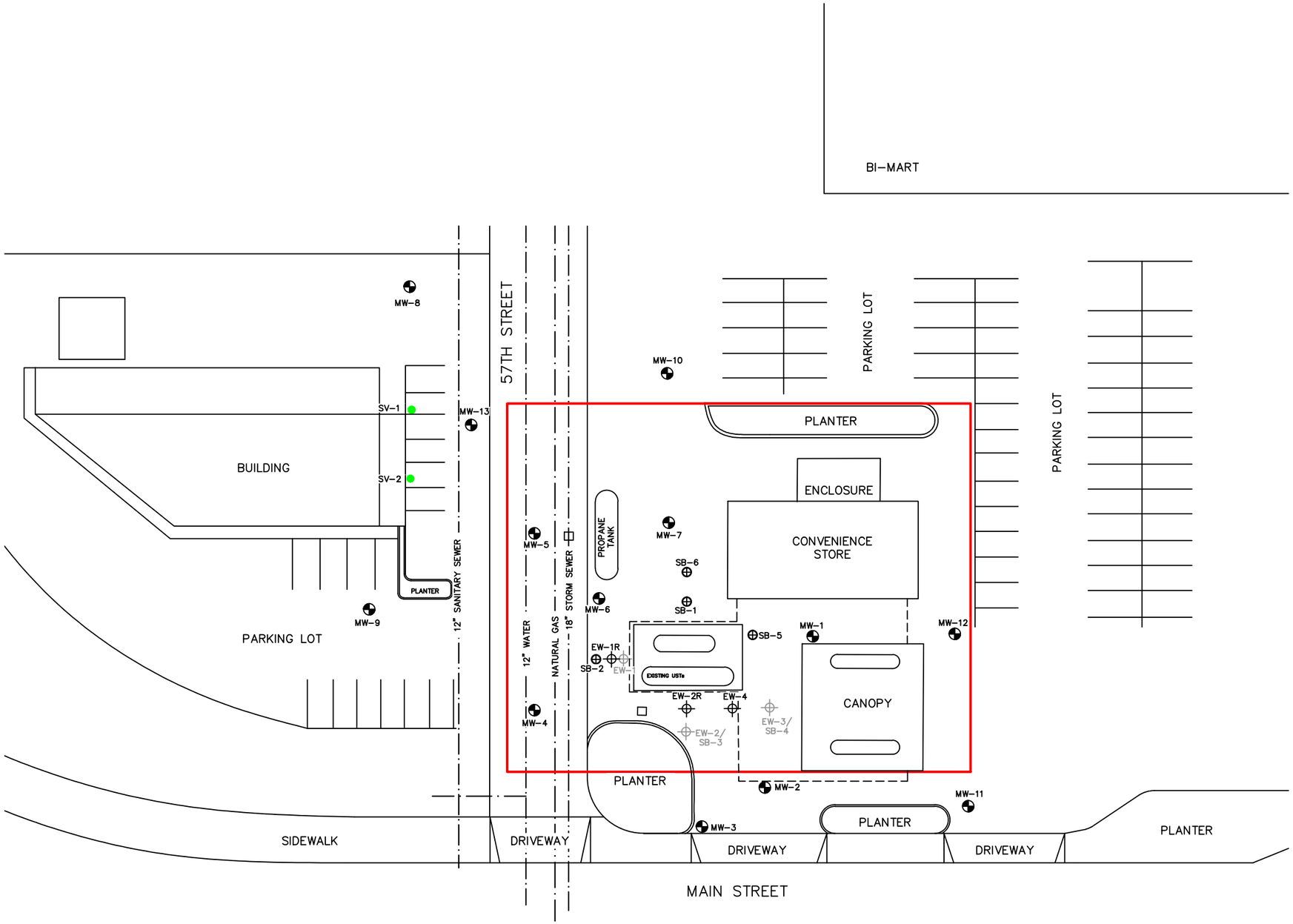

LEGEND

- SOIL BORING LOCATION
- MONITORING WELL LOCATION
- EXTRACTION WELL LOCATION
- DESTROYED EXTRACTION WELL LOCATION
- VAPOR PROBE LOCATION

N

40 0 40

APPROXIMATE SCALE: 1" = 40'

SOURCE: GOOGLE EARTH 2020

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1631 E. Saint Andrew Place, Santa Ana, CA 92705 | t 714.919.6500

FIGURE 2

AREA PLAN

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN 02/21/2025

PROJECT NO. 027409

FILE NO. F2-AP

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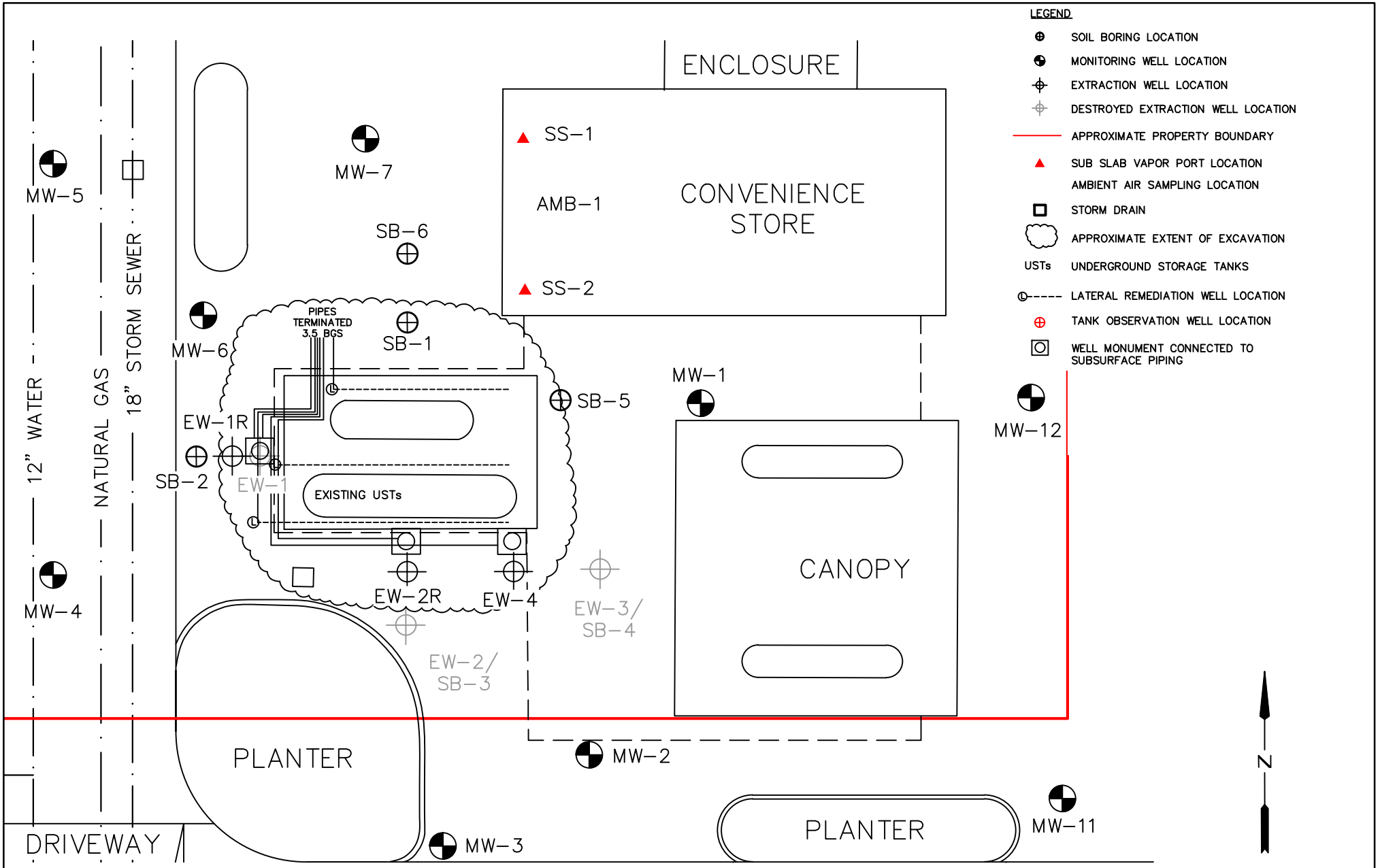
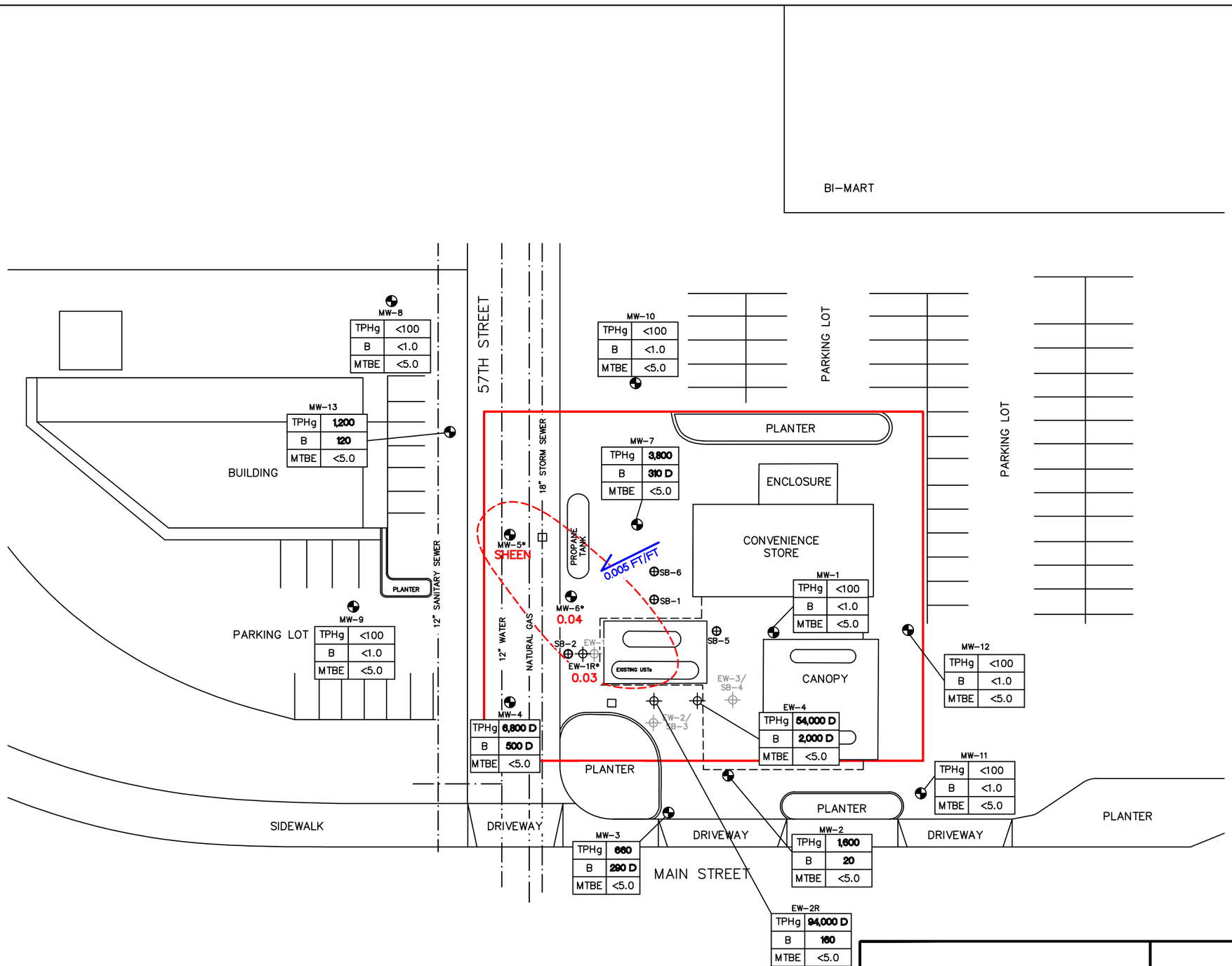

LEGEND
SOIL BORING LOCATION
MONITORING WELL LOCATION
EXTRACTION WELL LOCATION
DESTROYED EXTRACTION WELL LOCATION
APPROXIMATE PROPERTY BOUNDARY
SUB SLAB VAPOR PORT LOCATION
AMBIENT AIR SAMPLING LOCATION
STORM DRAIN
APPROXIMATE EXTENT OF EXCAVATION
USTs UNDERGROUND STORAGE TANKS
LATERAL REMEDIATION WELL LOCATION
TANK OBSERVATION WELL LOCATION
WELL MONUMENT CONNECTED TO SUBSURFACE PIPING
ENCLOSURE
SS-1
SS-2
AMB-1
CONVENIENCE STORE
MW-7
SB-6
MW-5
MW-6
PIPES TERMINATED 3.5 BGS
SB-1
SB-5
MW-1
MW-12
EW-1R
SB-2
EW-1
EXISTING USTs
CANOPY
MW-4
EW-2R
EW-4
EW-3/ SB-4
EW-2/ SB-3
MW-2
PLANTER
PLANTER
MW-11
MW-3
DRIVEWAY
12" WATER
NATURAL GAS
18" STORM SEWER
N
20 0 20
APPROXIMATE SCALE: 1" = 20'
SOURCE: GOOGLE EARTH 2020
MONTROSE ENVIRONMENTAL
1631 E. Saint Andrew Place, Santa Ana, CA 92705 | t 714.919.6500
FIGURE 3
SITE PLAN
United Pacific #5468
5720 Main Street,
Springfield, OR 97478
DATE DRAWN
2/21/2025
PROJECT NO.
027409
FILE NO.
F3-SP



APPROXIMATE SCALE: 1" = 40'

SOURCE: GOOGLE EARTH 2020

LEGEND

- ⊕ SOIL BORING LOCATION
- ◒ MONITORING WELL LOCATION
- ⊕ EXTRACTION WELL LOCATION
- ⊕ DESTROYED EXTRACTION WELL LOCATION
- APPROXIMATE PROPERTY BOUNDARY
- □ STORM DRAIN
- 0.005 FT/FT APPROXIMATE GROUNDWATER DIRECTION AND MAGNITUDE IN FEET PER FOOT
- USTs UNDERGROUND STORAGE TANKS
- LPH LIQUID PHASE HYDROCARBONS
- APPROXIMATE CURRENT EXTENT OF LPH
- 0.01 FEET OF LPH IN WELL
- <5.0 COMPOUND NOT DETECTED AT OR ABOVE LABORATORY METHOD REPORTING LIMIT
- TPHg TOTAL GASOLINE-RANGE PETROLEUM HYDROCARBONS
- B BENZENE
- MTBE METHYL TERT-BUTYL ETHER
- ug/L MICROGRAMS PER LITER
- SHEEN SHEEN WAS OBSERVED
- **BOLD** DETECTION EXCEEDS RISK BASED CONCENTRATION (RBC)
- * NOT SAMPLED DUE TO LPH PRESENCE
- D DILUTION WAS REQUIRED

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FIGURE 4

GROUNDWATER ANALYTICAL MAP
MARCH 19 & 20, 2025

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN 04/29/2025

PROJECT NO. 027409

FILE NO. F4-GAR

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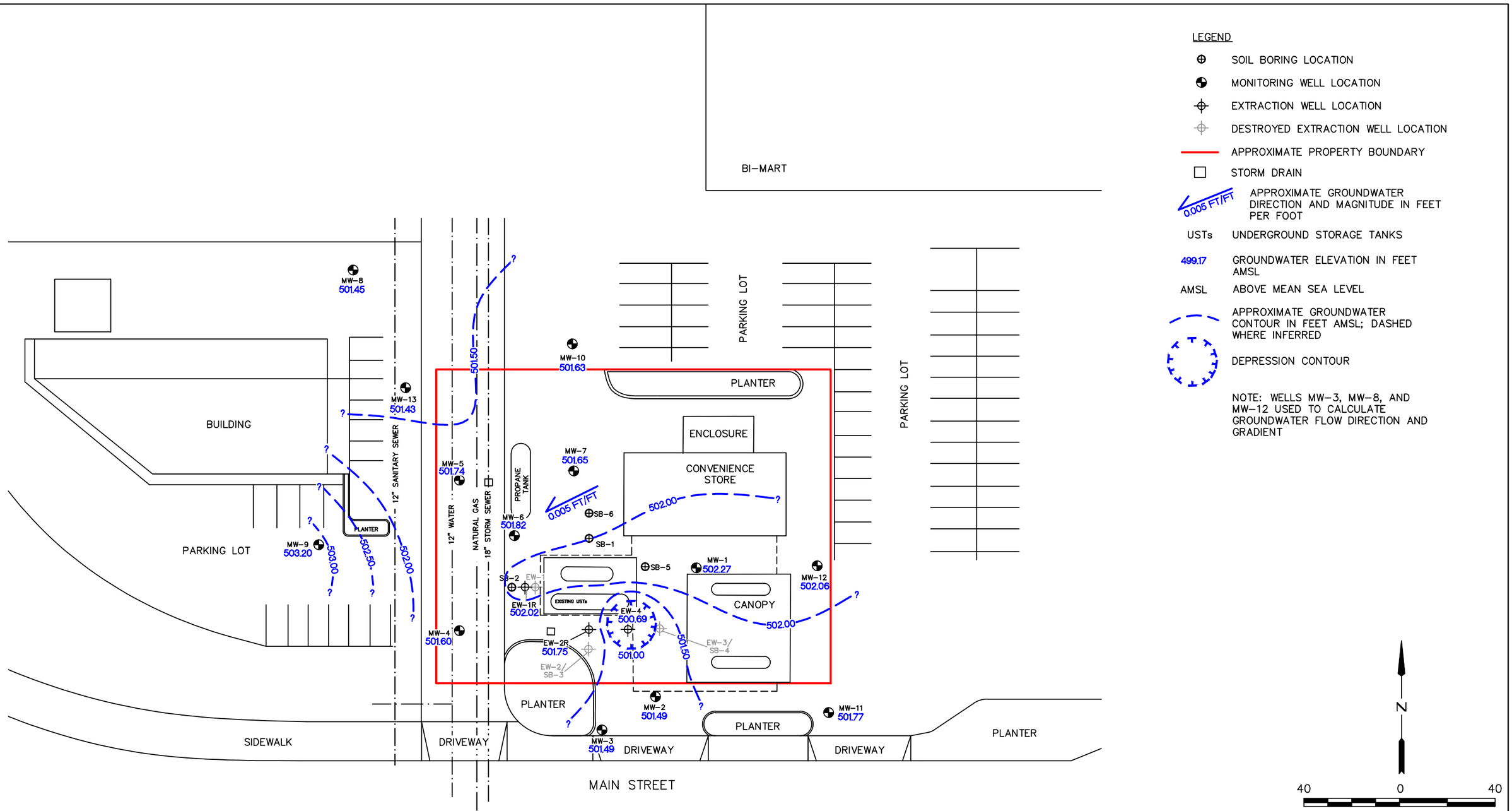

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FIGURE 5

GROUNDWATER CONTOUR MAP
MARCH 19 & 20, 2025

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN 04/29/2025

PROJECT NO. 027409

FILE NO. F5-GCM

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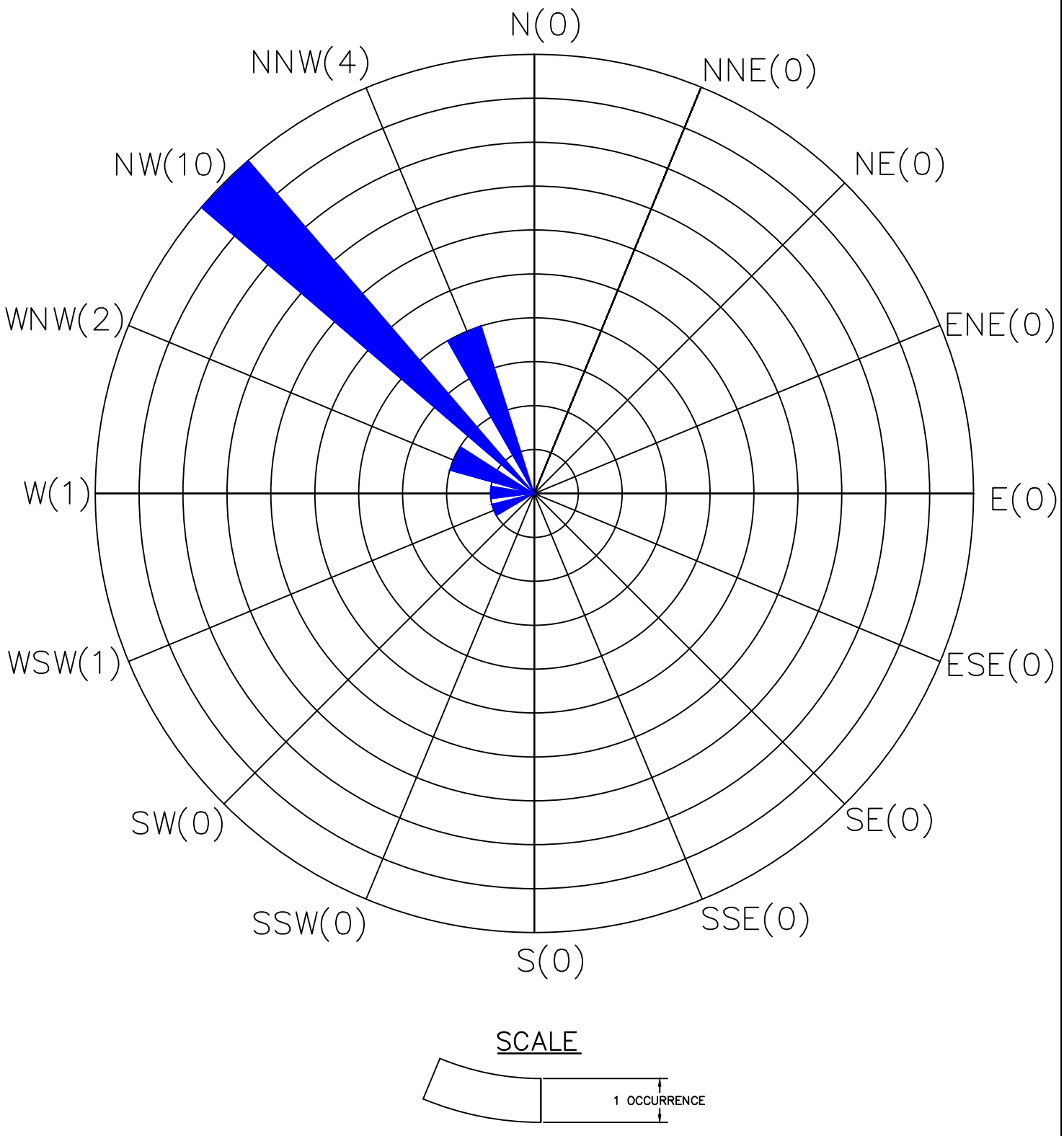

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FIGURE 6

GROUNDWATER FLOW DIRECTION
ROSE DIAGRAM

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN
04/29/2025

PROJECT NO.
027409

FILE NO.
F6-RD

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TABLES

TABLE 1
United Pacific #5468
Summary of LPH Removal
Springfield, Oregon
Page 1 of 7

Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
EW-1	11/19/20[3]	510.97	--	11.05	--	--	499.92	--	--	--	700.0	700.0
	01/13/21[3]		--	10.48	--	--	500.49	0.57	--	--	--	700.0
	01/27/21[4]		10.70	10.92	0.22	0.22	500.22	-0.27	0.35	0.35	1.4	701.4
	02/03/21[3]		10.55	10.57	0.02	-0.20	500.42	0.20	5.00	5.35	50.0	751.4
	02/25/21[5]		10.55	10.59	0.04	0.02	500.41	0.00	0.25	5.60	3.0	754.4
	03/30/21		11.05	11.14	0.09	0.05	499.90	-0.51	0.00	5.60	0.0	754.4
	04/20/21		11.55	11.73	0.18	0.09	499.38	-0.52	0.00	5.60	0.0	754.4
	05/20/21[7]		11.80	11.94	0.14	-0.04	499.14	-0.24	15.00	20.60	135.0	889.4
	06/08/21		--	11.73	0.00	-0.14	499.24	0.10	0.00	20.60	0.0	889.4
	06/23/21[8]		--	11.74	0.00	0.00	499.23	-0.01	0.00	20.60	1.7	891.1
	07/08/21		--	11.96	0.00	0.00	499.01	-0.22	0.00	20.60	0.0	891.1
	07/22/21		12.11	12.12	0.01	0.01	498.86	-0.15	0.25	20.85	1.0	892.1
	08/05/21		--	12.18	0.00	-0.01	498.79	-0.07	0.00	20.85	0.0	892.1
	08/18/21		--	12.29	0.00	0.00	498.68	-0.11	0.00	20.85	0.0	892.1
	09/01/21		--	12.26	0.00	0.00	498.71	0.03	0.00	20.85	0.0	892.1
	09/22/21		--	11.72	0.00	0.00	499.25	0.54	0.00	20.85	1.4	893.5
	10/06/21		--	11.40	0.00	0.00	499.57	0.32	0.00	20.85	0.0	893.5
	10/20/21		--	11.37	0.00	0.00	499.60	0.03	0.00	20.85	0.0	893.5
	11/03/21		--	11.02	0.00	0.00	499.95	0.35	0.00	20.85	0.0	893.5
	11/17/21		--	10.81	0.00	0.00	500.16	0.21	0.00	20.85	0.0	893.5
	12/08/21		--	10.68	0.00	0.00	500.29	0.13	0.00	20.85	0.0	893.5
	12/22/21		--	9.90	0.00	0.00	501.07	0.78	0.00	20.85	0.0	893.5
	01/11/22		--	10.20	0.00	0.00	500.77	-0.30	0.00	20.85	0.0	893.5
	01/26/22		--	10.37	0.00	0.00	500.60	-0.17	0.00	20.85	0.0	893.5
	02/07/22		--	10.26	0.00	0.00	500.71	0.11	0.00	20.85	0.0	893.5
	Well Decommissioned on 02/08/22											
EW-1R	10/12/22[4]	510.86	12.17	12.19	0.02	--	498.69	--	0.10	0.10	2.0	2.0
	11/14/22		--	10.90	0.00	-0.02	499.96	1.27	0.00	0.10	0.0	2.0
	12/19/22		--	11.32	0.00	0.00	499.54	-0.42	0.00	0.10	3.0	5.0
	01/18/23		--	10.91	0.00	0.00	499.95	0.41	0.00	0.10	0.0	5.0
	02/28/23		--	10.69	0.00	0.00	500.17	0.22	0.00	0.10	0.0	5.0
	03/27/23		--	10.35	0.00	0.00	500.51	0.34	1.00	1.10	5.5	10.5
	01/18/23		--	10.91	0.00	0.00	499.95	-0.56	0.00	0.00	0.0	10.5
	02/23/23[5]		--	10.69	0.00	0.00	500.17	0.22	0.00	0.00	0.0	10.5
	03/27/23[5]		--	10.35	0.00	0.00	500.51	0.34	0.00	0.00	0.0	10.5
	04/06/23[5]		10.10	10.11	0.01	0.01	500.76	0.25	0.20	1.30	1.3	11.8
	05/09/23		--	10.53	0.00	0.00	500.33	-0.43	0.00	1.30	3.0	14.8
	06/29/23		--	11.82	0.00	0.00	499.04	-1.29	0.00	1.30	0.0	14.8
	07/27/23		--	12.11	0.00	0.00	498.75	-0.29	0.00	1.30	0.25	15.1
	08/10/23		12.32	12.33	0.01	0.01	498.54	-0.21	0.10	1.40	2.4	17.5
	09/19/23		12.30	12.45	0.15	0.14	498.52	-0.01	0.15	1.55	3.3	20.7
	10/25/23		11.38	11.45	0.07	-0.08	499.46	0.94	0.10	1.65	3.0	23.7
	11/21/23		11.23	11.25	0.02	-0.05	499.63	0.16	0.05	1.70	1.05	24.8
	12/13/23		--	10.18	Sheen	-0.02	500.68	1.05	0.01	1.71	1.75	26.5
	01/30/24		--	9.66	0.00	0.00	501.20	0.52	0.00	1.71	1.75	28.3
	02/28/24		--	10.37	Sheen	0.00	500.49	-0.71	0.00	1.71	2.25	30.5
	03/28/24		10.43	10.44	0.01	0.01	500.43	-0.06	0.01	1.72	2.00	32.5
	04/16/24[4]		--	10.74	Sheen	-0.01	500.12	-0.31	0.00	1.72	2.60	35.1
	05/15/24[4]		--	10.56	0.00	0.00	500.30	0.18	0.00	1.72	2.70	37.8
	06/12/24[4]		11.51	11.54	0.03	0.03	499.34	-0.96	0.05	1.77	1.95	39.8
	07/11/24[4]		--	11.79	Sheen	-0.03	499.07	-0.27	0.10	1.87	1.70	41.5
	08/21/24		--	11.78	0.00	0.00	499.08	0.01	0.26	2.13	0.00	41.5
	09/24/24		--	11.89	Sheen	0.00	498.97	-0.11	0.00	2.13	0.00	41.5
	10/29/24		--	11.36	0.00	0.00	499.50	0.53	0.00	2.13	0.3	41.8
	11/21/24		--	10.39	0.00	0.00	500.47	0.97	0.13	2.26	0.13	41.9
	12/26/24		--	9.75	Sheen	0.00	501.11	0.64	0.00	2.26	1.0	42.9
	01/23/25		--	10.90	Sheen	0.00	499.96	-1.15	0.00	2.26	3.0	45.9
	02/18/25		--	10.08	0.00	0.00	500.78	0.82	0.00	2.26	2.0	47.9
	03/20/25		8.83	8.86	0.03	0.03	502.00	1.22	0.00	2.26	2.0	49.9
EW-2	11/19/20 [3]	510.90	11.20	11.68	0.48	--	499.59	--	32.5	32.50	617.5[2]	617.5
	01/13/21[3]		10.22	12.05	1.83	1.35	500.25	0.66	5.00	37.50	45.0	662.5
	01/27/21[4]		10.50	12.35	1.85	0.02	499.97	-0.28	2.60	40.10	2.4	664.9
	02/03/21[3]		10.77	11.37	0.60	-1.25	499.99	0.02	23.00	63.10	209.0	873.9
	02/25/21[5]		10.74	11.10	0.36	-0.24	500.08	0.09	0.50	63.60	0.0	873.9
	03/30/21		11.20	11.28	0.08	-0.28	499.68	-0.39	0.03	63.63	0.0	873.9

TABLE 1
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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
EW-2	04/20/21	510.90	11.74	11.93	0.19	0.11	499.12	-0.57	0.00	63.63	0.0	873.9
Cont.	05/20/21[7]		11.95	12.20	0.25	0.06	498.89	-0.22	15.00	78.63	135.0	1,008.9
	06/08/21[4]		11.90	12.00	0.10	-0.15	498.98	0.09	0.25	78.88	4.0	1,012.9
	06/23/21[4]		11.88	12.07	0.19	0.09	498.98	0.00	0.40	79.28	4.2	1,017.1
	07/08/21[9]		12.12	12.17	0.05	-0.14	498.77	-0.21	0.26	79.54	3.2	1,020.3
	07/22/21		--	12.28	0.00	-0.05	498.62	-0.15	0.00	79.54	0.0	1,020.3
	08/05/21[4]		12.32	12.33	0.01	0.01	498.58	-0.04	0.10	79.64	0.4	1,020.7
	08/18/21[4]		12.48	12.50	0.02	0.01	498.42	-0.16	0.10	79.74	1.0	1,021.7
	09/01/21[4]		12.40	12.42	0.02	0.00	498.50	0.08	0.10	79.84	1.0	1,022.7
	09/22/21[4]		11.84	11.87	0.03	0.01	499.05	0.56	0.20	80.04	3.0	1,025.7
	10/06/21		11.55	11.59	0.04	0.01	499.34	0.29	0.25	80.29	2.0	1,027.7
	10/20/21[4,5]		11.52	11.63	0.11	0.07	499.35	0.01	0.25	80.54	3.0	1,030.7
	11/03/21		--	11.19	0.00	-0.11	499.71	0.36	0.00	80.54	0.0	1,030.7
	11/17/21		--	11.02	0.00	0.00	499.88	0.17	0.00	80.54	0.0	1,030.7
	12/08/21[7]		10.95	10.97	0.02	0.02	499.95	0.07	1.30	81.84	128.7	1,159.4
	12/22/21		10.20	10.22	0.02	0.00	500.70	0.75	0.13	81.97	0.0	1,159.4
	01/11/22		10.00	11.96	1.96	1.94	500.44	-0.26	6.60	88.57	2.4	1,161.8
	01/26/22[7]		10.95	12.00	1.05	-0.91	499.70	-0.74	11.60	100.17	20.0	1,181.8
	02/07/22		9.98	11.99	2.01	0.96	500.45	0.74	1.59	101.76	0.0	1,181.8
	Well Decommissioned on 02/08/22											
EW-2R	10/12/22[4]	510.91	12.32	12.34	0.02	--	498.59	--	0.20	0.20	3.0	3.0
	11/14/22		--	10.94	0.00	-0.02	499.97	1.38	0.00	0.20	0.0	3.0
	12/19/22		11.53	11.54	0.01	0.01	499.38	-0.59	0.50	0.70	6.0	9.0
	01/18/23[4]		11.11	11.12	0.01	0.00	499.80	0.42	0.13	0.83	4.0	13.0
	02/28/23		--	10.93	0.00	0.00	499.98	0.18	0.00	0.83	0.0	13.0
	03/27/23		--	10.53	0.00	0.00	500.38	0.40	0.00	0.83	0.0	13.0
	04/06/23		--	10.32	0.00	0.00	500.59	0.21	0.00	0.83	0.0	13.0
	05/09/23		--	10.59	0.00	0.00	500.32	-0.27	0.00	0.83	0.0	13.0
	06/29/23		--	12.17	0.00	0.00	498.74	-1.58	0.00	0.83	0.0	13.0
	07/27/23		--	12.74	0.00	0.00	498.17	-0.57	0.00	0.83	0.0	13.0
	08/10/23		--	12.44	0.00	0.00	498.47	0.30	0.00	0.83	0.0	13.0
	09/19/23		--	12.46	0.00	0.00	498.45	-0.02	0.00	0.83	0.0	13.0
	10/25/23		--	11.60	0.00	0.00	499.31	0.86	0.00	0.83	0.1	13.1
	11/21/23		--	11.37	0.00	0.00	499.54	0.23	0.00	0.83	0.2	13.3
	12/13/23		--	10.44	0.00	0.00	500.47	0.93	0.00	0.83	0.0	13.3
	01/30/24		--	9.96	0.00	0.00	500.95	0.48	0.00	0.83	0.0	13.3
	02/27/24		--	10.63	0.00	0.00	500.28	-0.67	0.00	0.83	0.0	13.3
	03/28/24		--	10.65	0.00	0.00	500.26	-0.02	0.00	0.83	0.0	13.3
	04/16/24		--	10.89	0.00	0.00	500.02	-0.24	0.00	0.83	0.0	13.3
	05/14/24		--	10.76	0.00	0.00	500.15	0.13	0.00	0.83	0.0	13.3
	06/12/24		--	11.66	0.00	0.00	499.25	-0.90	0.00	0.83	0.0	13.3
	07/11/24		--	11.87	0.00	0.00	499.04	-0.21	0.00	0.83	0.0	13.3
	08/21/24		--	11.82	0.00	0.00	499.09	0.05	0.00	0.83	0.0	13.3
	09/24/24		--	11.22	0.00	0.00	499.69	0.60	0.00	0.83	0.0	13.3
	10/29/24		--	11.70	0.00	0.00	499.21	-0.48	0.00	0.83	0.0	13.3
	11/21/24		--	10.42	0.00	0.00	500.49	1.28	0.00	0.83	0.0	13.3
	12/26/24		--	9.91	0.00	0.00	501.00	0.51	0.00	0.83	0.0	13.3
	01/22/25		--	11.16	0.00	0.00	499.75	-1.25	0.00	0.83	0.0	13.3
	02/17/25		--	10.38	0.00	0.00	500.53	0.78	0.00	0.83	0.0	13.3
	03/19/25		--	9.16	0.00	0.00	501.75	1.22	0.00	0.83	0.0	13.3
EW-3	11/19/20[3]	511.63	12.02	12.45	0.43	--	499.51	--	32.5	32.50	617.5[2]	617.5
	01/13/21[3]		11.13	11.29	0.16	-0.27	500.46	0.95	5.00	37.50	45.0	662.5
	01/27/21[4]		11.36	11.68	0.32	0.16	500.19	-0.27	0.60	38.10	3.9	666.4
	02/03/21[3]		12.79	12.89	0.10	-0.22	498.82	-1.38	16.00	54.10	149.0	815.4
	02/25/21[5]		ND	11.39	0.00	-0.10	500.24	1.42	0.00	54.10	0.0	815.4
	03/30/21		11.68	11.90	0.22	0.22	499.90	-0.34	0.07	54.17	1.5	816.9
	04/20/21[4]		12.25	12.64	0.39	0.17	499.29	-0.61	0.00	54.17	0.0	816.9
	05/20/21[7]		12.42	12.84	0.42	0.03	499.11	-0.18	15.00	69.17	135.0	951.9
	06/08/21		--	12.44	0.00	-0.42	499.19	0.08	0.00	69.17	0.0	951.9
	06/23/21[4]		12.40	12.41	0.01	0.01	499.23	0.04	0.07	69.24	0.5	952.4
	07/8/21[4]		12.62	12.71	0.09	0.08	498.99	-0.24	0.40	69.64	0.8	953.2
	07/22/21[4]		12.80	12.94	0.14	0.05	498.80	-0.19	1.00	70.64	4.0	957.2
	08/05/21[4]		12.86	13.07	0.21	0.07	498.72	-0.08	0.50	71.14	2.0	959.2
	08/18/21[4]		13.01	13.20	0.19	-0.02	498.58	-0.15	1.50	72.64	2.0	961.2

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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
EW-3 Cont.	09/01/21[4]		13.00	13.14	0.14	-0.05	498.60	0.02	0.25	72.89	1.5	962.7
	09/22/21[4]		12.36	12.45	0.09	-0.05	499.25	0.65	0.40	73.29	4.0	966.7
	10/06/21		--	12.16	0.00	-0.09	499.47	0.22	0.00	73.29	0.0	966.7
	10/20/21[4,5]		12.08	12.12	0.00	0.00	499.51	0.04	0.10	73.39	3.0	969.7
	11/03/21		--	11.75	0.00	0.00	499.88	0.37	0.00	73.39	0.0	969.7
	11/17/21		--	11.55	0.00	0.00	500.08	0.20	0.00	73.39	0.0	969.7
	12/08/21		--	11.44	0.00	0.00	500.19	0.11	0.00	73.39	0.0	969.7
	12/22/21		10.76	10.77	0.01	0.01	500.87	0.68	0.13	73.52	0.3	970.0
	01/11/22		11.43	11.44	0.01	0.00	500.20	-0.67	0.16	73.68	2.9	972.9
	01/26/22		--	11.73	0.00	-0.01	499.90	-0.30	0.00	73.68	0.0	972.9
	02/07/22		11.39	11.51	0.12	0.12	500.21	0.31	0.80	74.48	0.8	973.7
	Well Decommissioned on 02/07/22											
EW-4	10/12/22[4]	510.67	12.89	12.90	0.01	--	497.78	--	0.10	0.10	2.0	2.0
	11/14/22		--	10.97	0.00	-0.01	499.70	1.92	0.00	0.10	0.0	2.0
	12/19/22[4,5]		12.08	12.30	0.22	0.22	498.54	-1.16	1.00	1.10	8.0	10.0
	01/18/23[4]		11.67	11.68	0.01	-0.21	499.00	0.46	0.50	1.60	4.5	14.5
	02/28/23[5]		--	11.60	0.00	-0.01	499.07	0.07	0.00	1.60	1.5	16.0
	03/27/23		--	11.20	0.00	0.00	499.47	0.40	1.60	3.20	4.9	20.9
	04/06/23		--	11.00	0.00	0.00	499.67	0.20	0.10	3.30	1.4	22.3
	05/09/23		10.60	10.62	0.02	0.02	500.07	0.40	0.30	3.60	3.0	25.3
	06/29/23		--	12.72	0.00	-0.02	497.95	-2.12	0.00	3.60	0.0	25.3
	07/27/23		--	12.81	0.00	0.00	497.86	-0.09	0.00	3.60	0.0	25.3
	08/10/23		--	13.04	0.00	0.00	497.63	-0.23	0.00	3.60	0.0	25.3
	09/19/23		--	13.07	0.00	0.00	497.60	-0.03	0.00	3.60	0.0	25.3
	10/25/23		--	12.19	0.00	0.00	498.48	0.88	0.00	3.60	0.0	25.3
	11/21/23		--	12.01	0.00	0.00	498.66	0.18	0.00	3.60	0.0	25.3
	12/13/23		--	9.29	0.00	0.00	501.38	2.72	0.00	3.60	0.0	25.3
	01/30/24		--	10.51	0.00	0.00	500.16	-1.22	0.00	3.60	0.0	25.3
	02/27/24		--	11.19	0.00	0.00	499.48	-0.68	0.00	3.60	0.5	25.8
	03/28/24		--	11.20	0.00	0.00	499.47	-0.01	0.00	3.60	0.0	25.8
	04/16/24		--	11.45	0.00	0.00	499.22	-0.25	0.00	3.60	0.0	25.8
	05/14/24		--	11.34	0.00	0.00	499.33	0.11	0.00	3.60	0.0	25.8
	06/12/24		--	12.20	0.00	0.00	498.47	-0.86	0.00	3.60	0.0	25.8
	07/11/24		--	12.43	0.00	0.00	498.24	-0.23	0.00	3.60	0.0	25.8
	08/21/24		--	12.42	0.00	0.00	498.25	0.01	0.00	3.60	0.0	25.8
	09/24/24		--	12.30	0.00	0.00	498.37	0.12	0.00	3.60	0.0	25.8
	10/29/24		--	12.28	0.00	0.00	498.39	0.02	0.00	3.60	0.0	25.8
	11/21/24		--	11.18	Sheen	0.00	499.49	1.10	0.00	3.60	0.0	25.8
	12/26/24		--	10.60	0.00	0.00	500.07	0.58	0.00	3.60	0.0	25.8
	01/22/25		--	11.67	0.00	0.00	499.00	-1.07	0.00	3.60	0.0	25.8
	02/17/25		--	11.34	0.00	0.00	499.33	0.33	0.00	3.60	0.0	25.8
	03/20/25		--	9.98	0.00	0.00	500.69	1.36	0.00	3.60	0.0	25.8
MW-1	03/30/21	512.70	12.78	12.79	0.01	--	499.92	--	0.00	0.00	0.0	0.0
	04/20/21		13.40	13.59	0.19	0.18	499.26	-0.66	0.00	0.00	0.0	0.0
	05/20/21[7]		13.61	13.95	0.34	0.15	499.01	-0.25	15.00	15.00	135.0	135.0
	06/08/21[4]		13.59	13.86	0.27	-0.07	499.05	0.04	2.00	17.00	2.0	137.0
	06/23/21[4]		13.55	13.83	0.28	0.01	499.08	0.04	0.40	17.40	2.1	139.1
	07/8/21[4,5]		13.76	14.15	0.39	0.11	498.85	-0.24	2.10	19.50	0.8	139.9
	07/22/21		13.95	14.22	0.27	-0.12	498.69	-0.16	2.50	22.00	3.0	142.9
	08/05/21		14.02	14.27	0.25	-0.02	498.62	-0.07	2.00	24.00	2.0	144.9
	08/18/21		14.17	14.25	0.08	-0.17	498.51	-0.11	2.00	26.00	1.5	146.4
	09/01/21[9]		14.15	14.16	0.01	-0.07	498.55	0.04	0.10	26.10	1.0	147.4
	09/22/21[4]		13.56	13.57	0.01	0.00	499.14	0.59	0.10	26.20	1.0	148.4
	10/06/21		--	13.18	0.00	-0.01	499.52	0.38	0.00	26.20	0.0	148.4
	10/20/21		--	13.23	0.00	0.00	499.47	-0.05	0.00	26.20	0.0	148.4
	11/03/21		--	12.80	0.00	0.00	499.90	0.43	0.00	26.20	0.0	148.4
	11/17/21		--	12.39	0.00	0.00	500.31	0.41	0.00	26.20	0.0	148.4
	12/08/21		--	12.47	0.00	0.00	500.23	-0.08	0.00	26.20	0.0	148.4
	12/22/21		--	11.61	0.00	0.00	501.09	0.86	0.00	26.20	0.0	148.4
	01/11/22		--	11.82	0.00	0.00	500.88	-0.21	0.00	26.20	0.0	148.4
	01/26/22		--	12.56	0.00	0.00	500.14	-0.74	0.00	26.20	0.0	148.4
	02/07/22		--	11.88	0.00	0.00	500.82	0.68	0.00	26.20	0.0	148.4
	03/23/22		12.97	13.00	0.03	0.03	499.72	-1.10	0.00	26.20	0.0	148.4

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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
MW-1 Cont.	06/28/22[4,5]	512.70	13.14	13.16	0.02	-0.01	499.56	-0.17	0.10	26.30	2.0	150.4
	08/11/22		--	13.75	0.00†	-0.02	498.95	-0.61	0.11	26.41	0.5	150.9
	08/25/22[4]		13.97	14.00	0.03	0.03	498.72	-0.23	0.30	26.71	2.0	152.9
	09/08/22[4]		13.88	13.90	0.02	-0.01	498.82	0.09	0.50	27.21	3.25	156.2
	10/12/22[4]		13.07	13.11	0.04	0.02	499.62	0.81	0.50	27.71	3.0	159.2
	11/14/22		12.37	12.39	0.02	-0.02	500.33	0.70	0.50	28.21	3.0	162.2
	12/19/22[9]		--	13.17	0.00	-0.02	499.53	-0.80	0.00	28.21	1.0	163.2
	01/18/23		--	12.68	0.00	0.00	500.02	0.49	0.00	28.21	0.0	163.2
	02/28/23		--	11.90	0.00	0.00	500.80	0.78	0.00	28.21	0.0	163.2
	03/27/23		--	11.59	0.00	0.00	501.11	0.31	0.00	28.21	0.0	163.2
	04/06/23		--	11.64	0.00	0.00	501.06	-0.05	0.00	28.21	0.0	163.2
	05/09/23		--	12.69	0.00	0.00	500.01	-1.05	0.00	28.21	0.0	163.2
	06/29/23		--	12.75	0.00	0.00	499.95	-0.06	0.00	28.21	0.0	163.2
	07/27/23		--	14.04	Sheen	0.00	498.66	-1.29	0.00	28.21	0.25	163.4
	08/10/23		14.18	14.25	0.07	0.00	498.50	-0.16	0.10	28.31	0.90	164.3
	09/19/23		14.23	14.25	0.02	0.00	498.47	-0.04	0.05	28.36	0.60	164.9
	10/25/23		--	13.10	0.00	-0.02	499.60	1.13	0.00	28.36	0.10	165.0
	11/21/23		--	13.01	0.00	0.00	499.69	0.09	0.00	28.36	0.20	165.2
	12/13/23		--	11.78	0.00	0.00	500.92	1.23	0.00	28.36	0.00	165.2
	01/30/24		--	11.47	0.00	0.00	501.23	0.31	0.00	28.36	0.00	165.2
	02/27/24		--	12.18	0.00	0.00	500.52	-0.71	0.00	28.36	0.00	165.2
	03/28/24		--	12.07	0.00	0.00	500.63	0.11	0.00	28.36	0.00	165.2
	04/16/24		--	12.47	0.00	0.00	500.23	-0.40	0.00	28.36	0.00	165.2
	05/14/24		--	12.56	0.00	0.00	500.14	-0.09	0.00	28.36	0.00	165.2
	06/12/24[4]		13.29	13.30	0.01	0.01	499.41	-0.73	Sheen	28.36	0.5	165.7
	07/11/24		--	13.61	0.00	-0.01	499.09	-0.32	0.00	28.36	0.00	165.7
	08/21/24		--	13.62	0.00	0.00	499.08	-0.01	0.00	28.36	0.00	165.7
	09/24/24		--	13.45	0.00	0.00	499.25	0.17	0.00	28.36	0.00	165.7
	10/29/24		--	12.83	0.00	0.00	499.87	0.62	0.00	28.36	0.00	165.7
	11/21/24		--	10.89	0.00	0.00	501.81	1.94	0.00	28.36	0.00	165.7
	12/26/24		--	11.52	0.00	0.00	501.18	-0.63	0.00	28.36	0.00	165.7
	01/22/25		--	12.40	0.00	0.00	500.30	-0.88	0.00	28.36	0.00	165.7
	02/17/25		--	11.75	0.00	0.00	500.95	0.65	0.00	28.36	0.00	165.7
	03/20/25		--	10.43	0.00	0.00	502.27	1.32	0.00	28.36	0.00	165.7
MW-2	03/30/21	511.29	11.42	11.93	0.51	--	499.75	--	0.00	0.00	0.0	0.0
	04/20/21[4,5]		11.88	12.60	0.72	0.21	499.24	-0.51	3.25	3.25	5.0	5.0
	05/20/21[7]		--	12.30	0.00	-0.72	498.99	-0.25	15.53	18.78	135.0	140.0
	06/08/21		--	12.27	0.00	0.00	499.02	0.03	0.00	18.78	0.0	140.0
	06/23/21[4]		12.15	12.16	0.01	0.01	499.14	0.12	0.07	18.85	0.5	140.5
	07/08/21[4]		12.36	12.49	0.13	0.12	498.90	-0.24	0.80	19.65	1.6	142.1
	07/22/21[4]		12.50	12.67	0.17	0.04	498.75	-0.15	1.50	21.15	3.0	145.1
	08/05/21		12.54	12.76	0.22	0.05	498.70	-0.05	1.00	22.15	3.0	148.1
	08/18/21		12.70	12.95	0.25	0.03	498.53	-0.17	0.75	22.90	2.0	150.1
	09/01/21[4,5]		12.64	12.85	0.21	-0.04	498.60	0.07	0.50	23.40	2.0	152.1
	09/22/21		12.09	12.16	0.07	-0.14	499.18	0.58	0.75	24.15	3.0	155.1
	10/06/21		--	11.84	0.00	-0.07	499.45	0.27	0.00	24.15	0.0	155.1
	10/20/21		--	11.80	0.00	0.00	499.49	0.04	0.00	24.15	0.0	155.1
	11/03/21		--	11.51	0.00	0.00	499.78	0.29	0.00	24.15	0.0	155.1
	11/17/21		--	11.17	0.00	0.00	500.12	0.34	0.00	24.15	0.0	155.1
	12/08/21		--	11.12	0.00	0.00	500.17	0.05	0.00	24.15	0.0	155.1
	12/22/21		10.50	10.51	0.01	0.01	500.79	0.62	0.07	24.22	0.0	155.1
	01/11/22		--	11.40	0.00	-0.01	499.89	-0.90	0.00	24.22	0.3	155.4
	01/26/22		--	11.49	0.00	0.00	499.80	-0.09	0.00	24.22	0.0	155.4
	02/07/22		--	11.47	0.00	0.00	499.82	0.02	0.13	24.35	0.3	155.7
	03/23/22		11.75	11.76	0.01	0.01	499.54	-0.28	0.00	24.35	0.0	155.7
	06/28/22		12.12	12.14	0.02	0.01	499.17	-0.37	0.10	24.45	2.0	157.7
	08/11/22[4]		12.40	12.42	0.02	0.00	498.89	-0.28	0.23	24.68	3.2	160.9
	08/25/22[9]		--	12.70	0.00	-0.02	498.59	-0.30	0.20	24.88	0.5	161.4
	09/08/22[4,5]		12.55	12.56	0.01	0.01	498.74	0.15	0.10	24.98	3.0	164.4
	10/12/22[4]		12.77	12.84	0.07	0.06	498.50	-0.23	0.25	25.23	3.0	167.4
	11/14/22		10.93	10.95	0.02	-0.05	500.36	1.85	0.25	25.48	2.5	169.9
	12/19/22		--	11.95	0.00	-0.02	499.34	-1.02	0.13	25.61	0.5	170.4
	01/18/23		--	11.55	0.00	0.00	499.74	0.40	0.00	25.61	0.5	170.9

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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
MW-2 Cont.	02/28/23	511.29	11.33	11.34	0.01	0.01	499.96	0.22	0.10	25.71	1.3	172.1
	03/27/23		--	11.02	0.00	-0.01	500.27	0.31	0.10	25.81	1.4	173.5
	04/06/23		--	10.81	0.00	0.00	500.48	0.21	0.00	25.81	0.5	174.0
	05/09/23		--	11.75	0.00	0.00	499.54	-0.94	0.00	25.81	0.5	174.5
	06/29/23		--	12.33	0.00	0.00	498.96	-0.58	0.00	25.81	0.5	175.0
	07/27/23		--	12.71	0.00	0.00	498.58	-0.38	0.00	25.81	0.5	175.5
	08/10/23		12.86	12.91	0.05	0.00	498.42	-0.16	0.05	25.86	0.45	176.0
	09/19/23		12.98	13.04	0.06	0.00	498.30	-0.12	0.05	25.91	1.20	177.2
	10/25/23		--	12.07	0.00	-0.06	499.22	0.92	0.00	25.91	0.00	177.2
	11/21/23		--	11.85	0.00	0.00	499.44	0.22	0.00	25.91	0.00	177.2
	12/13/23		--	10.84	0.00	0.00	500.45	1.01	0.00	25.91	0.00	177.2
	01/30/24		--	10.49	0.00	0.00	500.80	0.35	0.00	25.91	0.00	177.2
	02/27/24		--	11.12	0.00	0.00	500.17	-0.63	0.00	25.91	0.00	177.2
	03/27/24		--	11.23	0.00	0.00	500.06	-0.11	0.00	25.91	0.00	177.2
	04/16/24		--	11.34	0.00	0.00	499.95	-0.11	0.00	25.91	0.00	177.2
	05/14/24		--	11.45	0.00	0.00	499.84	-0.11	0.00	25.91	0.00	177.2
	06/12/24		--	11.98	0.00	0.00	499.31	-0.53	0.00	25.91	0.00	177.2
	07/11/24		--	12.48	0.00	0.00	498.81	-0.50	0.00	25.91	0.00	177.2
	08/21/24		--	12.29	0.00	0.00	499.00	0.19	0.00	25.91	0.00	177.2
	09/24/24		--	12.11	0.00	0.00	499.18	0.18	0.00	25.91	0.00	177.2
	10/29/24		--	11.74	0.00	0.00	499.55	0.37	0.00	25.91	0.00	177.2
	11/21/24		--	10.95	0.00	0.00	500.34	0.79	0.00	25.91	0.00	177.2
	12/26/24		--	10.47	0.00	0.00	500.82	0.48	0.00	25.91	0.00	177.2
	01/22/25		--	11.57	0.00	0.00	499.72	-1.10	0.00	25.91	0.00	177.2
	02/17/25		--	10.50	0.00	0.00	500.79	1.07	0.00	25.91	0.00	177.2
	03/19/25		--	9.80	0.00	0.00	501.49	0.70	0.00	25.91	0.00	177.2
MW-5	03/30/21	509.10	--	9.56	0.00	--	499.54	--	0.00	0.00	0.0	0.0
	04/20/21		--	10.13	0.00	0.00	498.97	-0.57	0.00	0.00	0.0	0.0
	05/20/21		--	10.32	0.00	0.00	498.78	-0.19	0.00	0.00	0.0	0.0
	06/08/21		--	10.31	0.00	0.00	498.79	0.01	0.00	0.00	0.0	0.0
	06/23/21		--	10.29	0.00	0.00	498.81	0.02	0.00	0.00	0.0	0.0
	07/08/21		--	10.53	0.00	0.00	498.57	-0.24	0.00	0.00	0.0	0.0
	07/22/21		--	10.69	0.00	0.00	498.41	-0.16	0.00	0.00	0.0	0.0
	08/05/21[4]		10.74	10.76	0.02	0.02	498.36	-0.05	0.10	0.10	0.5	0.5
	08/18/21[4]		10.87	11.10	0.23	0.21	498.18	-0.18	0.75	0.85	2.5	3.0
	09/01/21[4]		10.76	10.77	0.01	-0.22	498.34	0.16	0.10	0.95	1.0	4.0
	09/22/21		--	10.27	0.00	-0.01	498.83	0.49	0.00	0.95	0.9	4.9
	10/06/21		--	9.93	0.00	0.00	499.17	0.34	0.00	0.95	0.0	4.9
	10/20/21		--	9.95	0.00	0.00	499.15	-0.02	0.00	0.95	0.0	4.9
	11/03/21		--	9.56	0.00	0.00	499.54	0.39	0.00	0.95	0.0	4.9
	11/17/21		--	9.37	0.00	0.00	499.73	0.19	0.00	0.95	0.0	4.9
	12/08/21		--	9.25	0.00	0.00	499.85	0.12	0.00	0.95	0.0	4.9
	12/22/21		--	8.45	0.00	0.00	500.65	0.80	0.00	0.95	0.0	4.9
	01/11/22		--	8.81	0.00	0.00	500.29	-0.36	0.00	0.95	0.0	4.9
	01/26/22		--	9.14	0.00	0.00	499.96	-0.33	0.00	0.95	0.0	4.9
	02/07/22		--	8.84	0.00	0.00	500.26	0.30	0.00	0.95	0.0	4.9
	03/23/22		--	9.50	0.00	0.00	499.60	-0.66	0.00	0.95	0.0	4.9
	06/29/22		--	10.02	0.00	0.00	499.08	-0.52	0.00	0.95	2.9	7.8
	08/11/22[4,5]		10.41	10.50	0.09	0.09	498.67	-0.41	0.10	1.05	2.0	9.8
	08/25/22		10.63	10.73	0.10	0.01	498.45	-0.22	0.75	1.80	0.75	10.6
	09/08/22[4]		10.57	10.58	0.01	-0.09	498.53	0.08	0.30	2.10	3.5	14.1
	10/12/22[4]		11.68	11.75	0.07	0.06	497.40	-1.12	1.00	3.10	5.0	19.1
	11/14/22		--	9.34	0.00	-0.07	499.76	2.36	0.50	3.60	0.0	19.1
	12/19/22[4]		--	9.82	0.00	0.00	499.28	-0.48	0.10	3.70	2.0	21.1
	01/18/23		--	9.44	0.00	0.00	499.66	0.38	0.25	3.95	1.0	22.1
	02/28/23[4]		9.22	9.23	0.01	0.01	499.88	0.22	5.90	9.85	0.6	22.7
	03/27/23		--	9.12	0.00	-0.01	499.98	0.10	0.00	9.85	1.0	23.7
	04/06/23		--	8.66	0.00	0.00	500.44	0.46	0.13	9.98	1.5	25.2
	05/09/23		--	9.55	0.00	0.00	499.55	-0.89	0.10	10.08	1.0	26.2
	06/29/23		10.50	10.56	0.06	0.06	498.59	-0.96	0.79	10.87	0.3	26.4
	07/27/23		--	11.89	0.00	-0.06	497.21	-1.38	0.00	10.87	0.0	26.4
	08/10/23		10.90	10.97	0.07	0.07	498.18	0.97	0.05	10.92	0.95	27.4
	09/19/23		--	11.98	Sheen	-0.07	497.12	-1.06	0.00	10.92	0.35	27.7

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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
MW-5 Cont.	10/25/23	509.10	9.93	9.94	0.01	0.01	499.17	2.05	0.10	11.02	1.65	29.4
	11/21/23		--	11.13	0.00	-0.01	497.97	-1.20	0.65	11.67	0.10	29.5
	12/13/23		8.78	8.79	0.01	0.01	500.32	2.35	0.05	11.72	1.70	31.2
	01/30/24		--	8.11	0.00	-0.01	500.99	0.67	0.00	11.72	1.75	32.9
	02/28/24		--	8.93	Sheen	0.00	500.17	-0.82	0.00	11.72	2.50	35.4
	03/28/24		--	9.00	Sheen	0.00	500.10	-0.07	0.01	11.73	2.1	37.5
	04/16/24		--	9.31	Sheen	0.00	499.79	-0.31	0.00	11.73	2.40	39.9
	05/15/24		--	9.12	Sheen	0.00	499.98	0.19	0.00	11.73	2.75	42.7
	06/12/24		--	10.04	Sheen	0.00	499.06	-0.92	Sheen	11.73	3.5	46.2
	07/11/24		--	10.43	0.00	0.00	498.67	-0.39	0.00	11.73	2.00	48.2
	08/21/24		--	10.33	0.00	0.00	498.77	0.10	0.26	11.99	0.00	48.2
	09/24/24		--	10.49	Sheen	0.00	498.61	-0.16	0.00	11.99	0.00	48.2
	10/29/24		--	10.79	0.00	0.00	498.31	-0.30	0.1	12.09	0.1	48.3
	11/21/24		--	9.81	0.00	0.00	499.29	0.98	0.13	12.22	0.13	48.4
	12/26/24		8.14	8.15	0.01	0.01	500.95	1.66	0.0	12.22	1.0	49.4
	01/23/25		--	9.45	Sheen	0.00	499.65	-1.30	0.00	12.22	2.25	51.6
	02/18/25		--	8.50	Sheen	0.00	500.60	0.95	0.00	12.22	2.0	53.6
	03/20/25		--	7.36	Sheen	0.00	501.74	1.14	0.00	12.22	2.0	55.6
MW-6	03/30/21[6,5]	510.51	10.50	12.15	1.65	--	499.62	--	6.00	6.00	1.0	1.0
	04/20/21[4]		11.31	12.04	0.73	-0.92	499.03	-0.59	4.00	10.00	6.0	7.0
	05/20/21[7]		11.60	12.22	0.62	-0.11	498.76	-0.26	17.24	27.24	135.0	142.0
	06/08/21[4]		11.70	11.72	0.02	-0.60	498.81	0.04	2.08	29.32	4.0	146.0
	06/23/21[4]		11.60	11.62	0.02	0.00	498.91	0.10	1.65	30.97	0.5	146.5
	07/08/21		--	11.91	0.00	-0.02	498.60	-0.31	2.10	33.07	2.1	148.6
	07/22/21[4]		11.92	12.18	0.26	0.26	498.53	-0.07	3.00	36.07	3.5	152.1
	08/05/21[4]		11.88	12.56	0.68	0.42	498.47	-0.06	3.50	39.57	3.5	155.6
	08/18/21[4]		11.95	12.75	0.80	0.12	498.37	-0.10	3.50	43.07	2.0	157.6
	09/1/21[4]		11.98	12.58	0.60	-0.20	498.39	0.02	3.25	46.32	1.0	158.6
	09/22/21[4]		11.47	11.88	0.41	-0.19	498.94	0.55	5.20	51.52	6.0	164.6
	10/06/21		--	11.04	0.00	-0.41	499.47	0.53	0.00	51.52	0.0	164.6
	10/20/21[4]		11.05	11.85	0.00	0.00	498.66	-0.81	3.50	55.02	4.0	168.6
	11/3/21[4]		10.88	10.90	0.02	0.02	499.63	0.97	1.45	56.47	0.7	169.3
	11/17/21		--	10.61	0.00	-0.02	499.90	0.27	0.13	56.60	0.0	169.3
	12/08/21		--	10.53	0.00	0.00	499.98	0.08	0.26	56.86	0.0	169.3
	12/22/21		9.91	9.92	0.01	0.01	500.60	0.62	0.13	56.99	0.5	169.8
	01/11/22[4]		10.08	10.13	0.05	0.04	500.42	-0.18	1.98	58.97	4.0	173.8
	01/26/22[4]		10.88	10.92	0.04	-0.01	499.62	-0.80	0.81	59.78	2.1	175.9
	02/07/22[4]		10.12	10.26	0.14	0.10	500.36	0.74	2.50	62.28	3.5	179.4
	03/23/22[4]		10.74	11.15	0.41	0.27	499.67	-0.68	1.84	64.12	2.1	181.5
	06/28/22[4]		11.17	11.86	0.69	0.28	499.18	-0.50	3.00	67.12	6.0	187.5
	08/11/22[4]		11.68	11.95	0.27	-0.42	498.77	-0.41	2.50	69.62	3.5	191.0
	08/25/22		--	12.12	0.00	-0.27	498.39	-0.38	1.00	70.62	0.0	191.0
	09/08/22[4]		11.85	11.92	0.07	0.07	498.64	0.25	2.50	73.12	3.5	194.5
	10/12/22[4]		11.99	12.12	0.13	0.06	498.49	-0.15	2.50	75.62	6.0	200.5
	11/24/22		10.55	10.71	0.16	0.03	499.92	1.43	1.25	76.87	3.0	203.5
	12/19/22		11.09	11.64	0.55	0.39	499.29	-0.63	3.00	79.87	3.5	207.0
	01/18/23[4]		10.73	10.75	0.02	-0.53	499.78	0.48	2.00	81.87	5.0	212.0
	02/28/23[4]		10.52	10.58	0.06	0.04	499.98	0.20	3.00	84.87	0.3	212.3
	03/27/23		10.27	10.34	0.07	0.01	500.22	0.25	1.20	86.07	6.0	218.3
	04/06/23		9.95	10.00	0.05	-0.02	500.55	0.32	1.00	87.07	7.5	225.8
	05/09/23[4]		11.18	11.29	0.11	0.06	499.30	-1.24	0.50	87.57	5.0	230.8
	06/29/23		11.78	11.89	0.11	0.00	498.70	-0.60	0.79	88.36	0.3	231.1
	07/27/23		--	12.11	Sheen	-0.11	498.40	-0.30	1.00	89.36	0.0	231.1
	08/10/23		12.28	12.45	0.17	0.17	498.19	-0.21	0.50	89.86	0.0	231.1
	09/19/23		12.26	12.30	0.04	-0.13	498.24	0.05	1.00	90.86	0.25	231.3
	10/25/23		--	11.38	Sheen	-0.04	499.13	0.89	0.01	90.87	0.50	231.8
	11/21/23		--	9.82	0.00	0.00	500.69	1.56	0.00	90.87	0.00	231.8
	12/13/23		--	10.10	Sheen	0.00	500.41	-0.28	0.00	90.87	1.75	233.6
	01/30/24		9.49	9.50	0.01	0.01	501.02	0.61	0.00	90.87	1.75	235.3
	02/28/24		--	10.21	Sheen	-0.01	500.30	-0.72	0.05	90.92	2.75	238.1
	03/28/24		10.30	10.31	0.01	0.01	500.21	-0.09	0.05	90.97	1.8	239.9
	04/16/24		10.59	10.61	0.02	0.01	499.92	-0.29	0.01	90.98	2.75	242.6
	05/15/24		--	10.46	0.00	-0.02	500.05	0.13	0.05	91.03	2.25	244.9

TABLE 1
United Pacific #5468
Summary of LPH Removal
Springfield, Oregon
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Well ID	Date Measured	TOC Elevation (ft amsl)	Depth to LPH (ft btoc)	Depth to Water (ft btoc)	LPH Thickness (ft)	Thickness Change (ft)	Groundwater Elevation[1] (ft amsl)	Elevation Change (ft)	Estimated LPH Removed (gal)	Cumulative LPH Removed (gal)	Estimated Water Removed (gal)	Cumulative Water Removed (gal)
MW-6 Cont.	06/12/24	510.51	11.34	11.38	0.04	0.04	499.16	-0.89	0.1	91.13	1.4	246.3
	07/11/24		--	11.68	Sheen	-0.04	498.83	-0.33	0.01	91.14	2.24	248.5
	08/21/24		--	12.62	0.00	0.00	497.89	-0.94	0.26	91.40	0.00	248.5
	09/24/24		--	12.78	Sheen	0.00	497.73	-0.16	0.00	91.40	0.00	248.5
	10/29/24		--	10.98	0.00	0.00	499.53	1.80	0.00	91.40	0.2	248.7
	11/21/24		--	10.97	0.00	0.00	499.54	0.01	0.00	91.40	0.13	248.9
	12/26/24		--	9.16	Sheen	0.00	501.35	1.81	0.00	91.40	1.0	249.9
	01/23/25		10.74	10.77	0.03	0.03	499.76	-1.59	0.00	91.40	2.5	252.4
	02/17/25		9.82	9.86	0.04	0.01	500.68	0.92	0.00	91.40	3.0	255.4
	03/20/25		8.68	8.72	0.04	0.00	501.79	1.11	0.00	91.40	3.0	258.4

EW-1 Cumulative	**20.85**	**893.5**
EW-2 Cumulative	**101.76**	**1,181.8**
EW-3 Cumulative	**74.48**	**973.7**
EW-4 Cumulative	**3.60**	**25.8**
EW-1R Cumulative	**2.26**	**49.9**
EW-2R Cumulative	**0.83**	**13.3**
MW-1 Cumulative	**28.36**	**165.7**
MW-2 Cumulative	**25.91**	**177.2**
MW-5 Cumulative	**12.22**	**55.6**
MW-6 Cumulative	**91.40**	**258.4**
Cumulative Removed From Site Wells	**361.66**	**3,794.9**

Notes:

(1): groundwater elevation corrected for the presence of free-product using the following calculation: casing elevation minus depth to water plus the product thickness times its density (0.765).
(2): recorded value is gallons of LPH and water removed
(3): overpurging conducted using a vacuum truck
(4): LPH removal by manual bailing
(5): LPH removal using downhole skimmer initiated
(6): LPH removal using peristaltic pump
(7): LPH removal using vacuum truck
(8): well sampled using low-flow purge methods
(9): downhole skimmer removed
--: not detected / not applicable / not surveyed
*: thickness measurements made in reference to total depth of premium UST = 12.20 btofp
**: water volume estimates based on Containment Solutions® 12,000 gallon fiberglass double wall UST volume chart

†: LPH accumulation in skimmer
amsl: above mean sea level
btoc: below top of casing
btofp: below top of fill port
ft: feet
gal: gallons
LPH: liquid phase hydrocarbons
Sheen: LPH sheen observed
TOC: top of casing
TOFP: top of fill port

Table 2
Summary of Groundwater Monitoring Data
United Pacific #5468
Springfield, Oregon

WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS											WATER QUALITY PARAMETERS							MONITORING PARAMETERS				WELL ELEVATION			WELL	
			TPH-Ox (µg/L)	TPH-Dx (µg/L)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Naph (µg/L)	EDB* (µg/L)	EDC (µg/L)	Lead (µg/L)	DO (mg/L)	ORP (mV)	Conductivity (µs/cm)	pH	Temp (°C)	Turbidity (NTU)	Fe^{2+} (mg/L)	DTP (ft btoc)	DTW (ft btoc)	DTB (ft btoc)	PT (ft)	CASING (ft amsl)	GW (ft amsl)	GW Δ (ft amsl)	DIA (inches)	SCREEN (ft bgs)
			NWTPH-Dx		NWTPH-Gx	EPA Method 8260D								EPA 7010															
MW-1	Active	03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	4.89	162.3	424	6.48	13.9	8.01	0.0	ND	10.43	24.40	0.00	512.70	502.27	1.09	4	5-25
MW-2	Active	03/19/25	--	--	**1,600**	**20**	28	**34**	200	<5.0	**7.1**	<0.010	<1.0	--	0.42	-167.1	505	7.23	15.6	2.94	3.0	ND	9.80	24.92	0.00	511.29	501.49	0.67	4	5-25
MW-3	Active	03/19/25	--	--	**660**	**290 D**	3.9	**48**	7.8	<5.0	**7.2**	<0.010	<1.0	--	0.43	-29.8	522	7.24	15.5	13.08	0.0	ND	9.63	24.65	0.00	511.12	501.49	0.58	4	5-25
MW-4	Active	03/19/25	--	--	**6,800 D**	**500 D**	300 D	**360 D**	**1,600 D**	<5.0	**64**	<0.010	<1.0	--	0.46	-158.6	604	7.49	14.6	3.12	3.0	ND	8.18	23.80	0.00	509.78	501.60	0.67	4	5-25
MW-5[1]	Active	03/19/25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	7.36	22.55	0.00	509.10	501.74	0.78	4	3.5-23.5
MW-6[1]	Active	03/19/25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.68	8.72	24.10	0.04	510.51	501.82	0.47	4	5-25
MW-7	Active	03/20/25	--	--	**3,800**	**310 D**	55	**240 D**	170	<5.0	**57**	<0.010	<1.0	--	0.51	-142.2	693	7.26	13.9	13.38	5.0	ND	10.00	24.95	0.00	511.65	501.65	0.69	4	5-25
MW-8	Active	03/20/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	9.07	150.6	235	6.40	12.3	4.08	0.0	ND	8.30	18.00	0.00	509.75	501.45	1.32	4	8-18
MW-9	Active	03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	8.40	163.2	156	6.21	11.7	13.17	0.0	ND	6.69	17.24	0.00	509.89	503.20	0.96	4	7-17
MW-10	Active	03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	10.08	174.8	2	6.52	12.4	18.33	0.0	ND	9.50	19.93	0.00	511.13	501.63	0.88	4	7-17
MW-11	Active	03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	6.08	157.0	330	6.56	14.4	3.90	0.0	ND	9.92	19.95	0.00	511.69	501.77	0.93	2	10-20
MW-12	Active	03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	--	7.16	166.6	436	6.44	14.3	5.23	0.0	ND	10.55	20.00	0.00	512.61	502.06	0.83	4	5-20
MW-13	Active	03/19/25	--	--	**1,200**	**120**	190	**54**	260	<5.0	<5.0	<0.010	<1.0	--	0.56	-93.5	214	6.62	13.4	33.91	4.0	ND	8.28	19.80	0.00	509.71	501.43	0.22	4	5-20
EW-1R[1]	Active	03/19/25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.83	8.86	23.00	0.03	510.86	502.02	0.91	4	13-23
EW-2R	Active	03/19/25	--	--	**94,000 D**	**160**	4,100 D	**1,400 D**	**19,000 D**	<5.0	**230 D**	<0.010	<1.0	--	0.43	-79.6	243	7.03	11.8	10.08	2.0	ND	9.16	22.80	0.00	510.91	501.75	0.75	4	13-23
EW-4	Active	03/20/25	--	--	**54,000 D**	**2,000 D**	**10,000 D**	**1,900 D**	**9,000 D**	<5.0	**230 D**	<0.010	<1.0	--	0.45	-120.5	358	7.08	12.9	12.02	8.0	ND	9.98	23.00	0.00	510.67	500.69	0.62	4	13-23
NW Obs.	Observation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	5-15
NE Obs.	Observation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	5-15
SE Obs.	Observation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	5-15
SW Obs.	Observation	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	5-15
RBC: Ingestion/Inhalation from Tapwater[2]			430	430	450	2.1	6,300	6.4	830	68	0.72	0.034	0.78	15	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RBC: Volatilization to Outdoor Air[3]			>S	>S	>S	14,000	>S	43,000	>S	1,500,000	16,000	790	9,000	nv	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RBC: Volatilization to Indoor Air[4]			1,700	1,700	520	12/650	150,000/160,000	31/420,000	3,300/200,000	3,200/1,600,000	50/83,000	1.5/--	18/--	--	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
RBC: Groundwater in Excavations[5]			>S	>S	14,000	1,800	220,000	4,500	23,000	63,000	500	27	630	>S	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na

Notes:

Results in **BOLD** indicate detections that exceed the ODEQ Risk-Based Concetrations (RBCs) for groundwater

(1): Sample not collected due to liquid-phase hydrocarbons (LPH; free-product) present in well; groundwater elevation corrected for the presence of LPH using the following calculation: TOC elevation minus DTW plus the product thickness times its density (0.765)

(2): RBC for Groundwater - Injestion and Inhalation from Tapwater, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals - Revision: May 2018 revised August 2023)

(3): RBC for Groundwater - Volatilization to Outdoor Air, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals- Revision: May 2018 revised August 2023)

(4): RBC for Groundwater - Volatilization to Indoor Air, Commercial scenario; Chronic/Acute screening values (see OQED Table 1 Chronic & Acute Vapor Intrusion Risk-Based Concentrations - March 2024)

(5): RBC for Groundwater in Excavation, Contact to Construction and Excavation Workers

--: not analyzed / not measured / unknown

<: less than the laboratory method detection limit

>S: RBC exceeds the solubility limit

°C: degrees celsius

*: analyzed using SIM (selected ion monitoring)

µg/L: micrograms per Liter

µs/cm: microsiemens per centimeter

Active: groundwater well currently used for monitoring

amsl: above mean sea level

bgs: below ground surface

BTEX: benzene, toluene, ethylbenzene, and total xylenes

btoc: below top of casing

D: dilution was required

DIA: casing diameter

DO: dissolved oxygen

DTB: depth to bottom

DTP: depth to product

DTW: depth to water

DTW Δ : Change in depth to water since last monitoring event

EDB: 1,2-dibromoethane

EDC: 1,2-dichloroethane

EPA: Environmental Protection Agency

Fe^{2+}: ferrous iron

ft: feet

GW: groundwater

mg/L: milligrams per Liter

mV: millivolts

na: not applicable

Naph: naphthalene

ND: not detected

NM: not measured

NTU: nephelometric turbidity units

nv: chemical is considered "non volatile" for purposes of the exposure calculations in this document

Observation: Observation well located within tank cavity used for periodic gauging

ODEQ: Oregon Dpeatrment of Environmental Quality

ORP: oxidation reduction potential

pH: potential hydrogen

PT: free-product thickness

RBC: Risked Based Concentration established by the Oregon Department of Environmental Quality (ODEQ)

Sheen: sheen observed in well

Temp: temperature

TPH-Dx: total diesel-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Dx

TPH-Gx: total gasoline-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Gx

TPH-Ox: total oil-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Ox

Table 3
Summary of Historical Groundwater Monitoring Data
United Pacific #5468
Springfield, Oregon
Page 1 of 4

WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS												MONITORING PARAMETERS			WELL ELEVATION		
			TPH-Ox (µg/L)	TPH-Dx (µg/L)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Naph (µg/L)	EDB (µg/L)	EDC (µg/L)	Other VOCs	DTP [1] (ft btoc)	DTW (ft btoc)	PT (ft)	CASING [2] (ft amsl)	GW [3] (ft amsl)	GW Δ (ft amsl)
			NWTPH-Dx		NWTPH-Gx	EPA Method 8260D														
MW-1	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	12.78	12.79	0.01	512.70	499.92	--
		06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	13.55	13.83	0.28		499.08	-0.83
		09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	13.56	13.57	0.01		499.14	0.05
		12/22/21	--	--	**3,900**	**260 E**	67	<1.0	230	<5.0	<5.0	<0.01	<1.0	(9)	ND	11.61	0.00		501.09	1.95
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	12.97	13.00	0.03		499.72	-1.37
		06/28/22	--	--	--	--	--	--	--	--	--	--	--	--	13.14	13.16	0.02		499.56	-0.17
		10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	13.07	13.11	0.04		499.62	0.06
		12/20/22	--	--	**2,100**	1.1	2.6	<1.0	250	<5.0	<5.0	<0.01	<1.0	(9)	ND	13.17	0.00		499.53	-0.09
		04/06/23	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.64	0.00		501.06	1.53
		06/29/23	--	--	**3,200**	**62**	510	**65**	440	<5.0	**19**	0.014	<1.0	(9)	ND	12.75	0.00		499.95	-1.11
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	14.23	14.25	0.02		498.47	-1.48
		12/13/23	--	--	**1,100**	<1.0	<2.0	1.4	11	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.78	0.00		500.92	2.45
		03/28/24	--	--	240	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.07	0.00		500.63	-0.29
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	13.29	13.30	0.01		499.41	-1.22
		09/24/24	--	--	**12,000**	**60**	240	**170**	**1,100**	<5.0	**52**	<0.010	<1.0	(8)	ND	13.45	0.00		499.25	-0.16
DUP-1		09/24/24	--	--	**8,000**	**92**	250	**170**	**910**	<5.0	**45**	<0.010	<1.0	(8)	--	--	--		--	--
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	12.83	0.00		499.87	0.62
		12/27/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.52	0.00		501.18	1.31
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.43	0.00		502.27	1.09
MW-2	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	11.42	11.93	0.51	511.29	499.75	--
		06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	12.15	12.16	0.01		499.14	-0.61
		09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	12.09	12.16	0.07		499.18	0.05
		12/22/21	--	--	--	--	--	--	--	--	--	--	--	--	10.50	10.51	0.01		500.79	1.60
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		499.54	-1.25
		06/28/22	--	--	--	--	--	--	--	--	--	--	--	--	12.12	12.14	0.02		499.17	-0.37
		10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	12.77	12.84	0.07		498.50	-0.67
		12/20/22	--	--	**26,000**	**1,000**	2,600	**510**	**2,300**	<5.0	**89**	<0.010	<1.0	(9)	ND	11.95	0.00		499.34	0.84
		04/06/23	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.81	0.00		500.48	1.14
		06/29/23	--	--	**31,000**	**780**	5,400	**760**	**4,400**	<5.0	**70**	0.016	<1.0	(9)	ND	12.33	0.00		498.96	-1.52
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	12.98	13.04	0.06		498.30	-0.66
		12/13/23	--	--	**25,000**	**260**	2,200	**620**	**4,700**	<5.0	**120**	<0.010	<1.0	(9)	ND	10.84	0.00		500.45	2.15
		03/27/24	--	--	**4,000**	**70**	340	**200**	**420**	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.23	0.00		500.06	-0.39
		06/12/24	--	--	**18,000**	**730**	1,000	**800**	**1,100**	<5.0	**82**	<0.010	<1.0	(9)	ND	11.98	0.00		499.31	-0.75
DUP-1		06/12/24	--	--	**8,700**	**530**	710	**570**	**750**	<5.0	**77**	<0.010	<1.0	(9)	--	--	--		--	--
		09/24/24	--	--	**20,000**	**490**	2,500	**630**	**3,500**	<5.0	**91**	<0.010	<1.0	(9)	ND	12.11	0.00		499.18	-0.13
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.74	0.00		499.55	0.37
		12/28/25	--	--	**3,700**	**2.2**	29	**65**	380	<5	**8.0**	<0.010	<1.0	(8)	ND	10.47	0.00		500.82	1.27
		03/19/25	--	--	**1,600**	**20**	28	**34**	200	<5.0	**7.1**	<0.010	<1.0	(9)	ND	9.80	0.00		501.49	0.67
DUP-1		03/19/25	--	--	**1,600**	**21**	29	**33**	190	<5.0	**6.8**	<0.010	<1.0	(9)	--	--	--		--	--
MW-3	Active	03/30/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.32	0.00	511.12	499.80	--
		06/23/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.89	0.00		499.23	-0.57
DUP-1		06/23/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--		--	--
		09/23/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.86	0.00		499.26	0.03
		12/22/21	--	--	110	20	<1.0	<1.0	2.3	<5.0	<5.0	<0.01	<1.0	(8)	ND	10.33	0.00		500.79	1.53
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	260	**36**	32	1.9	26	<5.0	<5.0	<0.01	<1.0	(9)	ND	11.31	0.00		499.81	-0.98
		06/28/22	--	--	220	<1.0	<1.0	<1.0	32	<5.0	<5.0	<0.01	<1.0	(9)	ND	11.77	0.00		499.35	-0.46
		10/12/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	12.33	0.00		498.79	-0.56
DUP-1		10/12/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--		--	--
		12/20/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.55	0.00		499.57	0.78
		04/06/23	--	--	<100	**56**	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(9)	ND	10.50	0.00		500.62	1.05
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.01	0.00		499.11	-1.51
		09/19/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.48	0.00		498.64	-0.47
		12/13/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.66	0.00		500.46	1.82
		03/27/24	--	--	**950**	**200**	<2.0	**50**	<2.0	<5.0	**5.0**	<0.010	<1.0	(8)	ND	10.92	0.00		500.20	-0.26
		06/12/24	--	--	<100	**25**	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.67	0.00		499.45	-0.75
		09/24/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.72	0.00		499.40	-0.05
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.30	0.00		499.82	0.42
		12/27/25	--	--	140	**34**	<2.0	<1.0	<1.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.21	0.00		500.91	1.09
		03/19/25	--	--	**660**	**290 D**	3.9	**48**	7.8	<5.0	**7.2**	<0.010	<1.0	(8)	ND	9.63	0.00		501.49	0.58
MW-4	Active	03/30/21	--	--	**180,000**	**3,000**	**25,000 E**	**3,100**	**18,000**	<5.0	**180**	<0.01	<1.0	(9)	ND	10.17	0.00	509.78	499.61	--
DUP-1		03/30/21	--	--	**190,000**	**3,000**	**25,000 E**	**3,000**	**17,000**	<5.0	**250**	<0.01	<1.0	(9)	--	--	--		--	--
		06/23/21	--	--	**52,000**	**1,600**	**17,000**	**2,200**	**21,000**	<5.0	**500**	<0.01	<1.0	(9)	ND	10.83	0.00		498.95	-0.66
		09/23/21	--	--	**40,000**	**1,300**	**6,600**	**1,400**	**8,600**	<5.0	**530**	<0.01	<1.0	(9)	ND	10.78	0.00		499.00	0.05
DUP-1		09/23/21	--	--	**39,000**	**1,200**	5,500	**1,400**	**6,900**	<5.0	**620**	<0.01	<1.0	(9)	--	--	--		--	--
		12/22/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	9.11	0.00		500.67	1.67
		01/11/22[10]	--	--	**2,400**	**250**	53	<1.0	160	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	**62,000**	**1,100**	5,900	**1,600**	**10,000**	<250	**250**	<0.5	<50	(9)	ND	10.11	0.00		499.67	-1.00
		06/29/22	--	--	**37,000**	**560**	1,400	<1.0	**10,000**	<5.0	**130**	<0.01	<1.0	(9)	ND	10.53	0.00		499.25	-0.42
		10/12/22	--	--	**24,000**	**600**	380	**510**	**5,500**	<5.0	**78**	<0.01	<1.0	(9)	ND	11.26	0.00		498.52	-0.73
		12/20/22	--	--	**33,000**	**330**	2,000	**480**	**3,800**	50	**380**	<0.1	<10	(9)	ND	10.37	0.00		499.41	0.89
		04/06/23	--	--	**4,400**	**82**	<10	<10	**1,500**	50	<50	<0.10	<10	(9)	ND	10.29	0.00		499.49	0.08
		06/29/23	--	--	**4,000**	**67**	190	33	**890**	<5.0	**48**	<0.010	<1.0	(9)	ND	10.93	0.00		498.85	-0.64
		09/19/23	--	--	**19,000**	**300**	140	3.9	**5,100**	<5.0	**130**	<0.010	<1.0	(9)	ND	11.29	0.00		498.49	-0.36
		12/13/23	--	--	**7,800**	**56**	420	**290**	**1,500**	<5.0	**92**	<0.010	<1.0	(9)	ND	9.29	0.00		500.49	2.00
DUP-1		12/13/23	--	--	**6,800**	**53**	500	**170**	**1,400**	<5.0	**19**	<0.010	<1.0	(9)	--	--	--		--	--
		03/27/24	--	--	**1,600**	**140**	4.7	<1.0	220	<5.0	**26**	<0.010	<1.0	(9)	ND	9.80	0.00		499.98	-0.51
		06/12/24	--	--	170	<1.0	<2.0	<1.0	20	<5.0	**15**	<0.010	<1.0	(8)	ND	10.38	0.00		499.40	-0.58
		09/24/24	--	--	**970**	<1.0	<2.0	**8.7**	290	<5.0	**11**	<0.010	<1.0	(8)	ND	10.51	0.00		499.27	-0.13
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.56	0.00		499.22	-0.05
		12/26/24	--	--	**2,300**	**120**	220	**99**	**440**	<5.0	**16**	<0.010	<1.0	(8)	ND	8.85	0.00		500.93	1.71
		03/19/25	--	--	**6,800 D**	**500 D**	300 D	**360 D**	**1,600 D**	<5.0	**64**	<0.010	<1.0	(9)	ND	8.18	0.00		501.60	0.67

Table 3
Summary of Historical Groundwater Monitoring Data
United Pacific #5468
Springfield, Oregon
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WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS												MONITORING PARAMETERS			WELL ELEVATION		
			TPH-Ox (µg/L)	TPH-Dx (µg/L)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Naph (µg/L)	EDB (µg/L)	EDC (µg/L)	Other VOCs	DTP [1] (ft btoc)	DTW (ft btoc)	PT (ft)	CASING [2] (ft amsl)	GW [3] (ft amsl)	GW Δ (ft amsl)
			NWTPH-Dx		NWTPH-Gx	EPA Method 8260D														
MW-5	Active	03/30/21	--	--	250,000 E	3,900	34,000 E	3,500	23,000	<5.0	230	<0.01	<1.0	(9)	ND	9.56	0.00	509.10	499.54	--
		06/23/21	--	--	58,000	4,400	24,000 E	2,500	17,000	<5.0	350	<0.01	<1.0	(9)	ND	10.29	0.00		498.81	-0.73
		09/23/21	--	--	65,000	3,900	18,000 E	1,600	11,000	<5.0	450	<0.01	<1.0	(9)	ND	10.27	0.00		498.83	0.02
		12/22/21	--	--	230,000	4,900	29,000 E	210	18,000	<5.0	310	<0.01	<1.0	(9)	ND	8.45	0.00		500.65	1.82
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	110,000	4,000	14,000 E	1,800	15,000	<250	360	<0.5	<50	(9)	ND	9.50	0.00		499.60	-1.05
		06/29/22	--	--	260,000 E	5,800	45,000 E	2,900	34,000 E	<5.0	320	<0.01	<1.0	(9)	ND	10.02	0.00		499.08	-0.52
		10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	11.68	11.75	0.07		497.40	-1.68
		12/20/22	--	--	80,000	3,700	10,000	1,800	11,000	50	270	<0.1	<10	(9)	ND	9.90	0.00	509.10	499.20	1.80
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	8.66	0.00		500.44	1.24
		06/29/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	10.50	10.56	0.06		498.59	-1.85
		09/19/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	11.98	0.00		497.12	-1.47
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	8.78	8.79	0.01		500.32	3.20
		03/28/24	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	9.00	0.00		500.10	-0.22
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	10.04	0.00		499.06	-1.04
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	10.49	0.00		498.61	-0.45
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.79	0.00		498.31	-0.30
		12/28/24[13]	--	--	130,000	2,700	13,000	1,500	16,000	<5.0	2,000	<0.010	<1.0	(9)	8.14	8.15	0.01		500.96	2.65
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	7.36	0.00		501.74	0.78
MW-6	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	10.50	12.15	1.65	510.51	499.62	--
		06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	11.60	11.62	0.02		498.91	-0.72
		09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	11.47	11.88	0.41		498.94	0.04
		12/22/21	--	--	--	--	--	--	--	--	--	--	--	--	9.91	9.92	0.01		500.60	1.65
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
		06/28/22	--	--	--	--	--	--	--	--	--	--	--	--	11.17	11.86	0.69		499.18	-1.42
		10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	11.99	12.12	0.13		498.49	-0.69
		12/20/22	--	--	--	--	--	--	--	--	--	--	--	--	11.09	11.64	0.55		499.29	0.80
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	9.95	10.00	0.05		500.55	1.26
		06/29/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	11.78	11.89	0.11		498.70	-1.84
		09/19/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	12.26	12.30	0.04		498.24	-0.46
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	10.10	0.00		500.41	2.17
		03/28/24	--	--	--	--	--	--	--	--	--	--	--	--	10.30	10.31	0.01		500.21	-0.20
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	11.34	11.38	0.04		499.16	-1.05
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	12.78	0.00		497.73	-1.43
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.98	0.00		499.53	1.80
		12/28/24[13]	--	--	330,000	7,600	31,000	4,900	35,000	<5.0	2,300	<0.010	<1.0	(9)	Sheen	9.16	0.00		501.35	1.82
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--	--	8.68	8.72	0.04		501.82	0.47
MW-7	Active	03/30/21	--	--	260	33	1.7	<1.0	3.6	<5.0	<5.0	<0.01	<1.0	(8)	ND	12.12	0.00	511.65	499.53	--
		06/23/21	--	--	170	11	39	6.3	46	<5.0	<5.0	<0.01	<1.0	(9)	ND	12.85	0.00		498.80	-0.73
DUP-1		06/23/21	--	--	<100	9.0	17	2.0	15	<5.0	<5.0	<0.01	<1.0	(9)	--	--	--		--	--
		09/23/21	--	--	850	170	84	7.5	67	<5.0	<5.0	<0.01	<1.0	(9)	ND	12.82	0.00		498.83	0.03
		12/22/21	--	--	15,000	980	2,300 E	140	850	<5.0	23	<0.01	<1.0	(9)	ND	10.89	0.00		500.76	1.93
MW-7 Dup		12/22/21	--	--	21,000 E	790 E	1,400 E	159	890 E	<5.0	24	<0.01	<1.0	(9)	--	--	--		--	--
		01/11/22[10]	--	--	4,600	490	730	58	300	--	--	--	--	--	--	--	--		--	--
		03/23/22	--	--	14,000	1,000	2,900	200	1,300	<5.0	28	<0.01	<1.0	(9)	ND	12.00	0.00		499.65	-1.11
DUP-2		03/23/22	--	--	22,000	1,200	3,300	230	1,400	<250	<250	<0.5	<50	(9)	--	--	--		--	--
		06/28/22	--	--	17,000	1,100	3,900	320	1,100	<5.0	31	<0.01	<1.0	(9)	ND	12.56	0.00		499.09	-0.56
		10/12/22	--	--	24,000	1,300	3,500	240	1,600	<5.0	9.7	<0.01	<1.0	(9)	ND	13.18	0.00		498.47	-0.62
		12/20/22	--	--	5,000	710	890	120	490	<5.0	34	<0.01	<1.0	(9)	ND	12.33	0.00		499.32	0.85
		04/06/23	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.07	0.00		500.58	1.26
		06/29/23	--	--	9,200	670	530	320	1,600	<5.0	33	<0.010	<1.0	(9)	ND	12.98	0.00		498.67	-1.91
DUP-1		06/29/23	--	--	8,000	710	570	350	1,800	<5.0	23	<0.010	<1.0	(9)	--	--	--		--	--
		09/19/23	--	--	7,100	510	210	180	1,200	<5.0	37	<0.010	<1.0	(9)	ND	13.34	0.00		498.31	-0.36
DUP-1		09/19/23	--	--	3,300	250	76	57	580	<5.0	21	<0.010	<1.0	(9)	--	--	--		--	--
		12/12/23	--	--	3,900	170	43	130	630	<5.0	110	<0.010	<1.0	(9)	ND	11.04	0.00		500.61	2.30
		03/27/24	--	--	6,100	230	21	260	1,200	<5.0	19	<0.010	<1.0	(9)	ND	11.62	0.00		500.03	-0.58
		06/11/24	--	--	5,000	170	12	200	920	<5.0	72	<0.010	<1.0	(9)	ND	12.47	0.00		499.18	-0.85
		09/24/24	--	--	710	32	<2.0	17	68	<5.0	12	<0.010	<1.0	(9)	ND	12.60	0.00		499.05	-0.13
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	12.11	0.00		499.54	0.49
		12/27/24	--	--	940	21	2.5	25	68	<5.0	9.5	<0.010	<1.0	(8)	ND	10.69	0.00		500.96	1.42
		03/20/25	--	--	3,800	310 D	55	240 D	170	<5.0	57	<0.010	<1.0	(9)	ND	10.00	0.00		501.65	0.69
MW-8	Active	12/19/22	--	--	<100	<1.0	2.7	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.55	0.00	509.75	498.20	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.96	0.00		499.79	1.59
DUP-1		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--		--	--
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.94	0.00		497.81	-1.98
		09/18/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.51	0.00		497.24	-0.57
		12/12/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.08	0.00		499.67	2.43
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.58	0.00		499.17	-0.50
		06/12/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.63	0.00		498.12	-1.05
		09/24/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.91	0.00		497.84	-0.28
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.20	0.00		498.55	0.71
		12/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.62	0.00		500.13	1.58
		03/20/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	8.30	0.00		501.45	1.32
MW-9	Active	12/19/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	10.52	0.00	509.89	499.37	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.30	0.00		500.59	1.22
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.03	0.00		498.86	-1.73
		09/18/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.54	0.00		498.35	-0.51
		12/12/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	8.72	0.00		501.17	2.82
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.88	0.00		500.01	-1.16
DUP-1		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--		--	--
		06/12/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.61	0.00		499.28	-0.73
		09/24/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.68	0.00		499.21	-0.07
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.28	0.00		499.61	0.40
		12/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	7.65	0.00		502.24	2.63
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	6.69	0.00		503.20	0.96

Table 3
Summary of Historical Groundwater Monitoring Data
United Pacific #5468
Springfield, Oregon
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WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS												MONITORING PARAMETERS			WELL ELEVATION		
			TPH-Ox (µg/L)	TPH-Dx (µg/L)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Naph (µg/L)	EDB (µg/L)	EDC (µg/L)	Other VOCs	DTP [1] (ft btoc)	DTW (ft btoc)	PT (ft)	CASING [2] (ft amsl)	GW [3] (ft amsl)	GW Δ (ft amsl)
			NWTPH-Dx		NWTPH-Gx	EPA Method 8260D														
MW-10	Active	12/20/22	--	--	120	1.9	11	2.6	13	<5.0	<5.0	<0.01	<1.0	(9)	ND	9.59	0.00	511.13	501.54	--
DUP-1		12/20/22	--	--	100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(9)	--	--	--		--	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.50	0.00		500.63	-0.91
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.62	0.00		498.51	-2.12
		09/18/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	13.08	0.00		498.05	-0.46
		12/12/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.71	0.00		500.42	2.37
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.24	0.00		499.89	-0.53
		06/11/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.21	0.00		498.92	-0.97
		09/24/24	--	--	<100	**3.0**	<2.0	2.9	3.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.32	0.00		498.81	-0.11
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.88	0.00		499.25	0.44
		12/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.38	0.00		500.75	1.50
DUP-1		12/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--		--	--
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.50	0.00		501.63	0.88
MW-11	Active	12/20/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	ND	11.70	0.00	511.69	499.99	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.59	0.00		501.10	1.11
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.37	0.00		499.32	-1.78
		09/19/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.69	0.00		499.00	-0.32
		12/13/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.80	0.00		500.89	1.89
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.12	0.00		500.57	-0.32
		06/12/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.80	0.00		499.89	-0.68
		09/24/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.11	0.00		499.58	-0.31
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.60	0.00		500.09	0.51
		12/28/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.85	0.00		500.84	0.75
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	9.92	0.00		501.77	0.93
MW-12	Active	10/29/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	12.53	0.00	512.61	500.08	--
DUP-1		10/29/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--		--	--
		12/27/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	11.38	0.00		501.23	1.15
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	ND	10.55	0.00		502.06	0.83
MW-13	Active	10/29/24	--	--	**9,400**	**630**	2,800	**230**	**1,600**	<5.0	**34**	<0.010	<1.0	(9)	ND	10.57	0.00	509.71	499.14	--
		12/27/24	--	--	<100	2.0	<2.0	3.4	15	<5.0	<5.0	<0.010	<1.0	(8)	ND	8.50	0.00		501.21	2.07
		03/19/25	--	--	**1,200**	**120**	190	**54**	260	<5.0	<5.0	<0.010	<1.0	(8)	ND	8.28	0.00		501.43	0.22
EW-1	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	11.05	11.14	0.09	510.97	499.90	--
		06/23/21	--	--	**156,000**	**11,000**	**66,000 E**	**5,600**	**36,000**	<5.0	**650**	<0.01	<1.0	(9)	ND	11.74	0.00		499.23	-0.67
		09/23/21	--	--	**21,000**	**490**	4,200	**550**	**3,200**	<5.0	**110**	<0.01	<1.0	(9)	ND	11.72	0.00		499.25	0.02
		12/22/21	--	--	**40,000**	**560**	2,700 E	**580**	<20	<50	**87**	<0.10	<10	(9)	ND	9.90	0.00		501.07	1.82
DUP-1		12/22/21	--	--	**40,000**	**600**	2,900 E	**620**	<20	<50	**22**	<0.10	<10	(9)	--	--	--		--	--
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
	Abandoned[11]	03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
EW-1R[12]	Active	10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	12.17	12.19	0.02	510.86	498.69	--
		12/20/22	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.32	0.00		499.54	0.85
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	10.10	10.11	0.01		500.75	1.21
		06/29/23	--	--	**25,000**	**1,600**	3,500	**900**	**4,800**	<5.0	**17**	<0.010	<1.0	(9)	ND	11.82	0.00		499.04	-1.71
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	12.30	12.45	0.15		498.52	-0.52
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	10.18	0.00		500.68	2.16
		03/28/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	10.43	10.44	0.01		500.43	-0.25
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	11.51	11.54	0.03		499.34	-1.08
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	11.89	0.00		498.97	-0.37
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.36	0.00		499.50	0.53
		12/28/24[13]	--	--	**130,000**	**2,100**	**14,000**	**2,000**	**19,000**	<5.0	**3,600**	<0.010	<1.0	(9)	Sheen	9.75	0.00		501.11	1.61
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--	--	8.83	8.86	0.03		502.02	0.91
EW-2	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	11.20	11.28	0.08	510.90	499.68	--
		06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	11.88	12.07	0.19		498.98	-0.71
		09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	11.84	11.87	0.03		499.05	0.08
		12/22/21	--	--	--	--	--	--	--	--	--	--	--	--	10.20	10.22	0.02		500.70	1.64
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
	Abandoned[11]	03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
EW-2R[12]	Active	10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	12.32	12.34	0.02	510.91	498.59	--
		12/20/22	--	--	--	--	--	--	--	--	--	--	--	--	11.53	11.54	0.01		499.38	0.79
		04/06/23	--	--	--	--	--	--	--	--	--	--	--	--	ND	10.32	0.00		500.59	1.21
		06/29/23	--	--	**5,200**	**340**	1,200	**180**	**710**	<5.0	**27**	<0.010	<1.0	(9)	ND	12.17	0.00		498.74	-1.85
		09/19/23	--	--	**840**	**6.5**	3.4	<1.0	**140**	<5.0	**6.2**	<0.010	<1.0	(8)	ND	12.46	0.00		498.45	-0.29
		12/13/23	--	--	**200,000**	**2,100**	**35,000**	**3,900**	**17,000**	<5.0	**610**	<0.010	<1.0	(9)	ND	10.44	0.00		500.47	2.02
		03/28/24	--	--	**69,000**	**920**	**9,000**	**850**	**13,000**	<5.0	**51**	<0.010	<1.0	(9)	ND	10.65	0.00		500.26	-0.21
		06/12/24	--	--	**89,000**	**2,300**	**19,000**	**2,000**	**20,000**	<5.0	**800**	<0.010	<1.0	(9)	ND	11.66	0.00		499.25	-1.01
		09/24/24	--	--	**13,000**	**300**	2,300	**330**	**2,100**	<5.0	**53**	<0.010	<1.0	(9)	ND	11.22	0.00		499.69	0.44
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	11.70	0.00		499.21	-0.48
		12/27/24	--	--	**71,000**	**940**	**16,000**	**1,400**	**24,000**	<5.0	**190**	<0.010	<1.0	(9)	ND	9.91	0.00		501.00	1.79
		03/19/25	--	--	**94,000 D**	**160**	4,100 D	**1,400 D**	**19,000 D**	<5.0	**230 D**	<0.010	<1.0	(9)	ND	9.16	0.00		501.75	0.75
EW-3	Active	03/30/21	--	--	--	--	--	--	--	--	--	--	--	--	11.68	11.90	0.22	511.63	499.90	--
		06/23/21	--	--	--	--	--	--	--	--	--	--	--	--	12.40	12.41	0.01		499.23	-0.67
		09/23/21	--	--	--	--	--	--	--	--	--	--	--	--	12.36	12.45	0.09		499.25	0.02
		12/22/21	--	--	--	--	--	--	--	--	--	--	--	--	10.76	10.77	0.01		500.87	1.62
		01/11/22[10]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
	Abandoned[11]	03/23/22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--
EW-4[12]	Active	10/12/22	--	--	--	--	--	--	--	--	--	--	--	--	12.89	12.90	0.01	510.67	497.78	--
		12/20/22	--	--	--	--	--	--	--	--	--	--	--	--	12.08	12.30	0.22		498.54	0.76
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--	--	Sheen	11.00	0.00		499.67	1.13
		06/29/23	--	--	**40,000**	**2,700**	**8,900**	**910**	**5,900**	<5.0	**89**	<0.010	<1.0	(9)	ND	12.72	0.00		497.95	-1.72
		09/19/23	--	--	**17,000**	**1,200**	2,000	**110**	**2,000**	<5.0	**48**	0.023	<1.0	(9)	ND	13.07	0.00		497.60	-0.35
		12/13/23	--	--	**98,000**	**7,000**	**17,000**	**2,700**	**7,100**	<5.0	**590**	<0.010	<1.0	(9)	ND	10.99	0.00		499.68	2.08
		03/28/24	--	--	**64,000**	**1,800**	**10,000**	**1,300**	**7,900**	<5.0	**130**	<0.010	<1.0	(9)	ND	11.20	0.00		499.47	-0.21
		06/12/24	--	--	**68,000**	**3,400**	**16,000**	**1,900**	**9,300**	<5.0	**750**	<0.010	<1.0	(9)	ND	12.20	0.00		498.47	-1.00
		09/24/24	--	--	**20,000**	**960**	2,500	**380**	**3,400**	<5.0	**96**	<0.010	<1.0	(9)	ND	12.30	0.00		498.37	-0.10
		10/29/24	--	--	--	--	--	--	--	--	--	--	--	--	ND	12.28	0.00		498.39	0.02
		12/27/24	--	--	**65,000**	**2,200**	5,200	**1,100**	**5,400**	<5.0	**4,400**	<0.010	<1.0	(9)	ND	10.60	0.00		500.07	1.68
		03/19/25	--	--	**54,000 D**	**2,000 D**	**10,000 D**	**1,900 D**	**9,000 D**	<5.0	**230 D**	<0.010	<1.0	(9)	ND	9.98	0.00		500.69	0.62

Table 3
Summary of Historical Groundwater Monitoring Data
United Pacific #5468
Springfield, Oregon
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WELL ID	WELL STATUS	SAMPLE DATE	ANALYTICAL PARAMETERS												MONITORING PARAMETERS			WELL ELEVATION		
			TPH-Ox (µg/L)	TPH-Dx (µg/L)	TPH-Gx (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	Naph (µg/L)	EDB (µg/L)	EDC (µg/L)	Other VOCs	DTP [1] (ft btoc)	DTW (ft btoc)	PT (ft)	CASING [2] (ft amsl)	GW [3] (ft amsl)	GW Δ (ft amsl)
			NWTPH-Dx		NWTPH-Gx	EPA Method 8260D														
			QA/QC Samples																	
EB-1		03/30/21	--	--	<100	<1.0	1.1	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		06/23/21	--	--	<100	<1.0	10	1.3	8.1	<5.0	<5.0	<0.01	<1.0	(9)	--	--	--	--	--	--
		09/23/21	--	--	100	<1.0	2.2	<1.0	2.3	<5.0	<5.0	<0.01	<1.0	(9)	--	--	--	--	--	--
		12/22/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(9)	--	--	--	--	--	--
		03/23/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		06/28/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		10/12/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/19/22	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		09/19/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/12/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		06/11/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		09/24/24	--	--	<100	<1.0	2.7	<1.0	12	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		10/29/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		12/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		03/19/25	--	--	<100	<1.0	<2.0	<1.0	10	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
EB-2		06/29/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/20/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
EB-2 Dup		12/20/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		06/29/23	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		09/19/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/13/23	--	--	770	3.8	140	20	160	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		06/12/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		12/28/24	--	--	<100	4.5	13	1.6	9.4	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		03/20/25	--	--	<100	1.7	5.0	<1.0	3.8	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
Trip Blank		06/23/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/22/21	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		03/23/22	--	--	<100	<1.1	<1.0	<1.0	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		10/12/22	--	--	<100	<1.0	<1.0	1.2	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		12/20/22	--	--	<100	<1.0	<1.0	1.2	<2.0	<5.0	<5.0	<0.01	<1.0	(8)	--	--	--	--	--	--
		04/06/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		06/29/23	--	--	<100	<1.0	<1.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		12/13/23	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		03/27/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		06/11/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		09/24/24	--	--	--	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		10/29/24	--	--	--	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		12/28/24	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
		03/20/25	--	--	<100	<1.0	<2.0	<1.0	<2.0	<5.0	<5.0	<0.010	<1.0	(8)	--	--	--	--	--	--
RBC: Injestion/Inhalation from Tapwater [4]			430	430	450	2.1	6,300	6.4	830	68	0.72	0.034	0.78	--	na	na	na	na	na	na
RBC: Volatilization to Outdoor Air [5]			>S	>S	>S	14,000	>S	43,000	>S	1,500,000	16,000	790	9,000	--	na	na	na	na	na	na
RBC: Volatilization to Indoor Air [6]			1,700	1,700	520	12/650	150,000/160,000	31/420,000	3,300/200,000	3,200/1,600,000	50/83,000	1.5/--	55/--	--	na	na	na	na	na	na
RBC: Groundwater in Excavations [7]			>S	>S	14,000	1,800	220,000	4,500	23,000	63,000	500	27	630	--	na	na	na	na	na	na

Notes:

Results in **BOLD** indicate detections that exceed ODEQ Risk-Based Concentrations (RBCs) for groundwater
(1): wells containing free-product were not sampled
(2): top of casing elevations surveyed on 12/09/20 and 03/22/21.
(3): groundwater elevation corrected for the presence of free-product using the following calculation: casing elevation minus depth to water plus the product thickness times its density (0.765). An average density of 0.765 (based on published literature) is used in the calculation.
(4): RBC for Groundwater - Injestion and Inhalation from Tapwater, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals - Revision: May 2018 revised August 2023)
(5): RBC for Groundwater - Volatilization to Outdoor Air, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals - Revision: May 2018 revised August 2023)
(6): RBC for Groundwater - Volatilization to Indoor Air, Commercial scenario; Chronic/Acute screening values (see OQED Table 1 Chronic & Acute Vapor Intrusion Risk-Based Concentrations - March 2024)
(7): RBC for Groundwater in Excavation, Contact to Construction and Excavation Workers
(8): No other VOCs detected in sample
(9): Other VOCs detected in sample; refer to Table 4 for other VOCs detected
(10): Confirmation samples collected from Wells MW-4 and MW-7 on 1/11/2022
(11): Wells EW-1, EW-2, and EW-3 abandoned on March 7 and 8, 2022
(12): Wells EW-1R, EW-2R, and EW-4 installed on September 20 and 21, 2022
(13): Remediation system startup baseline sampling - grab sample
--: not analyzed / not measured / unknown
<: less than the laboratory method reporting limit
>S: RBC exceeds the solubility limit
µg/L: micrograms per Liter

Active: groundwater well currently used for monitoring
amsl: above mean sea level
BTEX: benzene, toluene, ethylbenzene, and total xylenes
btoc: below top of casing
DTP: depth to product
DTW: depth to water
DTW Δ : Change in depth to water since last monitoring event
DUP: duplicate sample
E: reported result is an estimate because it exceeds the calibration range
EB-1: equipment blank
EDB: 1,2-dibromoethane
EDC: 1,2-dichlorethane
ft: feet
GW: groundwater
MTBE: Methyl tert-butyl ether
na: not applicable
ND: not detected
PT: free-product thickness
RBC: Risked Based Concentration established bythe Oregon Department of Environmental Quality (ODEQ)
TPH-Dx: total diesel-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Dx
TPH-Gx: total gasoline-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Gx
TPH-Ox: total oil-range petroleum hydrocarbons, analyzed by Northwest Method NWTPH-Ox

TABLE 4
Additional VOCs detected in Groundwater
United Pacific #5468
Springfield, Oregon
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Boring ID	Well Status	Date Sampled	CM (µg/L)	IPB (µg/L)	NPB (µg/L)	1,3,5-TMB (µg/L)	1,2,4-TMB (µg/L)	SBB (µg/L)	IPT (µg/L)	TBB (µg/L)	NBB (µg/L)	2-methyl (µg/L)	1-methyl (µg/L)
			Method 8260D										
MW-1	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		09/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		12/22/21	33	<4.0	<1.0	41	36	<1.0	2.3	<1.0	<1.0	--	--
		03/23/22[1]	--	--	--	--	--	--	--	--	--	--	--
		06/28/22[1]	--	--	--	--	--	--	--	--	--	--	--
		10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22	2.4	<4.0	<1.0	140	83	<1.0	9.7	<1.0	3.6	--	--
		04/06/23	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	<4.0	8.8	24	94	<1.0	1.3	<1.0	<1.0	--	--
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--
		12/13/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/28/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--
		09/24/24	--	--	--	--	--	--	--	--	--	55	37
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-2	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		09/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		12/22/21[1]	--	--	--	--	--	--	--	--	--	--	--
		03/23/22[1]	--	--	--	--	--	--	--	--	--	--	--
		6/28/22[1]	--	--	--	--	--	--	--	--	--	--	--
		10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22	24	31	99	150	**560**	<1.0	<1.0	<1.0	6.8	--	--
		04/06/23	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	36	130	230	**880**	7.0	15	<1.0	7.0	--	--
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--
		12/13/23	--	--	--	--	--	--	--	--	--	83	49
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	35	24
DUP-1		06/12/24	--	--	--	--	--	--	--	--	--	31	19
		09/24/24	--	--	--	--	--	--	--	--	--	51	29
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	9.0	9.0
DUP-1		03/19/25	--	--	--	--	--	--	--	--	--	8.9	9.8
MW-3	Active	03/30/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/23/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/23/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/22/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		03/23/22	<2.0	<4.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/28/22	<2.0	<4.0	<1.0	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		10/12/22	<2.0	<4.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	--	--
DUP-1		10/12/22	<2.0	<4.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/20/22	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	2.2	<4.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/13/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-4	Active	03/30/21	<2.0	74	190	**430**	**1,700**	<1.0	11	280	6.8	--	--
DUP-1		03/30/21	<2.0	73	220	**460**	**1,800**	<1.0	12	270	6.6	--	--
		06/23/21	24	52	94	**750**	**2,800**	<1.0	15	1.0	6.2	--	--
		09/22/21	18	59	120	250	**1,200**	<1.0	12	1.0	4.6	--	--
DUP-1		09/23/21	15	52	110	**340**	**1,200**	<1.0	11	<1.0	4.1	--	--
		12/22/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		03/23/22	<100	<200	140	**500**	**1,700**	<50	50	250	50	--	--
		06/29/22	18	<4.0	<1.0	**310**	**1,300**	<1.0	<1.0	<1.0	<1.0	--	--
		10/12/22	14	12	10	**430**	**1,300**	2.4	15	86	11	--	--
		12/20/22	20	40	11	**320**	**990**	<10	11	<10	41	--	--
		04/06/23	<20	<40	<10	46	14	<10	<10	<10	<10	--	--
		06/29/23	<2.0	4.2	4.5	27	120	<1.0	2.5	<1.0	<1.0	--	--
		09/18/23	--	--	--	--	--	--	--	--	--	27	40
		12/13/23	--	--	--	--	--	--	--	--	--	21	16
DUP-1		12/13/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	5.7
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	5.8	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	35	31
MW-5	Active	03/30/21	<2.0	94	300	**600**	**2,600**	<1.0	19	410	10	--	--
		06/23/21	38	66	310	**860**	**2,900**	<1.0	25	<1.0	13	--	--
		09/23/21	48	57	140	**560**	**1,800**	<1.0	20	<1.0	9	--	--
		12/22/21	<2.0	71	1,700	**590**	**2,100**	<1.0	26	<1.0	<1.0	--	--
		03/23/22	<100	<200	170	**840**	**2,600**	<50	<50	<50	<50	--	--
		06/29/22	87	83	154	**1,200**	**4,100**	<1.0	31	570	107	--	--
		10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22	20	80	300	**630**	**1,900**	<10	24	<10	14	--	--
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--
		06/29/23[1]	--	--	--	--	--	--	--	--	--	--	--
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--
		03/28/24[1]	--	--	--	--	--	--	--	--	--	--	--
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24[10]	--	--	--	--	--	--	--	--	--	3,900	2,700
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--

TABLE 4
Additional VOCs detected in Groundwater
United Pacific #5468
Springfield, Oregon
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Boring ID	Well Status	Date Sampled	CM (µg/L)	IPB (µg/L)	NPB (µg/L)	1,3,5-TMB (µg/L)	1,2,4-TMB (µg/L)	SBB (µg/L)	IPT (µg/L)	TBB (µg/L)	NBB (µg/L)	2-methyl (µg/L)	1-methyl (µg/L)
			Method 8260D										
MW-6	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		09/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		12/22/21[1]	--	--	--	--	--	--	--	--	--	--	--
		03/23/22[1]	--	--	--	--	--	--	--	--	--	--	--
		06/28/22[1]	--	--	--	--	--	--	--	--	--	--	--
		10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22[1]	--	--	--	--	--	--	--	--	--	--	--
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--
		06/29/23[1]	--	--	--	--	--	--	--	--	--	--	--
		09/18/23[1]	--	--	--	--	--	--	--	--	--	--	--
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--
		03/28/24[1]	--	--	--	--	--	--	--	--	--	--	--
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24[10]	--	--	--	--	--	--	--	--	--	2,600	2,800
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--
MW-7	Active	03/30/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/23/21	<2.0	<4.0	<1.0	3.7	12	<1.0	<1.0	<1.0	<1.0	--	--
DUP-1		06/23/21	<2.0	<4.0	<1.0	1.1	3.5	<1.0	<1.0	<1.0	<1.0	--	--
		09/23/21	8.4	<4.0	<1.0	1.8	6.9	<1.0	<1.0	<1.0	<1.0	--	--
		12/22/21	18	3.9	8.9	19	71	<1.0	<1.0	<1.0	<1.0	--	--
MW-7 Dup		12/22/21	21	4.7	11	24	89	<1.0	<1.0	<1.0	<1.0	--	--
		03/23/22	4.1	7.9	20	41	130	<1.0	1.8	<1.0	<1.0	--	--
DUP-2		03/23/22	<100	<200	<50	<50	140	<50	<50	<50	<50	--	--
		06/28/22	<2.0	5.2	14	35	162	<1.0	<1.0	23	5.8	--	--
		10/12/22	<2.0	5.7	17	38	150	<1.0	<1.0	24	<1.0	--	--
		12/20/22	<2.0	4.5	13	32	120	<1.0	1.4	<1.0	<1.0	--	--
		04/06/23	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	9.5	<1.0	55	**300**	1.6	2.3	<1.0	<1.0	--	--
DUP-1		06/29/23	<2.0	9.6	29	62	**330**	1.6	2.4	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	15	10
DUP-1		09/19/23	--	--	--	--	--	--	--	--	--	12	7.6
		12/12/23	--	--	--	--	--	--	--	--	--	32	22
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/11/24	--	--	--	--	--	--	--	--	--	8.2	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	6.8
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/20/25	--	--	--	--	--	--	--	--	--	49	36
MW-8	Active	12/19/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
DUP-1		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/18/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/12/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/20/25	--	--	--	--	--	--	--	--	--	--	--
MW-9	Active	12/19/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/18/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/12/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
DUP-1		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-10	Active	12/20/22	<2.0	<4.0	<1.0	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	--	--
DUP-1		12/20/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/18/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/12/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/11/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/04	--	--	--	--	--	--	--	--	--	<5.0	<5.0
DUP-1		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-11	Active	12/20/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/13/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-12[8]	Active	10/29/24	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
DUP-1		10/29/24	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
MW-13[8]	Active	10/29/24[9]	<2.0	9.4	17	44	130	160	<1.0	29	11	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
EW-1	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21	46	100	490	**930**	**3,900**	<1.0	19	<1.0	9.3	--	--
		09/22/21	13	22	63	130	**520**	<1.0	7.0	<1.0	3.6	--	--
		12/22/21	29	29	91	220	**742**	<10	12	<10	<10	--	--
DUP-1		12/22/21	30	31	97	230	**770**	<10	11	<10	<10	--	--
	Abandoned[6]	03/23/22	--	--	--	--	--	--	--	--	--	--	--

TABLE 4
Additional VOCs detected in Groundwater
United Pacific #5468
Springfield, Oregon
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Boring ID	Well Status	Date Sampled	CM (µg/L)	IPB (µg/L)	NPB (µg/L)	1,3,5-TMB (µg/L)	1,2,4-TMB (µg/L)	SBB (µg/L)	IPT (µg/L)	TBB (µg/L)	NBB (µg/L)	2-methyl (µg/L)	1-methyl (µg/L)
			Method 8260D										
EW-1R[7]	Active	10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22[1]	--	--	--	--	--	--	--	--	--	--	--
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	11	35	61	**1,000**	2.8	4.4	<1.0	2.8	--	--
		09/19/23[1]	--	--	--	--	--	--	--	--	--	--	--
		12/13/23[1]	--	--	--	--	--	--	--	--	--	--	--
		03/28/24[1]	--	--	--	--	--	--	--	--	--	--	--
		06/12/24[1]	--	--	--	--	--	--	--	--	--	--	--
		09/24/24[1]	--	--	--	--	--	--	--	--	--	--	--
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24[10]	--	--	--	--	--	--	--	--	--	3,200	3,600
		03/19/25[1]	--	--	--	--	--	--	--	--	--	--	--
EW-2	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		09/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		12/22/21[1]	--	--	--	--	--	--	--	--	--	--	--
	Abandoned[6]	03/23/22	--	--	--	--	--	--	--	--	--	--	--
EW-2R[7]	Active	10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22[1]	--	--	--	--	--	--	--	--	--	--	--
		04/06/23	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	16	1.3	36	160	1.2	1.2	<1.0	1.3	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/13/23	--	--	--	--	--	--	--	--	--	220	260
		03/28/24	--	--	--	--	--	--	--	--	--	51	31
		06/12/24	--	--	--	--	--	--	--	--	--	65	29
		09/24/24	--	--	--	--	--	--	--	--	--	17	11
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24	--	--	--	--	--	--	--	--	--	40	25
		03/19/25	--	--	--	--	--	--	--	--	--	200	130
EW-3	Active	03/30/21[1]	--	--	--	--	--	--	--	--	--	--	--
		06/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		09/23/21[1]	--	--	--	--	--	--	--	--	--	--	--
		12/22/21[1]	--	--	--	--	--	--	--	--	--	--	--
	Abandoned[6]	03/23/22	--	--	--	--	--	--	--	--	--	--	--
EW-4[7]	Active	10/12/22[1]	--	--	--	--	--	--	--	--	--	--	--
		12/20/22[1]	--	--	--	--	--	--	--	--	--	--	--
		04/06/23[1]	--	--	--	--	--	--	--	--	--	--	--
		06/29/23	<2.0	37	110	220	**900**	7.3	10	<1.0	8.1	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	43	25
		12/13/23	--	--	--	--	--	--	--	--	--	170	190
		03/28/24	--	--	--	--	--	--	--	--	--	92	36
		06/12/24	--	--	--	--	--	--	--	--	--	140	83
		09/24/24	--	--	--	--	--	--	--	--	--	54	32
		10/29/24	--	--	--	--	--	--	--	--	--	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	37	22
		03/19/25	--	--	--	--	--	--	--	--	--	170	140

TABLE 4
Additional VOCs detected in Groundwater
United Pacific #5468
Springfield, Oregon
Page 4 of 4

Boring ID	Well Status	Date Sampled	CM (µg/L)	IPB (µg/L)	NPB (µg/L)	1,3,5-TMB (µg/L)	1,2,4-TMB (µg/L)	SBB (µg/L)	IPT (µg/L)	TBB (µg/L)	NBB (µg/L)	2-methyl (µg/L)	1-methyl (µg/L)
			Method 8260D										
QA/QC Samples													
EB-1		03/30/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/23/21	<2.0	<4.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	--	--
		09/23/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/22/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		03/23/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/28/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		10/12/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/19/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/12/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/11/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/19/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
EB-2		06/29/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/20/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
EB-2 Dup		12/20/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		12/13/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/12/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	--	--
		12/28/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/20/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
Trip Blank		06/23/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/22/21	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		03/23/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		10/12/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/20/22	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		04/06/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		06/29/23	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		09/19/23	--	--	--	--	--	--	--	--	--	--	--
		12/12/23	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/27/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		06/11/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		09/24/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		10/29/24	<2.0	<4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
		12/28/24	--	--	--	--	--	--	--	--	--	<5.0	<5.0
		03/20/25	--	--	--	--	--	--	--	--	--	<5.0	<5.0
RBC: Injestion/Inhalation from Tapwater[2]			79	2,000	ne	280	250	ne	ne	ne	ne	ne	ne
RBC: Volatilization to Outdoor Air[3]			1,800,000	>S	ne	>S	>S	ne	ne	ne	ne	ne	ne
RBC: Volatilization to Indoor Air[4]			1,500/12,000	9,100/--	22,000/--	1,700/--	2,400/--	ne	ne	NITI	NITI	ne	ne
RBC: Groundwater in Excavations[5]			22,000	51,000	ne	7,500	6,300	ne	ne	ne	ne	ne	ne

Notes:

Results in **BOLD** indicate detections that exceed the ODEQ Risk-Based Concetrations (RBCs) for groundwater
samples analyzed for gasoline-range organics using NWTPH-Gx and BTEX using Method 8260D;
select samples further analyzed for diesel- and oil-range organics using NWTPH-Dx/Ox, for full scan VOCs using Method 8260
(1): sample not collected due to liquid-phase hydrocarbons (LPH; free-product) in well
(2): RBC for Groundwater - Injestion and Inhalation from Tapwater, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals - Revision: May 2018 revised August 2023)
(3): RBC for Groundwater - Volatilization to Outdoor Air, occupational receptor scenario (see ODEQ Table of RBCs for Individual Chemicals - Revision: May 2018 revised August 2023)
(4): RBC for Groundwater - Volatilization to Indoor Air, Commercial scenario; Chronic/Acute screening values (see OQED Table 1 Chronic & Acute Vapor Intrusion Risk-Based Concentrations - March 2024)
(5): RBC for Groundwater in Excavation, Contact to Construction and Excavation Workers
(6): Wells EW-1, EW-2, and EW-3 abandoned on March 7 and 8, 2022
(7): Wells EW-1R, EW-2R, and EW-4 installed on September 20 and 21, 2022
(8): Wells MW12 and MW-13 installaed on October 3, 2024
(9): Well MW-13 also contained styrene (28 µg/L), 2-Chlorotoluene (6.3 µg/L) and 4-Chlorotoluene (11 µg/L)
(10): Remediation system startup baseline sampling - grab sample
1,2,4-TMB: 1,2,4-trimethylbenzene
1,3,5-TMB: 1,3,5-trimethylbenzene
1-methyl: 1-methylnaphthalene
2-methyl: 2-methylnaphthalene
--: not analyzed
<: not detected at or above stated laboratory reporting limit (RL)
>S: groundwater RBC exceeds the solubility limit. Refer to RBC Table Appendix D for value of S. Groundwater concentration in excess of S indicate free product may be present
BB: butylbenzene
CM: chloromethane
DUP: duplicate sample
EB-1: Equipment blank
ft bgs: feet below ground surface
IPB: iso-propylbenzene (cumene)
IPT: p-isopropyltoluene
na: not applicable
NBB: n-butylbenzene
ne: not established on RBC Table
NITI: listed as no inhalation toxicity information
NPB: n-propylbenzene
ODEQ RBCs: State of Oregon Department of Environmental Qulity Risked-Based Concentrations
ppmv: parts per million per volume
SSB: sec-butylbenzene
TBB: tert-butylbenzene
VOCs: volatile organic compounds

Table 5
Summary of Groundwater Flow Direction and Gradient Data
United Pacific #5468
Springfield, Oregon

Date	Groundwater Gradient (ft/ft)	Groundwater Flow Direction														
		North	North-northeast	Northeast	East-northeast	East	East-southeast	Southeast	South-southeast	South	South-southwest	Southwest	West-southwest	West	West-northwest	Northwest	North-northwest
03/30/21	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
06/23/21	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
09/22/21	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
12/22/21	0.002	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0
03/23/22	0.0014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
06/28/22	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
10/12/22	0.024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
12/20/22	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
04/06/23	0.0077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
06/29/23	0.012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
09/19/23	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
12/13/23	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
03/28/24	0.008	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
06/12/24	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0
09/24/24	0.007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
10/29/24	0.013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
12/26/24	0.0049	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0
03/18/25	0.005	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	0	0
TOTAL		0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	**2**	**10**	**4**

Notes:
ft/ft: feet per foot

CHARTS

CHART 1
Groundwater Elevation Trends
United Pacific #5468
Springfield, Oregon

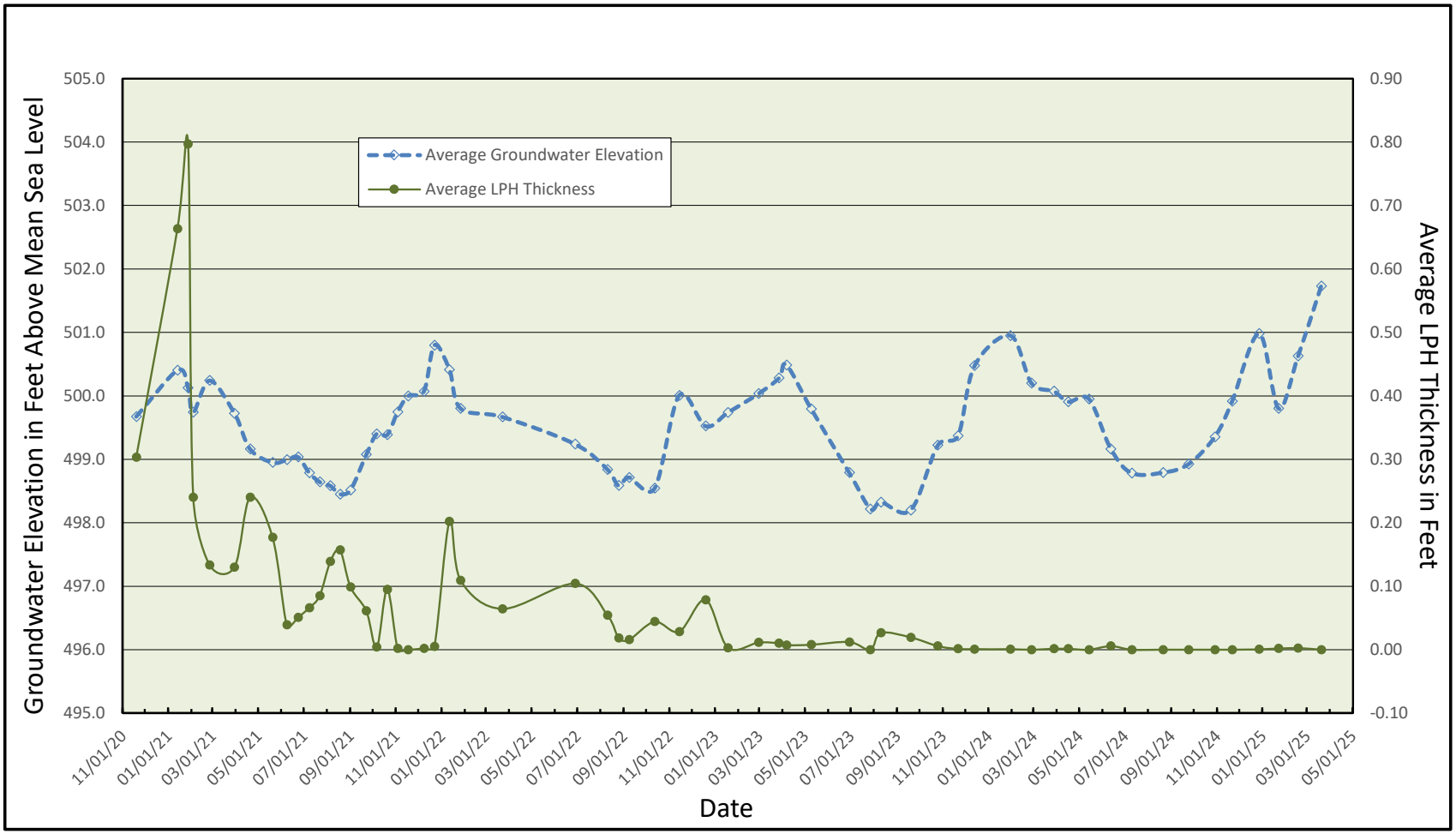


Chart 3
Benzene Concentration Trends
United Pacific #5468
Springfield, Oregon

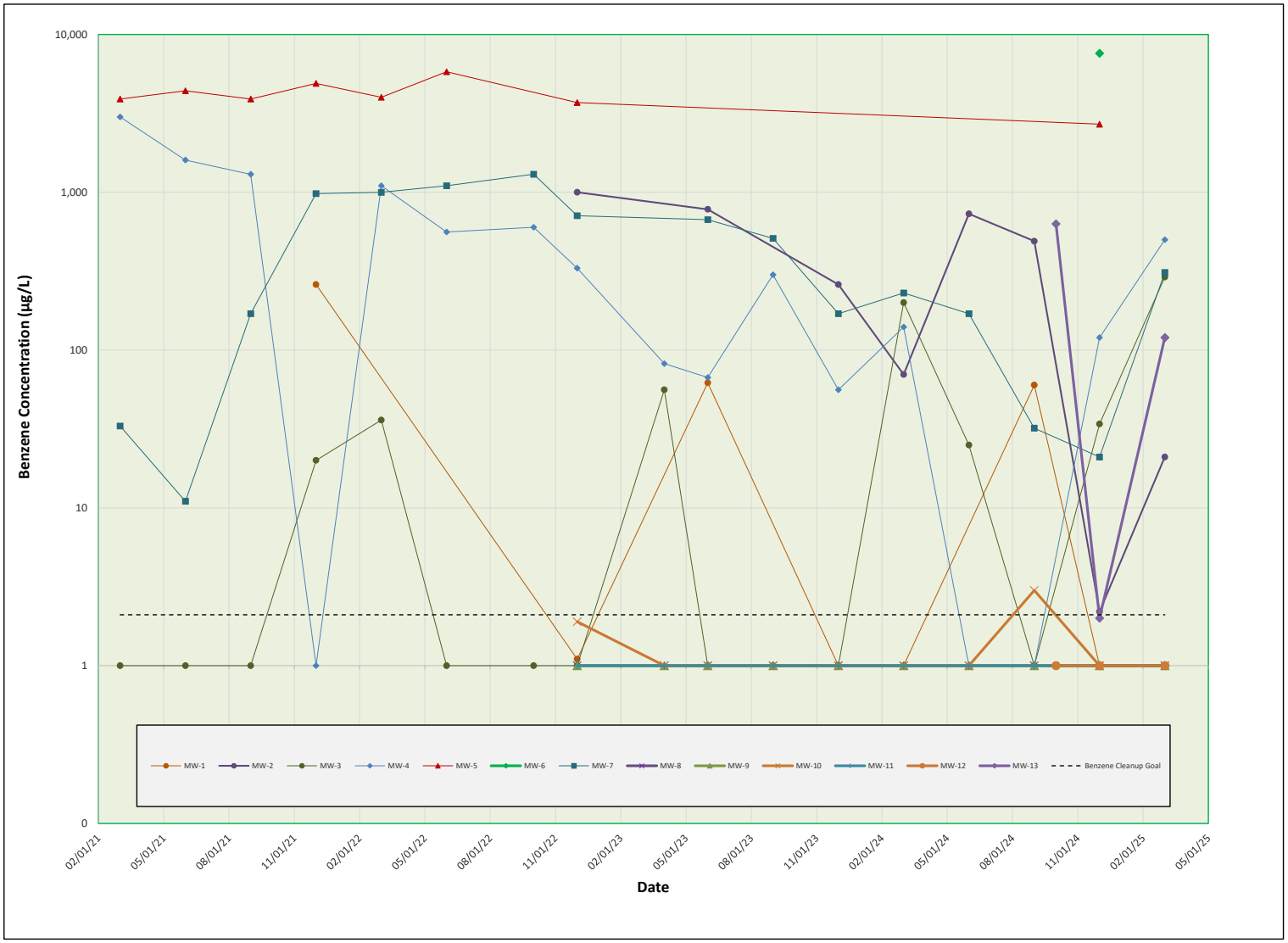
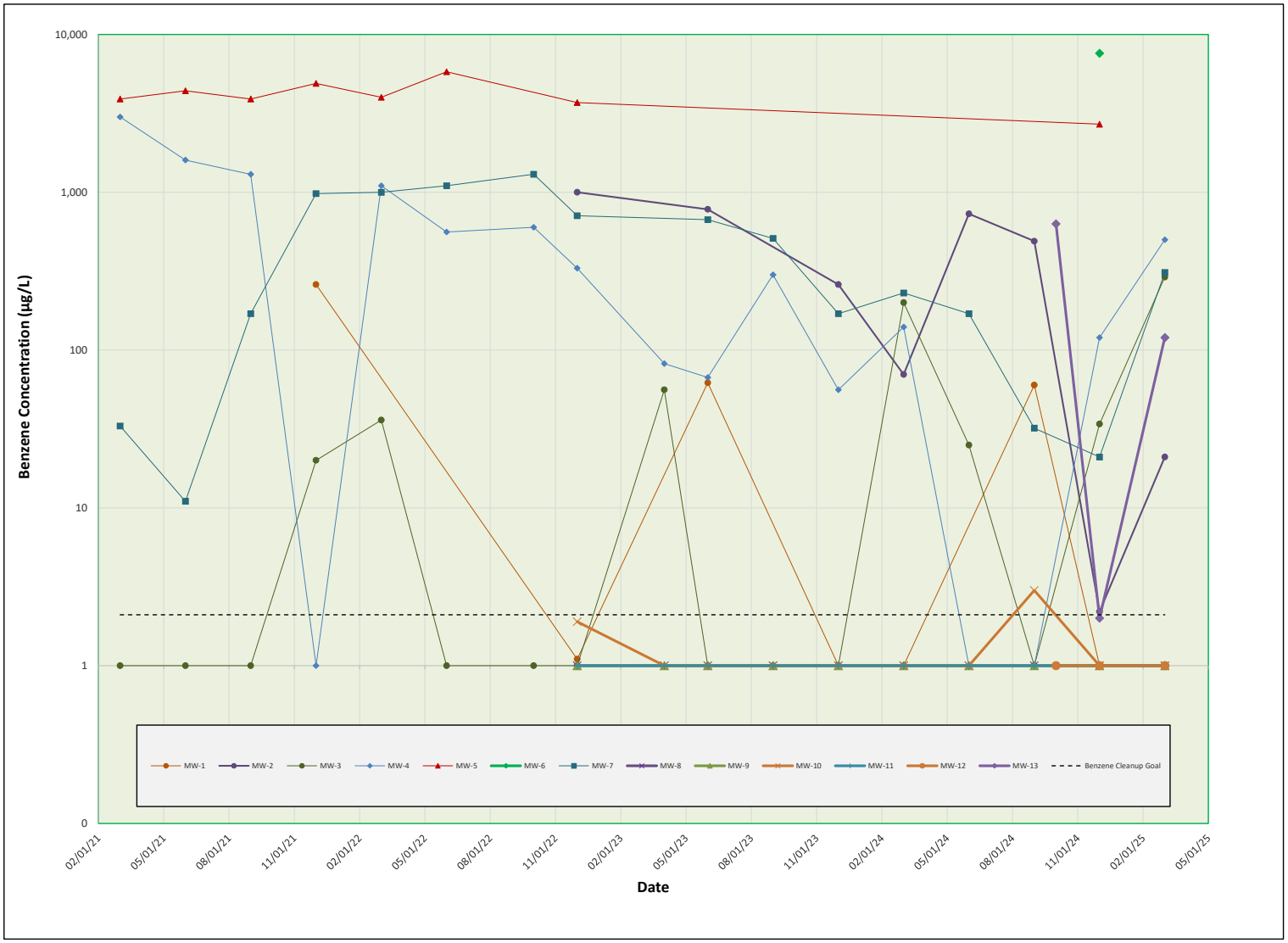


Chart 3
Benzene Concentration Trends
United Pacific #5468
Springfield, Oregon



APPENDIX A

LPH Removal Field Forms

WELL GAUGING DATA FORM

Site Name: 5468
Project No:

Location: Springfield, OR
Date: 1/22/25
Technician: CMH

Well ID	Time	Well Dia (inch)	Sheen / Odor	Depth to Product (feet)	Thickness of Product (feet)	Depth to Water (feet)	Total Well Depth (feet below TOC)[1]	Date of Sample	Time of Sample
MW-3	1320	4"	odor	–	–	11.25	24.03	–	–
MW-2	1248	4	odor	–	–	11.57	24.92	–	–
MW-11	1243	4	No	–	–	11.39	26.68	–	–
MW-12	1418	4	No	–	–	12.32	20.00	–	–
MW-1	1428	4	No	–	–	12.40	24.03	–	–
EW-4	1245	4	odor	–	–	11.67	23.00	–	–
MW-4	1400	4	No	–	–	9.90	23.80	–	–
MW-13	1613	4	No	–	–	10.33	19.85	–	–
MW-8	1603	4	No	–	–	10.90	17.95	–	–
MW-10	1513	4	odor	–	–	11.55	17.90	–	–
MW-7	1436	4	odor	–	–	11.92	24.88	–	–
EW-2R	1313	4	odor	–	–	11.16	22.85	–	–
MW-9	1221	4	No	–	–	9.10	17.25	–	–
MW-5	0810	4	odor/sheen	–	–	9.45	22.50	–	–
MW-6	0738	4	odor/sheen	10.74	0.03	10.77	24.10	–	–
EW-1R	0840	4	odor/sheen	–	–	10.90	7.50	–	–

Notes:

MW-10 missing bolts.

7 Drums, ~20 gal in Drum stored contents from removal/inspection event

N - No
Y - Yes
NA - not applicable
NM - not measured
TOC - top of casing
mg/L: milligrams per Liter

[1] - If not TOC, survey point will be noted

LPH Removal Field Sheet

Project No.: Springfield, OR LPH 1Q25	
Sampler: CHa	Gauging Date: 1/23/25
Well ID: MW-5	Well Diameter (in): 4"
Total Well Depth (ft): ~22.50	Depth to Water (ft): 9.45
Depth to Free Product: N/A	Thickness of Free Product (ft):
to:	Equipment:

Purge Method: Skimmer + Bail	
Sampling Method:	Other: —

Purge Start Time: 810 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

- Skimmer Drained and bailer deployed for additional recovery.

Did well dewater? : No	Amount of H20 actually evacuated: ~20 2.25
Sampling Time:	Sampling Date:
Sample ID:	Laboratory:
Analyzed for:	
Equipment Blank ID:	Duplicate ID:
Other Information: Strong Sheen on evacuated contents.	

LPH Removal Field Sheet

Project No.: Springfield LPH 1Q25	
Sampler: CHM	Gauging Date: 1/23/25
Well ID: MW-6	Well Diameter (in): 4"
Total Well Depth (ft): 24.10	Depth to Water (ft): 10.77
Depth to Free Product: 10.74	Thickness of Free Product (ft):
to:	Equipment: Interface probe

Purge Method: Bailer + Skimmer	
Sampling Method: NA	Other: —

Purge Start Time: 0738 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

Skimmer emptied. Bailer used to recover upper portion of water column.

Did well dewater? : No	Amount of H20 actually evacuated: 2.5
Sampling Time: —	Sampling Date:
Sample ID: —	Laboratory:
Analyzed for: —	
Equipment Blank ID: —	Duplicate ID:

Other Information:

Faint to strong sheen

LPH Removal Field Sheet

Project No.:	Spring Field, OR 1025 LPH		
Sampler:	CHM	Gauging Date:	1/23/25
Well ID:	FW-1R	Well Diameter (in):	4"
Total Well Depth (ft):	~17.50	Depth to Water (ft):	10.90
Depth to Free Product:	Not observed	Thickness of Free Product (ft):	-
to:		Equipment:	Interface probe

Purge Method:	Skimmer & Bailer		
Sampling Method:	NA	Other:	—

Purge Start Time: 840 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

Skimmer emptied. Bailer deployed for additional recovery.

Did well dewater? :	No	Amount of H20 actually evacuated:	3.0
Sampling Time:	NA	Sampling Date:	
Sample ID:		Laboratory:	
Analyzed for:			
Equipment Blank ID:		Duplicate ID:	

Other Information:

Strong Sheen.

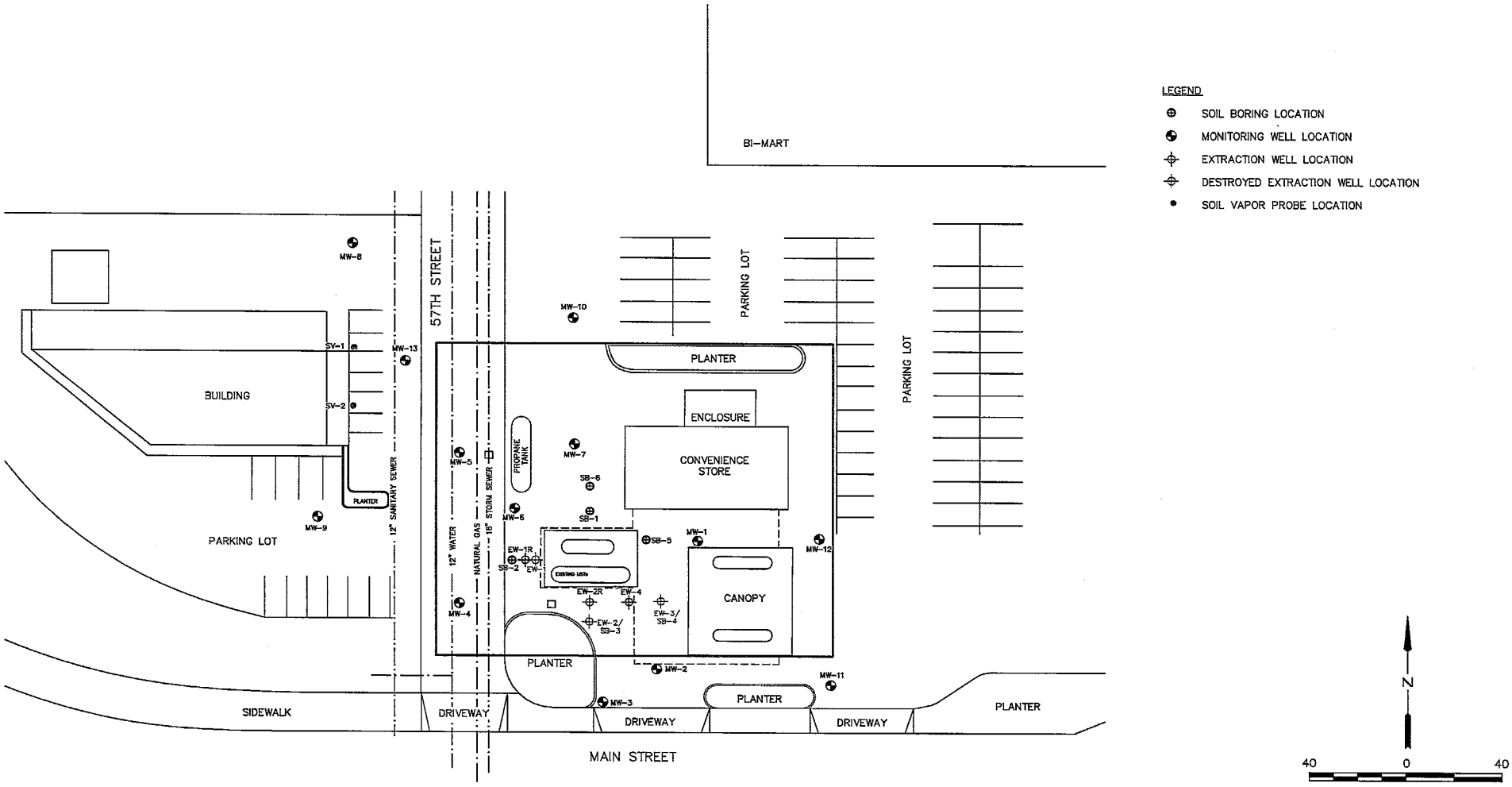
WELLHEAD INSPECTION FORM

PN: _____ Date: 1/23/25 Page: 1 of 1

Site: 5720 Main St, Client: Montrose, Environmental

Technician: _____

Well ID	Well inspected - No corrective action required	Cap non-functional	Lock non-functional	Bolts missing (list quantity)	Tabs stripped (list quantity)	Tabs broken (list quantity)	Annular seal incomplete	Apron damaged	Rim/lid broken	Trip hazard	Below grade	Other (explain in notes)	Well not inspected (explain in notes)	NOTES - please note if cap or lock is replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe is damaged, or any other details not covered by checklist
MW1				3										
MW2				2										
MW3	✓													
MW4	✓													
MW5	✓													
MW6	✓													
MW7				2										
MW8	✓													
MW9	✓													
MW10				2										
MW11	✓													
MW12	✓													
MW13	✓													Bentonite in Manument
EW-1R	✓													
EW-2R	✓													
EW-4	✓													



MONTROSE ENVIRONMENTAL

FIGURE 2

AREA PLAN

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN
11/27/2024

PROJECT NO.
027409

FILE NO.
027409F2-AP

R:\03_Site Assessment & Remediation\United Pacific\5468, Springfield, OR\Reports\2024 Additional Well Install (offsite Well & Probes)\Figures\004668.dwg

WELL GAUGING DATA FORM

Site Name: 5469
Project No:

Location: 5276 Main St, Springfield, OR
Date: 2/17/25
Technician: CHM

Well ID	Time	Well Dia (inch)	Sheen / Odor	Depth to Product (feet)	Thickness of Product (feet)	Depth to Water (feet)	Total Well Depth (feet below TOC)[1]	Date of Sample	Time of Sample
MW-1	1441	4	—	—	—	[illegible]	24.03	—	—
MW-2	1405	4"	odor	—	—	10.50	24.92	—	—
MW-3	1400	4	odor	—	—	10.79	26.68	—	—
MW-4	1433	4	—	—	—	9.34	23.80	—	—
MW-5	0752	4	yes	—	—	8.50	22.55	—	—
MW-6	0730	4	yes	9.82	0.04	9.86	24.10	—	—
MW-7	1516	4	odor	—	—	10.99	24.88	—	—
MW-8	1501	4	—	—	—	9.79	17.95	—	—
MW-9	0702	4	—	—	—	[illegible]	8.38	—	—
MW-10	1511	4	—	—	—	10.54	17.90	—	—
MW-11	1420	4	—	—	—	10.65	19.95	—	—
MW-12	1425	4	—	—	—	11.41	20.00	—	—
MW-13	1540	4	—	—	—	9.10	19.85	—	—
EW-1R	082	4	odor	—	—	10.02	23.00	—	—
EW-2R	1451	4	—	—	—	10.38	22.85	—	—
EW-4	1413	4	—	—	—	11.34	23.00	—	—
					—			—	

11.75

Notes:

Monument contents Drumed.

N - No
Y - Yes
NA - not applicable
NM - not measured
TOC - top of casing
mg/L: milligrams per Liter

[1] - If not TOC, survey point will be noted

LPH Removal Field Sheet

Project No.: Springfield ~ 5468	
Sampler: CHd	Gauging Date: 2/18/25
Well ID: EW-1R	Well Diameter (in):
Total Well Depth (ft): 23.00	Depth to Water (ft): 10.02
Depth to Free Product: N/A	Thickness of Free Product (ft):
to: N/A	Equipment:

Purge Method: Skimmer / Bailer	
Sampling Method: N/A	Other:

Purge Start Time: 810 Flow Rate: _____ Pump Depth (ft): 10'

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	
0830		10.09	2.0	Trace	No Free product

Did well dewater? : No	Amount of H20 actually evacuated: 2.0
Sampling Time: N/A	Sampling Date:
Sample ID: N/A	Laboratory:
Analyzed for:	
Equipment Blank ID:	Duplicate ID:
Other Information:	

LPH Removal Field Sheet

Project No.:	5468 Springfield		
Sampler:	CHdM	Gauging Date:	2/17-2/18/15
Well ID:	MW-6	Well Diameter (in):	4"
Total Well Depth (ft):	24.10	Depth to Water (ft):	9.82
Depth to Free Product:	9.82 - 9.86	Thickness of Free Product (ft):	0.04
to:	9.80	Equipment:	IP

Purge Method:	Bailer / Skimmer
Sampling Method:	Other:

Purge Start Time: 0655 Flow Rate: 0723 Pump Depth (ft): 9.5

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	
0713	.	9.92	9.91	Trace	
0722		9.92	9.91	trace	Heavy Sheen

few Strokers in purge bucket.

Well Did not dewater or exhibit Significant drawdown.

3.0 gal

Did well dewater? :	No	Amount of H20 actually evacuated:	~~2.0~~ gal
Sampling Time:	NA	Sampling Date:	N/A
Sample ID:		Laboratory:	
Analyzed for:			
Equipment Blank ID:		Duplicate ID:	
Other Information:			

LPH Removal Field Sheet

Project No.:	Springfield 5468		
Sampler:	CHh	Gauging Date:	2/18/25
Well ID:	MW-5	Well Diameter (in):	4"
Total Well Depth (ft):	~~8.50~~ 22.50	Depth to Water (ft):	8.50
Depth to Free Product:	—	Thickness of Free Product (ft):	0
to:		Equipment:	Interface probe

Purge Method:	Skimmer / Bailer
Sampling Method:	Other:

Purge Start Time: 0730 Flow Rate: ~~8~~ NA Pump Depth (ft): 9'

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	
0753		8.63	2.0	Trace	

Faint Sheen in Skimmer and Bailer evacuated water. Few strands

Did well dewater? :	NO	Amount of H20 actually evacuated:	2.0 gal
Sampling Time:	N/A	Sampling Date:	N/A
Sample ID:	N/A	Laboratory:	
Analyzed for:			
Equipment Blank ID:		Duplicate ID:	
Other Information:			

LPH Removal Field Sheet

Project No.: Springfield, OR LPH 1Q25	
Sampler: CHa	Gauging Date: 1/23/25
Well ID: MW-5	Well Diameter (in): 4"
Total Well Depth (ft): ~22.50	Depth to Water (ft): 9.45
Depth to Free Product: N/A	Thickness of Free Product (ft):
to:	Equipment:

Purge Method: Skimmer + Bail	
Sampling Method:	Other: —

Purge Start Time: 810 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

- Skimmer Drained and bailer deployed for additional recovery.

Did well dewater? : No	Amount of H20 actually evacuated: ~20 2.25
Sampling Time:	Sampling Date:
Sample ID:	Laboratory:
Analyzed for:	
Equipment Blank ID:	Duplicate ID:
Other Information: Strong Sheen on evacuated contents.	

LPH Removal Field Sheet

Project No.: Springfield LPH 1Q25	
Sampler: CHM	Gauging Date: 1/23/25
Well ID: MW-6	Well Diameter (in): 4"
Total Well Depth (ft): 24.10	Depth to Water (ft): 10.77
Depth to Free Product: 10.74	Thickness of Free Product (ft):
to:	Equipment: Interface probe

Purge Method: Bailer + Skimmer	
Sampling Method: NA	Other: —

Purge Start Time: 0738 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

Skimmer emptied. Bailer used to recover upper portion of water column.

Did well dewater? : No	Amount of H20 actually evacuated: 2.5
Sampling Time: —	Sampling Date:
Sample ID: —	Laboratory:
Analyzed for: —	
Equipment Blank ID: —	Duplicate ID:

Other Information:

Faint to strong sheen

LPH Removal Field Sheet

Project No.:	Spring Field, OR 1025 LPH		
Sampler:	CHM	Gauging Date:	1/23/25
Well ID:	FW-1R	Well Diameter (in):	4"
Total Well Depth (ft):	~17.50	Depth to Water (ft):	10.90
Depth to Free Product:	Not observed	Thickness of Free Product (ft):	-
to:		Equipment:	Interface probe

Purge Method:	Skimmer & Bailer		
Sampling Method:	NA	Other:	—

Purge Start Time: 840 Flow Rate: _____ Pump Depth (ft): _____

Time	DTP (feet btoc)	DTW	Water Removed	LPH Removed	

Skimmer emptied. Bailer deployed for additional recovery.

Did well dewater? :	No	Amount of H20 actually evacuated:	3.0
Sampling Time:	NA	Sampling Date:	
Sample ID:		Laboratory:	
Analyzed for:			
Equipment Blank ID:		Duplicate ID:	

Other Information:

Strong Sheen.

WELL GAUGING DATA FORM

Site Name: 5468
Project No:

Location: Springfield, OR
Date: 1/22/25
Technician: CMH

Well ID	Time	Well Dia (inch)	Sheen / Odor	Depth to Product (feet)	Thickness of Product (feet)	Depth to Water (feet)	Total Well Depth (feet below TOC)[1]	Date of Sample	Time of Sample
MW-3	1320	4"	odor	–	–	11.25	24.03	–	–
MW-2	1248	4	odor	–	–	11.57	24.92	–	–
MW-11	1243	4	No	–	–	11.39	26.68	–	–
MW-12	1418	4	No	–	–	12.32	20.00	–	–
MW-1	1428	4	No	–	–	12.40	24.03	–	–
EW-4	1245	4	odor	–	–	11.67	23.00	–	–
MW-4	1400	4	No	–	–	9.90	23.80	–	–
MW-13	1613	4	No	–	–	10.33	19.85	–	–
MW-8	1603	4	No	–	–	10.90	17.95	–	–
MW-10	1513	4	odor	–	–	11.55	17.90	–	–
MW-7	1436	4	odor	–	–	11.92	24.88	–	–
EW-2R	1313	4	odor	–	–	11.16	22.85	–	–
MW-9	1221	4	No	–	–	9.10	17.25	–	–
MW-5	0810	4	odor/sheen	–	–	9.45	22.50	–	–
MW-6	0738	4	odor/sheen	10.74	0.03	10.77	24.10	–	–
EW-1R	0840	4	odor/sheen	–	–	10.90	7.50	–	–

Notes:

MW-10 missing bolts.

7 Drums, ~20 gal in Drum stored contents from removal/inspection event

N - No
Y - Yes
NA - not applicable
NM - not measured
TOC - top of casing
mg/L: milligrams per Liter

[1] - If not TOC, survey point will be noted

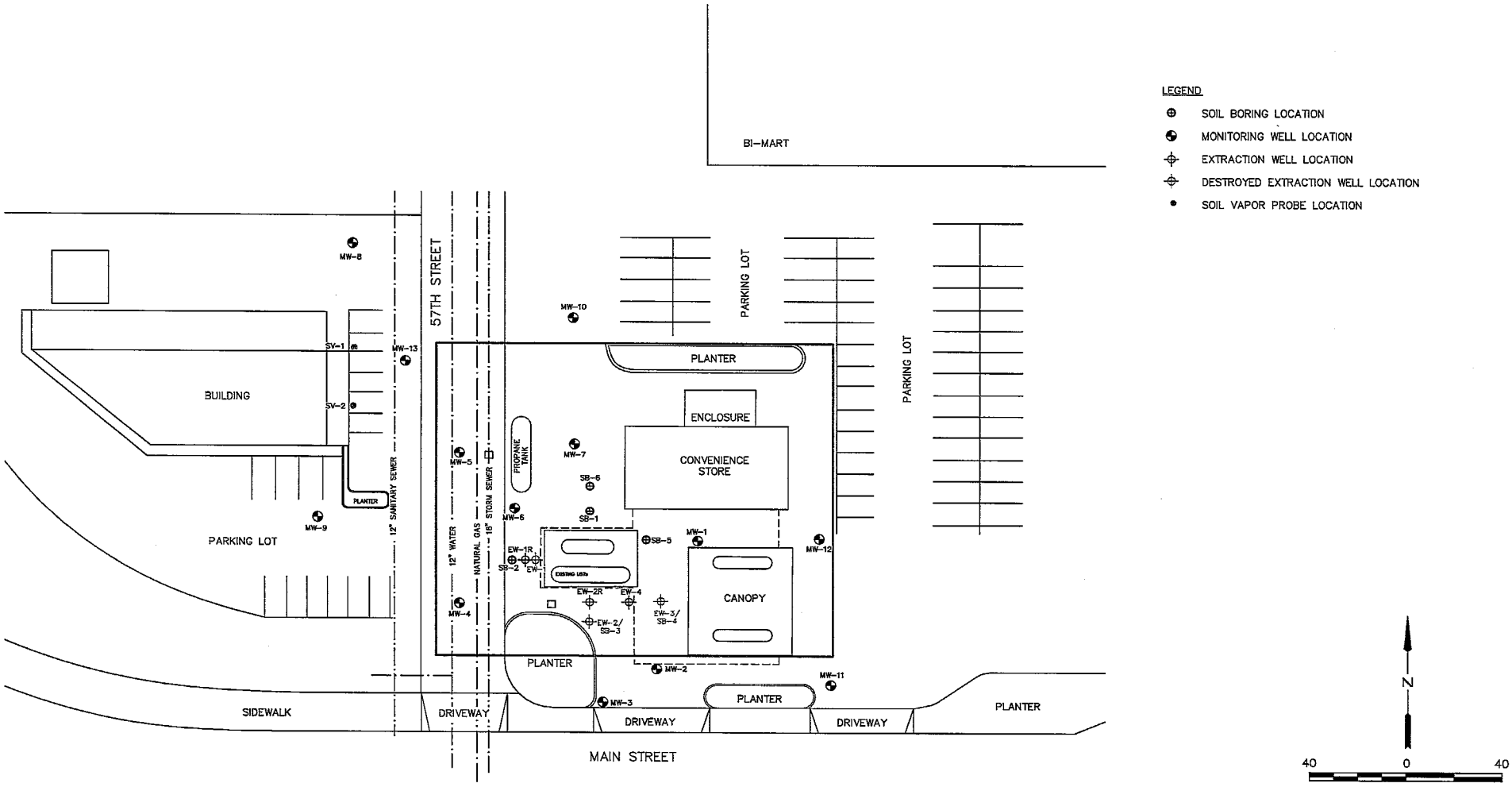
WELLHEAD INSPECTION FORM

PN: _____ Date: 1/23/25 Page: 1 of 1

Site: 5720 Main St, Client: Montrose, Environmental

Technician: _____

Well ID	Well inspected - No corrective action required	Cap non-functional	Lock non-functional	Bolts missing (list quantity)	Tabs stripped (list quantity)	Tabs broken (list quantity)	Annular seal incomplete	Apron damaged	Rim/lid broken	Trip hazard	Below grade	Other (explain in notes)	Well not inspected (explain in notes)	NOTES - please note if cap or lock is replaced, if there are access issues associated with repairs, if traffic control is required, if stand pipe is damaged, or any other details not covered by checklist
MW1				3										
MW2				2										
MW3	✓													
MW4	✓													
MW5	✓													
MW6	✓													
MW7				2										
MW8	✓													
MW9	✓													
MW10				2										
MW11	✓													
MW12	✓													
MW13	✓													Bentonite in Manument
EW-1R	✓													
EW-2R	✓													
EW-4	✓													



MONTROSE ENVIRONMENTAL

FIGURE 2

AREA PLAN

United Pacific #5468
5720 Main Street,
Springfield, OR 97478

DATE DRAWN
11/27/2024

PROJECT NO.
027409

FILE NO.
027409F2-AP

R:\03_Site Assessment & Remediation\United Pacific\5468, Springfield, OR\Reports\2024 Additional Well Install (offsite Well & Probes)\Figures\004668.dwg

APPENDIX B

Site Background Information

SITE BACKGROUND
United Pacific #5468
5720 Main Street
Springfield Oregon

Site Assessment and Remediation History

The Site is an active retail fueling station located on the north side of Main Street, approximately 500 feet east of the intersection of Main Street and Bob Straub Parkway. The Site is located at the southern end of a large parking lot for multiple retail stores and restaurants. The property is improved with a convenience store and canopy covering four dispenser islands, each with one fuel dispenser. Gasoline and diesel fuel are both dispensed at the Site.

Three USTs are located on the Site; two contain unleaded gasoline and one contains diesel fuel. The capacities of the USTs are 12,000 gallons each. Note that the UST containing premium grade gasoline, suspected of leaking, was emptied and is not in use; UP plans to replace the entire fuel distribution system at the Site. The regular grade gasoline and diesel USTs are currently active.

A petroleum release at the Site was reported to DEQ in 1989. Various groundwater monitoring wells and remediation wells were installed and a remediation system was operated at the Site. A second fuel release was reported in 1997 and the remediation system operated until 2000. Numerous site assessments and groundwater monitoring events were conducted throughout the years and eventually, in 2012, the Site was granted NFA status by DEQ and the environmental issues at the Site were considered resolved.

On September 21, 2020, UP notified the DEQ of a failure of the UST containing premium gasoline at the Site and that the tank had been emptied and taken offline. On September 22, 2020, UP contacted Montrose to relay concerns regarding one of the USTs at the Site; the continuous statistical leak detection (CSLD) system had indicated a failure of the UST containing premium gasoline. On September 23, 2020, a *UST Petroleum Release Form* was submitted to the DEQ to further document the release. On September 24, 2020, Montrose performed a visit to inspect the Site and review recent fuel inventory records (kept in the convenience store office). Based on conversations with the station manager and a review of fuel inventory documents, problems with the fuel inventory were first observed on or around August 13, 2020. On September 15, 2020, the station stopped dispensing premium gasoline and over the next several days, physical measurements of the fuel level in the premium UST indicated that gasoline was exiting the system.

On September 19, 2020, approximately 3,914 gallons of gasoline was removed from the premium UST and on September 23, 2020, the fuel level was pumped down to the lowest achievable level and the fuel was transported offsite for disposal.

On October 13, 2020, Montrose prepared and submitted an Initial (Twenty Day) Report Form for UST Cleanup Projects to the DEQ and DEQ assigned the following leaking underground storage tank (LUST) number to the Site: 20-20-0844. Note, the Site had previously been identified by the following underground storage tank (UST) number: 791.

In November 2020, Montrose performed an initial site assessment which included advancing six soil borings (SB-1 through SB-6) using direct-push drilling techniques and the installation of three LPH extraction wells (EW-1 through EW-3) using roto-sonic drilling techniques. Visible LPH was observed during the advancement of Borings SB-2 through SB-5 and therefore, soil samples were only collected from Borings SB-1 and SB-6. Wells EW-1 through EW-3 were installed in an effort to access and recover the LPH observed during the initial direct-push drilling. Complete details of the work were reported in the *Initial Site Assessment and Interim Remedial Action Report,* dated December 15, 2021. Three soil samples collected contained COCs at concentrations exceeding the DEQ's RBCs for the leaching to groundwater scenario.

During January and February 2021, Montrose performed four separate LPH removal events, during which LPH and impacted groundwater were removed from Wells EW-1 through EW-3. LPH was recovered using various techniques including manual bailing and the use of a vacuum truck. On February 25, 2021, passive down-hole product skimmers were installed in Wells EW-2 and EW-3 to enhance recovery of LPH.

In February and March 2021, Montrose conducted additional site assessment work at the Site which included a vapor intrusion (VI) assessment, utility corridor assessment, and well installation activities. The VI assessment consisted of the collection of two sub-slab soil gas samples (SVP-1 and SVP-2), one indoor ambient air sample, and one outdoor ambient air sample. Additionally, seven groundwater monitoring wells (MW-1 through MW-7) were installed at the Site. Results of the VI assessment indicated that vapors from the liquid phase and dissolved phase hydrocarbon plumes beneath the Site did not currently pose a threat to either indoor or outdoor air. Soil samples collected from five of the seven wells contained COCs at concentrations exceeding DEQ's RBCs for the leaching to groundwater scenario. Following well installation, quarterly groundwater monitoring was initiated at the Site. Initial groundwater monitoring results indicated the presence of LPH or elevated COC concentrations in a majority of the wells. Complete details were reported in the *Additional Site Assessment, Well Installation, Vapor Intrusion, and Groundwater Monitoring Report*, dated June 7, 2021.

In September 2021, additional sub-slab soil vapor and indoor air and ambient air sampling was conducted. The results were reported in the *Third Quarter 2021 Air Monitoring Report*, dated November 16, 2021. Quarterly groundwater monitoring, continued VI assessment and LPH removal efforts are ongoing.

Montrose submitted the *Workplan for Additional Soil and Groundwater Investigation*, dated October 12, 2021, which proposed the installation of up to five additional groundwater monitoring wells, one soil vapor probe, continued vapor intrusion assessment, the collection of additional vapor and ambient air samples, and the completion of a preliminary site conceptual model. The DEQ concurred with the Workplan in their letter dated December 6, 2021.

In December 2021, additional sub-slab soil vapor and indoor air and ambient air sampling was conducted with the results presented in the *Fourth Quarter 2021 Air Monitoring Report,* dated March 10, 2022. The preliminary site conceptual model was completed by Montrose on February 1, 2022, and was sent to the DEQ and UP.

In February 2022, extraction wells EW-1, EW-2 and EW-3, located adjacent to the UST cavity, were decommissioned in advance of planned replacement of the fuel distribution system at the site. The field activities were summarized in the *Well Decommissioning Report*, dated April 25, 2022.

Beginning in March 2022, the fuel distribution system at the Site was replaced by Anderson Environmental Contracting of Kelso, Washington. Following removal of the old USTs, approximately 660 tons of petroleum contaminated soil (PCS) was over-excavated from the UST pit and exported to Coffin Butte Landfill, in Corvallis, Oregon. In addition to soil removal, approximately 47,000 gallons of UST pit water was pumped and disposed of to facilitate the installation of the two new USTs; one 20,000-gallon tank containing diesel and one 20,000-gallon dual-compartment UST containing 12,000-gallons of unleaded gasoline and 8,000-gallons of premium gasoline. Montrose conducted the decommissioning soil sampling as required by Oregon state law. Several soil samples collected from beneath former product lines contained COCs at concentrations exceeding applicable CULs. Montrose directed the over-excavation of soil from those areas and collected confirmation soil samples to show that all PCS was removed. Installation of the new fuel distribution system and rehabilitation of the Site was complete by June 30, 2022.

In September 2022, Montrose conducted drilling activities at the Site which included the installation of three replacement wells identified as EW-1R, EW-2R, and EW-4. The three wells serve as replacements for Wells EW-1, EW-2, and EW-3 that were formally decommissioned in February 2022, prior to the replacement of the fuel distribution system.

In November 2022, Montrose conducted additional assessment activities at the Site which included the installation of four groundwater monitoring wells at locations which served to further delineate hydrocarbon impacts beneath the site and neighboring properties. The wells were identified as MW-8 through MW-11. A fifth well was planned but was ultimately not installed due to time constraints for the project. Soil samples were collected from each of the borings and analyzed for fuel constituents. COCs were not detected at concentrations exceeding applicable CULs. Complete results were presented in the *Additional Site Assessment and Fourth Quarter 2022 Groundwater Monitoring Report*, dated March 2, 2023.

In March 2023, a limited step pumping test was performed in order to determine certain aquifer parameters and to acquire field data needed to assist in the design of a long-term remedial plan for the Site. Results of the test were presented in the *Aquifer Pumping Test Report*, dated May 31, 2023. The pumping test was performed in general accordance with *Workplan for Remedial Pilot Testing*, dated December 5, 2022.

In October 2024, Montrose conducted additional assessment activities at the Site which included the installation of two groundwater monitoring wells at locations to further investigate impacts northwest by the installation of MW-13 and to further define the plume to the east MW-12 at locations that were precleared during assessment activities. Additionally, two soil vapor probes (SV-1 and SV-2) were installed to further investigate impacts northwest of the Site.

Quarterly groundwater monitoring and periodic LPH removal efforts are ongoing at the Site while remedial strategies are being evaluated.

APPENDIX C

Laboratory Analytical Report

Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957
Phone (360) 352-2110 • libbyenv@gmail.com

March 27, 2025

Laura Skow
Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

RE: Springfield 5468
Work Order Number: L25C079

Enclosed are the results of analyses for samples received by our laboratory on 3/20/2025.

Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please feel free to contact us. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry Chilcutt
Senior Chemist

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Ph: 360-352-2110
Fax: 360-352-4154

Chain of Custody Record

www.LibbyEnvironmental.c

Date:

Page: 1 of 1

Client: Montrose Env

Project Manager: Laura Skow

Address: 1631 E. Saint Andrew Pl

Project Name: Springfield 5468

City: Santa Ana State: Ca Zip: 92705

Location: 5720 Main St City, State: Springfield, OR

Phone: 714-743-7855 Fax:

Collector: Charles McFadden Date of Collection:

Client Project # PROJ-027409

Email: LSkow@Montrose-env.com

	Sample Number	Depth	Time	Sample Type	Container Type	VOC 8260 + MTCA	PCE & Daughter Prod.	NWTPH-Gx	BTEX (8260) / (8021)	NWTPH-HCID	NWTPH-Dx / Dx	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	cPAH 8270	PAH 8270	Semi Vol 8270			Field Notes
1	MW-9	N/A	0755	water	3 VOA	X		X												3/19/25
2	MW-11		0828			X		X												
3	MW-12		0859			X		X												
4	MW-1		0929			X		X												
5	MW-10		1008			X		X												
6	MW-13		1046			X		X												
7	MW-4		1133			X		X												
8	Dup-1		1200			X		X												
9	MW-2		1221			X		X												
10	MW-3		1306			X		X												
11	EW-2R		1348			X		X												
12	EB-1		1415			X		X												
13	MW-8		0734			X		X												3/20/25
14	MW-7		0812			X		X												
15	EW-4		0852			X		X												
16	EB-2		0908			X		X												
17	Trip Blanks		NA	water		X		X												

Relinquished by:	Date / Time	Received by:	Date / Time
	3/20/25		3.20.25 1505
Relinquished by:	Date / Time	Received by:	Date / Time
Relinquished by:	Date / Time	Received by:	Date / Time

Sample Receipt

Good Condition?	Y	N
Cooler Temp.		°C
Sample Temp.		°C
Total Number of Containers	48	

Remarks: PO-081531

TAT: 1-Day 2-Day 5-DAY

Distribution: White - Lab, Yellow - Originator

Libby Environmental, Inc.

Montrose Environmental Group, Inc. 4150 B Place NW, Suite 106 Auburn, WA 98001	**Project:** Springfield 5468 **Project Number:** 027409 **Project Manager:** Laura Skow	**City/State:** Springfield, OR **Work Order:** L25C079 **Reported:** 03/27/2025 12:29

Notes and Definitions

Item	Definition
D	Dilution was required.
S1	Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
RL	Reporting Limit
ND	Analyte NOT DETECTED at or above the reporting limit
DET	Analyte DETECTED at or above the reporting limit
Qual	Qualifier
	All results reported on an "as received" basis unless indicated by "Dry"
RPD	Relative Percent Difference
%REC	Percent Recovery
Parent	Sample that was matrix spiked or duplicated

Work Order Sample Summary

Lab ID	Sample	Matrix	Date Sampled	Date Received
L25C079-01	MW-9	Water	03/19/2025	03/20/2025
L25C079-02	MW-11	Water	03/19/2025	03/20/2025
L25C079-03	MW-12	Water	03/19/2025	03/20/2025
L25C079-04	MW-1	Water	03/19/2025	03/20/2025
L25C079-05	MW-10	Water	03/19/2025	03/20/2025
L25C079-06	MW-13	Water	03/19/2025	03/20/2025
L25C079-07	MW-4	Water	03/19/2025	03/20/2025
L25C079-08	DUP-1	Water	03/19/2025	03/20/2025
L25C079-09	MW-2	Water	03/19/2025	03/20/2025
L25C079-10	MW-3	Water	03/19/2025	03/20/2025
L25C079-11	EW-2R	Water	03/19/2025	03/20/2025
L25C079-12	EB-1	Water	03/19/2025	03/20/2025
L25C079-13	MW-8	Water	03/20/2025	03/20/2025
L25C079-14	MW-7	Water	03/20/2025	03/20/2025
L25C079-15	EW-4	Water	03/20/2025	03/20/2025
L25C079-16	EB-2	Water	03/20/2025	03/20/2025
L25C079-17	Trip Blank	Water	03/19/2025	03/20/2025

Libby Environmental, Inc.

Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

Project: Springfield 5468
Project Number: 027409
Project Manager: Laura Skow

City/State: Springfield, OR
Work Order: L25C079
Reported: 03/27/2025 12:29

Libby Environmental Sample Detection Summary

Analyte	Result	Qual	Units	RL	Method
Sample: **MW-13**			Lab#: L25C079-06		
Gasoline	1200		ug/L	100	NWTPH-Gx
Benzene	120		ug/L	1.0	8260D
Toluene	190		ug/L	2.0	8260D
Ethylbenzene	54		ug/L	1.0	8260D
Total Xylenes	260		ug/L	2.0	8260D
Sample: **MW-4**			Lab#: L25C079-07		
Gasoline	6800	D	ug/L	1000	NWTPH-Gx
Benzene	500	D	ug/L	10	8260D
Toluene	300	D	ug/L	20	8260D
Ethylbenzene	360	D	ug/L	10	8260D
Total Xylenes	1600	D	ug/L	20	8260D
Naphthalene	64		ug/L	5.0	8260D
2-Methylnaphthalene	35		ug/L	5.0	8260D
1-Methylnaphthalene	31		ug/L	5.0	8260D
Sample: **DUP-1**			Lab#: L25C079-08		
Gasoline	1600		ug/L	100	NWTPH-Gx
Benzene	21		ug/L	1.0	8260D
Toluene	29		ug/L	2.0	8260D
Ethylbenzene	33		ug/L	1.0	8260D
Total Xylenes	190		ug/L	2.0	8260D
Naphthalene	6.8		ug/L	5.0	8260D
2-Methylnaphthalene	8.9		ug/L	5.0	8260D
1-Methylnaphthalene	9.8		ug/L	5.0	8260D
Sample: **MW-2**			Lab#: L25C079-09		
Gasoline	1600		ug/L	100	NWTPH-Gx
Benzene	20		ug/L	1.0	8260D
Toluene	28		ug/L	2.0	8260D
Ethylbenzene	34		ug/L	1.0	8260D
Total Xylenes	200		ug/L	2.0	8260D
Naphthalene	7.1		ug/L	5.0	8260D
2-Methylnaphthalene	9.0		ug/L	5.0	8260D
1-Methylnaphthalene	9.0		ug/L	5.0	8260D

Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

Project: Springfield 5468
Project Number: 027409
Project Manager: Laura Skow

City/State: Springfield, OR
Work Order: L25C079
Reported: 03/27/2025 12:29

Libby Environmental Sample Detection Summary (Continued)

Analyte	Result	Qual	Units	RL	Method
Sample: **MW-3**			Lab#: L25C079-10		
Gasoline	660		ug/L	100	NWTPH-Gx
Benzene	290	D	ug/L	10	8260D
Toluene	3.9		ug/L	2.0	8260D
Ethylbenzene	48		ug/L	1.0	8260D
Total Xylenes	7.8		ug/L	2.0	8260D
Naphthalene	7.2		ug/L	5.0	8260D
Sample: **EW-2R**			Lab#: L25C079-11		
Gasoline	94000	D	ug/L	10000	NWTPH-Gx
Benzene	160		ug/L	1.0	8260D
Toluene	4100	D	ug/L	200	8260D
Ethylbenzene	1400	D	ug/L	10	8260D
Total Xylenes	19000	D	ug/L	200	8260D
Naphthalene	230	D	ug/L	50	8260D
2-Methylnaphthalene	200	D	ug/L	50	8260D
1-Methylnaphthalene	130		ug/L	5.0	8260D
Sample: **EB-1**			Lab#: L25C079-12		
Total Xylenes	10		ug/L	2.0	8260D
Sample: **MW-7**			Lab#: L25C079-14		
Gasoline	3800		ug/L	100	NWTPH-Gx
Benzene	310	D	ug/L	10	8260D
Toluene	55		ug/L	2.0	8260D
Ethylbenzene	240	D	ug/L	10	8260D
Total Xylenes	170		ug/L	2.0	8260D
Naphthalene	57		ug/L	5.0	8260D
2-Methylnaphthalene	49		ug/L	5.0	8260D
1-Methylnaphthalene	36		ug/L	5.0	8260D

Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

Project: Springfield 5468
Project Number: 027409
Project Manager: Laura Skow

City/State: Springfield, OR
Work Order: L25C079
Reported: 03/27/2025 12:29

Libby Environmental Sample Detection Summary (Continued)

Analyte	Result	Qual	Units	RL	Method
Sample: **EW-4**			Lab#: L25C079-15		
Gasoline	54000	D	ug/L	10000	NWTPH-Gx
Benzene	2000	D	ug/L	100	8260D
Toluene	10000	D	ug/L	200	8260D
Ethylbenzene	1900	D	ug/L	100	8260D
Total Xylenes	9000	D	ug/L	200	8260D
Naphthalene	230	D	ug/L	50	8260D
2-Methylnaphthalene	170	D	ug/L	50	8260D
1-Methylnaphthalene	140		ug/L	5.0	8260D
Sample: **EB-2**			Lab#: L25C079-16		
Benzene	1.7		ug/L	1.0	8260D
Toluene	5.0		ug/L	2.0	8260D
Total Xylenes	3.8		ug/L	2.0	8260D

Note: If no entry is made, then no target compounds were detected.

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Sample Results

Client Sample ID: MW-9

Lab ID: L25C079-01 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*115%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*116%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*97.3%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*72.2%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*97.3%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-11

Lab ID: L25C079-02 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*108%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*113%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*92.3%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*73.3%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*92.3%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-12

Lab ID: L25C079-03 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*113%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*110%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*96.8%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*73.6%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*96.8%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-1

Lab ID: L25C079-04 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*115%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*111%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*98.8%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*80.2%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*98.8%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-10

Lab ID: L25C079-05 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*113%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*111%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*97.6%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*70.2%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*97.6%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-13

Lab ID: L25C079-06 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	120		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	190		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	54		1.0	ug/L	03/24/2025	AA
Total Xylenes	260		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*108%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*111%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*102%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*101%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	1200		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*102%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-4

Lab ID: L25C079-07 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	500	D	10	ug/L	03/25/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	300	D	20	ug/L	03/25/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	360	D	10	ug/L	03/25/2025	AA
Total Xylenes	1600	D	20	ug/L	03/25/2025	AA
Naphthalene	64		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	35		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	31		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*105%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*102%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*100%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*111%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	6800	D	1000	ug/L	03/25/2025	AA
Surrogate: Toluene-d8	*98.6%*	*D*	*52.7-151*		*03/25/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: DUP-1

Lab ID: L25C079-08 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	21		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	29		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	33		1.0	ug/L	03/24/2025	AA
Total Xylenes	190		2.0	ug/L	03/24/2025	AA
Naphthalene	6.8		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	8.9		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	9.8		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*103%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*107%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*104%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*107%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	1600		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*104%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-2

Lab ID: L25C079-09 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	20		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	28		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	34		1.0	ug/L	03/24/2025	AA
Total Xylenes	200		2.0	ug/L	03/24/2025	AA
Naphthalene	7.1		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	9.0		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	9.0		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*106%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*109%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*98.3%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*109%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	1600		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*98.3%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-3

Lab ID: L25C079-10 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	290	D	10	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	3.9		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	48		1.0	ug/L	03/24/2025	AA
Total Xylenes	7.8		2.0	ug/L	03/24/2025	AA
Naphthalene	7.2		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*110%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*107%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*99.1%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*89.2%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	660		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*99.1%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: EW-2R

Lab ID: L25C079-11 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/25/2025	AA
Benzene	160		1.0	ug/L	03/25/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/25/2025	AA
Toluene	4100	D	200	ug/L	03/25/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/25/2025	AA
Ethylbenzene	1400	D	10	ug/L	03/25/2025	AA
Total Xylenes	19000	D	200	ug/L	03/25/2025	AA
Naphthalene	230	D	50	ug/L	03/25/2025	AA
2-Methylnaphthalene	200	D	50	ug/L	03/25/2025	AA
1-Methylnaphthalene	130		5.0	ug/L	03/25/2025	AA
Surrogate: Dibromofluoromethane	*99.4%*		*43.1-192*		*03/25/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*103%*		*29.2-203*		*03/25/2025*	*AA*
Surrogate: Toluene-d8	*105%*		*52.7-151*		*03/25/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*112%*		*58.9-123*		*03/25/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	94000	D	10000	ug/L	03/25/2025	AA
Surrogate: Toluene-d8	*94.8%*	*D*	*52.7-151*		*03/25/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: EB-1

Lab ID: L25C079-12 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	10		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*112%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*108%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*98.8%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*79.2%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*98.8%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-8

Lab ID: L25C079-13 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*111%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*104%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*97.5%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*77.6%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*97.5%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: MW-7

Lab ID: L25C079-14 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	310	D	10	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	55		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	240	D	10	ug/L	03/24/2025	AA
Total Xylenes	170		2.0	ug/L	03/24/2025	AA
Naphthalene	57		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	49		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	36		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*109%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*115%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*101%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*101%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	3800		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*101%*		*52.7-151*		*03/24/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: EW-4

Lab ID: L25C079-15 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/25/2025	AA
Benzene	2000	D	100	ug/L	03/25/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/25/2025	AA
Toluene	10000	D	200	ug/L	03/25/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/25/2025	AA
Ethylbenzene	1900	D	100	ug/L	03/25/2025	AA
Total Xylenes	9000	D	200	ug/L	03/25/2025	AA
Naphthalene	230	D	50	ug/L	03/25/2025	AA
2-Methylnaphthalene	170	D	50	ug/L	03/25/2025	AA
1-Methylnaphthalene	140		5.0	ug/L	03/25/2025	AA
Surrogate: Dibromofluoromethane	*85.7%*		*43.1-192*		*03/25/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*92.6%*		*29.2-203*		*03/25/2025*	*AA*
Surrogate: Toluene-d8	*101%*		*52.7-151*		*03/25/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*106%*		*58.9-123*		*03/25/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	54000	D	10000	ug/L	03/25/2025	AA
Surrogate: Toluene-d8	*99.9%*	*D*	*52.7-151*		*03/25/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: EB-2

Lab ID: L25C079-16 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/25/2025	AA
Benzene	1.7		1.0	ug/L	03/25/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/25/2025	AA
Toluene	5.0		2.0	ug/L	03/25/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/25/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/25/2025	AA
Total Xylenes	3.8		2.0	ug/L	03/25/2025	AA
Naphthalene	ND		5.0	ug/L	03/25/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/25/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/25/2025	AA
Surrogate: Dibromofluoromethane	*113%*		*43.1-192*		*03/25/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*103%*		*29.2-203*		*03/25/2025*	*AA*
Surrogate: Toluene-d8	*97.8%*		*52.7-151*		*03/25/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*77.5%*		*58.9-123*		*03/25/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/25/2025	AA
Surrogate: Toluene-d8	*97.8%*		*52.7-151*		*03/25/2025*	*AA*

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Sample Results (Continued)

Client Sample ID: Trip Blank

Lab ID: L25C079-17 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
Volatile Organic Compounds by EPA Method 8260D						
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L	03/24/2025	AA
Benzene	ND		1.0	ug/L	03/24/2025	AA
1,2-Dichloroethane (EDC)	ND		1.0	ug/L	03/24/2025	AA
Toluene	ND		2.0	ug/L	03/24/2025	AA
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L	03/24/2025	AA
Ethylbenzene	ND		1.0	ug/L	03/24/2025	AA
Total Xylenes	ND		2.0	ug/L	03/24/2025	AA
Naphthalene	ND		5.0	ug/L	03/24/2025	AA
2-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
1-Methylnaphthalene	ND		5.0	ug/L	03/24/2025	AA
Surrogate: Dibromofluoromethane	*116%*		*43.1-192*		*03/24/2025*	*AA*
Surrogate: 1,2-Dichloroethane-d4	*121%*		*29.2-203*		*03/24/2025*	*AA*
Surrogate: Toluene-d8	*101%*		*52.7-151*		*03/24/2025*	*AA*
Surrogate: 4-Bromofluorobenzene	*83.6%*		*58.9-123*		*03/24/2025*	*AA*
Gasoline by Method NWTPH-Gx						
Gasoline	ND		100	ug/L	03/24/2025	AA
Surrogate: Toluene-d8	*101%*		*52.7-151*		*03/24/2025*	*AA*

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Quality Control

Volatile Organic Compounds by EPA Method 8260D

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BZC0120 - VOA										
Blank (BZC0120-BLK1)					Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L						
Benzene	ND		1.0	ug/L						
1,2-Dichloroethane (EDC)	ND		1.0	ug/L						
Toluene	ND		2.0	ug/L						
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L						
Ethylbenzene	ND		1.0	ug/L						
Total Xylenes	ND		2.0	ug/L						
Naphthalene	ND		5.0	ug/L						
2-Methylnaphthalene	ND		5.0	ug/L						
1-Methylnaphthalene	ND		5.0	ug/L						
Surrogate: Dibromofluoromethane			*22.8*	*ug/L*	*20.0*		*114*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*23.0*	*ug/L*	*20.0*		*115*	*29.2-203*		
Surrogate: Toluene-d8			*19.7*	*ug/L*	*20.0*		*98.4*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*15.2*	*ug/L*	*20.0*		*76.0*	*58.9-123*		
LCS (BZC0120-BS1)					Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	12.0		5.0	ug/L	10.0		120	11.9-212		
Benzene	10.5		1.0	ug/L	10.0		105	62.1-139		
1,2-Dichloroethane (EDC)	11.7		1.0	ug/L	10.0		117	49.1-182		
Toluene	11.2		2.0	ug/L	10.0		112	47.4-147		
1,2-Dibromoethane (EDB)	9.92		2.0	ug/L	10.0		99.2	54.4-153		
Ethylbenzene	9.39		1.0	ug/L	10.0		93.9	56.1-129		
Total Xylenes	32.2		2.0	ug/L	30.0		107	52.2-125		
Naphthalene	8.48		5.0	ug/L	10.0		84.8	10-180		
2-Methylnaphthalene	8.20		5.0	ug/L	10.0		82.0	16.1-204		
1-Methylnaphthalene	8.32		5.0	ug/L	10.0		83.2	10-205		
Surrogate: Dibromofluoromethane			*22.4*	*ug/L*	*20.0*		*112*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*20.9*	*ug/L*	*20.0*		*105*	*29.2-203*		
Surrogate: Toluene-d8			*19.9*	*ug/L*	*20.0*		*99.6*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*21.3*	*ug/L*	*20.0*		*106*	*58.9-123*		
Duplicate (BZC0120-DUP1)		**Parent: L25C079-12**			Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L		ND				35
Benzene	ND		1.0	ug/L		ND				35
1,2-Dichloroethane (EDC)	ND		1.0	ug/L		ND				35
Toluene	ND		2.0	ug/L		ND				35
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L		ND				35
Ethylbenzene	ND		1.0	ug/L		ND				35
Total Xylenes	8.94		2.0	ug/L		9.98			10.9	35
Naphthalene	ND		5.0	ug/L		ND				35
2-Methylnaphthalene	ND		5.0	ug/L		ND				35
1-Methylnaphthalene	ND		5.0	ug/L		ND				35
Surrogate: Dibromofluoromethane			*23.1*	*ug/L*	*20.0*		*115*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*22.2*	*ug/L*	*20.0*		*111*	*29.2-203*		
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.6*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*16.6*	*ug/L*	*20.0*		*83.2*	*58.9-123*		

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Quality Control
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Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (BZC0120-DUP2)		**Parent: L25C079-01**			Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L		ND				35
Benzene	ND		1.0	ug/L		ND				35
1,2-Dichloroethane (EDC)	ND		1.0	ug/L		ND				35
Toluene	ND		2.0	ug/L		ND				35
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L		ND				35
Ethylbenzene	ND		1.0	ug/L		ND				35
Total Xylenes	ND		2.0	ug/L		ND				35
Naphthalene	ND		5.0	ug/L		ND				35
2-Methylnaphthalene	ND		5.0	ug/L		ND				35
1-Methylnaphthalene	ND		5.0	ug/L		ND				35
Surrogate: Dibromofluoromethane			*22.0*	*ug/L*	*20.0*		*110*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*23.3*	*ug/L*	*20.0*		*117*	*29.2-203*		
Surrogate: Toluene-d8			*19.4*	*ug/L*	*20.0*		*97.0*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*15.5*	*ug/L*	*20.0*		*77.7*	*58.9-123*		
Matrix Spike (BZC0120-MS1)		**Parent: L25C079-12**			Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	11.5		5.0	ug/L	10.0	ND	115	12.3-211		
Benzene	11.6		1.0	ug/L	10.0	ND	116	34-162		
1,2-Dichloroethane (EDC)	11.5		1.0	ug/L	10.0	ND	115	18.4-205		
Toluene	11.7		2.0	ug/L	10.0	ND	117	14.5-177		
1,2-Dibromoethane (EDB)	10.1		2.0	ug/L	10.0	ND	101	27.1-161		
Ethylbenzene	10.1		1.0	ug/L	10.0	ND	101	49.5-141		
Total Xylenes	43.4		2.0	ug/L	30.0	9.98	111	43.1-142		
Naphthalene	7.83		5.0	ug/L	10.0	ND	78.3	10-197		
2-Methylnaphthalene	8.42		5.0	ug/L	10.0	ND	84.2	10-200		
1-Methylnaphthalene	9.39		5.0	ug/L	10.0	ND	93.9	10-209		
Surrogate: Dibromofluoromethane			*23.4*	*ug/L*	*20.0*		*117*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*21.8*	*ug/L*	*20.0*		*109*	*29.2-203*		
Surrogate: Toluene-d8			*20.8*	*ug/L*	*20.0*		*104*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*21.3*	*ug/L*	*20.0*		*107*	*58.9-123*		
Matrix Spike Dup (BZC0120-MSD1)		**Parent: L25C079-12**			Prepared & Analyzed: 3/24/2025					
Methyl tert-Butyl Ether (MTBE)	11.7		5.0	ug/L	10.0	ND	117	12.3-211	2.09	35
Benzene	12.0		1.0	ug/L	10.0	ND	120	34-162	3.68	35
1,2-Dichloroethane (EDC)	12.3		1.0	ug/L	10.0	ND	123	18.4-205	6.65	35
Toluene	11.6		2.0	ug/L	10.0	ND	116	14.5-177	0.625	35
1,2-Dibromoethane (EDB)	10.8		2.0	ug/L	10.0	ND	108	27.1-161	6.81	35
Ethylbenzene	9.01		1.0	ug/L	10.0	ND	90.1	49.5-141	11.1	35
Total Xylenes	41.5		2.0	ug/L	30.0	9.98	105	43.1-142	4.45	35
Naphthalene	8.44		5.0	ug/L	10.0	ND	84.4	10-197	7.55	35
2-Methylnaphthalene	11.2		5.0	ug/L	10.0	ND	112	10-200	28.4	35
1-Methylnaphthalene	11.4		5.0	ug/L	10.0	ND	114	10-209	19.8	35
Surrogate: Dibromofluoromethane			*23.7*	*ug/L*	*20.0*		*118*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*24.8*	*ug/L*	*20.0*		*124*	*29.2-203*		
Surrogate: Toluene-d8			*21.5*	*ug/L*	*20.0*		*107*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*20.8*	*ug/L*	*20.0*		*104*	*58.9-123*		
Blank (BZC0127-BLK1)					Prepared & Analyzed: 3/25/2025					
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L						
Benzene	ND		1.0	ug/L						
1,2-Dichloroethane (EDC)	ND		1.0	ug/L						
Toluene	ND		2.0	ug/L						
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L						

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Quality Control
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Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Blank (BZC0127-BLK1)					Prepared & Analyzed: 3/25/2025					
Ethylbenzene	ND		1.0	ug/L						
Total Xylenes	ND		2.0	ug/L						
Naphthalene	ND		5.0	ug/L						
2-Methylnaphthalene	ND		5.0	ug/L						
1-Methylnaphthalene	ND		5.0	ug/L						
Surrogate: Dibromofluoromethane			*22.1*	*ug/L*	*20.0*		*110*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*21.5*	*ug/L*	*20.0*		*108*	*29.2-203*		
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.6*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*15.3*	*ug/L*	*20.0*		*76.4*	*58.9-123*		
LCS (BZC0127-BS1)					Prepared & Analyzed: 3/25/2025					
Methyl tert-Butyl Ether (MTBE)	12.4		5.0	ug/L	10.0		124	11.9-212		
Benzene	11.1		1.0	ug/L	10.0		111	62.1-139		
1,2-Dichloroethane (EDC)	11.2		1.0	ug/L	10.0		112	49.1-182		
Toluene	11.6		2.0	ug/L	10.0		116	47.4-147		
1,2-Dibromoethane (EDB)	9.30		2.0	ug/L	10.0		93.0	54.4-153		
Ethylbenzene	11.6		1.0	ug/L	10.0		116	56.1-129		
Total Xylenes	34.3		2.0	ug/L	30.0		114	52.2-125		
Naphthalene	8.96		5.0	ug/L	10.0		89.6	10-180		
2-Methylnaphthalene	8.81		5.0	ug/L	10.0		88.1	16.1-204		
1-Methylnaphthalene	8.37		5.0	ug/L	10.0		83.7	10-205		
Surrogate: Dibromofluoromethane			*23.5*	*ug/L*	*20.0*		*118*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*21.2*	*ug/L*	*20.0*		*106*	*29.2-203*		
Surrogate: Toluene-d8			*20.2*	*ug/L*	*20.0*		*101*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*22.6*	*ug/L*	*20.0*		*113*	*58.9-123*		
Duplicate (BZC0127-DUP1)		**Parent: L25C079-16**			Prepared & Analyzed: 3/25/2025					
Methyl tert-Butyl Ether (MTBE)	ND		5.0	ug/L		ND				35
Benzene	1.57		1.0	ug/L		1.66			5.57	35
1,2-Dichloroethane (EDC)	ND		1.0	ug/L		ND				35
Toluene	4.92		2.0	ug/L		5.03			2.09	35
1,2-Dibromoethane (EDB) (SIM)	ND		0.010	ug/L		ND				35
Ethylbenzene	1.06		1.0	ug/L		ND				35
Total Xylenes	3.48		2.0	ug/L		3.84			9.72	35
Naphthalene	ND		5.0	ug/L		ND				35
2-Methylnaphthalene	ND		5.0	ug/L		ND				35
1-Methylnaphthalene	ND		5.0	ug/L		ND				35
Surrogate: Dibromofluoromethane			*22.6*	*ug/L*	*20.0*		*113*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*21.1*	*ug/L*	*20.0*		*105*	*29.2-203*		
Surrogate: Toluene-d8			*19.4*	*ug/L*	*20.0*		*96.9*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*16.0*	*ug/L*	*20.0*		*80.2*	*58.9-123*		

Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

Project: Springfield 5468
Project Number: 027409
Project Manager: Laura Skow

City/State: Springfield, OR
Work Order: L25C079
Reported: 03/27/2025 12:29

Quality Control
(Continued)

Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (BZC0127-MS1)		**Parent: L25C079-16**			Prepared & Analyzed: 3/25/2025					
Methyl tert-Butyl Ether (MTBE)	11.9		5.0	ug/L	10.0	ND	119	12.3-211		
Benzene	16.8		1.0	ug/L	10.0	1.66	151	34-162		
1,2-Dichloroethane (EDC)	11.2		1.0	ug/L	10.0	ND	112	18.4-205		
Toluene	44.2	S1	2.0	ug/L	10.0	5.03	392	14.5-177		
1,2-Dibromoethane (EDB)	11.1		2.0	ug/L	10.0	ND	111	27.1-161		
Ethylbenzene	17.0	S1	1.0	ug/L	10.0	ND	170	49.5-141		
Total Xylenes	61.3	S1	2.0	ug/L	30.0	3.84	191	43.1-142		
Naphthalene	8.86		5.0	ug/L	10.0	ND	88.6	10-197		
2-Methylnaphthalene	8.76		5.0	ug/L	10.0	ND	87.6	10-200		
1-Methylnaphthalene	8.02		5.0	ug/L	10.0	ND	80.2	10-209		
Surrogate: Dibromofluoromethane			*22.8*	*ug/L*	*20.0*		*114*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*20.8*	*ug/L*	*20.0*		*104*	*29.2-203*		
Surrogate: Toluene-d8			*20.3*	*ug/L*	*20.0*		*102*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*21.5*	*ug/L*	*20.0*		*107*	*58.9-123*		
Matrix Spike Dup (BZC0127-MSD1)		**Parent: L25C079-16**			Prepared & Analyzed: 3/25/2025					
Methyl tert-Butyl Ether (MTBE)	11.4		5.0	ug/L	10.0	ND	114	12.3-211	3.99	35
Benzene	17.6		1.0	ug/L	10.0	1.66	160	34-162	4.93	35
1,2-Dichloroethane (EDC)	11.2		1.0	ug/L	10.0	ND	112	18.4-205	0.599	35
Toluene	41.3	S1	2.0	ug/L	10.0	5.03	363	14.5-177	6.83	35
1,2-Dibromoethane (EDB)	11.6		2.0	ug/L	10.0	ND	116	27.1-161	4.50	35
Ethylbenzene	15.2	S1	1.0	ug/L	10.0	ND	152	49.5-141	11.6	35
Total Xylenes	59.3	S1	2.0	ug/L	30.0	3.84	185	43.1-142	3.28	35
Naphthalene	9.68		5.0	ug/L	10.0	ND	96.8	10-197	8.81	35
2-Methylnaphthalene	10.7		5.0	ug/L	10.0	ND	107	10-200	20.1	35
1-Methylnaphthalene	9.32		5.0	ug/L	10.0	ND	93.2	10-209	15.1	35
Surrogate: Dibromofluoromethane			*21.8*	*ug/L*	*20.0*		*109*	*43.1-192*		
Surrogate: 1,2-Dichloroethane-d4			*20.6*	*ug/L*	*20.0*		*103*	*29.2-203*		
Surrogate: Toluene-d8			*20.4*	*ug/L*	*20.0*		*102*	*52.7-151*		
Surrogate: 4-Bromofluorobenzene			*20.6*	*ug/L*	*20.0*		*103*	*58.9-123*		

Montrose Environmental Group, Inc.
4150 B Place NW, Suite 106
Auburn, WA 98001

Project: Springfield 5468
Project Number: 027409
Project Manager: Laura Skow

City/State: Springfield, OR
Work Order: L25C079
Reported: 03/27/2025 12:29

Quality Control
(Continued)

Gasoline by Method NWTPH-Gx

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BZC0120 - VOA										
Blank (BZC0120-BLK1)					Prepared & Analyzed: 3/24/2025					
Gasoline	ND		100	ug/L						
Surrogate: Toluene-d8			*19.7*	*ug/L*	*20.0*		*98.4*	*52.7-151*		
Duplicate (BZC0120-DUP1)		**Parent: L25C079-12**			Prepared & Analyzed: 3/24/2025					
Gasoline	ND		100	ug/L		ND				35
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.6*	*52.7-151*		
Duplicate (BZC0120-DUP2)		**Parent: L25C079-01**			Prepared & Analyzed: 3/24/2025					
Gasoline	ND		100	ug/L		ND				35
Surrogate: Toluene-d8			*19.4*	*ug/L*	*20.0*		*97.0*	*52.7-151*		
Blank (BZC0127-BLK1)					Prepared & Analyzed: 3/25/2025					
Gasoline	ND		100	ug/L						
Surrogate: Toluene-d8			*19.5*	*ug/L*	*20.0*		*97.6*	*52.7-151*		
Duplicate (BZC0127-DUP1)		**Parent: L25C079-16**			Prepared & Analyzed: 3/25/2025					
Gasoline	ND		100	ug/L		ND				35
Surrogate: Toluene-d8			*19.4*	*ug/L*	*20.0*		*96.9*	*52.7-151*		

Libby Environmental, Inc.

3322 South Bay Road NE
Olympia, WA 98506
Phone: (360) 352-2110
FAX: (360) 352-4154
Email: libbyenv@gmail.com

Springfield 5468 Project
Montrose Environmental Group, Inc.
Libby Work Order # L25C079
Date Received 3/20/2025
Time Received 3:05 PM

Received By AA

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody is complete?	☑ Yes	☐ No	
2. How was the sample delivered?	☑ Hand Delivered	☐ Picked Up	☐ Shipped

Log In

3. Cooler or Shipping Container is present.	☑ Yes	☐ No	☐ N/A
4. Cooler or Shipping Container is in good condition.	☑ Yes	☐ No	☐ N/A
5. Cooler or Shipping Container has Custody Seals present.	☐ Yes	☑ No	☐ N/A
6. Was an attempt made to cool the samples?	☑ Yes	☐ No	☐ N/A
7. Temperature of cooler (0°C to 8°C recommended)	0.1 °C		
8. Temperature of sample(s) (0°C to 8°C recommended)	3.9 °C		
9. Did all containers arrive in good condition (unbroken)?	☑ Yes	☐ No	
10. Is it clear what analyses were requested?	☑ Yes	☐ No	
11. Did container labels match Chain of Custody?	☑ Yes	☐ No	
12. Are matrices correctly identified on Chain of Custody?	☑ Yes	☐ No	
13. Are correct containers used for the analysis indicated?	☑ Yes	☐ No	
14. Is there sufficient sample volume for indicated analysis?	☑ Yes	☐ No	
15. Were all containers properly preserved per each analysis?	☑ Yes	☐ No	
16. Were VOA vials collected correctly (no headspace)?	☑ Yes	☐ No	☐ N/A
17. Were all holding times able to be met?	☑ Yes	☐ No	

Discrepancies/ Notes

18. Was client notified of all discrepancies? ☐ Yes ☐ No ☑ N/A

Person Notified: _____ Date: _____

By Whom: _____ Via: _____

Regarding: _____

19. Comments. _____

APPENDIX D

Groundwater Monitoring Field Forms

WELL GAUGING DATA FORM

Site Name: UP5968
Project No: 027409

Location: 5720 Main St, Stratford, ON
Date: 3/18/25
Technician: Charles McFadden

Well ID	Time	Well Dia (inch)	Sheen / Odor	Depth to Product (feet)	Thickness of Product (feet)	Depth to Water (feet)	Total Well Depth (feet below TOC)[1]	Date of Sample	Time of Sample
MW-1	1258	4"	–	–	–	10.43	24.40	3/19	0929
MW-2	1317	4"	–	–	–	9.80	24.92	3/19	1221
MW-3	1237	4"	Odor	–	–	9.63	24.65	3/19	1306
MW-4	1305	4"	–	–	–	8.18	23.80	3/19	1133
MW-5	1442	4"	Odor/Sheen	7.36	Sheen	7.36	22.55	3/19 NA	–
MW-6	1450	4"	Odor	8.68	0.04'	8.72	24.10	NA	–
MW-7	1353	4"	Odor	–	–	10.00	24.95	3/20	0812
MW-8	1400	4"	–	–	–	8.30	18.00	3/20	0734
MW-9	1406	4"	–	–	–	6.69	17.24	3/19	0753
MW-10	1345	4"	–	–	–	9.50	17.93	3/19	1008
MW-11	1250	2"	–	–	–	9.92	19.95	3/19	0829
MW-12	1245	4"	–	–	–	10.55	20.00	3/19	0859
MW-13	1332	4"	–	–	–	8.28	19.80	3/19	1046
EW-1R	1504	4"	Sheen/Odor	8.83	0.03'	8.86	23.00	NA	–
EW-2R	1422	4"	Odor	–	–	9.16	2280	–	1348
EW-4	1312	4"	Odor	–	–	9.98	23.00	3/20	0852

Notes:
1Q-2025 GW/M Event March 18th, 2025 - March 20th, 2025

N - No
Y - Yes
NA - not applicable
NM - not measured
TOC - top of casing
mg/L - milligrams per Liter

[1] - if not TOC, survey point will be noted

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: 495468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-1
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 0929
Contractor: Montrose

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	10.43	10.75
Depth of Well (ft)	24.40	NA
Water Column Height (ft)	13.97	13.65
Calculated Drawdown (ft)	NA	0.32
Depth to Top of Screen	5'	
Screen Length (ft)	20	
Pump depth (ft)	~20'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml): -
Volume of flow through cell (ml): -
Radius of dishcarge tubing (ft): -
Length of discharge tubing (ft): -
System Volume (ml): 2700
Total Volume Purged (ml): 4500
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
0916	1100	10.70	200-300	5.14	163.0	0.420	6.48	13.6	10.08	Clear
0920	1900	10.73	↓	4.96	162.8	0.421	6.48	13.9	8.29	
0925	2900	10.75	↓	4.91	162.4	0.423	6.48	13.9	8.63	
0928	3700	10.75	↓	4.89	162.3	0.424	6.48	13.9	8.01	
Stability:				± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Initial DTW 10.60 @ 911 on 3/19
Start 911, No odor, No sheen

Dissolved Iron (Fe^{+2}) = 0.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: WP 5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-2
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 1221
Contractor: Montrose

Well Diameter: 4"
Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.80	9.93
Depth of Well (ft)	24.92	NA
Water Column Height (ft)	15.12	14.99
Calculated Drawdown (ft)	NA	0.13
Depth to Top of Screen	5'	
Screen Length (ft)	20'	
Pump depth (ft)	12'	

System Volume[a] (ml) =bladder + discharge tubing

Volume of bladder pump (ml): –
Volume of flow through cell (ml): –
Radius of dishcarge tubing (ft): –
Length of discharge tubing (ft): –
System Volume (ml): –
Total Volume Purged (ml): 6000
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection

1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
1203	1300	9.92	200-300	1.00	-146.8	0.504	7.23	15.4	3.03	Clear/clear
1208	2200	9.92	↓	0.53	-159.6	0.505	7.22	15.5	3.02	↓
1211	2800	9.92		0.49	-161.7	0.504	7.23	15.6	2.71	
1214	3600	9.92		0.45	-164.5	0.505	7.23	15.6	2.65	
1217	4600	9.93		0.43	-166.4	0.505	7.23	15.6	2.84	
1220	5400	9.93		0.42	-167.1	0.505	7.23	15.6	2.94	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)

Start 1158, Initial = 9.90, odor, Dup-1 (3/19/25 1200)

Dissolved Iron (Fe^{+2}) = 3.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: LRP 5468 Springfield, OR
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-3
Equipment: YSI Geopump WLM
Sample ID/Time: 1306
Contractor: Mastrose

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.63	9.76
Depth of Well (ft) 29.65	24.66	NA
Water Column Height (ft)	15.02	14.89
Calculated Drawdown (ft)	NA	0.13
Depth to Top of Screen	5'	
Screen Length (ft)	20'	
Pump depth (ft)	12.5	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml): -
Volume of flow through cell (ml): -
Radius of dishcarge tubing (ft): -
Length of discharge tubing (ft): -
System Volume (ml): -
Total Volume Purged (ml): 5400
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
1300	1000	9.76	200-300	0.90	-36.6	0.522	7.24	15.5	63.48	cloudy clear
1253	1600	9.76		0.63	-31.5	0.522	7.24	15.5	97.98	
1256	2400	9.76		0.50	-29.4	0.523	7.24	15.5	13.72	
1259	3300	9.76		0.45	-29.3	0.524	7.24	15.6	13.13	
1302	3900	9.76		0.44	-29.6	0.524	7.24	15.6	14.40	
1305	4600	9.76		0.43	-29.8	0.522	7.24	15.5	13.08	
Stability:				± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Stwt 1245 DTW = 9.70, strong odor

Dissolved Iron (Fe^{+2}) = 0.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP 5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-4
Equipment: YSI, Geopump, Water
Sample ID/Time: 1133
Contractor: Matrix

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	8.18	8.30
Depth of Well (ft)	23.80	NA
Water Column Height (ft)	15.62	15.50
Calculated Drawdown (ft)	NA	0.12
Depth to Top of Screen	5'	
Screen Length (ft)	20	
Pump depth (ft)	~~9~~ 10	

System Volume[(a)] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 6100
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity ~~(us/cm)~~ mS/cm	pH	Temp (°C)	Turbidity (NTU)	Color
1112	700	8.30	200-300	1.32	-137.9	0.601	7.45	14.4	2.74	Clear
1115	1400	8.30		0.85	-145.2	0.601	7.47	14.4	3.99	
1118	2200	8.30		0.65	-151.2	0.603	7.48	14.5	2.69	
1122	3300	8.30		0.55	-154.4	0.605	7.49	14.2	2.61	
1126	4200	8.30		0.51	-156.0	0.603	7.49	14.5	3.64	
1129	5000	8.30		0.48	-157.6	0.603	7.48	14.7	2.98	
1132	5700	8.60		0.46	-158.4	0.604	7.49	14.6	3.12	
Stability:				± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 1108: DTW = 8.21
Odor, Strong odor
Dissolved Iron (Fe^{+2}) = 3.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: WP 5468
Project Number: 022409
Date: 3/20/25
ES Personnel: CHM

Well Number: MW-7
Equipment: YSI, Geopump, WLM
Sample ID/Time: 0912
Contractor: Manhose

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	10.00	10.39
Depth of Well (ft)	24.95	NA
Water Column Height (ft)	14.95	14.56
Calculated Drawdown (ft)	NA	0.39
Depth to Top of Screen	5'	
Screen Length (ft)	20'	
Pump depth (ft)	12-12.5'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5000
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
0758	1000	10.31	200-300	1.81	-121.3	0.683	7.24	13.2	12.88	Clear
0801	1800	10.38		0.74	-135.6	0.692	7.25	13.4	10.66	
0805	2600	10.39		0.52	-140.8	0.693	7.26	13.7	13.62	
0808	3400	10.39		0.52	-141.8	0.692	7.26	13.9	13.19	
0811	4400	10.39		0.51	-142.2	0.693	7.26	13.9	13.38	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 0753, DTW = 10.20, odw

Dissolved Iron (Fe^{+2}) = 5.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP Springfield Subs
Project Number: 027409
Date: 3/20/25
ES Personnel: CHM

Well Number: MW-8
Equipment: YSI DSS, WLM, Geopump
Sample ID/Time: 734
Contractor: Montrose

Well Diameter: 4"
Casing Material: PVC

Reference: Top of Casing	Before	After
Depth to Water (ft)	8.30	8.91
Depth of Well (ft)	18.00	NA
Water Column Height (ft)	9.70	9.09
Calculated Drawdown (ft)	NA	0.61
Depth to Top of Screen	8	
Screen Length (ft)	10	
Pump depth (ft)	10.5	

System Volume[(a)] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5800
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection

1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
718	1100	8.90	200-300	9.04	132.3	0.238	6.42	12.1	4.65	Clear
721	2000	8.90		9.02	142.7	0.238	6.41	12.1	4.28	
724	2800	8.91		9.04	146.8	0.238	6.41	12.2	4.29	
727	3500	8.91		9.05	148.6	0.238	6.41	12.2	4.11	
730	4600	8.91		9.08	149.4	0.237	6.40	12.3	4.13	
733	5400	8.91		9.07	150.6	0.236	6.40	12.3	4.08	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 0714, Initial DTW 8.78 No color

Dissolved Iron (Fe^{+2}) = 0.0

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP-5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-9
Equipment: YSI DDS, Geopump, UWC
Sample ID/Time: 753
Contractor: Montrose

Well Diameter: 4" Casing Material: PE
Reference: Top of Casing

	Before	After
Depth to Water (ft)	6.69	6.90
Depth of Well (ft)	17.24	NA
Water Column Height (ft)	10.55	8.34
Calculated Drawdown (ft)	NA	0.21
Depth to Top of Screen	7'	
Screen Length (ft)	10'	
Pump depth (ft)	9.5'	

System Volume[(a)] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5600mL
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (µs/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
740	1800	6.91	200-300	8.09	152.7	0.156	6.23	11.6	11.23	Clear
743	2900	6.91		8.21	158.0	0.156	6.22	11.6	11.26	
746	3800	6.90		8.29	160.7	0.157	6.22	11.8	12.55	
749	4600	6.90		8.33	162.2	0.156	6.22	11.8	12.75	
752	5200	6.90		8.40	163.2	0.156	6.21	11.7	13.17	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 732
DTW 6.90 @734 on 3/19. No odor
Dissolved Iron (Fe^{+2}) = 0.0 mg/L

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP 5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: ~~MW-10~~ MW-10
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 1008
Contractor: Montrose

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.50	9.74
Depth of Well (ft)	17.93	NA
Water Column Height (ft)	8.43	8.19
Calculated Drawdown (ft)	NA	0.24
Depth to Top of Screen	7'	
Screen Length (ft)	10'	
Pump depth (ft)	11.5'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5400 mL
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (µs/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
0955	1200	9.70	200ml/m	9.97	177.2	0.002	6.52	12.1	18.32	Clear
0958	1800	9.73		10.17	174.7	0.002	6.57	12.2	18.29	
~~1001~~	2500	9.74		10.03	175.0	0.002	6.56	12.3	18.26	
1004	3700	9.74		10.18	174.4	0.002	6.55	12.4	18.36	
1007	4800	9.74		10.08	174.8	0.002	6.52	12.4	18.33	
			Stability	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 0950 · initial DTW = ~~0955~~ 09.55

Dissolved Iron (Fe^{+2}) = 0.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP-5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-11
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 0828
Contractor: Mentrose

Well Diameter: 2" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.92	10.33
Depth of Well (ft)	19.95	NA
Water Column Height (ft)	10.03	9.62
Calculated Drawdown (ft)	NA	0.41
Depth to Top of Screen	10	
Screen Length (ft)	10	
Pump depth (ft)	12	

System Volume[(a)] (ml) =bladder + discharge tubing
Volume of bladder pump (ml): -
Volume of flow through cell (ml): -
Radius of dishcarge tubing (ft): -
Length of discharge tubing (ft): -
System Volume (ml): -
Total Volume Purged (ml): 5800
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
0816	1800	10.20	200-300	6.29	159.7	0.335	6.56	13.4	4.43	Clear
0819	2400	10.25	↓	6.28	158.5	0.333	6.56	14.0	4.36	↓
0821	3600	10.30	↓	6.15	157.5	0.333	6.55	14.3	3.95	↓
0824	4400	10.32	↓	5.98	157.3	0.332	6.55	14.3	3.89	↓
0827	5800	10.33	↓	6.08	157.0	0.330	6.56	14.4	3.90	↓
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
DTW 10.02 on 3/19 @ 808
No odor
Dissolved Iron (Fe^{+2}) = 0.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP 5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHM

Well Number: MW-12
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 0859
Contractor:

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	10.55	10.98
Depth of Well (ft)	23.00	NA
Water Column Height (ft)	12.45	12.02
Calculated Drawdown (ft)	NA	
Depth to Top of Screen	5'	
Screen Length (ft)	20 15'	
Pump depth (ft)	12'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml): —
Volume of flow through cell (ml): —
Radius of dishcarge tubing (ft): —
Length of discharge tubing (ft): —
System Volume (ml): —
Total Volume Purged (ml): 4600.
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
0849	800	10.75	200-300	7.43	166.0	0.438	6.43	14.3	3.85	Clear
0852	2500	10.86		7.19	166.6	0.437	6.44	14.1	4.96	
0855	3200	10.93		7.15	166.7	0.436	6.44	14.3	5.22	
0858	4400	10.98		7.16	166.6	0.436	6.44	14.3	5.23	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
DTW 3/19/25 @ 845 = 10.55 ; No odor

Dissolved Iron (Fe^{+2}) = 0.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP 5468
Project Number: 027409
Date: 3/19/25
ES Personnel: CHL

Well Number: MW-13
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 1046
Contractor: Montrose Env.

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	8.28	8.90
Depth of Well (ft)	20.80	NA
Water Column Height (ft)	12.52	10.90
Calculated Drawdown (ft)	NA	0.62
Depth to Top of Screen	10'	
Screen Length (ft)	10'-15'	
Pump depth (ft)	11'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5400
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity ~~mS~~/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
1028	1000	8.50	200-300	1.16	-94.2	0.218	6.64	13.2	372.8	clear
1031	1600	8.66		0.74	-101.7	0.217	6.63	13.4	180.74	
1036	2900	8.80		0.59	-103.5	0.215	6.62	13.2	141.24	
1040	3900	8.83		0.81	-81.9	0.214	6.62	13.4	34.79	
1045	4800	8.90		0.56	-93.5	0.214	6.62	13.4	33.91	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Initial DTW 8.30 start 1024, Mostly Clear water
1037 empty flow cell due to suspended solids skewing high turbidity. No odor present.
Dissolved Iron (Fe^{+2}) = ~~3.0 ppm~~ 4.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UPS46.5
Project Number: 027409
Date: 3/14/25
ES Personnel: CHM

Well Number: EW-2R
Equipment: YSI DDS, Geopump, WLM
Sample ID/Time: 1348
Contractor: Montrose Environmental

Well Diameter: 4" Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.16	9.30
Depth of Well (ft)	22.80	NA
Water Column Height (ft)	13.64	13.50
Calculated Drawdown (ft)	NA	0.14
Depth to Top of Screen	~~10~~ 13'	
Screen Length (ft)	~~10~~ 10'	
Pump depth (ft)	11'	

System Volume[(a)] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 5800
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (mS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
1330	0400	9.32	200-300	0.64	-81.0	0.238	7.07	11.8	3.85	Clear
1334	1850	9.30		0.49	-81.9	0.235	7.06	11.7	8.56	
1337	2600	9.30		0.47	-80.0	0.236	7.06	11.6	8.63	
1340	3500	9.30		0.44	-79.4	0.238	7.05	11.8	10.07	
1344	4600	9.30		0.43	-79.6	0.240	7.04	11.8	10.30	
1347	5400	9.30		0.43	-79.6	0.243	7.03	11.8	10.08	
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Purge 9.30, Start 1326, Odor

Dissolved Iron (Fe^{+2}) = 1.0 ≈ 2.0 ppm

LOW-FLOW GROUNDWATER SAMPLING LOG

Project Name: UP 5466
Project Number: 027409
Date: 3/20/25
ES Personnel: CHM

Well Number: EW-4
Equipment: YSI, Geopump, WLM
Sample ID/Time: ~~0855~~ 0852
Contractor: Mantooth

Well Diameter: 4"
Casing Material: PVC
Reference: Top of Casing

	Before	After
Depth to Water (ft)	9.98	10.08
Depth of Well (ft)	23.00	NA
Water Column Height (ft)	13.02	12.92
Calculated Drawdown (ft)	NA	0.10
Depth to Top of Screen	~~5~~ 13'	
Screen Length (ft)	10'	
Pump depth (ft)	12'	

System Volume[a] (ml) =bladder + discharge tubing
Volume of bladder pump (ml):
Volume of flow through cell (ml):
Radius of dishcarge tubing (ft):
Length of discharge tubing (ft):
System Volume (ml):
Total Volume Purged (ml): 16000
Total No. of SV Purged:

Notes/Calcs: (a): flow cell disconnected before sample collection
1ft of tubing = 10ml

WATER QUALITY INDICATOR PARAMETERS

Time	Volume (ml)	Water Level (ft)	Pumping Rate (ml)	DO (mg/L)	ORP (mV)	Conductivity (µS/cm)	pH	Temp (°C)	Turbidity (NTU)	Color
836	1000	10.06	200-300	0.77	-117.0	0.357	7.12	13.0	7.17	Clear
0839	2200	10.08		0.58	-118.8	0.359	7.11	13.0	11.09	
0842	2900	10.07		0.52	-119.6	0.359	7.10	12.9	14.08	
0845	3800	10.09		0.49	-119.2	0.359	7.09	12.9	12.01	
0848	4800	10.08		0.46	-119.7	0.359	7.07	12.9	12.25	
0851	5600	10.08		0.45	-120.5	0.358	7.08	12.9	12.02	
0854										
			Stability:	± 0.2 mg/L	± 20 mV	± 3-5%	± 0.2 units	± 0.2 units	± 10%	

Notes: (weather, well and well box conditions, etc...)
Start 0832; dbw

Dissolved Iron (Fe^{+2}) = 8.0

APPENDIX E

Montrose Groundwater Sampling Field Procedures

MONITORING WELL SAMPLING PROTOCOLS

The groundwater sampling procedures used by Montrose Environmental (Montrose) are designed to comply with local regulatory guidance and reflect the current professional standards and practices employed in the industry. A description of the groundwater sampling procedures is provided below.

Well Gauging

Initial site activities include determination of well locations based on a current site map. The area around each well is inspected to ensure that it is free of debris that could potentially fall into the well. A clean plastic trash bag or a piece of visqueen plastic sheeting is placed adjacent to the well to stage sampling equipment and supplies. Indications of well or well box damage are noted on appropriate field forms.

Prior to sampling, the construction details of each groundwater monitoring well to be sampled are reviewed to establish their respective depths and the length and placement of their screened intervals.

When the well is opened, the Technician will immediately measure the concentration of volatile organic vapors in the upper portion of the well casing with a photo-ionization detector (PID) calibrated to hexane. This measurement will guide the selection of respiratory protection equipment for sampling (as dictated by Montrose's Health and Safety Plan) at that particular well. Historical air monitoring data should also be referred to when selecting appropriate respiratory protection.

Prior to purging or sampling, initial static water levels are measured and recorded for all site wells. Depth to groundwater measurements accurate to 0.01 feet are obtained with an electronic sounding instrument that can also distinguish between liquid phase hydrocarbon (LPH) and water. The depths to LPH (if present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present). These measurements and the approximate thickness of potential LPH are recorded on the Fluid Level Measurement Form. Field forms are included in the Groundwater Monitoring Report as an Appendix.

As the measuring device is removed, it is thoroughly washed with a Liqui-nox/ water mixture and rinsed with distilled water. The tape is wiped dry with a paper towel as it is re-wound.

Note, wells that are found to contain LPH are not purged or sampled.

Traditional Well Purging

If purging is required, depth to groundwater measurements and well construction details are used to calculate the volume of water within each well casing.

During purging, the water quality parameters consisting of temperature, pH, conductivity, and turbidity are monitored as each well volume is removed. In some cases, additional water quality parameters, such as dissolved oxygen (DO) and oxidation-reduction potential (ORP), are also measured during purging. Purging continues until these parameters vary less than 10 percent from the previous reading, three well volumes are removed, or 80 percent of the well volume has been removed with no significant well recharge. Groundwater samples are collected without additional purging if the volume of groundwater in a well does not recover to at least 80 percent of its initial pre-purge measurement within two hours.

Depth to groundwater measurements, purge volumes, and water quality parameters obtained as each well is purged are recorded on Groundwater Monitoring Field Forms.

Instruments used for groundwater parameter measurements are calibrated daily in accordance with the manufacturer's instructions.

Purge water is generally collected in labeled 55-gallon, DOT-approved drums for disposal. Drums may be left on site in a secure location for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water is collected directly from the site by a licensed vacuum truck company, or treated on site by an active remediation system.

Low Flow, Minimal Drawdown Sampling

For non-LNAPL (floating product) sites: This procedure is designed to assist the user in taking representative groundwater samples from groundwater monitoring wells. The groundwater samples will be collected using low-flow (minimal drawdown) purging and sampling methods and is based upon U.S. EPA, Ground Water Issue, Publication #EPA/540/S-95/504, April 1996.

The field sampler's objective is to purge and sample the well so that the water that is discharged from the pump, and subsequently collected, is representative of the formation water from the aquifer's identified zone of interest.

1. Calibrate all field instruments at the start of each day's deployment per the instrument manufacturer's instruction. Record calibration data on the appropriate field calibration documentation form.

2. Begin sampling at the least contaminated and preferably upgradient well(s). Make notes describing the well condition, personnel, weather, location, etc.

3. Use only new, dedicated and/or clean (phosphate-free detergent, rinse and triple rinsed) equipment and sampling supplies. The water level meter, low-flow pump, discharge tubing and/or bailer will either be new or decontaminated before well gauging and sampling. Note - anything placed into a monitoring well must be CLEANED and DECONTAMINATED beforehand.

4. Measure the depth to water from the surveyed reference mark on the wellhead and record the measurement on the gauging and sampling sheet. Lock the water level meter in place so that the level can be monitored during purging and sampling. When placing the probe in the well, take precautions to not disturb or agitate the water. Where compounds of interest are known to concentrate near the top or the bottom the screen zone, locate the pump intake or end of tubing in the upper one-third or lower one-third of the interval, respectively.

5. Connect the compressed air source's airline to the pump controller's "AIR IN" connection (if utilizing a gas-engine operated generator, locate the generator at least 25 feet downwind from the wellhead). If using a peristaltic pump located at the surface, connect the flexible tubing to the pump drive head.

6. Connect the pump controller "AIR OUT" air-line to the bladder pump's air supply fitting at the wellhead (if using an electric pump, connect to generator's electric panel). If using a peristaltic pump, connect downhole tubing to flexible tubing in pump drive head.

7. Connect the pump discharge line to the in-line flow cell's "IN" fitting. If electric, same as above. If using a peristaltic pump, connect the discharge tubing to the "IN" fitting of the flow cell.

8. Connect the flow cell's "OUT" line and secure to drain the purge water into the purge water collection container.

9. Turn on or start the air supply to the pump. Set the pump controller settings to the documented settings for the specific well. Confirm the flow rate is equal to the well's established optimum flow rate, not to exceed 1 liter (1,000 ml) per minute. Modify as necessary and document any required modification. If electric, document MHz pump frequency for optimum flow rate.

10. Monitor the water level and confirm that the water level drawdown has stabilized within the well's allowable limits. Minimal drawdown is to be achieved which is less than 1/3-foot.

11. After a single pump-system's volume (bladder volume + discharge tubing volume, or for peristaltic pump downhole tubing volume + flexible tubing volume) has been adequately purged, read and record water quality field measurements every three to five minutes until all parameters have stabilized within their allowable ranges for at least three consecutive measurements. When stabilization has been achieved, sample collection may begin.

12. Disconnect the flow cell and its tubing from the pump line before collecting samples. Decrease the pump (MHz) rate to 100 millimeters per minute or less by lowering the controller's air pressure setting or MHz pump frequency prior to collecting samples for volatiles. If using a peristaltic pump, cut the discharge tubing between the pump head drive and the "IN" fitting on the flow cell. Place the samples in a cooler with enough ice to keep them at four degrees Celsius.

13. Once samples for volatiles have been collected, re-established pump flow rate to the original purge flow rate by inputting the documented controller settings for the well without the In-Line Flow Cell connected and collect remaining samples.

14. When all sample containers have been filled, make a final measurement of the well's Static Water Level and record the measurement on the gauging and sampling sheet.

15. Measure and record total purge volume collected. Consolidate generated purge water.

16. Remove and decontaminate the In-Line Flow Cell with phosphate-free detergent and triple rinse. If using a peristaltic pump, disconnect flexible tubing portion from the pump drive head. If dedicating the downhole tubing to the well, place tubing in the well in such a way that it will be easily retrievable during the next sampling event.

17. Disconnect the controller air supply to the pump. Disconnect electric cables to generator.

18. Secure the wellhead cover and secure with its lock. Move equipment to next well to be sampled.

Groundwater Sampling

After wells are purged, or not purged, according to agency-approved instructions or guidelines, groundwater samples are collected for laboratory analysis.

Groundwater samples will be collected from each well directly from the discharge tubing, of which the intake end is located within the screened interval. Groundwater samples should NOT be passed through the low-flow cell, or through any groundwater quality measuring device prior to collection. Groundwater brought to the surface is conveyed into appropriate laboratory prepared containers for each required analysis.

After filling, sample containers are immediately capped. Particular care is given to containers for volatile organic analysis (VOAs), which require filling to zero headspace and fitting with Teflon-sealed caps.

Each sample container is labeled with the project number (or site ID), well designation, sample date, and the samplers initials, and then immediately sealed in a zip lock bag and placed in a pre-chilled, insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container description and requested analyses are entered onto a chain-of-custody form to provide instruction for the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the point of collection to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form along with the package tracking number.

For wells that are connected to a treatment system, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging, and Sampling

The sequence in which monitoring activities are conducted is determined on a site-specific basis. In general, wells are gauged beginning with the least-affected well and ending with the well that has the highest contaminant concentration based on previous analytical results. After gauging is completed, wells are purged and/or sampled in the order of least-affected to most-affected wells.

Field QA/QC Procedures

A trip blank field sample is used to ensure that sample collection and handling procedures do not introduce contaminants into the groundwater samples. The trip blank is prepared by filling sample containers in the field with de-ionized water. The sample containers are labeled as “Trip Blank,” placed in the cooler with other groundwater samples, and transported to the laboratory for analysis.

Silica Gel Cleanup of Groundwater Samples

Unless clearly specified by the project manager and subsequently noted on the chain-of-custody, groundwater samples that are to be analyzed for diesel and heavy oil using Methods NWTPH-Dx/Ox will not be ‘cleaned-up’ using silica gel or any other agents.

If samples that are to be analyzed for TPH-Dx/Ox are subjected to silica gel cleanup

procedures, that fact will be noted on the chain-of-custody, the analytical report and in the groundwater monitoring report.

Decontamination

To reduce the potential for cross-contamination between wells, strict isolation and decontamination procedures are observed.

Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that may come in contact with fluids is either dedicated to a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of a four-stage decontamination process: a phosphate-free detergent (Liqui-nox) wash, a double potable-water rinse, and a final deionized water rinse.

Exceptions

Additional tasks or non-standard procedures that may be requested or required for a particular site are documented on the appropriate field notes/forms.