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Project No. 0204793-000

Mary Monahan, Project Coordinator
Toxics Cleanup Program - Central Regional Office
Washington State Department of Ecology
1250 West Alder Street
Union Gap, Washington 98903-0009

Subject: Final Baseline Groundwater Monitoring Event Report - October 2023
Former Tiger Oil West Nob Hill Boulevard Site
Facility Site ID: 469, Cleanup Site ID: 4919
2312 West Nob Hill Boulevard, Yakima, Washington 98902

Dear Mary:

On 9 through 11 October 2023, Haley & Aldrich, Inc. (Haley & Aldrich) conducted a baseline groundwater monitoring event at the former Tiger Oil West Nob Hill Boulevard Site (Washington State Department of Ecology [Ecology] Facility Site No. 469, Cleanup Site No. 4919), located at 2312 West Nob Hill Boulevard, in Yakima, Washington (Figure 1).

This event fulfills the groundwater monitoring event requirement specified in the Ecology-approved interim remedial action completion report (Maul Foster Alongi, Inc. [MFA], 2015a), as well as the progress reporting requirement specified in Section IX of the Amended Consent Decree, No. 02-2-00956-2; and Section 9-1 of the amended cleanup action plan (Ecology, 2014). Monitoring activities were conducted as described in the groundwater monitoring plan (GMP) (MFA, 2015b), as revised in the amended compliance monitoring plan memoranda (MFA, 2017, 2018), and in accordance with the monitoring requirements outlined in the Washington State Model Toxics Control Act (MTCA) (Washington Administrative Code 173-340-410).

Background information on the Site's previous environmental site cleanup activities (2015 interim remedial action and 2019 *in situ* light non-aqueous phase liquid [LNAPL]), investigations (2018 high resolution site characterization (HRSC) and soil vapor point installation, and 2019 additional laboratory analyses) are provided in MFA's Semiannual Groundwater Monitoring Report - November 2021 (MFA, 2019 and 2022).

The objectives of the baseline groundwater monitoring event were to:

- Conduct a baseline groundwater monitoring event at the Site involving its 23 monitoring wells (including 17 compliance monitoring wells) with additional monitoring/sampling activities for

Microbial Insight QuantArray Petroleum and QuantArray Chlor analyses, at four selected monitoring wells;

- Obtain an updated baseline understanding of the Site's groundwater quality conditions and the groundwater environment;
- Obtain insights into the existing microbial populations conditions at selected monitoring wells located within and downgradient of the proposed nutrient enhanced biological stimulation (NEBS) pilot study interim remedial action. Note: laboratory analytical results and findings from the microbial analyses, to be utilized for the proposed NEBS pilot study interim remedial action, will be presented under separate cover;
- Evaluate the potential changes in the gasoline-range petroleum hydrocarbons impacted plume at the Site since the last completed semi-annual groundwater monitoring event in November 2021;
- Evaluate the potential changes in the halogenated volatile organic compounds (VOCs) impacted plume at the Site since the last completed semi-annual groundwater monitoring event in November 2021;
- Evaluate the potential ongoing biodegradation of the commingled gasoline-range petroleum hydrocarbons and/or halogenated VOCs impacted plume; and
- Evaluate the groundwater flow directions and potential seasonal variations at the Site during the October 2023 baseline groundwater monitoring event.

Scope of Services

To accomplish the above objectives, Haley & Aldrich conducted the baseline groundwater monitoring event at the Property's 23 monitoring wells. Groundwater monitoring and sampling procedures used during this event were completed in general accordance with the Site's GMP and industry-standard sampling protocols. Our scope of services included:

- Measure the static water level at the Site's 23 monitoring wells (Figure 1) using a water level probe.
- Measure the thickness of the encountered light non-aqueous phase liquid (LNAPL; i.e., free product) using an oil/water interface meter.
- Conduct groundwater monitoring/sampling activities at the Site's designated 17 compliance monitoring wells.
- Observe and document the integrity of each well seal and cap to ensure potential surficial contaminants would not enter the well.
- Conduct groundwater monitoring and sampling activities in general accordance with industry standard sampling protocols and consistent with the Site's GMP with at least one pore volume extracted from each well and field parameters stabilized before sample collection.
- Measure the water quality parameters with a YSI meter and a turbidity meter before sample collection and record the parameters on field sampling data sheets.

- Collect groundwater samples using low-flow sampling techniques involving a peristaltic pump and newly replaced dedicated disposable tubing.
- Collect a field duplicate groundwater sample at YMW-2.
- Analyze groundwater samples from non-LNAPL-containing monitoring wells for the following constituents of concern (COCs) and geochemical parameters:
  - Gasoline-range total petroleum hydrocarbons (TPHs) by Northwest TPH Method Gx;
  - Petroleum fuel associated VOCs, specifically benzene, toluene, ethylbenzene, and xylenes (BTEX) and naphthalene by U.S. Environmental Protection Agency (EPA) Method 8260D;
  - Halogenated VOCs by EPA Method 8260D;
  - Nitrate by EPA Method 353.2;
  - Total manganese by EPA Method 200.8;
  - Sulfate by American Society for Testing and Materials (ASTM) International D516-07;
  - Methane by EPA National Risk Management Research Laboratory Method 175; and
  - Ferrous iron will be measured in the field, using a Hach test kit (Model IR-18C).
- Monitor the Site's four soil vapor points monitoring wells (SVP-01 through SVP-04) screened interval (shallow, medium, and deep) using a multi-gas meter.
- Store the generated investigation-derived waste (IDW), such as purged water, during the groundwater monitoring event in 55-gallon Washington State Department of Transportation-approved drums and temporarily stored on Site. The waste will be disposed of once a sufficient number of drums (at least four) have been accumulated and the characterization of the IDW has been completed and approved by the regulated disposal facility.

Site Groundwater Conditions

Our understanding of the Site's hydrogeologic conditions is based on the previous completed environmental investigations, HRSC, groundwater monitoring events, and the Site's network of 23 monitoring wells (Figure 1). Based on these findings, our estimated extent of residual LNAPL is presented in Figure 2.

The matrix of the unconfined shallow aquifer appears to be interbedded sands and silts. The depths to groundwater are variable at the Site, ranging approximately from 9 to 13 feet below ground surface, and is influenced by seasonal fluctuations in the groundwater table due to local irrigation practices. The annual irrigation schedule is from April through September, which appears to impact the groundwater table, causing it to rise between 2 to 4 feet during that period.

The direction of groundwater flow at the Site, based on previous quarterly groundwater monitoring events completed from November 2015 through November 2018 and subsequent semi-annual groundwater monitoring events, is generally southeast with tangent to the east. Figure 3 presents the groundwater potentiometric map drafted for the October 2023 baseline groundwater monitoring event.

Field Procedures

MONITORING WELL SAMPLING

On 9 and 10 October 2023, a baseline groundwater monitoring event was conducted.

The integrity of each well seal and cap was evaluated and documented, followed by measuring the depth to groundwater at the Site's 23 monitoring wells, from the top of the casing elevation to the nearest 0.01 foot. An oil/water interface meter was used at all monitoring wells to evaluate presence of LNAPL and measure its thickness, if present.

Purging and sampling activities were performed at the Site's 17 compliance monitoring wells, using a peristaltic pump and low-flow sampling techniques. During purging, field parameters were measured to evaluate the effectiveness of purging. Groundwater was pumped directly into laboratory-supplied containers. To prevent cross-contamination between sample locations, new disposable equipment (e.g., nitrile gloves and Teflon® tubing) were used for each groundwater sample. Field sampling data sheets are provided in Appendix A.

The groundwater samples were submitted for laboratory analyses for the COCs and geochemical parameters, as indicated above, to evaluate the potential biodegradation process of TPH and PCE at the Site. Depth to water measurements and calculated groundwater elevations are summarized in Table 1. The monitoring wells conditions and integrity are summarized in Table 2. Final water quality parameters (pH, temperature, dissolved oxygen, conductivity, oxidation reduction potential, and turbidity) are summarized in Table 3.

Purged groundwater from the monitoring activities was contained in Washington State Department of Transportation-approved 55-gallon steel drums for off-site transport and disposal. The drums are currently stored at the southeast corner of the Xochimilco Mexican Restaurant parking lot. The disposal manifests and landfill receipts will be provided separately from this report.

SOIL VAPOR POINTS MONITORING WELLS

On 10 October 2023, the Site's four soil vapor point (SVP-01 through SVP-04) screen interval (shallow, medium, and deep) were monitored using a multigas meter. The following gases were measured at each screened interval:

- Methane
- Carbon dioxide
- Oxygen

The soil vapor point monitoring wells are shown in Figure 1. The soil vapor monitoring results are presented in Table 4.

Results and Discussion

Laboratory analytical reports are provided in Appendix B. Analytical data and the laboratory's internal quality assurance and quality control data were reviewed to assess whether they meet project-specific data quality objectives. A data validation memorandum summarizing data evaluation procedures, data usability, and deviations from specific field and/or laboratory methods for the October 2023 groundwater quality data is included as Appendix C.

SUMMARY OF FINDINGS

Groundwater data and groundwater analytical results indicate the following:

- LNAPL was encountered only at KMW-10 (0.4 feet) and MW-7 (0.03 feet) (Table 1 and Figure 3). During the May/November 2021 semi-annual groundwater monitoring events, up to seven monitoring wells had observed indications of LNAPL (Table 1).
- The direction of groundwater flow during the October 2023 groundwater monitoring event was southeast (Figure 4). The groundwater flow direction for the October 2023 groundwater monitoring event, to the southeast, continues to reflect the local and regional groundwater flow direction. Cross-sections showing the water level and LNAPL thickness during the October 2023 monitoring event are presented on Figure 5. The decreasing trends in presence of residual LNAPL at the Site are exhibited in Figure 6.
- Isoconcentration contours of gasoline-range TPH and benzene, exhibited in Figures 7 and 8, respectively, show notable decreases in both concentrations (Table 4) and estimated areal extent of the dissolved-phase plume of gasoline-range TPH and benzene.
- The gasoline-range TPH and benzene dissolved phase plume, at the core plume monitoring wells, is progressively biodegrading at the source area, as exhibited by the trend graphs for the core dissolved phase plume monitoring wells (MW-11, S-2, YMW-1, YMW-2, YMW-3, MW-13, and MWG-3 - Figure 9 and 11, respectively). This trend is also demonstrated by:
  - continuing trends of dissolved oxygen (maintaining an aerobic subsurface environment), decreasing oxidation-reduction potential, and overall increasing conductivity (Table 3); and
  - geochemical parameters where trends of increasing metabolic byproducts (such as ferrous iron and manganese) and overall, generally decreasing redox potential are also indicative of biodegradation of TPHs (Table 5).
- In contrast, groundwater analytical results from the May 2021 to October 2023 groundwater monitoring event indicated a steady increasing trend in gasoline-range TPH and benzene concentrations at the periphery monitoring wells (KMW-6 and KMW-16) during this time period, as exhibited in the trend graphs of Figures 10 and 12 and Table 4. Elevated detections of benzene at KMW-6 (69 micrograms per liter [µg/L]) and at KMW-16 (260 µg/L) and gasoline-range TPH at KMW-16 (2,500 µg/L) are above he MTCA Method A CULs for benzene (5 µg/L) and gasoline-range TPH (800 µg/L with presence of benzene).

- However, sentry monitoring wells, KMW-14 and KMW-15, located at the distal end of the dissolved phase plume in the southeast area of the Site and downgradient and crossgradient, respectively, of KMW-16 continue to exhibit no detectable concentrations of gasoline-range TPH (Table 4, Figures 7 and 8). Benzene was not exhibited at KMW-14, and a detection of 0.3 µg/L was exhibited at KMW-15.
- Petroleum sheen was observed during the groundwater monitoring and purging activities at MW-9, approximately 20 minutes into the monitoring activities. Therefore, a groundwater sample was not collected from this well (Appendix A).
- Concentrations of naphthalene in the dissolved phase plume continue to be exhibited at levels (390 µg/L to 1,500 µg/L) exceeding the MTCA Method A CUL (160 µg/L) at monitoring wells located near the source area and immediately downgradient, including at YMW-1, YMW-3, MW-11, MWG-3 (Figure 14 and Table 4).
- A lack of indications of reductive dechlorination of PCE are exhibited by the lack of increases in the breakdown products of PCE (cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) (Table 6) and a lack of an anaerobic groundwater environment to support anaerobic dechlorination of PCE. Furthermore, trends of decreasing key indicator parameters (oxygen, nitrate, and sulfate) (Table 5) are also not apparent; thus, further indicative of a groundwater environment that is not reducing for anaerobic dechlorination of PCE to occur.
- Soil gas data (methane, carbon dioxide, and oxygen) from soil vapor points monitoring wells support indications that the residual LNAPL is continuing to undergo biodegradation with trends of increasing methane and carbon dioxide and decreasing oxygen (Table 8), notably at the medium- and deep-screen intervals at the soil vapor monitoring points SVP-01 through SVP-04. Trend graphs for methane at the shallow-, medium-, and deep-screened intervals (Figures 15 through 17) and for carbon dioxide at the shallow-screened interval (Figure 18) support the indications of continuing biodegradation trends of the residual LNAPL.

CONCLUSION AND RECOMMENDATIONS

Indications of ongoing aerobic biodegradation activities, as exhibited in the cumulative groundwater analytical results, groundwater quality field parameters, and geochemical parameters, are favorable for the continuation trend of decreasing concentrations of gasoline-range TPHs and BTEX constituents in the source area and immediate downgradient monitoring wells in the northwest area of the petroleum dissolved phase plume.

The soil gas monitored in the vadose zone at the four soil vapor points monitoring wells provide an understanding of the soil vapor gradients in three separate depths in the vadose zone, above the residual LNAPL. Overall, the soil vapor gradients appear to indicate profiles of oxygen decreasing with depth to the residual LNAPL, and increasing profiles of methane and carbon dioxide with depth to the residual LNAPL. Taking the recent sets of soil vapor data from May 2020 through October 2023 into consideration with the previous natural source zone depletion (NSZD) evaluation and findings at the Site (conducted by MFA in 2018), it appears the residual LNAPL is continuing to naturally degrade at a low NSZD rate.

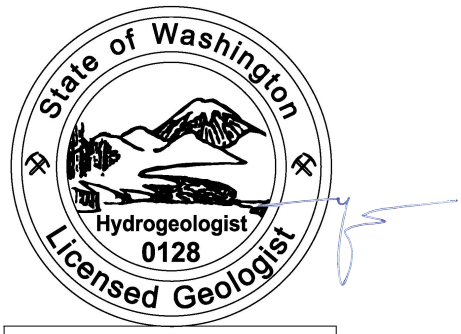
The decreasing thickness of residual LNAPL at KMW-10 and MW-7 appears to support this observation. Additionally, the lack of usually observed presence of LNAPL at MW-11 and MW-13, located at the source area and inferred downgradient to the southeast, respectively, during the October 2023 groundwater monitoring event may also be additional indications of the biodegradation of the residual LNAPL.

The PCE-dissolved-phase plume appears to be relatively unchanged based on the collective groundwater analytical results of PCE and its breakdown products from November 2019 to October 2023. MW-10 and KMW-7, the two westernmost and upgradient monitoring wells at the Site, continue to exhibit PCE in the range of approximately 23 µg/L to 33 µg/L with no obvious indications of reductive dechlorination of PCE. HVOC groundwater analytical results for the central and distal end of the PCE-dissolved-phase plume (YMW-1/MWG-2/KMW-5 and KMW-15/KMW-16, respectively) also generally reflect this relatively unchanged condition. This observation is supported by the groundwater quality field parameters data indicative of a non-anaerobic subsurface environment, no apparent biodegradation activities that would impact the redox potential, electrical conductivity. Additionally, there is also no apparent decreasing trends in the terminal electron acceptors (oxygen, nitrate, and sulfate) and an aerobic subsurface environment. Collectively, these data trends and data sets appear to indicate that the groundwater environment is not supportive of a reducing environment, necessary for anaerobic dechlorination of PCE to occur.

Haley & Aldrich recommends conducting quarterly groundwater monitoring events after the completion of the upcoming Nutrients Enhanced Biological Stimulation interim remedial action pilot study to further evaluate the efficacy of this interim remedial action and to continue evaluating the groundwater quality conditions and groundwater environment at the Site.

Please contact us if you have any questions.

Sincerely yours,
HALEY & ALDRICH, INC.



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Attachments:

References

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Appendix A - Field Sampling Data Sheets

Appendix B - Analytical Laboratory Report

Appendix C - Quality Assurance Review

cc: Bill Preston, City of Yakima

References

1. Ecology. 2014. Amended Cleanup Action Plan, Tiger Oil Facility, 2312 W Nob Hill Blvd, Yakima, WA 98902. Washington State Department of Ecology. June.
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3. MFA. 2015b. Groundwater monitoring plan— Former Tiger Oil Site, Facility Site ID: 469/Cleanup Site ID: 4919, 2312 West Nob Hill Boulevard, Yakima, Washington, Washington. August 26.
4. MFA. 2017. Memorandum (re: Amended Compliance Monitoring Plan— Former Tiger Oil Site, Facility Site ID: 469/Cleanup Site ID: 4919, 2312 West Nob Hill Boulevard, Yakima, Washington). March 2.
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7. MFA. 2022. Letter (re: Draft Semiannual Groundwater Monitoring Report - November 2021, Former Tiger Oil Site, Facility Site ID: 469/Cleanup Site ID: 4919, 2312 West Nob Hill Boulevard, Yakima, Washington. March 22.

TABLES

TABLE 1
SUMMARY OF WATER LEVEL DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Well Identifier	Reference Point Elevation (feet above MSL)	Date of Measurement	Depth to Water (feet)	LNAPL Thickness (feet)	Depth to Water Corrected for Presence of LNAPL (feet)(a)(1)	Groundwater Elevation (feet, NAVD 88)	Change in Groundwater Elevation Level (feet)(b)
KMW-5	1082.85	5/27/2015	9.11	-	-	1073.74	-
		2/1/2016	8.78	-	-	1074.07	0.33
		5/9/2016	8.72	-	-	1074.13	0.06
		7/25/2016	8.1	-	-	1074.75	0.62
		11/7/2016	8.35	-	-	1074.50	-0.25
		2/14/2017	8.95	-	-	1073.90	-0.6
		5/8/2017	8.51	-	-	1074.34	0.44
		8/14/2017	7.64	-	-	1075.21	0.87
		11/6/2018	8.62	-	-	1074.23	-0.98
		5/7/2019	9.17	-	-	1073.68	-0.55
		11/4/2019	8.6	-	-	1074.25	0.57
		5/4/2020	9.7	-	-	1073.15	-1.1
		11/2/2020	8.68	-	-	1074.17	1.02
		5/3/2021	9.61	-	-	1073.24	-0.93
		11/1/2021	8.57	-	-	1074.28	1.04
		10/9/2023	8.37	-	-	1074.48	0.2
KMW-6	1083.58	5/28/2015	8.82	-	-	1074.76	-
		11/3/2015	8.43	-	-	1075.15	0.39
		2/1/2016	8.45	-	-	1075.13	-0.02
		5/9/2016	8.36	-	-	1075.22	0.09
		7/25/2016	7.71	-	-	1075.87	0.65
		11/7/2016	7.94	-	-	1075.64	-0.23
		2/15/2017	8.65	-	-	1074.93	-0.71
		5/8/2017	8.06	-	-	1075.52	0.59
		8/14/2017	7.18	-	-	1076.40	0.88
		11/6/2018	8.3	-	-	1075.28	-1.12
		5/7/2019	8.96	-	-	1074.62	-0.66
		11/4/2019	8.26	-	-	1075.32	0.7
		5/4/2020	9.53	-	-	1074.05	-1.27
		11/2/2020	8.4	-	-	1075.18	1.13
		5/3/2021	9.44	-	-	1074.14	-1.04
		11/1/2021	8.22	-	-	1075.36	1.22
		10/9/2023	8.08	-	-	1075.50	0.14
KMW-7	1091.96	5/29/2015	13.47	-	-	1078.49	-
		11/2/2015	12.64	-	-	1079.32	0.83
		2/1/2016	12.85	-	-	1079.11	-0.21
		5/9/2016	12.69	-	-	1079.27	0.16
		7/25/2016	11.98	-	-	1079.98	0.71
		11/7/2016	12.09	-	-	1079.87	-0.11
		2/14/2017	13.1	-	-	1078.86	-1.01
		5/8/2017	12.3	-	-	1079.66	0.8
		8/14/2017	11.4	-	-	1080.56	0.9
		11/6/2018	12.45	-	-	1079.51	-1.05
		5/7/2019	13.4	-	-	1078.56	-0.95
		11/4/2019	12.36	0.01	12.35	1079.61	1.0475
		5/4/2020	14	-	-	1077.96	-1.6475
		11/2/2020	12.51	-	-	1079.45	1.49
		5/3/2021	13.91	-	-	1078.05	-1.4
		11/1/2021	12.49	-	-	1079.47	1.42
		10/9/2023	12.16	-	-	1079.80	0.33
KMW-8	1092.11	5/29/2015	13.48	-	-	1078.63	-
		11/4/2019	12.33	-	-	1079.78	1.15
		5/4/2020	14.03	-	-	1078.08	-1.7
		11/2/2020	12.7	-	-	1079.41	1.33
		5/3/2021	13.91	-	-	1078.20	-1.21
		11/1/2021	12.45	-	-	1079.66	1.46
		10/9/2023	12.11	-	-	1080.00	0.34
KMW-10(d)	1090.63	5/29/2015	13.1	-	-	1077.53	-
		7/25/2016	12.25	0.43	11.93	1078.70	1.1725
		11/7/2016	12.5	0.58	12.07	1078.57	-0.1375
		2/15/2017	13.3	0.4	13.00	1077.63	-0.935
		5/8/2017	12.51	0.32	12.27	1078.36	0.73
		8/14/2017	11.48	0.29	11.26	1079.37	1.0075
		11/6/2018	12.7	0.37	12.42	1078.21	-1.16
		5/7/2019	13.4	0.21	13.24	1077.39	-0.82
		11/4/2019	12.37	0.09	12.30	1078.33	0.94
		5/4/2020	13.85	0.13	13.75	1076.88	-1.45
		11/2/2020	12.91	0.61	12.45	1078.18	1.3
		5/3/2021	14.17	0.61	13.71	1076.92	-1.26
		11/1/2021	12.91	0.61	12.45	1078.18	1.26
		10/9/2023	12.41	0.4	12.11	1078.52	0.3425
KMW-14	1082.4	5/28/2015	12.66	-	-	1069.74	-
		11/3/2015	12.37	-	-	1070.03	0.29
		2/1/2016	12.27	-	-	1070.13	0.1
		5/9/2016	12.29	-	-	1070.11	-0.02
		7/25/2016	11.86	-	-	1070.54	0.43
		11/7/2016	11.98	-	-	1070.42	-0.12
		2/15/2017	12.62	-	-	1069.78	-0.64
		5/8/2017	12.02	-	-	1070.38	0.6
		8/14/2017	11.38	-	-	1071.02	0.64
		11/6/2018	12.22	-	-	1070.18	-0.84
		5/7/2019	12.88	-	-	1069.52	-0.66
		11/4/2019	12.3	-	-	1070.10	0.58
		5/4/2020	13.39	-	-	1069.01	-1.09
		11/2/2020	12.44	-	-	1069.96	0.95
		5/3/2021	13.39	-	-	1069.01	-0.95
		11/1/2021	12.17	-	-	1070.23	1.22
		10/9/2023	12.05	-	-	1070.35	0.12
KMW-15	1083.54	11/3/2015	10.9	-	-	1072.64	-
		2/1/2016	10.86	-	-	1072.68	0.04
		5/9/2016	10.88	-	-	1072.66	-0.02
		7/25/2016	10.36	-	-	1073.18	0.52
		11/7/2016	10.51	-	-	1073.03	-0.15
		2/15/2017	11.14	-	-	1072.40	-0.63
		5/8/2017	10.56	-	-	1072.98	0.58
		8/14/2017	9.84	-	-	1073.70	0.72
		11/6/2018	10.73	-	-	1072.81	-0.89
		5/7/2019	11.3	-	-	1072.24	-0.57
		11/4/2019	10.78	-	-	1072.76	0.52
		5/4/2020	11.85	-	-	1071.69	-1.07
		11/2/2020	10.89	-	-	1072.65	0.96
		5/3/2021	11.83	-	-	1071.71	-0.94
		11/1/2021	10.7	-	-	1072.84	1.13
		10/9/2023	10.3	-	-	1073.24	0.4
KMW-16	1083.27	5/28/2015	11.05	-	-	1072.22	-
		11/3/2015	10.67	-	-	1072.60	0.38
		2/2/2016	10.67	-	-	1072.60	0
		5/9/2016	10.66	-	-	1072.61	0.01
		7/25/2016	10.14	-	-	1073.13	0.52
		11/7/2016	10.27	-	-	1073.00	-0.13
		2/15/2017	-	-	-	NM[2]	-
		5/8/2017	10.31	-	-	1072.96	-
		8/15/2017	9.58	-	-	1073.69	0.73
		11/6/2018	10.47	-	-	1072.80	-0.89
		5/7/2019	11.1	-	-	1072.17	-0.63
		11/4/2019	10.49	-	-	1072.78	0.61
		5/4/2020	11.63	-	-	1071.64	-1.14
		11/2/2020	10.63	-	-	1072.64	1
		5/3/2021	11.63	-	-	1071.64	-1
		11/1/2021	10.41	-	-	1072.86	1.22
		10/9/2023	9.68	-	-	1073.59	0.73

TABLE 1
SUMMARY OF WATER LEVEL DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Well Identifier	Reference Point Elevation (feet above MSL)	Date of Measurement	Depth to Water (feet)	LNAPL Thickness (feet)	Depth to Water Corrected for Presence of LNAPL (feet)(a)(1)	Groundwater Elevation (feet, NAVD 88)	Change in Groundwater Elevation Level (feet)(b)
KMW-18	1085.34	5/27/2015	9.7	-	-	1075.64	-
		11/4/2019	9.21	-	-	1076.13	0.49
		5/4/2020	11.63	-	-	1073.71	-2.42
		11/2/2020	9.16	-	-	1076.18	2.47
		11/1/2021	6.16	-	-	1079.18	3.00
		10/9/2023	9.01	-	-	1076.33	-2.85
KMW-24	1087.47	5/29/2015	10.25	-	-	1077.22	-
		11/6/2019	9.37	-	-	1078.10	0.88
		11/2/2020	9.4	-	-	1078.07	-0.03
		5/3/2021	10.48	-	-	1076.99	-1.08
		11/1/2021	9.56	-	-	1077.91	0.92
		10/9/2023	9.18	-	-	1078.29	0.38
MW-7	1090.3	5/29/2015	13.78	1.44	12.70	1077.60	-
		11/4/2015	12.2	0.29	11.98	1078.32	0.72
		2/1/2016	12.3	0.29	12.08	1078.22	-0.10
		5/9/2016	12.21	0.32	11.97	1078.33	0.11
		7/25/2016	11.5	0.3	11.28	1079.03	0.69
		11/7/2016	11.58	0.28	11.37	1078.93	-0.09
		2/15/2017	12.42	0.27	12.22	1078.08	-0.85
		5/8/2017	11.77	0.18	11.64	1078.67	0.58
		8/14/2017	10.55	0.21	10.39	1079.91	1.24
		11/6/2018	11.95	0.2	11.80	1078.50	-1.41
		5/7/2019	12.76	0.18	12.63	1077.68	-0.83
		11/4/2019	11.67	-	-	1078.63	0.96
		5/4/2020	13.26	0.26	13.07	1077.24	-1.40
		11/2/2020	11.86	0.13	11.76	1078.54	1.30
		5/3/2021	13.32	0.38	13.04	1077.27	-1.27
		11/1/2021	11.91	0.1	11.84	1078.47	1.20
		10/9/2023	11.55	0.03	11.53	1078.77	0.31
MW-9	1091.48	5/28/2015	14.2	-	-	1077.28	-
		11/3/2015	13.98	-	-	1077.50	0.22
		2/1/2016	14.21	-	-	1077.27	-0.23
		5/9/2016	14.11	-	-	1077.37	0.10
		7/25/2016	13.43	-	-	1078.05	0.68
		11/7/2016	13.59	-	-	1077.89	-0.16
		2/15/2017	14.45	-	-	1077.03	-0.86
		5/8/2017	13.74	-	-	1077.74	0.71
		8/14/2017	12.78	-	-	1078.70	0.96
		11/6/2018	13.95	-	-	1077.53	-1.17
		5/7/2019	14.79	-	-	1076.69	-0.84
		11/4/2019	13.92	-	-	1077.56	0.87
		5/4/2020	16.68	1.66	15.44	1074.80	-2.76
		11/2/2020	15.5	1.84	14.12	1075.98	1.18
		5/3/2021 (e)	14.79	2.79	-	1078.79	-
		11/1/2021	13.58	NM[3]	-	1077.90	-
		10/9/2023	13.3	-	-	1078.18	-
MW-10	1092.11	5/29/2015	13.19	-	-	1078.92	-
		11/2/2015	12.36	-	-	1079.75	0.83
		2/1/2016	12.54	-	-	1079.57	-0.18
		5/9/2016	12.35	-	-	1079.76	0.19
		7/25/2016	11.6	-	-	1080.51	0.75
		11/7/2016	11.7	-	-	1080.41	-0.10
		2/14/2017	12.71	-	-	1079.4	-1.01
		5/8/2017	11.96	-	-	1080.15	0.75
		8/14/2017	11	-	-	1081.11	0.96
		11/6/2018	12.1	-	-	1080.01	-1.10
		5/7/2019	13.06	-	-	1079.05	-0.96
		11/4/2019	12.05	0.0200005	12.03	1080.08	1.03
		5/4/2020	13.69	-	-	1078.42	-1.66
		11/2/2020	12.18	-	-	1079.93	1.51
		5/3/2021	13.62	-	-	1078.49	-1.44
		11/1/2021	12.13	-	-	1079.98	1.49
		10/9/2023	11.8	-	-	1080.31	0.33
MW-11	1091.68	5/29/2015	14.51	0.55	14.10	1077.58	-
		11/4/2015	13.35	0.01	13.34	1078.34	0.76
		2/1/2016	13.52	0.1	13.45	1078.24	-0.10
		5/9/2016	13.41	0.1	13.34	1078.35	0.11
		7/25/2016	12.62	-	-	1079.06	0.71
		11/7/2016	12.7	-	-	1078.98	-0.08
		2/14/2017	13.7	0.01	13.69	1077.99	-0.99
		5/8/2017	12.93	-	-	1078.75	0.76
		8/14/2017	11.95	-	-	1079.73	0.98
		11/6/2018	13.05	0.01	13.04	1078.64	-1.09
		5/7/2019	14.15	0.17	14.02	1077.66	-0.98
		11/4/2019	13.01	0.02	13.00	1078.69	1.03
		5/4/2020	14.94	0.44	14.61	1077.07	-1.62
		11/2/2020	13.13	0.01	13.12	1078.56	1.49
		5/3/2021	14.66	0.19	14.52	1077.16	-1.39
		11/1/2021	13.1	0.01	13.09	1078.59	1.42
		10/9/2023	12.79	-	-	1078.89	0.30
MW-13	1091.27	5/28/2015	10.1	-	-	1081.17	-
		11/4/2015	14.03	0.2	13.88	1077.39	-3.78
		2/1/2016	14.1	0.21	13.94	1077.33	-0.06
		5/9/2016	13.98	0.18	13.85	1077.43	0.10
		7/25/2016	13.12	0.02	13.11	1078.17	0.74
		11/7/2016	13.3	0.05	13.26	1078.01	-0.16
		2/14/2017	14.19	0.04	14.16	1077.11	-0.90
		5/8/2017	13.48	0.04	13.45	1077.82	0.71
		8/14/2017	12.45	-	-	1078.82	1.00
		11/6/2018	13.6	-	-	1077.67	-1.15
		5/7/2019	14.5	-	-	1076.77	-0.90
		11/4/2019	13.55	-	-	1077.72	0.95
		5/4/2020	15.1	-	-	1076.17	-1.55
		11/2/2020	13.7	0.01	13.69	1077.58	1.41
		5/3/2021	15.01	-	-	1076.26	-1.32
		11/1/2021	13.65	0.01	13.64	1077.63	1.37
		10/9/2023	13.41	-	-	1077.86	0.23
MWG-1	1083.98	5/28/2015	9.71	-	-	1074.27	-
		11/4/2019	8.98	-	-	1075.00	0.73
		5/3/2021	10.4	-	-	1073.58	-1.42
		11/1/2021	9.02	-	-	1074.96	1.38
MWG-2	1085.47	2/1/2016	8.9	-	-	1076.57	-
		5/9/2016	8.78	-	-	1076.69	0.12
		7/25/2016	8.1	-	-	1077.37	0.68
		11/7/2016	8.32	-	-	1077.15	-0.22
		2/14/2017	9.15	-	-	1076.32	-0.83
		5/8/2017	8.46	-	-	1077.01	0.69
		8/14/2017	7.47	-	-	1078.00	0.99
		11/6/2018	8.6	-	-	1076.87	-1.13
		5/7/2019	9.47	-	-	1076.00	-0.87
		11/4/2019	8.62	-	-	1076.85	0.85
		5/4/2020	10.08	-	-	1075.39	-1.46
		11/2/2020	8.82	-	-	1076.65	1.26
		5/3/2021	10.05	-	-	1075.42	-1.23
		11/1/2021	8.95	-	-	1076.52	1.10
		10/9/2023	8.41	-	-	1077.06	0.54

TABLE 1
SUMMARY OF WATER LEVEL DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Well Identifier	Reference Point Elevation (feet above MSL)	Date of Measurement	Depth to Water (feet)	LNAPL Thickness (feet)	Depth to Water Corrected for Presence of LNAPL (feet)(a)(1)	Groundwater Elevation (feet, NAVD 88)	Change in Groundwater Elevation Level (feet)(b)
MWG-3	1084.15	5/28/2015	7.6	-	-	1076.55	-
		11/3/2015	7.1	0.06	7.06	1077.10	0.55
		2/1/2016	7.1	0.08	7.04	1077.11	0.02
		5/9/2016	7	0.04	6.97	1077.18	0.07
		7/25/2016	6.4	0.05	6.36	1077.79	0.61
		11/7/2016	6.61	0.11	6.53	1077.62	-0.16
		2/14/2017	7.27	0.02	7.26	1076.90	-0.73
		5/8/2017	6.68	0.03	6.66	1077.49	0.60
		8/14/2017	5.81	-	-	1078.34	0.85
		11/6/2018	6.9	0.05	6.86	1077.29	-1.05
		5/7/2019	7.6	0.02	7.59	1076.57	-0.72
		11/4/2019	6.8	-	-	1077.35	0.78
		5/4/2020	8.12	-	-	1076.03	-1.32
		11/2/2020	6.9	0.01	6.89	1077.26	1.23
		5/3/2021	8.05	0.01	8.04	1076.11	-1.15
		11/1/2021	6.9	-	-	1077.25	1.14
		10/9/2023	6.6	-	-	1077.55	0.30
S-1	1088.82	5/28/2015	11.79	-	-	1077.03	-
		11/4/2019	10.81	-	-	1078.01	0.98
		11/2/2020	10.97	-	-	1077.85	-0.16
		5/3/2021	12.26	-	-	1076.56	-1.29
		11/1/2021	10.89	-	-	1077.93	1.37
		10/10/2023	10.61	-	-	1078.21	0.28
S-2	1085.74	5/27/2015	8.73	-	-	1077.01	-
		11/7/2016	7.67	-	-	1078.07	1.06
		2/14/2017	8.41	-	-	1077.33	-0.74
		5/8/2017	7.88	-	-	1077.86	0.53
		8/14/2017	7.02	-	-	1078.72	0.86
		11/6/2018	8.1	-	-	1077.64	-1.08
		5/7/2019	8.7	-	-	1077.04	-0.60
		11/4/2019	8.01	-	-	1077.73	0.69
		5/4/2020	9.18	-	-	1076.56	-1.17
		11/2/2020	7.99	-	-	1077.75	1.19
		5/3/2021	9.04	-	-	1076.7	-1.05
		11/1/2021	8.02	-	-	1077.72	1.02
		10/10/2023	7.7	-	-	1078.04	0.32
YMW-1	1089.05	5/29/2015	12.0	-	-	1077.05	-
		11/4/2015	11.4	-	-	1077.65	0.6
		2/1/2016	11.49	-	-	1077.56	-0.09
		5/9/2016	11.36	-	-	1077.69	0.13
		7/25/2016	10.69	-	-	1078.36	0.67
		11/7/2016	10.79	-	-	1078.26	-0.1
		2/15/2017	11.65	-	-	1077.4	-0.86
		5/8/2017	11.01	-	-	1078.04	0.64
		8/14/2017	10.03	-	-	1079.02	0.98
		11/6/2018	11.25	-	-	1077.8	-1.22
		5/7/2019	12.01	-	-	1077.04	-0.76
		11/4/2019	11.09	-	-	1077.96	0.92
		5/4/2020	12.46	-	-	1076.59	-1.37
		11/2/2020	11.14	-	-	1077.91	1.32
		5/3/2021	12.38	-	-	1076.67	-1.24
		11/1/2021	11.27	-	-	1077.78	1.11
		10/10/2023	10.9	-	-	1078.15	0.37
YMW-2	1090.86	5/29/2015	13.73	-	-	1077.13	-
		11/4/2015	13.1	-	-	1077.76	0.63
		2/1/2016	13.17	-	-	1077.69	-0.07
		5/9/2016	13.08	-	-	1077.78	0.09
		7/25/2016	12.3	-	-	1078.56	0.78
		11/7/2016	12.44	-	-	1078.42	-0.14
		2/15/2017	13.36	-	-	1077.5	-0.92
		5/8/2017	12.65	-	-	1078.21	0.71
		8/14/2017	11.12	-	-	1079.74	1.53
		11/6/2018	12.9	-	-	1077.96	-1.78
		5/7/2019	13.71	-	-	1077.15	-0.81
		11/4/2019	12.73	-	-	1078.13	0.98
		5/4/2020	14.21	-	-	1076.65	-1.48
		11/2/2020	12.85	-	-	1078.01	1.36
		5/3/2021	14.13	-	-	1076.73	-1.28
		11/1/2021	12.84	-	-	1078.02	1.29
		10/9/2023	12.54	-	-	1078.32	0.3
YMW-3	1089.53	5/29/2015	12.28	-	-	1077.25	-
		11/4/2015	11.68	0.0600004	11.63	1077.895	0.65
		2/1/2016	11.75	-	-	1077.78	-0.12
		5/9/2016	11.62	-	-	1077.91	0.13
		7/25/2016	10.92	-	-	1078.61	0.70
		11/7/2016	11.05	-	-	1078.48	-0.13
		2/15/2017	11.9	-	-	1077.63	-0.85
		5/8/2017	11.21	-	-	1078.32	0.69
		8/14/2017	10.18	-	-	1079.35	1.03
		11/6/2018	11.42	-	-	1078.11	-1.24
		5/7/2019	12.24	-	-	1077.29	-0.82
		11/4/2019	11.31	-	-	1078.22	0.93
		5/4/2020	12.7	-	-	1076.83	-1.39
		11/2/2020	11.37	-	-	1078.16	1.33
		5/3/2021	12.62	-	-	1076.91	-1.25
		11/1/2021	11.44	-	-	1078.09	1.18
		10/9/2023	11.1	-	-	1078.43	0.34

ABBREVIATIONS AND NOTES:

-:Not Applicable
LNAPL: Light Nonaqueous-Phase Liquid
NAVD 88: North American Vertical Datum of 1988
NA: not applicable
NM: Not Measured

(a) Water level corrected for presence of LNAPL, using assumed product density of 0.75 grams per cubic centimeter.
(b) Change in water level is relative to two most recent sampling events.
(c) Inconsistent detections of free product using oil-water interface probe.
(d) Monitoring well KMW-10 is included in monitoring well network only for evaluating presence of LNAPL and depth to water.
(e) Thickness of product is an estimate due to a clay-like substance present in the well.
(1) API. 2000. Non-aqueous phase liquid (NAPL) mobility limits in soil. American Petroleum Institute, Houston, Texas. June.
(2) Monitoring well KMW-16 was not sampled because of inaccessibility caused by snow pile.
(3) Thickness of product was not able to be measured due to a clay-like substance present in the well.

TABLE 2
MONITORING WELLS CONDITION SUMMARY
FORMER TIGER OIL NOB HILL SITE
YAKIMA, WASHINGTON

Location	Date	Well Diameter (inches)	Monument	Gasket	Lock	Functional Compression Plug	Number of Bolts	Comments
KMW-5	10/9/2023	4	Y	Y	Y	Y	3	
KMW-6	10/9/2023	4	Y	Y	Y	Y	0	Need 3 bolts
KMW-7	10/9/2023	4	Y	Y	Y	Y	0	Need 3 bolts
KMW-14	10/9/2023	4	Y	Y	Y	Y	2	Need 1 bolt
KMW-15	10/9/2023	4	Y	Y	Y	Y	3	
KMW-16	10/9/2023	4	Y	Y	Y	Y	3	
MW-7	10/9/2023	2	Y	Y	Y	Y	3	
MW-9	10/9/2023	2	Y	Y	Y	Y	2	
MW-10	10/9/2023	2	Y	Y	Y	Y	0	Need 3 bolts
MW-11	10/9/2023	2	Y	Y	Y	Y	2	
MW-13	10/9/2023	2	Y	Y	Y	Y	2	
MWG-2	10/9/2023	2	Y	Y	Y	Y	2	Need 1 bolt
MWG-3	10/9/2023	2	Y	Y	Y	Y	2	
S-2	10/9/2023	2	Y	Y	Y	Y	3	
YMW-1	10/9/2023	2	Y	Y	Y	Y	2	
YMW-2	10/9/2023	2	Y	Y	Y	Y	2	
YMW-3	10/9/2023	2	Y	Y	Y	Y	2	
** KMW-8*	10/9/2023	4	Y	Y	Y	Y	2	Need 1 bolt
** KMW-10*	10/9/2023	4	Y	Y	Y	Y	2	Need 1 bolt & 4-inch J Plug
** KMW-18*	10/9/2023	4	Y	Y	Y	Y	3	
** KMW-24*	10/9/2023	4	Y	Y	Y	Y	3	
** MWG-1*	10/9/2023	2	Y	Y	Y	Y	3	
** S-1*	10/9/2023	4	Y	Y	Y	Y	3	

Notes:

Y = yes, component integrity checked and confirmed.

** = monitoring well not in the network for conducting monitoring, sampling activities. Only collect depth to water and depth to bottom data.*

TABLE 3
SUMMARY OF FIELD PARAMETERS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Date	Field Parameters					
		pH, Field pH units	Temperature Deg C	Conductivity, Field uS/cm	Dissolved Oxygen, Field ug/L	Oxidation Reduction Potential (ORP), Field mv	Turbidity, Field NTU
KMW-5	05/27/2015	7.02	18	1098	340	28.6	7.03
	02/02/2016	6.63	14.8	879	1490	256.6	6.06
	05/09/2016	7.31	16.1	881	2280	-74	3.67
	07/25/2016	6.58	25.8	287	1320	9.4	4.71
	11/07/2016	7.16	19	791	2080	-2.1	2.76
	02/14/2017	7.21	12.6	3238	2600	-15	1.83
	05/08/2017	7.1	16	693	2540	-0.9	2.11
	08/16/2017	6.62	28.6	326	950	149.8	1.48
	11/06/2018	7.38	18.1	838	3750	37.6	1.43
	05/07/2019	6.98	14.7	1195	960	185.4	3.2
	11/04/2019	7.27	16.8	734	3790	61.5	4.87
	05/04/2020	7.11	17.3	1153	300	69.8	2.21
	11/02/2020	7.2	18.4	745	980	222.1	1
	05/03/2021	7.05	15.7	1101	650	155.3	2.01
	11/02/2021	7.19	17.6	878	1780	114.8	1.83
	10/10/2023	6.69	20.9	781	540	94	17
KMW-6	05/28/2015	7.98	16.5	816	1780	-30.3	2.42
	11/03/2015	7.05	17.9	965	1690	74.2	0.36
	02/01/2016	6.81	15.5	840	2300	293.9	2.82
	05/09/2016	7.58	15.3	825	4270	-104	2.51
	07/25/2016	7.68	16.7	994	2290	-85.9	3.31
	11/08/2016	7.68	17.6	988	1610	120.6	1.31
	02/15/2017	7.17	13.9	1138	940	-20.9	1.04
	05/08/2017	7.34	14.7	975	1660	-49	2.77
	08/15/2017	7.63	18.7	1246	1360	-66.1	0.85
	11/06/2018	7.44	18	951	2110	-43.4	3.23
	05/07/2019	7.14	14.8	939	2990	84.6	2.61
	11/04/2019	7.3	16.7	1030	2700	15.4	5.81
	05/04/2020	7.4	16	786	4090	53.8	1.6
	11/03/2020	7.4	17	748	3900	50.4	1.03
	05/03/2021	7.35	15.3	725	3730	148	2.03
	11/01/2021	7.34	17.5	959	2480	10.3	0.39
	10/10/2023	7.19	17.8	1132	950	-82	2
KMW-7	05/29/2015	7.33	16.6	123	7440	123.6	2.33
	11/02/2015	7.05	16.6	934	2920	6.3	1.04
	02/03/2016	7.4	15.3	832	3390	187	3.78
	05/10/2016	7.49	15	799	7980	-50.6	3.12
	07/26/2016	7.65	16.1	770	9430	29.9	2.32
	11/09/2016	7.68	16.9	775	7930	57.3	0.92
	02/14/2017	7.26	15	824	5400	-20.3	1.16
	05/09/2017	7.16	14.8	995	2940	-35.4	3.11
	08/16/2017	6.86	19.2	817	7870	122.3	1.31
	11/08/2018	7.52	15.8	667	7940	70	1.36
	05/08/2019	7.15	14.6	822	5720	113.5	2.64
	05/05/2020	7.45	16.1	783	8600	49.9	0.83
	11/03/2020	7.32	15.9	804	5280	25.2	1.14
	05/04/2021	7.39	15.7	701	6090	78.2	3.81
	11/02/2021	7.53	16.5	847	3730	122.6	1.13
	10/11/2023	7.34	17.5	839	7430	125	3.8
KMW-8	05/29/2015	7.41	17.2	889	7350	114.2	9.62
KMW-10	05/29/2015	7.27	21.3	795	5240	132.6	3.81
KMW-14	05/28/2015	6.99	15.7	1266	140	-33.5	6.88
	11/03/2015	6.51	17.9	1230	220	-12.3	7.32
	02/02/2016	6.84	15.6	959	380	287.7	5.66
	05/09/2016	7.02	16.1	1868	230	-102.8	5.24
	07/25/2016	7.02	18.4	1104	1410	61.1	5.88
	11/07/2016	7.14	17.4	983	1120	-39.8	6.55
	02/15/2017	7.16	13.2	976	430	-36.4	7.45
	05/08/2017	7.03	14.1	1053	1470	-6.5	14.5
	08/15/2017	7.62	16.9	1097	940	37.3	1.76
	11/06/2018	6.95	17.4	1020	730	-25.9	6.34
	05/07/2019	6.76	14.2	1120	210	-37.2	8.6
	11/05/2019	6.97	16.9	1049	890	-27.2	4.97
	05/04/2020	7	16.3	1083	0	-68.2	9.89
	11/02/2020	6.84	18.5	1126	190	14.7	9.53
	05/03/2021	6.97	16.2	999	240	129.6	14.2
	11/01/2021	6.89	18.2	1074	550	95.9	3.33
	10/10/2023	6.64	19.3	1389	430	65	7.2
KMW-15	11/03/2015	6.95	17.9	930	2060	63.3	1.14
	02/02/2016	7.12	15	768	4020	292.1	5.48
	05/09/2016	7.58	16.2	758	7950	-58.4	2.42
	07/25/2016	7.68	18	779	7000	18.4	4.62
	11/07/2016	7.72	18.2	776	6130	40.3	0.91
	02/15/2017	7.1	13.1	813	4240	14.3	1.16
	05/08/2017	6.8	16.3	827	3900	10.2	1.88
	08/15/2017	7.19	19.3	854	5190	71.7	2.11
	11/06/2018	7.53	17.7	767	5490	30.1	3.93
	05/07/2019	7.13	14.8	809	5350	146.3	1.86
	11/05/2019	7.29	15.8	692	6020	47.2	4.82
	05/04/2020	7.5	16.4	737	4460	60.1	2.16
	11/02/2020	7.45	17.7	672	5930	250.5	0.19
	05/03/2021	7.32	15.4	697	7010	192.7	4.83
	11/01/2021	7.34	17.3	854	4790	152.5	0.17
	10/10/2023	7.01	18.7	1113	290	-56	8.7
KMW-16	05/28/2015	7.56	16.8	879	810	10.9	1.71
	11/03/2015	6.88	18.3	1147	200	26.3	1.13
	02/02/2016	6.8	14.6	935	690	258	3.12
	05/09/2016	7.26	15.8	1061	740	-82.8	3.76
	07/25/2016	7.4	17.3	1064	690	-129.8	1.72
	11/07/2016	7.54	17.7	1056	750	-119.4	1.72
	05/08/2017	6.96	15.8	1179	810	1.6	4.93
	08/15/2017	7.81	18.3	1137	730	-19.5	8.73
	11/06/2018	7.34	17.7	1021	540	-65.3	14.8
	05/07/2019	7.15	15.1	964	1260	79.4	2.54
	11/05/2019	7.43	16.7	955	970	-35.3	4.23
	05/04/2020	7.35	15.7	880	2640	107.4	1.81
	11/02/2020	7.11	17.8	1064	1750	-12	6.63
	05/03/2021	7.12	16.1	897	3060	157.4	4.6
	11/01/2021	6.96	17.7	1080	730	94.3	11.9
	10/10/2023	6.9	19.4	1653	230	-133	2.8
KMW-18	05/27/2015	7.05	17.8	846	4800	70.1	27.83
KMW-24	05/29/2015	7.51	16	771	7410	22.4	1.52
MW-7	11/06/2019	7.28	15.9	1038	1300	-96.5	6.31
MW-9	05/28/2015	7.09	22.6	1186	1570	-28.5	153.2
	11/03/2015	6.65	14.7	1375	610	-40.2	15.83
	02/02/2016	6.58	10	1198	500	244.2	14.4
	05/10/2016	7.04	17.3	1184	400	-130.1	9.85
	07/26/2016	7.11	23.2	1156	1170	-140.7	8.58
	11/08/2016	7.24	17.1	1122	1050	-128.5	3.12
	02/15/2017	7.13	9.8	1163	800	-34.8	12.5
	05/09/2017	7.04	16.4	1175	1180	-41.7	3.83
	08/16/2017	7.75	19.6	1212	2280	-73.2	6.39
	11/07/2018	7	15.6	1190	1480	-82.3	21.8
	05/08/2019	6.68	17.7	1200	1620	29.4	1.6
	11/06/2019	7.17	12.5	1083	1680	-44.8	14.3
	10/10/2023	6.68	16.1	1246	240	-54.5	72.9

TABLE 3
SUMMARY OF FIELD PARAMETERS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Date	Field Parameters					
		pH, Field pH units	Temperature Deg C	Conductivity, Field uS/cm	Dissolved Oxygen, Field ug/L	Oxidation Reduction Potential (ORP), Field mv	Turbidity, Field NTU
MW-10	11/02/2015	6.98	16.5	1114	2680	108.2	12.78
	02/03/2016	7.25	11.9	1980	4250	250.1	30.8
	05/10/2016	7.58	14.7	1165	9840	85.1	9.51
	07/26/2016	7.6	18	1041	9220	87.9	12.5
	11/07/2016	7.6	17.8	1058	7240	58.8	9.51
	02/14/2017	7.29	11.9	1076	4890	-14.3	9.13
	05/09/2017	7.03	14.3	1575	5080	-29.2	3.16
	08/16/2017	7.61	18.3	1062	7980	135.7	2.67
	11/08/2018	7.44	15.3	790	22980	115.7	2.69
	05/08/2019	7.05	13.3	1039	6840	207.7	2.32
	05/05/2020	7.72	15.1	774	6720	207.1	6.42
	11/03/2020	7.5	16.9	770	7120	51.3	0.61
	05/04/2021	7.49	15.4	718	5920	108.4	5.96
	11/02/2021	7.48	17	1080	6820	121.2	0.78
	10/11/2023	7.27	17.7	1399	7130	119	3.4
MW-11	07/26/2016	7.05	18.4	2471	1350	-182.5	17.5
	11/08/2016	7.16	16.8	2339	1070	-181	7.03
	05/09/2017	7.29	15.1	2446	390	-106.5	10.1
	08/16/2017	8	17.7	2719	750	-108.8	9.17
	10/11/2023	6.76	16.5	2068	2200	-80.2	14.58
MW-13	05/28/2015	7.06	21	906	1280	58	49.35
	08/16/2017	7.85	18.4	980	960	-74	12.5
	11/07/2018	6.85	15.6	765	2500	-52.6	2.78
	05/08/2019	6.67	17.2	948	450	0.2	12.5
	11/06/2019	6.79	11.6	8840	470	7.9	3.98
	05/05/2020	6.81	17.3	805	900	-33.6	47.4
	05/04/2021	6.56	14.1	776	500	102.1	17.1
	10/11/2023	6.7	15.8	843	250	-53.6	12.12
MWG-1	05/28/2015	7.45	17.1	843	4710	24.1	2.62
MWG-2	02/03/2016	7.29	13.6	774	3450	279.3	22.2
	05/09/2016	7.55	16.5	768	7040	-48.3	1.94
	07/26/2016	7.62	19.3	775	7580	42.2	1.81
	11/07/2016	7.7	19.4	778	6230	35.6	1.16
	02/14/2017	7.26	11.5	800	4500	-5.4	22.3
	05/09/2017	7.11	13.9	807	5230	-0.7	9.82
	08/14/2017	7.4	20.4	857	5510	154.6	1.51
	11/06/2018	7.57	19.2	755	5340	48.2	1.72
	05/07/2019	7.39	15.7	822	4440	48.8	3.69
	11/05/2019	7.46	17.6	803	5490	88.1	2.08
	05/05/2020	7.61	15.5	776	4660	187.4	3.05
	11/03/2020	7.32	18.4	808	4590	124.1	2.08
	05/04/2021	7.46	14.3	796	5830	57.1	1.4
	11/02/2021	7.33	17	831	2560	138.4	3.67
	10/10/2023	7.37	19.7	818	5810	383.2	2.42
MWG-3	05/28/2015	8.16	16.9	872	80	-156	1.34
	08/14/2017	8.02	18.7	1210	490	-133.8	3.14
	11/05/2019	7.38	15.5	843	820	-83.1	5.83
	05/05/2020	7.11	15.3	1141	200	-94.6	1.96
	11/02/2021	7.05	15.1	1039	1090	140.5	4.89
	10/10/2023	6.92	17.3	1189	250	-85.3	4.81
S-1	05/28/2015	8.09	17.7	822	2480	-7.7	2.32
	10/10/2023	7.38	17.3	818	3430	4.87	2.2
S-2	05/27/2015	7.4	16.7	1145	280	-86.4	2.25
	11/07/2016	7.28	16.9	1527	1010	-165.5	0.73
	02/14/2017	7.64	12.2	1534	400	-88	4.37
	05/08/2017	7.35	14.7	1628	430	-90.5	3.12
	08/14/2017	8.01	18.2	1559	710	-115.4	1.89
	11/08/2018	7.17	15.7	1172	890	-119.3	1.24
	05/07/2019	6.98	13.6	1218	160	-32.1	3.79
	11/05/2019	7.04	16	1232	880	-137.8	4.35
	05/04/2020	7.34	14.7	1099	520	-110.2	1.91
	11/02/2020	7.01	16.3	1353	290	-115	2.01
	05/03/2021	7.01	15.4	1115	370	-109.1	2.5
	11/02/2021	6.83	14.7	1390	690	170.3	3.62
	10/10/2023	6.73	16.9	1343	250	-131	2.6
YMW-1	11/04/2015	6.87	15.8	1154	1420	-46.3	4.98
	02/02/2016	6.87	15.2	1202	330	232.6	6.03
	05/10/2016	7.33	16.7	1054	1470	-156.9	4.11
	07/27/2016	7.37	17.2	1148	1060	-176.5	7.03
	11/08/2016	7.36	17.4	1669	1060	-179.1	2.32
	02/15/2017	7.47	13.5	1566	560	-95	2.81
	05/09/2017	7.34	15.9	1763	1200	-108.3	3.71
	08/17/2017	7.99	17.8	2030	1810	-109.1	2.81
	11/07/2018	7.32	16.6	1157	350	-142.3	1.8
	05/08/2019	6.89	15.2	1132	400	-80.3	3
	11/05/2019	7.19	17.2	1230	880	-116.8	2.56
	05/05/2020	7.29	17.6	937	630	-115	5
	11/03/2020	7.18	16.4	816	1380	-102.4	1.34
	05/04/2021	7.13	16.8	961	880	-98	2.4
	11/02/2021	7.17	16.5	1196	210	-107	1.25
	10/10/2023	6.83	17.5	1149	1120	-93.8	3.29
YMW-2	11/04/2015	6.98	16.4	987	1520	48.3	4.11
	02/01/2016	6.37	15	1110	790	327.9	8.98
	05/10/2016	7.32	16.9	919	2620	-81.7	1.73
	07/27/2016	7.15	18.3	1524	1310	-185.9	4.72
	11/08/2016	7.21	19	1570	950	-179.4	1.81
	02/15/2017	7.17	13.5	1001	830	-44.6	3.12
	05/09/2017	7	16.5	1220	350	-48.4	2.87
	08/17/2017	7.98	19.1	1230	800	-107.1	4.19
	11/07/2018	7.1	18.1	1246	830	-143	2.99
	05/08/2019	6.97	16.9	1292	200	-55.3	2.4
	11/05/2019	7.35	16.8	1173	890	-93.5	5.01
	05/05/2020	7.15	16.6	1472	290	-119.6	1.13
	11/03/2020	6.83	17.4	1656	110	-128.6	1.24
	05/04/2021	7.02	16.1	1173	500	-28.6	4.33
	11/02/2021	6.94	17.9	1417	530	134	2.33
	10/10/2023	6.8	18.7	1121	340	-38.7	3.12
	10/11/2023	6.8	18.7	1121	340	-38.7	3.1
YMW-3	02/01/2016	6.5	15.1	1505	390	208.3	2.77
	05/10/2016	7.41	16.1	1393	400	-196	2.49
	07/26/2016	7.5	18.4	1303	710	-206.4	6.92
	11/09/2016	7.66	17.9	1643	930	-188.3	4.57
	02/15/2017	7.42	13.7	1853	340	-99.3	4.64
	05/09/2017	7.16	16.4	3441	240	-95.1	10.5
	08/16/2017	8.09	19.2	2236	100	-169.1	9.33
	11/08/2018	7.48	15.5	2095	670	-130.9	5.78
	05/08/2019	7.44	16	1653	180	-57.9	5.79
	11/06/2019	7.5	16.7	1930	200	-128.4	4.46
	05/05/2020	7.46	16.9	1576	0	-143.8	1.81
	11/03/2020	7.4	16	1067	100	-148.1	2.44
	05/04/2021	7.39	17.2	1100	80	-135.2	2.4
	11/02/2021	7.33	16.9	2343	10	-138.6	2.3
	10/11/2023	7.23	17	1552	1870	171.8	2.77

ABBREVIATIONS AND NOTES:

Deg C: Degrees Celsius
uS/cm: microSiemen per centimeter
mv: millvolts
NTU: Nephelometric Turbidity Units
mg/L: milligrams per liter

TABLE 4
SUMMARY OF GROUNDWATER QUALITY DATA: PETROLEUM HYDROCARBONS AND VOCs
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

				Total Petroleum Hydrocarbon Identification (detect/non-detect)			Total Petroleum Hydrocarbons			Petroleum Volatile Organic Compounds				
Sample Location	Sample Name	Sample Date	Sample Depth (bgs)	Diesel Range Organics ug/L	Gasoline Range Organics ug/L	PHC as Lube Oil ug/L	Diesel Range Organics ug/L	Gasoline Range Organics ug/L	PHC as Lube Oil ug/L	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Xylene (Total)* ug/L	Naphthalene ug/L
MTCA Method A Cleanup Level				NA	NA	NA	500	800	500	5	1000	700	1000	160
DSW-MILTPT03	DSW-MILTPT03-20181204-GW-10.0	12/04/2018	10 (ft)	-	-	-	-	**360**	-	**2.9**	**2.6**	**10**	**3.8**	-
	DSW-MILTPT03-20181204-GW-11.0	12/04/2018	11 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
	DSW-MILTPT03-20181205-GW-12-14	12/05/2018	12 - 14 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	**5.8**	-
	DSW-MILTPT03-20181205-GW-15-17	12/05/2018	15 - 17 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
DSW-MILTPT05	DSW-MILTPT05-20181205-GW-9-11	12/05/2018	9 - 11 (ft)	-	-	-	-	**1800**	-	**5.5**	**4.5**	**89**	**34**	-
	DSW-MILTPT05-20181205-GW-12-14	12/05/2018	12 - 14 (ft)	-	-	-	-	**760**	-	**25**	**1.6**	**29**	3 U	-
	DSW-MILTPT05-20181205-GW-16-18	12/05/2018	16 - 18 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
DSW-MILTPT10	DSW-MILTPT10-20181205-GW-10-12	12/05/2018	10 - 12 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
	DSW-MILTPT10-20181205-GW-13-15	12/05/2018	13 - 15 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
	DSW-MILTPT10-20181205-GW-16-18	12/05/2018	16 - 18 (ft)	-	-	-	-	100 U	-	1 U	1 U	1 U	3 U	-
KMW-5	KMW-5-20150527-GW	05/27/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW5-20160202-GW	02/02/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20160509-GW	05/09/2016	-	-	-	-	-	100 U	-	1 U	**2**	1 U	1 U	-
	KMW-5-20160725-GW	07/25/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20170214-GW	02/14/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20170508-GW	05/08/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20170816-GW	08/16/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20181106-GW	11/06/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-5-20190507-GW	05/07/2019	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW5-20191104-GW	11/04/2019	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.5 U
	KMW-5-20200504-GW	05/04/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-5-20201102-GW	11/02/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	-
	KMW5-20210503-GW	05/03/2021	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-5-20211102-GW	11/02/2021	14 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW5-W-13-20231010	10/10/2023	13 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	2 U
KMW-6	KMW-6-20150528-GW	05/28/2015	-	-	-	-	-	100 U	-	**47**	1 U	**1.6**	1 U	-
	KMW-6-20151103-GW	11/03/2015	-	-	-	-	-	**410**	-	**15**	**7.4**	**18**	**35.6**	-
	KMW6-20160201-GW	02/01/2016	-	-	-	-	-	400 U	-	**42**	4 U	**22**	**5.4**	-
	KMW-6-20160509-GW	05/09/2016	-	-	-	-	-	**270**	-	**69**	**3**	**33**	**3.2**	-
	KMW-6-20160725-GW	07/25/2016	-	-	-	-	-	**480**	-	**31**	**2**	**32**	**13.5**	-
	KMW-6-20161108-GW	11/08/2016	-	-	-	-	-	**470**	-	**13**	1 U	**48**	**9.4**	-
	KMW-6-20170215-GW	02/15/2017	-	-	-	-	-	**250**	-	**46**	1 U	**11**	**2.7**	-
	KMW-6-20170508-GW	05/08/2017	-	-	-	-	-	**830**	-	**170**	**1.8**	**38**	**15.9**	-
	KMW-6-20170815-GW	08/15/2017	-	-	-	-	-	**760**	-	**36**	4 U	**23**	**10.5**	-
	KMW-6-20181106-GW	11/06/2018	-	-	-	-	-	**430**	-	**5.5**	1 U	**13**	**4.2**	-
	KMW-6-20190507-GW	05/07/2019	-	-	-	-	-	**140**	-	**49**	1 U	**8.4**	1 U	-
	KMW6-20191104-GW	11/04/2019	-	-	-	-	-	**690**	-	**100**	5 U	**24**	**7**	7.5 U
	KMW-6-20200504-GW	05/04/2020	-	-	-	-	-	100 U	-	**10**	1 U	**0.39**	0.4 U	1 U
	KMW-6-20201103-GW	11/03/2020	-	-	-	-	-	**380**	-	**72**	**3.4**	**29**	**14.2**	-
	KMW6-20210503-GW	05/03/2021	-	-	-	-	-	100 U	-	**5.1**	1 U	**0.21**	0.4 U	1 U
	KMW-6-20211101-GW	11/01/2021	14 (ft)	-	-	-	-	**300**	-	**31**	1 U	**25**	**5.73**	**4 Y**
	KMW6-W-14-20231010	10/10/2023	14 (ft)	-	-	-	-	**780**	-	**69**	4 U	**80**	**14.7**	**24**
KMW-7	KMW-7-20150529-GW	05/29/2015	-	-	-	-	-	**620**	-	**8.4**	**2**	**14**	**88**	-
	KMW-7-20151102-GW	11/02/2015	-	-	-	-	-	**350**	-	**13**	1 U	**21**	**5.1**	-
	KMW7-20160203-GW	02/03/2016	-	-	-	-	-	**610**	-	**47**	1 U	**41**	**2.1**	-
	KMW-7-20160510-GW	05/10/2016	-	-	-	-	-	**250**	-	**25**	**2.3**	**21**	1 U	-
	KMW-7-20160726-GW	07/26/2016	-	-	-	-	-	100 U	-	**3.1**	1 U	**1.5**	1 U	-
	KMW-7-20161109-GW	11/09/2016	-	-	-	-	-	100 U	-	**5**	1 U	**6.3**	**2.5**	-
	KMW-7-20170214-GW	02/14/2017	-	-	-	-	-	**200**	-	**12**	1 U	**30**	**4.6**	-
	KMW-7-20170509-GW	05/09/2017	-	-	-	-	-	**1800**	-	**110**	5 U	**150**	**196**	-
	KMW-7-20170816-GW	08/16/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-7-20181108-GW	11/08/2018	-	-	-	-	-	**120**	-	**1.3**	1 U	**8.3**	**2.8**	-
	KMW-7-20190508-GW	05/08/2019	-	-	-	-	-	**360**	-	**3.2**	1 U	**40**	**6.7**	-
	KMW-7-20200505-GW	05/05/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	**0.22**	0.4 U	1 U
	KMW-7-20201103-GW	11/03/2020	-	-	-	-	-	**250**	-	**0.39**	1 U	**24**	**7.6**	-
	KMW7-20210504-GW	05/04/2021	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-7-20211102-GW	11/02/2021	16 (ft)	-	-	-	-	**100**	-	0.2 U	1 U	**12**	**4.2**	**3**
	KMW7-W-15-20231011	10/11/2023	15 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	**0.35**	0.4 U	2 U
KMW-8	KMW-8-20150529-GW	05/29/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	**1**	-
KMW-10	KMW-10-20150529-GW	05/29/2015	-	-	-	-	-	**81000**	-	**830**	**4000**	**1200**	**6400**	-

TABLE 4
SUMMARY OF GROUNDWATER QUALITY DATA: PETROLEUM HYDROCARBONS AND VOCs
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Name	Sample Date	Sample Depth (bgs)	Total Petroleum Hydrocarbon Identification (detect/non-detect)			Total Petroleum Hydrocarbons			Petroleum Volatile Organic Compounds				
				Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Benzene	Toluene	Ethylbenzene	Xylene (Total)*	Naphthalene
				ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
			MTCA Method A Cleanup Level	NA	NA	NA	500	800	500	5	1000	700	1000	160
KMW-14	KMW-14-20150528-GW	05/28/2015	-	-	-	-	-	100 U	-	**1.9**	1 U	1 U	1 U	-
	KMW-14-20151103-GW	11/03/2015	-	-	-	-	-	100 U	-	**5.5**	1 U	1 U	1 U	-
	KMW14-20160202-GW	02/02/2016	-	-	-	-	-	100 U	-	**3**	1 U	1 U	1 U	-
	KMW-14-20160509-GW	05/09/2016	-	-	-	-	-	100 U	-	1 U	**1.9**	1 U	1 U	-
	KMW-14-20160725-GW	07/25/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-14-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-14-20170215-GW	02/15/2017	-	-	-	-	-	100 U	-	**1.2**	1 U	1 U	1 U	-
	KMW-14-20170508-GW	05/08/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-14-20170815-GW	08/15/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-14-20181106-GW	11/06/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-14-20190507-GW	05/07/2019	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
KMW-14	KMW14-20191105-GW	11/05/2019	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.5 U
	KMW-14-20200504-GW	05/04/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-14-20201102-GW	11/02/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	-
	KMW14-20210503-GW	05/03/2021	-	-	-	-	-	100 U	-	**0.22**	1 U	**0.35**	0.4 U	1 U
	KMW-14-20211101-GW	11/01/2021	16 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.4 U
	KMW14-W-15-20231010	10/10/2023	15 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	2 U
KMW-15	KMW-15-20151103-GW	11/03/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW15-20160202-GW	02/02/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20160509-GW	05/09/2016	-	-	-	-	-	100 U	-	1 U	**1.1**	1 U	1 U	-
	KMW-15-20160725-GW	07/25/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20170215-GW	02/15/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20170508-GW	05/08/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20170815-GW	08/15/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20181106-GW	11/06/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-15-20190507-GW	05/07/2019	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW15-20191105-GW	11/05/2019	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.5 U
	KMW-15-20200504-GW	05/04/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-15-20201102-GW	11/02/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	-
	KMW15-20210503-GW	05/03/2021	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	KMW-15-20211101-GW	11/01/2021	15 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.4 U
	KMW15-W-15-20231010	10/10/2023	15 (ft)	-	-	-	-	100 U	-	**0.3**	1 U	0.2 U	0.4 U	2 U
KMW-16	KMW-16-20150528-GW	05/28/2015	-	-	-	-	-	**280**	-	**60**	1 U	**9.6**	**4.6**	-
	KMW-16-20151103-GW	11/03/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW16-20160202-GW	02/02/2016	-	-	-	-	-	**200**	-	1 U	1 U	1 U	1 U	-
	KMW-16-20160509-GW	05/09/2016	-	-	-	-	-	**200**	-	**7.6**	1 U	1 U	1 U	-
	KMW-16-20160725-GW	07/25/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-16-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-16-20170508-GW	05/08/2017	-	-	-	-	-	**160**	-	**2.9**	1 U	1 U	1 U	-
	KMW-16-20170815-GW	08/15/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-16-20181106-GW	11/06/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-16-20190507-GW	05/07/2019	-	-	-	-	-	**150**	-	**2.6**	1 U	1 U	1 U	-
	KMW16-20191105-GW	11/05/2019	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.5 U
	KMW-16-20200504-GW	05/04/2020	-	-	-	-	-	**140**	-	**29**	1 U	**4**	**2.1**	**3.4**
	KMW-16-20201102-GW	11/02/2020	-	-	-	-	-	**130**	-	**0.62**	1 U	0.2 U	0.4 U	-
	KMW16-20210503-GW	05/03/2021	-	-	-	-	-	100 U	-	**33**	1 U	**0.88**	**0.51**	1 U
	KMW-16-20211101-GW	11/01/2021	15 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.4 U
	KMW16-W-11-20231010	10/10/2023	11 (ft)	-	-	-	-	**2500**	-	**260**	10 U	**370**	**79**	**92**
KMW-18	KMW-18-20150527-GW	05/27/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
KMW-24	KMW-24-20150529-GW	05/29/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	KMW-24-DUP-20150529-GW	05/29/2015	-	-	-	-	-	100 U	-	**1.7**	1 U	1 U	1 U	-
MW-7	MW7-20191106-GW	11/06/2019	-	-	-	-	-	**30000**	-	**12**	**150**	**850**	**4270**	-
MW-9	MW-9-20150528-GW	05/28/2015	-	-	-	-	-	**28000**	-	**1200**	**1900**	**740**	**2780**	-
	MW-9-20151103-GW	11/03/2015	-	-	-	-	-	**18000**	-	**1800**	**1400**	**720**	**2240**	-
	MW9-20160202-GW	02/02/2016	-	-	-	-	-	**19000**	-	**1800**	**1500**	**850**	**2670**	-
	MW-9-20160510-GW	05/10/2016	-	-	-	-	-	**26000**	-	**1500**	**1700**	**960**	**2810**	-
	MW-9-20160726-GW	07/26/2016	-	-	-	-	-	**26000**	-	**1400**	**2100**	**1300**	**3600**	-
	MW-9-20161108-GW	11/08/2016	-	-	-	-	-	**21000**	-	**810**	**1300**	**1300**	**3300**	-
	MW-9-20170215-GW	02/15/2017	-	-	-	-	-	**21000**	-	**390**	**960**	**1300**	**3200**	-
	MW-9-20170509-GW	05/09/2017	-	-	-	-	-	**15000**	-	**300**	**760**	**990**	**2270**	-
	MW-9-20170816-GW	08/16/2017	-	-	-	-	-	**17000**	-	**380**	**460**	**860**	**1800**	-
	MW-9-20181107-GW	11/07/2018	-	-	-	-	-	**16000**	-	**67**	**220**	**1200**	**1850**	-
	MW-9-20190508-GW	05/08/2019	-	-	-	-	-	**16000**	-	**15**	**99**	**820**	**1140**	-
	MW9-20191106-GW	11/06/2019	-	-	-	-	-	**20000**	-	**120**	**120**	**1200**	**1630**	-
	MW9-2023[1]	10/11/2023	-	-	-	-	-	-	-	-	-	-	-	-

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YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

				Total Petroleum Hydrocarbon Identification (detect/non-detect)			Total Petroleum Hydrocarbons			Petroleum Volatile Organic Compounds				
				Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Benzene	Toluene	Ethylbenzene	Xylene (Total)*	Naphthalene
Sample Location	Sample Name	Sample Date	Sample Depth (bgs)	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MTCA Method A Cleanup Level				NA	NA	NA	500	800	500	5	1000	700	1000	160
MW-10	MW-10-20151102-GW	11/02/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW10-20160203-GW	02/03/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20160510-GW	05/10/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20160726-GW	07/26/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20170214-GW	02/14/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20170509-GW	05/09/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20170816-GW	08/16/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20181108-GW	11/08/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20190508-GW	05/08/2019	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-10-20200505-GW	05/05/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	MW-10-20201103-GW	11/03/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	-
	MW10-20210504-GW	05/04/2021	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	MW-10-20211102-GW	11/02/2021	13.5 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	MW10-W-15-20231011	10/11/2023	15 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	2 U
MW-11	MW-11-20160726-GW	07/26/2016	-	-	-	-	-	**67000**	-	**110**	**150**	**1400**	**15900**	-
	MW-11-20161108-GW	11/08/2016	-	-	-	-	-	**52000**	-	**93**	**110**	**1800**	**12490**	-
	MW-11-20170509-GW	05/09/2017	-	-	-	-	-	**54000**	-	**57**	50 U	**1900**	**11100**	-
	MW-11-20170816-GW	08/16/2017	-	-	-	-	-	**90000**	-	100 U	100 U	**1500**	**8500**	-
	MW11-W-13-20231011	10/11/2023	13 (ft)	-	-	-	-	**54000**	-	20 U	100 U	**2600**	**9679**	**1500**
MW-13	MW-13-20150528-GW	05/28/2015	-	-	-	-	-	**92000**	-	**32**	**510**	**1500**	**12500**	-
	MW-13-20170816-GW	08/16/2017	-	-	-	-	-	**19000**	-	**6.5**	**23**	**340**	**870**	-
	MW-13-20181107-GW	11/07/2018	-	-	-	-	-	**4300**	-	1 U	**2.2**	**69**	**100**	-
	MW-13-20190508-GW	05/08/2019	-	-	-	-	-	**2800 O**	-	1 U	**1.1**	**18**	**21.7**	-
	MW13-20191106-GW	11/06/2019	-	-	-	-	-	**3700**	-	4 U	4 U	**62**	**98**	-
	MW-13-20200505-GW	05/05/2020	-	-	-	-	-	**3300**	-	1 U	5 U	**9**	**66**	-
	MW13-20210504-GW	05/04/2021	-	-	-	-	-	**1800 O**	-	**0.32**	1 U	**2.4**	**2.49**	**5.6**
	MW13-W-15-20231011	10/11/2023	15 (ft)	-	-	-	-	**8000**	-	0.8 U	4 U	**110**	**78**	**65**
MWG-1	MWG-1-20150528-GW	05/28/2015	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
MWG-2	MWG2-20160203-GW	02/03/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20160509-GW	05/09/2016	-	-	-	-	-	100 U	-	1 U	**2.1**	1 U	1 U	-
	MWG-2-20160726-GW	07/26/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20161107-GW	11/07/2016	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20170214-GW	02/14/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20170509-GW	05/09/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20170814-GW	08/14/2017	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MW-G2-20181106-GW	11/06/2018	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG-2-20190507-GW	05/07/2019	-	-	-	-	-	100 U	-	1 U	1 U	1 U	1 U	-
	MWG2-20191105-GW	11/05/2019	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1.5 U
	MWG-2-20200505-GW	05/05/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	**1.6 Y**
	MWG-2-20201103-GW	11/03/2020	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	-
	MWG2-20210504-GW	05/04/2021	-	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	MWG-2-20211102-GW	11/02/2021	12 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	1 U
	MWG2-W-10-20231010	10/10/2023	10 (ft)	-	-	-	-	100 U	-	0.2 U	1 U	0.2 U	0.4 U	2 U
MWG-3	MWG-3-20150528-GW	05/28/2015	-	-	-	-	-	**64000**	-	**3300**	**710**	**2700**	**8000**	-
	MWG-3-20170814-GW	08/14/2017	-	-	-	-	-	**27000**	-	**1100**	50 U	**1100**	**2570**	-
	MWG3-20191105-GW	11/05/2019	-	-	-	-	-	**20000**	-	**920**	**89**	**340**	**1650**	**420 Y**
	MWG-3-20200505-GW	05/05/2020	-	-	-	-	-	**10000**	-	**220**	10 U	**130**	**67**	**280 Y**
	MWG-3-20211102-GW	11/02/2021	10 (ft)	-	-	-	-	**18000**	-	**1200**	**180**	**680**	**2300**	**340**
	MWG3-W-10-20231010	10/10/2023	10 (ft)	-	-	-	-	**13000**	-	**1200**	**160**	**670**	**1660**	**390**
OS-LLMIP02	DSW-OS-LLMIP02-20210513-GW-17.0	05/13/2021	17 (ft)	**DETECT**	**DETECT**	**DETECT**	**550**	100 U	**270**	0.2 U	1 U	0.2 U	0.4 U	1.3 U
OS-LLMIP03	DSW-OS-LLMIP03-20210513-GW-20.0	05/13/2021	20 (ft)	ND	ND	ND	220 U	110 U	220 U	0.2 U	1 U	0.2 U	0.4 U	1.3 U
OS-LLMIP05	DSW-OS-LLMIP05-20210513-GW-22.0	05/13/2021	22 (ft)	ND	**DETECT**	**DETECT**	220 U	100 U	**490**	0.2 U	1 U	0.2 U	0.4 U	1.3 U
OS-LLMIP07	DSW-OS-LLMIP07-20210513-GW-21.0	05/13/2021	21 (ft)	**DETECT**	**DETECT**	**DETECT**	**300**	100 U	**290**	0.2 U	1 U	0.2 U	0.4 U	1.3 U
OS-LLMIP09	DSW-OS-LLMIP09-20210514-GW-19.0	05/14/2021	19 (ft)	**DETECT**	**DETECT**	**DETECT**	**1100**	100 U	**830**	**0.34**	1 U	0.2 U	0.4 U	1.3 U
S-1	S-1-20150528-GW	05/28/2015	-	-	-	-	-	**200**	-	1 U	1 U	**7.2**	**3.2**	-
S-2	S-2-20150527-GW	05/27/2015	-	-	-	-	-	**1600**	-	**1300**	10 U	**200**	**51**	-
	S-2-20161107-GW	11/07/2016	-	-	-	-	-	**3700**	-	**3000**	**35**	**570**	**337**	-
	S-2-20170214-GW	02/14/2017	-	-	-	-	-	**3900**	-	**2800**	**21**	**530**	**274**	-
	S-2-20170508-GW	05/08/2017	-	-	-	-	-	**14000**	-	**3300**	100 U	**710**	**510**	-
	S-2-20170814-GW	08/14/2017	-	-	-	-	-	**5400**	-	**2400**	50 U	**500**	**370**	-
	S-2-20181108-GW	11/08/2018	-	-	-	-	-	**4300**	-	**1800**	**28**	**510**	**248**	-
	S-2-20190507-GW	05/07/2019	-	-	-	-	-	**2600**	-	**640**	**6.8**	**280**	**87**	-
	S2-20191105-GW	11/05/2019	-	-	-	-	-	**5000**	-	**1400**	50 U	**520**	**170**	-
	S-2-20200504-GW	05/04/2020	-	-	-	-	-	**4500**	-	**1400**	50 U	**610**	**350**	-
	S-2-20201102-GW	11/02/2020	-	-	-	-	-	**3900**	-	**1500**	**17**	**590**	**139.1**	-
	S2-20210503-GW	05/03/2021	-	-	-	-	-	**710**	-	**170**	5 U	**88**	**5.1**	**11**
	S-2-20211102-GW	11/02/2021	10 (ft)	-	-	-	-	**2900**	-	**920**	20 U	**550**	**160**	**66**
	S2-W-10-20231010	10/10/2023	10 (ft)	-	-	-	-	**1800**	-	**470**	20 U	**340**	**115.1**	**58**

TABLE 4
SUMMARY OF GROUNDWATER QUALITY DATA: PETROLEUM HYDROCARBONS AND VOCs
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

				Total Petroleum Hydrocarbon Identification (detect/non-detect)			Total Petroleum Hydrocarbons			Petroleum Volatile Organic Compounds				
				Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Diesel Range Organics	Gasoline Range Organics	PHC as Lube Oil	Benzene	Toluene	Ethylbenzene	Xylene (Total)*	Naphthalene
Sample Location	Sample Name	Sample Date	Sample Depth (bgs)	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
			MTCA Method A Cleanup Level	NA	NA	NA	500	800	500	5	1000	700	1000	160
YMW-1	YMW-1-20151104-GW	11/04/2015	-	-	-	-	-	**11000**	-	**990**	**1400**	**470**	**1430**	-
	YMW1-20160202-GW	02/02/2016	-	-	-	-	-	**29000**	-	**2200**	**3900**	**840**	**3350**	-
	YMW-1-20160510-GW	05/10/2016	-	-	-	-	-	**21000**	-	**1600**	**2500**	**750**	**2750**	-
	YMW-1-20160727-GW	07/27/2016	-	-	-	-	-	**24000**	-	**2400**	**3200**	**930**	**3800**	-
	YMW-1-20161108-GW	11/08/2016	-	-	-	-	-	**30000**	-	**3300**	**3400**	**1100**	**4400**	-
	YMW-1-20170215-GW	02/15/2017	-	-	-	-	-	**31000**	-	**3200**	**2900**	**1500**	**5100**	-
	YMW-1-20170509-GW	05/09/2017	-	-	-	-	-	**42000**	-	**4400**	**2100**	**1500**	**5700**	-
	YMW-1-20170817-GW	08/17/2017	-	-	-	-	-	**64000**	-	**4500**	**4100**	**2100**	**8000**	-
	YMW-1-20181107-GW	11/07/2018	-	-	-	-	-	**11000**	-	**920**	**140**	**670**	**1610**	-
	YMW-1-20190508-GW	05/08/2019	-	-	-	-	-	**9600**	-	**630**	**44**	**490**	**938**	-
	YMW-1-DUP-20190508-GW	05/08/2019	-	-	-	-	-	**9400**	-	**610**	**45**	**480**	**929**	-
	YMW1-20191105-GW	11/05/2019	-	-	-	-	-	**15000**	-	**880**	**61**	**720**	**1480**	**250 Y**
	YMWDUP-20191105-GW	11/05/2019	-	-	-	-	-	**12000**	-	**1000**	**71**	**800**	**1697**	**280 Y**
	YMW-1-20200505-GW	05/05/2020	-	-	-	-	-	**10000**	-	**750**	50 U	**800**	**1222**	**520 Y**
	YMW-1-20201103-GW	11/03/2020	-	-	-	-	-	**8600**	-	**1200**	**69**	**860**	**1323**	**490**
	YMW1-20210504-GW	05/04/2021	-	-	-	-	-	**7000**	-	**680**	**58**	**580**	**987**	**300**
	YMW-1-20211102-GW	11/02/2021	15 (ft)	-	-	-	-	**12000**	-	**870**	**130**	**950**	**1846**	**410**
	YMW1-W-15-20231010	10/10/2023	15 (ft)	-	-	-	-	**9200**	-	**880**	40 U	**1200**	**1121**	**470**
YMW-2	YMW-2-20151104-GW	11/04/2015	-	-	-	-	-	**3700**	-	**72**	**130**	**150**	**770**	-
	YMW-2-DUP-20151104-GW	11/04/2015	-	-	-	-	-	**4100**	-	**76**	**140**	**160**	**840**	-
	YMW2-20160201-GW	02/01/2016	-	-	-	-	-	**13000**	-	**380**	**630**	**300**	**2510**	-
	YMW2-DUP-20160201-GW	02/01/2016	-	-	-	-	-	**13000**	-	**380**	**650**	**310**	**2630**	-
	YMW-2-20160510-GW	05/10/2016	-	-	-	-	-	**6600**	-	**240**	**570**	**180**	**1070**	-
	YMW-2-DUP-20160510-GW	05/10/2016	-	-	-	-	-	**8500**	-	**240**	**590**	**190**	**1110**	-
	YMW-2-20160727-GW	07/27/2016	-	-	-	-	-	**52000**	-	**1200**	**2800**	**1500**	**8000**	-
	YMW-2-DUP-20160727-GW	07/27/2016	-	-	-	-	-	**53000**	-	**1200**	**2800**	**1500**	**8200**	-
	YMW-2-20161108-GW	11/08/2016	-	-	-	-	-	**23000**	-	**180**	**230**	**1000**	**3210**	-
	YMW-2-DUP-20161108-GW	11/08/2016	-	-	-	-	-	**21000**	-	**190**	**230**	**1000**	**3220**	-
	YMW-2-20170215-GW	02/15/2017	-	-	-	-	-	**9200**	-	**300**	**360**	**440**	**1380**	-
	YMW-2-DUP-20170215-GW	02/15/2017	-	-	-	-	-	**11000**	-	**340**	**420**	**500**	**1530**	-
	YMW-2-20170509-GW	05/09/2017	-	-	-	-	-	**6700**	-	**380**	**150**	**330**	**810**	-
	YMW-2-DUP-20170509-GW	05/09/2017	-	-	-	-	-	**6600**	-	**370**	**140**	**320**	**790**	-
	YMW-2-20170817-GW	08/17/2017	-	-	-	-	-	**17000**	-	**69**	**14**	**650**	**740**	-
	YMW-2-DUP-20170817-GW	08/17/2017	-	-	-	-	-	**17000**	-	**67**	**13**	**630**	**730**	-
	YMW-2-20181107-GW	11/07/2018	-	-	-	-	-	**9300**	-	**39**	**8.8**	**380**	**189**	-
	YMW-2-20190508-GW	05/08/2019	-	-	-	-	-	**15000**	-	**410**	**110**	**810**	**2200**	-
	YMW2-20191105-GW	11/05/2019	-	-	-	-	-	**8300**	-	**41**	10 U	**340**	**110**	-
	YMW-2-20200505-GW	05/05/2020	-	-	-	-	-	**11000**	-	**360**	50 U	**1400**	**1323**	**460 Y**
	YMW-2-DUP-20200505-GW	05/05/2020	-	-	-	-	-	**11000**	-	**370**	50 U	**1400**	**1323**	**500 Y**
	YMW-2-20201103-GW	11/03/2020	-	-	-	-	-	**12000**	-	**320**	**55**	**1000**	**1385**	**350**
	YMW-2-DUP-20201103-GW	11/03/2020	-	-	-	-	-	**13000**	-	**320**	**54**	**990**	**1388**	**340**
	YMW2-20210504-GW	05/04/2021	-	-	-	-	-	**6300**	-	**180**	20 U	**810**	**531**	**190**
	YMW2-DUP-20210504-GW	05/04/2021	-	-	-	-	-	**6900**	-	**190**	20 U	**860**	**586**	**200**
	YMW-2-20211102-GW	11/02/2021	16 (ft)	-	-	-	-	**4000**	-	**30**	10 U	**470**	**23.4**	**130**
	YMW-2-DUP-20211102-GW	11/02/2021	16 (ft)	-	-	-	-	**4100**	-	**30**	10 U	**470**	**24.3**	**130**
	YMW2-W-15-20231010	10/10/2023	15 (ft)	-	-	-	-	**1100 J**	-	**35**	**6.2**	**200**	**135.8**	**46**
	YMW-DUP-W-DEPTH-20231011	10/11/2023	-	-	-	-	-	**1800 J**	-	**41**	10 U	**250**	**187.5**	**58**
YMW-3	YMW3-20160201-GW	02/01/2016	-	-	-	-	-	**31000**	-	**3100**	**1800**	**1200**	**5700**	-
	YMW-3-20160510-GW	05/10/2016	-	-	-	-	-	**23000**	-	**2000**	**1100**	**980**	**3210**	-
	YMW-3-20160726-GW	07/26/2016	-	-	-	-	-	**33000**	-	**2000**	**2100**	**1400**	**5100**	-
	YMW-3-20161109-GW	11/09/2016	-	-	-	-	-	**48000**	-	**2800**	**4500**	**2200**	**9000**	-
	YMW-3-20170215-GW	02/15/2017	-	-	-	-	-	**47000**	-	**990**	**3600**	**2400**	**8200**	-
	YMW-3-20170509-GW	05/09/2017	-	-	-	-	-	**33000**	-	**900**	**1100**	**1900**	**4200**	-
	YMW-3-20170816-GW	08/16/2017	-	-	-	-	-	**52000**	-	**810**	**1300**	**1800**	**7300**	-
	YMW-3-20181108-GW	11/08/2018	-	-	-	-	-	**38000**	-	**75**	**450**	**1800**	**5800**	-
	YMW-3-DUP-20181108-GW	11/08/2018	-	-	-	-	-	**39000**	-	**80**	**470**	**1900**	**6000**	-
	YMW-3-20190508-GW	05/08/2019	-	-	-	-	-	**22000**	-	**130**	**140**	**1100**	**2750**	-
	YMW3-20191106-GW	11/06/2019	-	-	-	-	-	**27000**	-	**42**	**130**	**1300**	**3440**	-
	YMW-3-20200505-GW	05/05/2020	-	-	-	-	-	**20000**	-	**120**	**91**	**1500**	**4040**	**770 Y**
	YMW-3-20201103-GW	11/03/2020	-	-	-	-	-	**22000**	-	**55**	**89**	**1200**	**2780**	**580**
	YMW3-20210504-GW	05/04/2021	-	-	-	-	-	**15000**	-	**24**	**110**	**1300**	**2260**	**460**
	YMW-3-20211102-GW	11/02/2021	15 (ft)	-	-	-	-	**25000**	-	**25**	**110**	**2600**	**2840**	**1000**
	YMW3-W-15-20231011	10/11/2023	15 (ft)	-	-	-	-	**24000**	-	**27**	**460**	**1800**	**5200**	**690**

TABLE 4
SUMMARY OF GROUNDWATER QUALITY DATA: PETROLEUM HYDROCARBONS AND VOCs
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

ABBREVIATIONS AND NOTES:

**Total xylenes is the sum of m,p-xylene and o-xylene. Non-detect results are summed at one-half the detection limit. When both results are non-detect, the higher detection limit is used.*

-: Not Analyzed

bgs: below ground surface

ft: feet

J: Value is estimated.

MTCA: Model Toxics Control Act

NA: Not Available

ND: Not Detected

U: not detected, value is the laboratory reporting limit

ug/L: microgram per liter

Y: result is an estimate

[1] : intermitten globules of gasoline-range TPH were observed during the groundwater purging/monitoring activities. Therefore, a groundwater sample was not collected.

Bold *values indicate a detected concentration.*

Blue shading indicates a detected analyte concentration exceeding a MTCA Method A Cleanup Level.

TABLE 5
SUMMARY OF GEOCHEMICAL RESULTS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Name	Sample Date	Dissolved Oxygen, Field (a) mg/L	Oxidation Reduction Potential (ORP), mv	Ferrous Iron, Field (b) mg/L	Manganese, Total mg/L	Methane, Total mg/L	Nitrate (as N), Total mg/L	Sulfate mg/L
DSW-MILTPT03	DSW-MILTPT03-20181204-GW-10.0	12/04/2018	-	-	-	**2.91**	**0.031**	-	**14.9 D**
	DSW-MILTPT03-20181204-GW-11.0	12/04/2018	-	-	-	**0.834**	0.005 U	-	**28.4 D**
	DSW-MILTPT03-20181205-GW-12-14	12/05/2018	-	-	-	**0.278**	0.005 U	-	**32.6 D**
	DSW-MILTPT03-20181205-GW-15-17	12/05/2018	-	-	-	**0.22**	0.005 U	-	**31.9 D**
DSW-MILTPT05	DSW-MILTPT05-20181205-GW-9-11	12/05/2018	-	-	-	**1.21**	**0.14**	-	**16.7 D**
	DSW-MILTPT05-20181205-GW-12-14	12/05/2018	-	-	-	**2.31**	**0.24**	-	**15.6 D**
	DSW-MILTPT05-20181205-GW-16-18	12/05/2018	-	-	-	**0.349**	0.005 U	-	**25.7 D**
DSW-MILTPT10	DSW-MILTPT10-20181205-GW-10-12	12/05/2018	-	-	-	**1.64**	**0.02**	-	**36.4 D**
	DSW-MILTPT10-20181205-GW-13-15	12/05/2018	-	-	-	**0.0651**	**0.0081**	-	**30.4 D**
	DSW-MILTPT10-20181205-GW-16-18	12/05/2018	-	-	-	**0.023**	0.005 U	-	**31 D**
KMW-5	KMW-5-20150527-GW	05/27/2015	**0.34**	**28.6**	-	-	-	-	-
	KMW5-20160202-GW	02/02/2016	**1.49**	**256.6**	-	-	-	-	-
	KMW-5-20160509-GW	05/09/2016	**2.28**	**-74**	-	-	-	-	-
	KMW-5-20160725-GW	07/25/2016	**1.32**	**9.4**	-	-	-	-	-
	KMW-5-20161107-GW	11/07/2016	**2.08**	**-2.1**	-	-	-	-	-
	KMW-5-20170214-GW	02/14/2017	**2.6**	**-15**	-	-	-	-	-
	KMW-5-20170508-GW	05/08/2017	**2.54**	**-0.9**	-	-	-	-	-
	KMW-5-20170816-GW	08/16/2017	**0.95**	**149.8**	-	-	-	-	-
	KMW-5-20181106-GW	11/06/2018	**3.75**	**37.6**	**0**	**1.1**	0.001 U	**3.2**	**26**
	KMW-5-20190507-GW	05/07/2019	**0.96**	**185.4**	**0**	**2**	**0.017**	**1.3**	**30**
	KMW5-20191104-GW	11/04/2019	**3.79**	**61.5**	**0**	**0.68**	**0.0021**	**2.9**	**26**
	KMW-5-20200504-GW	05/04/2020	**0.3**	**69.8**	**0**	**5.5**	**0.026**	**1.1**	**31**
	KMW-5-20201102-GW	11/02/2020	**0.98**	**222.1**	**0**	**1.3**	**0.0077**	**2.5**	**28**
	KMW5-20210503-GW	05/03/2021	**0.65**	**155.3**	**0**	**5.3**	**0.0026**	**0.9**	**48**
	KMW-5-20211102-GW	11/02/2021	**1.78**	**114.8**	**0**	**1.3**	**0.0045**	**2.3**	**27**
	KMW5-W-13-20231010	10/10/2023	**0.54**	**94**	**0**	**13**	**0.0017**	**2.8**	**27**
KMW-6	KMW-6-20150528-GW	05/28/2015	**1.78**	**-30.3**	-	-	-	-	-
	KMW-6-20151103-GW	11/03/2015	**1.69**	**74.2**	-	-	-	-	-
	KMW6-20160201-GW	02/01/2016	**2.3**	**293.9**	-	-	-	-	-
	KMW-6-20160509-GW	05/09/2016	**4.27**	**-104**	-	-	-	-	-
	KMW-6-20160725-GW	07/25/2016	**2.29**	**-85.9**	-	-	-	-	-
	KMW-6-20161108-GW	11/08/2016	**1.61**	**120.6**	-	-	-	-	-
	KMW-6-20170215-GW	02/15/2017	**0.94**	**-20.9**	-	-	-	-	-
	KMW-6-20170508-GW	05/08/2017	**1.66**	**-49**	-	-	-	-	-
	KMW-6-20170815-GW	08/15/2017	**1.36**	**-66.1**	-	-	-	-	-
	KMW-6-20181106-GW	11/06/2018	**2.11**	**-43.4**	**0.25**	**1.3**	**0.23**	**2.2**	**19**
	KMW-6-20190507-GW	05/07/2019	**2.99**	**84.6**	**0**	**0.87**	**0.15**	**3.1**	**29**
	KMW6-20191104-GW	11/04/2019	**2.7**	**15.4**	**0**	**1.3**	**0.33**	**2.3**	**21**
	KMW-6-20200504-GW	05/04/2020	**4.09**	**53.8**	**0**	**0.63**	**0.028**	**3.6**	**31**
	KMW-6-20201103-GW	11/03/2020	**3.9**	**50.4**	**0**	**0.73**	**0.21**	**2.8**	**23**
	KMW6-20210503-GW	05/03/2021	**3.73**	**148**	**0**	**0.66**	**0.0057**	**3.4**	**27**
	KMW-6-20211101-GW	11/01/2021	**2.48**	**10.3**	**0.25**	**1.2**	**0.21**	**2.4**	**21**
	KMW6-W-14-20231010	10/10/2023	**0.95**	**-82**	**0.5**	**1.9**	**0.81**	**2**	**16**
KMW-7	KMW-7-20150529-GW	05/29/2015	**7.44**	**123.6**	-	-	-	-	-
	KMW-7-20151102-GW	11/02/2015	**2.92**	**6.3**	-	-	-	-	-
	KMW7-20160203-GW	02/03/2016	**3.39**	**187**	-	-	-	-	-
	KMW-7-20160510-GW	05/10/2016	**7.98**	**-50.6**	-	-	-	-	-
	KMW-7-20160726-GW	07/26/2016	**9.43**	**29.9**	-	-	-	-	-
	KMW-7-20161109-GW	11/09/2016	**7.93**	**57.3**	-	-	-	-	-
	KMW-7-20170214-GW	02/14/2017	**5.4**	**-20.3**	-	-	-	-	-
	KMW-7-20170509-GW	05/09/2017	**2.94**	**-35.4**	-	-	-	-	-
	KMW-7-20170816-GW	08/16/2017	**7.87**	**122.3**	-	-	-	-	-
	KMW-7-20181108-GW	11/08/2018	**7.94**	**70**	**0**	**0.021**	**0.019**	**4.1**	**21**
	KMW-7-20190508-GW	05/08/2019	**5.72**	**113.5**	**0**	**0.032**	**0.086**	**4.3**	**22**
	KMW-7-20200505-GW	05/05/2020	**8.6**	**49.9**	**0**	0.011 U	**0.0013**	**4.3**	**30**
	KMW-7-20201103-GW	11/03/2020	**5.28**	**25.2**	**0**	**0.033**	**0.063**	**3.7**	**26**
	KMW7-20210504-GW	05/04/2021	**6.09**	**78.2**	**0**	0.011 U	0.00055 U	**4.1**	**28**
	KMW-7-20211102-GW	11/02/2021	**3.73**	**122.6**	**0**	**0.012**	**0.019**	**3.9**	**26**
	KMW7-W-15-20231011	10/11/2023	**7.43**	**125**	**0**	0.01 U	**0.0025**	**4.3**	**30**
KMW-8	KMW-8-20150529-GW	05/29/2015	**7.35**	**114.2**	-	-	-	-	-
KMW-10	KMW-10-20150529-GW	05/29/2015	**5.24**	**132.6**	-	-	-	-	-
KMW-14	KMW-14-20150528-GW	05/28/2015	**0.14**	**-33.5**	-	-	-	-	-
	KMW-14-20151103-GW	11/03/2015	**0.22**	**-12.3**	-	-	-	-	-
	KMW14-20160202-GW	02/02/2016	**0.38**	**287.7**	-	-	-	-	-
	KMW-14-20160509-GW	05/09/2016	**0.23**	**-102.8**	-	-	-	-	-
	KMW-14-20160725-GW	07/25/2016	**1.41**	**61.1**	-	-	-	-	-
	KMW-14-20161107-GW	11/07/2016	**1.12**	**-39.8**	-	-	-	-	-
	KMW-14-20170215-GW	02/15/2017	**0.43**	**-36.4**	-	-	-	-	-
	KMW-14-20170508-GW	05/08/2017	**1.47**	**-6.5**	-	-	-	-	-
	KMW-14-20170815-GW	08/15/2017	**0.94**	**37.3**	-	-	-	-	-
	KMW-14-20181106-GW	11/06/2018	**0.73**	**-25.9**	**0.75**	**2.6**	**0.066**	**0.5**	**26**
	KMW-14-20190507-GW	05/07/2019	**0.21**	**-37.2**	**2**	**2.8**	**0.025**	**0.1**	**33**
	KMW14-20191105-GW	11/05/2019	**0.89**	**-27.2**	**1.5**	**2.5**	**0.043**	**0.33**	**23**
	KMW-14-20200504-GW	05/04/2020	**0**	**-68.2**	**3.5**	**2.8**	**0.067**	0.05 U	**32**
	KMW-14-20201102-GW	11/02/2020	**0.19**	**14.7**	**0.25**	**1.7**	**0.078**	**0.67**	**36**
	KMW14-20210503-GW	05/03/2021	**0.24**	**129.6**	**1.5**	**2.7**	**0.068**	0.05 U	**22**
	KMW-14-20211101-GW	11/01/2021	**0.55**	**95.9**	**0.25**	**1.9**	**0.14**	**0.37**	**20**
	KMW14-W-15-20231010	10/10/2023	**0.43**	**65**	**0**	**0.52**	**0.0034**	**3.2**	**68**
KMW-15	KMW-15-20151103-GW	11/03/2015	**2.06**	**63.3**	-	-	-	-	-
	KMW15-20160202-GW	02/02/2016	**4.02**	**292.1**	-	-	-	-	-
	KMW-15-20160509-GW	05/09/2016	**7.95**	**-58.4**	-	-	-	-	-
	KMW-15-20160725-GW	07/25/2016	**7**	**18.4**	-	-	-	-	-
	KMW-15-20161107-GW	11/07/2016	**6.13**	**40.3**	-	-	-	-	-
	KMW-15-20170215-GW	02/15/2017	**4.24**	**14.3**	-	-	-	-	-
	KMW-15-20170508-GW	05/08/2017	**3.9**	**10.2**	-	-	-	-	-
	KMW-15-20170815-GW	08/15/2017	**5.19**	**71.7**	-	-	-	-	-
	KMW-15-20181106-GW	11/06/2018	**5.49**	**30.1**	**0**	**0.029**	**0.0016**	**4.3**	**26**
	KMW-15-20190507-GW	05/07/2019	**5.35**	**146.3**	**0**	0.011 U	0.004 U	**4.4**	**31**
	KMW15-20191105-GW	11/05/2019	**6.02**	**47.2**	**0**	0.011 U	0.00055 U	**4.1**	**30**
	KMW-15-20200504-GW	05/04/2020	**4.46**	**60.1**	**0**	0.011 U	0.00055 U	**4.3**	**29**
	KMW-15-20201102-GW	11/02/2020	**5.93**	**250.5**	**0**	0.011 U	0.00055 U	**4.1**	**31**
	KMW15-20210503-GW	05/03/2021	**7.01**	**192.7**	**0**	0.011 U	0.00055 U	**4.5**	**26**
	KMW-15-20211101-GW	11/01/2021	**4.79**	**152.5**	**0**	0.011 U	0.00055 U	**4.3**	**30**
	KMW15-W-15-20231010	10/10/2023	**0.29**	**-56**	**1**	**3.7**	**0.088**	**0.29**	**11**
KMW-16	KMW-16-20150528-GW	05/28/2015	**0.81**	**10.9**	-	-	-	-	-
	KMW-16-20151103-GW	11/03/2015	**0.2**	**26.3**	-	-	-	-	-
	KMW16-20160202-GW	02/02/2016	**0.69**	**258**	-	-	-	-	-
	KMW-16-20160509-GW	05/09/2016	**0.74**	**-82.8**	-	-	-	-	-
	KMW-16-20160725-GW	07/25/2016	**0.69**	**-129.8**	-	-	-	-	-
	KMW-16-20161107-GW	11/07/2016	**0.75**	**-119.4**	-	-	-	-	-
	KMW-16-20170508-GW	05/08/2017	**0.81**	**1.6**	-	-	-	-	-
	KMW-16-20170815-GW	08/15/2017	**0.73**	**-19.5**	-	-	-	-	-
	KMW-16-20181106-GW	11/06/2018	**0.54**	**-65.3**	**0.25**	**1.7**	**0.052**	**0.51**	**14**
	KMW-16-20190507-GW	05/07/2019	**1.26**	**79.4**	**0**	**0.75**	**0.054**	**2.2**	**20**
	KMW16-20191105-GW	11/05/2019	**0.97**	**-35.3**	**0.5**	**1.8**	**0.033**	**0.44**	**13**
	KMW-16-20200504-GW	05/04/2020	**2.64**	**107.4**	**0**	**0.4**	**0.28**	**3.1**	**23**
	KMW-16-20201102-GW	11/02/2020	**1.75**	**-12**	**0.5**	**1.8**	**0.079**	**1.3**	**19**
	KMW16-20210503-GW	05/03/2021	**3.06**	**157.4**	**0**	**0.77**	**0.037**	**3.2**	**24**
	KMW-16-20211101-GW	11/01/2021	**0.73**	**94.3**	**1**	**2.3**	**0.047**	**0.65**	**13**
	KMW16-W-11-20231010	10/10/2023	**0.23**	**-133**	**0**	**3.3**	**2.6**	**1.1**	**5.6**
KMW-18	KMW-18-20150527-GW	05/27/2015	**4.8**	**70.1**	-	-	-	-	-
KMW-24	KMW-24-20150529-GW	05/29/2015	**7.41**	**22.4**	-	-	-	-	-
MW-7	MW7-20191106-GW	11/06/2019	**1.3**	**-96.5**	**4**	**1.9**	**1.5**	**0.091**	5 U

TABLE 5
SUMMARY OF GEOCHEMICAL RESULTS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Name	Sample Date	Dissolved Oxygen, Field (a) mg/L	Oxidation Reduction Potential (ORP), mv	Ferrous Iron, Field (b) mg/L	Manganese, Total mg/L	Methane, Total mg/L	Nitrate (as N), Total mg/L	Sulfate mg/L
MW-9	MW-9-20150528-GW	05/28/2015	**1.57**	**-28.5**	-	-	-	-	-
	MW-9-20151103-GW	11/03/2015	**0.61**	**-40.2**	-	-	-	-	-
	MW9-20160202-GW	02/02/2016	**0.5**	**244.2**	-	-	-	-	-
	MW-9-20160510-GW	05/10/2016	**0.4**	**-130.1**	-	-	-	-	-
	MW-9-20160726-GW	07/26/2016	**1.17**	**-140.7**	-	-	-	-	-
	MW-9-20161108-GW	11/08/2016	**1.05**	**-128.5**	-	-	-	-	-
	MW-9-20170215-GW	02/15/2017	**0.8**	**-34.8**	**2**	**3.8**	-	0.05 U	5 U
	MW-9-20170509-GW	05/09/2017	**1.18**	**-41.7**	-	-	-	-	-
	MW-9-20170816-GW	08/16/2017	**2.28**	**-73.2**	**2.25**	**3.6**	-	0.05 U	5 U
	MW-9-20181107-GW	11/07/2018	**1.48**	**-82.3**	**3.5**	**4.4**	**1.4**	**0.081**	5 U
	MW-9-20190508-GW	05/08/2019	**1.62**	**29.4**	**2**	**3.7**	**0.76**	0.05 U	5 U
	MW9-20191106-GW	11/06/2019	**1.68**	**-44.8**	**2**	**4.9**	**1.8**	**0.051**	5 U
	MW-9-20231010	10/10/2023	**0.24**	**-54.5**	-	-	-	-	-
MW-10	MW-10-20151102-GW	11/02/2015	**2.68**	**108.2**	-	-	-	-	-
	MW10-20160203-GW	02/03/2016	**4.25**	**250.1**	-	-	-	-	-
	MW-10-20160510-GW	05/10/2016	**9.84**	**85.1**	-	-	-	-	-
	MW-10-20160726-GW	07/26/2016	**9.22**	**87.9**	-	-	-	-	-
	MW-10-20161107-GW	11/07/2016	**7.24**	**58.8**	-	-	-	-	-
	MW-10-20170214-GW	02/14/2017	**4.89**	**-14.3**	-	-	-	-	-
	MW-10-20170509-GW	05/09/2017	**5.08**	**-29.2**	-	-	-	-	-
	MW-10-20170816-GW	08/16/2017	**7.98**	**135.7**	-	-	-	-	-
	MW-10-20181108-GW	11/08/2018	**22.98**	**115.7**	**0**	**0.019**	0.001 U	**5.7**	**24**
	MW-10-20190508-GW	05/08/2019	**6.84**	**207.7**	**0**	0.011 U	0.001 U	**6**	**24**
	MW-10-20200505-GW	05/05/2020	**6.72**	**207.1**	**0**	0.011 U	0.00055 U	**4.3**	**28**
	MW-10-20201103-GW	11/03/2020	**7.12**	**51.3**	**0**	**0.04**	**0.0019**	**12**	**29**
	MW10-20210504-GW	05/04/2021	**5.92**	**108.4**	**0**	0.011 U	0.00055 U	**4.8**	**28**
	MW-10-20211102-GW	11/02/2021	**6.82**	**121.2**	**0**	0.011 U	0.00055 U	**5.7**	**28**
	MW10-W-15-20231011	10/11/2023	**7.13**	**119**	**0**	**0.043**	0.00055 U	**5.4**	**31**
MW-11	MW-11-20160726-GW	07/26/2016	**1.35**	**-182.5**	-	-	-	-	-
	MW-11-20161108-GW	11/08/2016	**1.07**	**-181**	-	-	-	-	-
	MW-11-20170509-GW	05/09/2017	**0.39**	**-106.5**	-	-	-	-	-
	MW-11-20170816-GW	08/16/2017	**0.75**	**-108.8**	-	-	-	-	-
	MW11-W-13-20231011	10/11/2023	**2.2**	**-80.2**	**9.8**	**4.3**	**0.22**	**1.3**	**99**
MW-13	MW-13-20150528-GW	05/28/2015	**1.28**	**58**	-	-	-	-	-
	MW-13-20170816-GW	08/16/2017	**0.96**	**-74**	-	-	-	-	-
	MW-13-20181107-GW	11/07/2018	**2.5**	**-52.6**	**1.5**	**1.2**	**0.13**	**2**	**18**
	MW-13-20190508-GW	05/08/2019	**0.45**	**0.2**	**1**	**0.88**	**0.22**	**0.47**	**14**
	MW13-20191106-GW	11/06/2019	**0.47**	**7.9**	**1.25**	**1.2**	**0.48**	**3.3**	**16**
	MW-13-20200505-GW	05/05/2020	**0.9**	**-33.6**	**1**	**0.54**	**0.13**	**0.45**	**19**
	MW13-20210504-GW	05/04/2021	**0.5**	**102.1**	**1.25**	**0.67**	**0.064**	**0.18**	**16**
	MW13-W-15-20231011	10/11/2023	**0.25**	**-53.6**	**2.1**	**0.96**	**0.79**	**1.7**	**17**
MWG-1	MWG-1-20150528-GW	05/28/2015	**4.71**	**24.1**	-	-	-	-	-
MWG-2	MWG2-20160203-GW	02/03/2016	**3.45**	**279.3**	-	-	-	-	-
	MWG-2-20160509-GW	05/09/2016	**7.04**	**-48.3**	-	-	-	-	-
	MWG-2-20160726-GW	07/26/2016	**7.58**	**42.2**	-	-	-	-	-
	MWG-2-20161107-GW	11/07/2016	**6.23**	**35.6**	-	-	-	-	-
	MWG-2-20170214-GW	02/14/2017	**4.5**	**-5.4**	-	-	-	-	-
	MWG-2-20170509-GW	05/09/2017	**5.23**	**-0.7**	-	-	-	-	-
	MWG-2-20170814-GW	08/14/2017	**5.51**	**154.6**	-	-	-	-	-
	MW-G2-20181106-GW	11/06/2018	**5.34**	**48.2**	-	**0.032**	**0.0021**	**4.7**	**30**
	MWG-2-20190507-GW	05/07/2019	**4.44**	**48.8**	**0**	0.011 U	**0.0034**	**5.3**	**30**
	MWG2-20191105-GW	11/05/2019	**5.49**	**88.1**	**0**	**0.024**	**0.00086**	**5.2**	**30**
	MWG-2-20200505-GW	05/05/2020	**4.66**	**187.4**	**0**	**0.042**	0.00055 U	**4.8**	**29**
	MWG-2-20201103-GW	11/03/2020	**4.59**	**124.1**	**0**	**0.028**	**0.00095**	**4.5**	**30**
	MWG2-20210504-GW	05/04/2021	**5.83**	**57.1**	**0**	0.011 U	0.00055 U	**4.4**	**28**
	MWG-2-20211102-GW	11/02/2021	**2.56**	**138.4**	**0**	**0.041**	**0.00094**	**4**	**28**
	MWG2-W-10-20231010	10/10/2023	**5.81**	**383.2**	**0**	**0.043**	0.00055 U	**4.3**	**29**
MWG-3	MWG-3-20150528-GW	05/28/2015	**0.08**	**-156**	-	-	-	-	-
	MWG-3-20170814-GW	08/14/2017	**0.49**	**-133.8**	-	-	-	-	-
	MWG3-20191105-GW	11/05/2019	**0.82**	**-83.1**	**2.25**	**0.76**	**1.1**	**0.89**	**25**
	MWG-3-20200505-GW	05/05/2020	**0.2**	**-94.6**	**2**	**1**	**1.3**	**1.1**	**7.7**
	MWG-3-20211102-GW	11/02/2021	**1.09**	**140.5**	**0.75**	**0.82**	**2.3**	**1.1**	**9.5**
	MWG3-W-10-20231010	10/10/2023	**0.25**	**-85.3**	**4.7**	**0.95**	**3.6**	**0.13**	5 U
OS-LLMIP05	DSW-OS-LLMIP05-20210513-GW-22.0	05/13/2021	-	-	-	**2.7**	**0.00061**	-	**25**
OS-LLMIP07	DSW-OS-LLMIP07-20210513-GW-21.0	05/13/2021	-	-	-	**5.9**	**0.00063**	-	**25**
S-1	S-1-20150528-GW	05/28/2015	**2.48**	**-7.7**	-	-	-	-	-
	S1-MI-W-12-20231010	10/10/2023	**3.43**	**4.87**	-	-	-	-	-
S-2	S-2-20150527-GW	05/27/2015	**0.28**	**-86.4**	-	-	-	-	-
	S-2-20161107-GW	11/07/2016	**1.01**	**-165.5**	-	-	-	-	-
	S-2-20170214-GW	02/14/2017	**0.4**	**-88**	-	-	-	-	-
	S-2-20170508-GW	05/08/2017	**0.43**	**-90.5**	-	-	-	-	-
	S-2-20170814-GW	08/14/2017	**0.71**	**-115.4**	-	-	-	-	-
	S-2-20181108-GW	11/08/2018	**0.89**	**-119.3**	**0.75**	**6.5**	**0.94**	**0.12**	**7.6**
	S-2-20190507-GW	05/07/2019	**0.16**	**-32.1**	**1.25**	**0.97**	**0.74**	**0.13**	**37**
	S2-20191105-GW	11/05/2019	**0.88**	**-137.8**	**2**	**5.5**	**1.5**	**0.14**	**12**
	S-2-20200504-GW	05/04/2020	**0.52**	**-110.2**	**2**	**4.7**	**1.3**	**0.094**	**5.6**
	S-2-20201102-GW	11/02/2020	**0.29**	**-115**	**4**	**5.3**	**0.78**	0.05 U	**12**
	S2-20210503-GW	05/03/2021	**0.37**	**-109.1**	**3**	**5**	**0.028**	0.05 U	**24**
	S-2-20211102-GW	11/02/2021	**0.69**	**170.3**	**4.5**	**6.1**	**0.92**	0.05 U	**5.7**
	S2-W-10-20231010	10/10/2023	**0.25**	**-131**	**6**	**4.8**	**0.82**	0.05 U	**5.1**
YMW-1	YMW-1-20151104-GW	11/04/2015	**1.42**	**-46.3**	-	-	-	-	-
	YMW1-20160202-GW	02/02/2016	**0.33**	**232.6**	-	-	-	-	-
	YMW-1-20160510-GW	05/10/2016	**1.47**	**-156.9**	-	-	-	-	-
	YMW-1-20160727-GW	07/27/2016	**1.06**	**-176.5**	-	-	-	-	-
	YMW-1-20161108-GW	11/08/2016	**1.06**	**-179.1**	-	-	-	-	-
	YMW-1-20170215-GW	02/15/2017	**0.56**	**-95**	-	-	-	-	-
	YMW-1-20170509-GW	05/09/2017	**1.2**	**-108.3**	-	-	-	-	-
	YMW-1-20170817-GW	08/17/2017	**1.81**	**-109.1**	**0.75**	**3.3**	-	0.05 U	5 U
	YMW-1-20181107-GW	11/07/2018	**0.35**	**-142.3**	**3**	**1.7**	**0.97**	**0.5**	**7.7**
	YMW-1-20190508-GW	05/08/2019	**0.4**	**-80.3**	**2**	**0.67**	**1.2**	**1.9**	**12**
	YMW-1-DUP-20190508-GW	05/08/2019	-	-	**2**	**0.69**	**1.4**	**2**	**14**
	YMW1-20191105-GW	11/05/2019	**0.88**	**-116.8**	**1.25**	**1.2**	**2.8**	**3.1**	**15**
	YMWDUP-20191105-GW	11/05/2019	-	-	**1.25**	**1.3**	**2.6**	**1**	**15**
	YMW-1-20200505-GW	05/05/2020	**0.63**	**-115**	**1.25**	**0.39**	**2.9**	**2.1**	**15**
	YMW-1-20201103-GW	11/03/2020	**1.38**	**-102.4**	**2.5**	**0.33**	**2**	**2.3**	**15**
	YMW1-20210504-GW	05/04/2021	**0.88**	**-98**	**2.5**	**0.41**	**0.67**	**2.5**	**18**
	YMW-1-20211102-GW	11/02/2021	**0.21**	**-107**	**5.5**	**0.49**	**1.7**	**1.2**	**10**
	YMW1-W-15-20231010	10/10/2023	**1.12**	**-93.8**	**9.6**	**0.34**	**1.1**	**1.6**	**11**
YMW-2	YMW-2-20151104-GW	11/04/2015	**1.52**	**48.3**	-	-	-	-	-
	YMW2-20160201-GW	02/01/2016	**0.79**	**327.9**	-	-	-	-	-
	YMW-2-20160510-GW	05/10/2016	**2.62**	**-81.7**	-	-	-	-	-
	YMW-2-20160727-GW	07/27/2016	**1.31**	**-185.9**	-	-	-	-	-
	YMW-2-20161108-GW	11/08/2016	**0.95**	**-179.4**	-	-	-	-	-
	YMW-2-20170215-GW	02/15/2017	**0.83**	**-44.6**	**1**	**1.7**	-	**0.69**	**21**
	YMW-2-20170509-GW	05/09/2017	**0.35**	**-48.4**	-	-	-	-	-
	YMW-2-20170817-GW	08/17/2017	**0.8**	**-107.1**	**0.25**	**0.96**	-	0.05 U	**16**
	YMW-2-20181107-GW	11/07/2018	**0.83**	**-143**	-	**1.5**	**0.49**	0.05 U	**26**
	YMW-2-20190508-GW	05/08/2019	**0.2**	**-55.3**	**2**	**2.2**	**1.6**	**1.1**	**11**
	YMW2-20191105-GW	11/05/2019	**0.89**	**-93.5**	**2**	**1.5**	**1.9**	0.05 U	**26**
	YMW-2-20200505-GW	05/05/2020	**0.29**	**-119.6**	**3.25**	**2.5**	**5.1**	**0.82**	5 U
	YMW-2-DUP-20200505-GW	05/05/2020	-	-	**3.25**	**2.3**	**4**	**0.84**	5 U
	YMW-2-20201103-GW	11/03/2020	**0.11**	**-128.6**	**4.5**	**3.5**	**2.9**	0.05 U	5 U
	YMW-2-DUP-20201103-GW	11/03/2020	-	-	**4.5**	**3.6**	**2.8**	0.05 U	5 U
	YMW2-20210504-GW	05/04/2021	**0.5**	**-28.6**	**2.5**	**2.9**	**0.74**	**1.3**	**7.1**
	YMW2-DUP-20210504-GW	05/04/2021	-	-	**2.5**	**2.7**	**0.47**	**1.5**	**6.6**
	YMW-2-20211102-GW	11/02/2021	**0.53**	**134**	**3**	**1.4**	**1.4**	0.05 U	5 U
	YMW-2-DUP-20211102-GW	11/02/2021	-	-	**3**	**1.4**	**1.3**	0.05 U	5 U
	YMW2-W-15-20231010	10/10/2023	**0.34**	**-38.7**	**6.2**	**2**	**0.28**	**0.76 J**	5 U
	YMW-DUP-W-DEPTH-20231011	10/11/2023	**0.34**	**-38.7**	-	**2.1**	**0.29**	**0.38 J**	**9.4**

TABLE 5
SUMMARY OF GEOCHEMICAL RESULTS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Name	Sample Date	Dissolved Oxygen, Field (a) mg/L	Oxidation Reduction Potential (ORP), mv	Ferrous Iron, Field (b) mg/L	Manganese, Total mg/L	Methane, Total mg/L	Nitrate (as N), Total mg/L	Sulfate mg/L
YMW-3	YMW3-20160201-GW	02/01/2016	**0.39**	**208.3**	-	-	-	-	-
	YMW-3-20160510-GW	05/10/2016	**0.4**	**-196**	-	-	-	-	-
	YMW-3-20160726-GW	07/26/2016	**0.71**	**-206.4**	-	-	-	-	-
	YMW-3-20161109-GW	11/09/2016	**0.93**	**-188.3**	-	-	-	-	-
	YMW-3-20170215-GW	02/15/2017	**0.34**	**-99.3**	**1.5**	**1.9**	-	**0.08**	5 U
	YMW-3-20170509-GW	05/09/2017	**0.24**	**-95.1**	-	-	-	-	-
	YMW-3-20170816-GW	08/16/2017	**0.1**	**-169.1**	-	-	-	-	-
	YMW-3-20181108-GW	11/08/2018	**0.67**	**-130.9**	**1**	**0.83**	**0.59**	0.05 U	20 U
	YMW-3-DUP-20181108-GW	11/08/2018	-	-	**1**	**0.86**	**0.67**	**0.069**	20 U
	YMW-3-20190508-GW	05/08/2019	**0.18**	**-57.9**	**0**	**0.78**	**0.97**	**0.15**	5 U
	YMW3-20191106-GW	11/06/2019	**0.2**	**-128.4**	**1**	**1**	**1.1**	**0.32**	5 U
	YMW-3-20200505-GW	05/05/2020	**0**	**-143.8**	**2.5**	**0.92**	**1.3**	**0.21**	5 U
	YMW-3-20201103-GW	11/03/2020	**0.1**	**-148.1**	**1**	**0.4**	**1.3**	**0.16**	**7.3**
	YMW3-20210504-GW	05/04/2021	**0.08**	**-135.2**	**1**	**0.58**	**1.2**	**0.21**	**8.5**
	YMW-3-20211102-GW	11/02/2021	**0.01**	**-138.6**	**2**	**1.8**	**2.3**	**0.12**	**7.8**
	YMW3-W-15-20231011	10/11/2023	**1.87**	**171.8**	**6.1**	**1.5**	**1.2**	0.05 U	5 U

ABBREVIATIONS AND NOTES:

-: Not Analyzed

***Bold** values indicate a detected concentration.*

D: result is a dilution

mg/L: milligrams per liter

mV = millivolt

U: not detected, value is the laboratory reporting limit

(a)Measured in the field, using a YSI meter and flow-through cell.

(b)Measured in the field, using a Hach test kit, Model IR-18C.

TABLE 6
SUMMARY OF GROUNDWATER HVOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Name	Sample Date	Sample Depth (bgs)	Halogenated Volatile Organic Compounds (HVOCs)					
				1,1-Dichloroethene ug/L	cis-1,2-Dichloroethene ug/L	Tetrachloroethene ug/L	trans-1,2-Dichloroethene ug/L	Trichloroethene ug/L	Vinyl chloride ug/L
MTCA Method A Cleanup Level				NA	NA	5	NA	5	0.2
KMW-5	KMW5-20191104-GW	11/04/2019	-	0.2 U	**0.3**	**21**	0.2 U	**1.9**	0.2 U
	KMW-5-20200504-GW	05/04/2020	-	0.2 U	**0.78**	**7.3**	**0.36**	**4.2**	0.2 U
	KMW-5-20201102-GW	11/02/2020	-	0.2 U	**0.57**	**11**	0.2 U	**3.9**	0.2 U
	KMW5-20210503-GW	05/03/2021	-	0.2 U	**0.76**	**4.5**	**0.48**	**3.8**	0.2 U
	KMW-5-20211102-GW	11/02/2021	14 (ft)	0.2 U	**0.31**	**16**	0.2 U	**3.9**	0.2 U
	KMW5-W-13-20231010	10/10/2023	13 (ft)	0.2 U	**0.31**	**13**	0.2 U	**2.2**	0.2 U
KMW-6	KMW6-20191104-GW	11/04/2019	-	1 U	**1.2**	**19**	1 U	**2**	1 U
	KMW-6-20200504-GW	05/04/2020	-	0.2 U	**0.26**	**28**	0.2 U	**1.2**	0.2 U
	KMW-6-20201103-GW	11/03/2020	-	0.4 U	**1**	**23**	**0.7**	**2.1**	0.4 U
	KMW6-20210503-GW	05/03/2021	-	0.2 U	**0.35**	**23**	**0.23**	**1.2**	0.2 U
	KMW-6-20211101-GW	11/01/2021	14 (ft)	0.2 U	**0.85**	**22**	**0.82**	**3.3**	0.2 U
	KMW6-W-14-20231010	10/10/2023	14 (ft)	0.8 U	0.8 U	**27**	0.8 U	**4.3**	0.8 U
KMW-7	KMW-7-20200505-GW	05/05/2020	-	0.2 U	0.2 U	**33**	0.2 U	**0.26**	0.2 U
	KMW-7-20201103-GW	11/03/2020	-	0.2 U	**0.63**	**25**	0.2 U	**0.94**	0.2 U
	KMW7-20210504-GW	05/04/2021	-	0.2 U	0.2 U	**27**	0.2 U	0.2 U	0.2 U
	KMW-7-20211102-GW	11/02/2021	16 (ft)	0.2 U	**0.35**	**29**	0.2 U	**0.53**	0.2 U
	KMW7-W-15-20231011	10/11/2023	15 (ft)	0.2 U	0.2 U	**27**	0.2 U	0.2 U	0.2 U
KMW-14	KMW14-20191105-GW	11/05/2019	-	0.2 U	**0.34**	**0.27**	0.2 U	0.2 U	**0.55**
	KMW-14-20200504-GW	05/04/2020	-	0.2 U	**0.62**	0.2 U	0.2 U	**0.31**	**0.54**
	KMW-14-20201102-GW	11/02/2020	-	0.2 U	**0.45**	**0.35**	0.2 U	**0.25**	**0.69**
	KMW14-20210503-GW	05/03/2021	-	0.2 U	**0.53**	**0.28**	0.2 U	**0.3**	**0.63**
	KMW-14-20211101-GW	11/01/2021	16 (ft)	0.2 U	**0.47**	**0.63**	0.2 U	**0.27**	**0.82**
	KMW14-W-15-20231010	10/10/2023	15 (ft)	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
KMW-15	KMW15-20191105-GW	11/05/2019	-	0.2 U	0.2 U	**29**	0.2 U	**0.52**	0.2 U
	KMW-15-20200504-GW	05/04/2020	-	0.2 U	0.2 U	**31**	0.2 U	**0.66**	0.2 U
	KMW-15-20201102-GW	11/02/2020	-	0.2 U	0.2 U	**30**	0.2 U	**0.61**	0.2 U
	KMW15-20210503-GW	05/03/2021	-	0.2 U	0.2 U	**28**	0.2 U	**0.57**	0.2 U
	KMW-15-20211101-GW	11/01/2021	15 (ft)	0.2 U	0.2 U	**30**	0.2 U	**0.63**	0.2 U
	KMW15-W-15-20231010	10/10/2023	15 (ft)	0.2 U	**0.37**	**5.2**	0.2 U	**1.8**	**0.47**
KMW-16	KMW16-20191105-GW	11/05/2019	-	0.2 U	**0.39**	**8**	0.2 U	**0.75**	**0.51**
	KMW-16-20200504-GW	05/04/2020	-	0.2 U	0.2 U	**23**	0.2 U	**0.62**	0.2 U
	KMW-16-20201102-GW	11/02/2020	-	0.2 U	**0.47**	**11**	0.2 U	**0.97**	**0.3**
	KMW16-20210503-GW	05/03/2021	-	0.2 U	0.2 U	**21**	0.2 U	**0.66**	0.2 U
	KMW-16-20211101-GW	11/01/2021	15 (ft)	0.2 U	**0.47**	**9.6**	0.2 U	**1.2**	**0.39**
	KMW16-W-11-20231010	10/10/2023	11 (ft)	2 U	2 U	2 U	2 U	2 U	**2**
MW-10	MW-10-20200505-GW	05/05/2020	-	0.2 U	0.2 U	**31**	0.2 U	0.2 U	0.2 U
	MW-10-20201103-GW	11/03/2020	-	0.2 U	0.2 U	**26**	0.2 U	0.2 U	0.2 U
	MW10-20210504-GW	05/04/2021	-	0.2 U	0.2 U	**26**	0.2 U	0.2 U	0.2 U
	MW-10-20211102-GW	11/02/2021	13.5 (ft)	0.2 U	0.2 U	**26**	0.2 U	0.2 U	0.2 U
	MW10-W-15-20231011	10/11/2023	15 (ft)	0.2 U	0.2 U	**23**	0.2 U	0.2 U	0.2 U
MW-11	MW11-W-13-20231011	10/11/2023	13 (ft)	20 U	20 U	20 U	20 U	20 U	20 U
MW-13	MW13-20210504-GW	05/04/2021	-	0.2 U	**2.9**	**1.2**	0.2 U	**1.7**	**0.98**
	MW13-W-15-20231011	10/11/2023	15 (ft)	0.8 U	**2.9**	**4.3**	0.8 U	**2.5**	**1.1**
MWG-2	MWG2-20191105-GW	11/05/2019	-	0.2 U	0.2 U	**27**	0.2 U	**0.41**	0.2 U
	MWG-2-20200505-GW	05/05/2020	-	0.2 U	0.2 U	**29**	0.2 U	**0.23**	0.2 U
	MWG-2-20201103-GW	11/03/2020	-	0.2 U	0.2 U	**30**	0.2 U	**0.39**	0.2 U
	MWG2-20210504-GW	05/04/2021	-	0.2 U	0.2 U	**27**	0.2 U	**0.21**	0.2 U
	MWG-2-20211102-GW	11/02/2021	12 (ft)	0.2 U	0.2 U	**29**	0.2 U	**0.5**	0.2 U
	MWG2-W-10-20231010	10/10/2023	10 (ft)	0.2 U	0.2 U	**28**	0.2 U	**0.26**	0.2 U
MWG-3	MWG3-20191105-GW	11/05/2019	-	10 U	10 U	**13**	10 U	10 U	10 U
	MWG-3-20200505-GW	05/05/2020	-	2 U	**2.9**	**8.8**	2 U	2 U	**2.1**
	MWG-3-20211102-GW	11/02/2021	10 (ft)	10 U	10 U	**12**	10 U	10 U	10 U
	MWG3-W-10-20231010	10/10/2023	10 (ft)	8 U	8 U	8 U	8 U	8 U	8 U
OS-LLMIP02	DSW-OS-LLMIP02-20210513-GW-17.0	05/13/2021	17 (ft)	0.2 U	0.2 U	**3**	0.2 U	0.2 U	0.2 U
OS-LLMIP03	DSW-OS-LLMIP03-20210513-GW-20.0	05/13/2021	20 (ft)	0.2 U	0.2 U	**16**	0.2 U	0.2 U	0.2 U
OS-LLMIP05	DSW-OS-LLMIP05-20210513-GW-22.0	05/13/2021	22 (ft)	0.2 U	0.2 U	**26**	0.2 U	0.2 U	0.2 U
OS-LLMIP07	DSW-OS-LLMIP07-20210513-GW-21.0	05/13/2021	21 (ft)	0.2 U	0.2 U	**21**	0.2 U	0.2 U	0.2 U
OS-LLMIP09	DSW-OS-LLMIP09-20210514-GW-19.0	05/14/2021	19 (ft)	0.2 U	0.2 U	**3.1**	0.2 U	0.2 U	0.2 U
S-2	S-2-20201102-GW	11/02/2020	-	1 U	**3.6**	1 U	1 U	**1.9**	1 U
	S2-20210503-GW	05/03/2021	-	1 U	**1.7**	1 U	1 U	**1.4**	1 U
	S-2-20211102-GW	11/02/2021	10 (ft)	4 U	4 U	4 U	4 U	4 U	4 U
	S2-W-10-20231010	10/10/2023	10 (ft)	4 U	4 U	4 U	4 U	4 U	4 U
YMW-1	YMW1-20191105-GW	11/05/2019	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMWDUP-20191105-GW	11/05/2019	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMW-1-20200505-GW	05/05/2020	-	10 U	10 U	**19**	10 U	10 U	10 U
	YMW-1-20201103-GW	11/03/2020	-	2 U	2 U	**15**	2 U	2 U	2 U
	YMW1-20210504-GW	05/04/2021	-	4 U	4 U	**15**	4 U	4 U	4 U
	YMW-1-20211102-GW	11/02/2021	15 (ft)	4 U	4 U	**11**	4 U	4 U	4 U
	YMW1-W-15-20231010	10/10/2023	15 (ft)	8 U	8 U	**11**	8 U	8 U	8 U
YMW-2	YMW-2-20200505-GW	05/05/2020	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMW-2-DUP-20200505-GW	05/05/2020	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMW-2-20201103-GW	11/03/2020	-	2 U	**4.2**	2 U	2 U	2 U	2 U
	YMW-2-DUP-20201103-GW	11/03/2020	-	2 U	**3.8**	2 U	2 U	2 U	2 U
	YMW2-20210504-GW	05/04/2021	-	4 U	4 U	**11**	4 U	4 U	4 U
	YMW2-DUP-20210504-GW	05/04/2021	-	4 U	4 U	**10**	4 U	4 U	4 U
	YMW-2-20211102-GW	11/02/2021	16 (ft)	2 U	**7.6**	2 U	2 U	2 U	2 U
	YMW-2-DUP-20211102-GW	11/02/2021	16 (ft)	2 U	**7.4**	2 U	2 U	2 U	2 U
	YMW2-W-15-20231010	10/10/2023	15 (ft)	1 U	**7.5**	**8.5**	1 U	**3.5**	1 U
	YMW-DUP-W-DEPTH-20231011	10/11/2023	-	2 U	**7.3**	**7.2**	2 U	**3.1**	2 U
YMW-3	YMW-3-20200505-GW	05/05/2020	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMW-3-20201103-GW	11/03/2020	-	2 U	**6.3**	2 U	2 U	2 U	2 U
	YMW3-20210504-GW	05/04/2021	-	10 U	10 U	10 U	10 U	10 U	10 U
	YMW-3-20211102-GW	11/02/2021	15 (ft)	10 U	10 U	10 U	10 U	10 U	10 U
	YMW3-W-15-20231011	10/11/2023	15 (ft)	10 U	10 U	10 U	10 U	10 U	10 U

ABBREVIATIONS AND NOTES:

bgs: below ground surface
ft: feet
MTCA: Model Toxics Control Act
NA: Not Available
OS: Off Site
U: not detected, value is the laboratory reporting limit
ug/L: microgram per liter

Bold *values indicate a detected concentration.*
Blue shading indicates a detected analyte concentration exceeding a MTCA Method A Cleanup Level.

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-5												
Sample Name	MTCA Method A	KMW-5-20150527-GW	KMW5-20160202-GW	KMW-5-20160509-GW	KMW-5-20160725-GW	KMW-5-20161107-GW	KMW-5-20170214-GW	KMW-5-20170508-GW	KMW-5-20170816-GW	KMW-5-20181106-GW	KMW-5-20190507-GW	KMW5-20191104-GW	KMW-5-20200504-GW	KMW-5-20201102-GW
Sample Date		05/27/2015	02/02/2016	05/09/2016	07/25/2016	11/07/2016	02/14/2017	05/08/2017	08/16/2017	11/06/2018	05/07/2019	11/04/2019	05/04/2020	11/02/2020
Lab Sample ID		1505-282-03	1602-026-08	1605-094-04	1607-230-06	1611-106-06	1702-152-03	1705-133-06	1708-229-09	1811-054-01	1905-111-03	1911-058-01	2005-036-01	2011-020-04
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.29 U	0.2 U	0.2 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.27 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.26 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	-	-	-	1.5 U	1 U	1 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	5 U	5 U	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
2-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
4-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	5 U	5 U	-
Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Bromobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Bromoform	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.5 U
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
Carbon tetrachloride	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Chlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Chlorobromomethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Chloroethane	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	-	-	-	**0.36**	0.2 U	0.2 U
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	-	-	-	1 U	1.4 U	1 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	**0.3**	**0.78**	**0.57**
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
Dibromochloromethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Dibromomethane	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.25 U	0.2 U
Ethylbenzene	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Iodomethane	NA	-	-	-	-	-	-	-	-	-	-	1.3 U	1.5 U	4.5 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
m,p-Xylenes	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Naphthalene	160	-	-	-	-	-	-	-	-	-	-	1.5 U	1 U	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
o-Xylene	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Styrene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	**21**	**7.3**	**11**
Toluene	1000	1 U	1 U	**2**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	**0.36**	0.2 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Trichloroethene	5	-	-	-	-	-	-	-	-	-	-	**1.9**	**4.2**	**3.9**
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-
Vinyl chloride	0.2	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U
Xylene (Total)	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-5			KMW-6										
Sample Name	MTCA Method A	KMW5-20210503-GW	KMW-5-20211102-GW	KMW5-W-13-20231010	KMW-6-20150528-GW	KMW-6-20151103-GW	KMW6-20160201-GW	KMW-6-20160509-GW	KMW-6-20160725-GW	KMW-6-20161108-GW	KMW-6-20170215-GW	KMW-6-20170508-GW	KMW-6-20170815-GW	KMW-6-20181106-GW
Sample Date		05/03/2021	11/02/2021	10/10/2023	05/28/2015	11/03/2015	02/01/2016	05/09/2016	07/25/2016	11/08/2016	02/15/2017	05/08/2017	08/15/2017	11/06/2018
Lab Sample ID		2105-012-01	2111-047-02	2310-129-01	1505-282-06	1511-035-06	1602-026-04	1605-094-05	1607-230-05	1611-106-09	1702-152-09	1705-133-05	1708-229-08	1811-054-06
Sample Depth (bgs)		-	14 (ft)	13 (ft)	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	0.2 U	0.2 U	1 U	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	0.2 U	0.2 U	0.2 U	**47**	**15**	**42**	**69**	**31**	**13**	**46**	**170**	**36**	**5.5**
Bromobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Bromoform	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	0.2 U	2.3 U	1 U	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Chloroethane	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	0.2 U	**0.27**	**0.34**	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	**0.76**	**0.31**	**0.31**	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Dibromomethane	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	700	0.2 U	0.2 U	0.2 U	**1.6**	**18**	**22**	**33**	**32**	**48**	**11**	**38**	**23**	**13**
Hexachlorobutadiene	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
Iodomethane	NA	1 U	1.7 U	2.5 U	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	0.4 U	0.4 U	0.4 U	1 U	**28**	**5.4**	**2**	**12**	**9.4**	**2.7**	**14**	**6.3**	**4.2**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-
Naphthalene	160	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	0.2 U	0.2 U	0.2 U	1 U	**7.6**	4 U	**1.2**	**1.5**	1 U	1 U	**1.9**	**4.2**	1 U
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	**4.5**	**16**	**13**	-	-	-	-	-	-	-	-	-	-
Toluene	1000	1 U	1 U	1 U	1 U	**7.4**	4 U	**3**	**2**	1 U	1 U	**1.8**	4 U	1 U
trans-1,2-Dichloroethene	NA	**0.48**	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	**3.8**	**3.9**	**2.2**	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Xylene (Total)	1000	0.4 U	0.4 U	0.4 U	1 U	**35.6**	**5.4**	**3.2**	**13.5**	**9.4**	**2.7**	**15.9**	**10.5**	**4.2**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-6							KMW-7					
Sample Name	MTCA Method A	KMW-6-20190507-GW	KMW6-20191104-GW	KMW-6-20200504-GW	KMW-6-20201103-GW	KMW6-20210503-GW	KMW-6-20211101-GW	KMW6-W-14-20231010	KMW-7-20150529-GW	KMW-7-20151102-GW	KMW7-20160203-GW	KMW-7-20160510-GW	KMW-7-20160726-GW	KMW-7-20161109-GW
Sample Date		05/07/2019	11/04/2019	05/04/2020	11/03/2020	05/03/2021	11/01/2021	10/10/2023	05/29/2015	11/02/2015	02/03/2016	05/10/2016	07/26/2016	11/09/2016
Lab Sample ID		1905-111-05	1911-058-02	2005-023-04	2011-031-02	2105-012-02	2111-027-04	KMW6-W-14	1505-282-15	1511-035-02	1602-026-12	1605-094-08	1607-230-09	1611-106-15
Sample Depth (bgs)		-	-	-	-	-	14 (ft)	14 (ft)	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1-Dichloroethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1-Dichloroethene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,1-Dichloropropene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	-	1.5 U	0.2 U	0.4 U	0.2 U	0.2 U	4 U	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	-	1.3 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	**4.4**	0.2 U	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	7.5 U	1 U	2 U	1 U	1.3 U	4 U	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2-Dichloroethane	5	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,2-Dichloropropane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	**1.3**	0.2 U	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,3-Dichloropropane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
2,2-Dichloropropane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	25 U	5 U	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	5 U	1 U	2 U	1 U	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	10 U	2 U	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	**1.2**	0.2 U	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	10 U	2 U	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	25 U	6.7 U	-	-	-	-	-	-	-	-	-	-
Benzene	5	**49**	**100**	**10**	**72**	**5.1**	**31**	**69**	**8.4**	**13**	**47**	**25**	**3.1**	**5**
Bromobenzene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Bromodichloromethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Bromoform	NA	-	5 U	1 U	2 U	1 U	1 U	4 U	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	-	1 U	0.26 U	0.92 U	0.2 U	2.3 U	4 U	-	-	-	-	-	-
Carbon disulfide	NA	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Chlorobenzene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Chlorobromomethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Chloroethane	NA	-	5 U	1 U	2 U	1 U	1 U	4 U	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	-	1 U	**0.44**	**0.77**	**0.44**	**0.73**	0.8 U	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	-	5 U	1.3 U	2 U	1 U	1 U	4 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	-	**1.2**	**0.26**	**1**	**0.35**	**0.85**	0.8 U	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Dibromomethane	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Ethylbenzene	700	**8.4**	**24**	**0.39**	**29**	**0.21**	**25**	**80**	**14**	**21**	**41**	**21**	**1.5**	**6.3**
Hexachlorobutadiene	NA	-	5 U	1 U	2 U	1 U	1 U	4 U	-	-	-	-	-	-
Iodomethane	NA	-	6.5 U	1 U	9.2 U	1 U	1.7 U	10 U	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	**3.2**	0.2 U	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	1 U	**7**	0.4 U	**11**	0.4 U	**5.4**	**13**	**47**	**5.1**	**2.1**	1 U	1 U	**2.5**
Methyl Tert Butyl Ether (MTBE)	20	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	5 U	1 U	2 U	1 U	1 U	4 U	-	-	-	-	-	-
Naphthalene	160	-	7.5 U	1 U	-	1 U	**4 Y**	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	**1.3**	0.2 U	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	**4.6**	0.2 U	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	1 U	1 U	0.2 U	**3.2**	0.2 U	**0.33**	**1.7**	**41**	1 U	1 U	1 U	1 U	1 U
Styrene	NA	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	**19**	**28**	**23**	**23**	**22**	**27**	-	-	-	-	-	-
Toluene	1000	1 U	5 U	1 U	**3.4**	1 U	1 U	4 U	**2**	1 U	1 U	**2.3**	1 U	1 U
trans-1,2-Dichloroethene	NA	-	1 U	0.2 U	**0.7**	**0.23**	**0.82**	0.8 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Trichloroethene	5	-	**2**	**1.2**	**2.1**	**1.2**	**3.3**	**4.3**	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Vinyl acetate	NA	-	5 U	1 U	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-
Xylene (Total)	1000	1 U	**7**	0.4 U	**14.2**	0.4 U	**5.73**	**14.7**	**88**	**5.1**	**2.1**	1 U	1 U	**2.5**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-7									KMW-7	KMW-8	KMW-10
Sample Name	MTCA Method A	KMW-7-20170214-GW	KMW-7-20170509-GW	KMW-7-20170816-GW	KMW-7-20181108-GW	KMW-7-20190508-GW	KMW-7-20200505-GW	KMW-7-20201103-GW	KMW7-20210504-GW	KMW-7-20211102-GW	KMW7-W-15-20231011	KMW-8-20150529-GW	KMW-10-20150529-GW
Sample Date		02/14/2017	05/09/2017	08/16/2017	11/08/2018	05/08/2019	05/05/2020	11/03/2020	05/04/2021	11/02/2021	10/11/2023	05/29/2015	05/29/2015
Lab Sample ID		1702-152-04	1705-133-11	1708-229-11	1811-095-02	1905-124-03	2005-036-12	2011-031-08	2105-024-01	2111-047-06	2310-129-03	1505-282-16	1505-282-14
Sample Depth (bgs)		-	-	-	-	-	-	-	-	16 (ft)	15 (ft)	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1,2-Trichloroethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloropropene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-
1,2,3-Trichloropropane	NA	-	-	-	-	-	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	-	-
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2-Dichlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2-Dichloroethane	5	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2-Dichloropropane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,3-Dichloropropane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,4-Dichlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
2,2-Dichloropropane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	5 U	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-
2-Chlorotoluene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	2 U	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
4-Chlorotoluene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	2 U	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	5 U	-	-	-	-	-	-
Benzene	5	**12**	**110**	1 U	**1.3**	**3.2**	0.2 U	**0.39**	0.2 U	0.2 U	0.2 U	1 U	**830**
Bromobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Bromodichloromethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Bromoform	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-	-
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	0.3 U	0.46 U	0.2 U	2.3 U	1 U	-	-
Carbon disulfide	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
Carbon tetrachloride	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Chlorobenzene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Chlorobromomethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Chloroethane	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-	-
Chloroform (Trichloromethane)	NA	-	-	-	-	-	**0.57**	**0.62**	**0.6**	**0.63**	**0.61**	-	-
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	1.4 U	1 U	1 U	1 U	1 U	-	-
cis-1,2-Dichloroethene	NA	-	-	-	-	-	0.2 U	**0.63**	0.2 U	**0.35**	0.2 U	-	-
cis-1,3-Dichloropropene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
Dibromochloromethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Dibromomethane	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	0.25 U	0.2 U	0.25 U	0.2 U	0.2 U	-	-
Ethylbenzene	700	**30**	**150**	1 U	**8.3**	**40**	**0.22**	**24**	0.2 U	**12**	**0.35**	1 U	**1200**
Hexachlorobutadiene	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-	-
Iodomethane	NA	-	-	-	-	-	1.5 U	4.6 U	1 U	1.7 U	2.5 U	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
m,p-Xylenes	NA	**4.6**	**180**	1 U	**2.8**	**6.7**	0.4 U	**7.6**	0.4 U	**4.2**	0.4 U	**1**	**4400**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	0.2 U	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-	-
Naphthalene	160	-	-	-	-	-	1 U	-	1 U	**3**	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
o-Xylene	NA	1 U	**16**	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	**2000**
Styrene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	0.2 U	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	**33**	**25**	**27**	**29**	**27**	-	-
Toluene	1000	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4000**
trans-1,2-Dichloroethene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
trans-1,3-Dichloropropene	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Trichloroethene	5	-	-	-	-	-	**0.26**	**0.94**	0.2 U	**0.53**	0.2 U	-	-
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Vinyl acetate	NA	-	-	-	-	-	1 U	-	-	-	-	-	-
Vinyl chloride	0.2	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Xylene (Total)	1000	**4.6**	**196**	1 U	**2.8**	**6.7**	0.4 U	**7.6**	0.4 U	**4.2**	0.4 U	**1**	**6400**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-14											
Sample Name	MTCA Method A	KMW-14-20150528-GW	KMW-14-20151103-GW	KMW14-20160202-GW	KMW-14-20160509-GW	KMW-14-20160725-GW	KMW-14-20161107-GW	KMW-14-20170215-GW	KMW-14-20170508-GW	KMW-14-20170815-GW	KMW-14-20181106-GW	KMW-14-20190507-GW	KMW14-20191105-GW
Sample Date		05/28/2015	11/03/2015	02/02/2016	05/09/2016	07/25/2016	11/07/2016	02/15/2017	05/08/2017	08/15/2017	11/06/2018	05/07/2019	11/05/2019
Lab Sample ID		1505-282-04	1511-035-03	1602-026-05	1605-094-02	1607-230-01	1611-106-01	1702-152-06	1705-133-01	1708-229-05	1811-054-03	1905-111-01	1911-058-05
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.29 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.26 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	-	-	-	-	1.5 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	5 U
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
2-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	2 U
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
4-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	2 U
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	5 U
Benzene	5	**1.9**	**5.5**	**3**	1 U	1 U	1 U	**1.2**	1 U	1 U	1 U	1 U	0.2 U
Bromobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Bromodichloromethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Bromoform	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Carbon tetrachloride	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Chlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Chlorobromomethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Chloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	**0.34**
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Dibromochloromethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Dibromomethane	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Ethylbenzene	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
Iodomethane	NA	-	-	-	-	-	-	-	-	-	-	-	1.3 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
m,p-Xylenes	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	-	-	-	-	1 U
Naphthalene	160	-	-	-	-	-	-	-	-	-	-	-	1.5 U
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
o-Xylene	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	**0.27**
Toluene	1000	1 U	1 U	1 U	**1.9**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Trichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	1 U
Vinyl chloride	0.2	-	-	-	-	-	-	-	-	-	-	-	**0.55**
Xylene (Total)	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-14					KMW-15						
Sample Name	MTCA Method A	KMW-14-20200504-GW	KMW-14-20201102-GW	KMW14-20210503-GW	KMW-14-20211101-GW	KMW14-W-15-20231010	KMW-15-20151103-GW	KMW15-20160202-GW	KMW-15-20160509-GW	KMW-15-20160725-GW	KMW-15-20161107-GW	KMW-15-20170215-GW	KMW-15-20170508-GW
Sample Date		05/04/2020	11/02/2020	05/03/2021	11/01/2021	10/10/2023	11/03/2015	02/02/2016	05/09/2016	07/25/2016	11/07/2016	02/15/2017	05/08/2017
Lab Sample ID		2005-023-01	2011-020-03	2105-012-03	2111-027-03	2310-129-04	1511-035-04	1602-026-06	1605-094-03	1607-230-03	1611-106-03	1702-152-08	1705-133-03
Sample Depth (bgs)		-	-	-	16 (ft)	15 (ft)	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	0.2 U	0.27 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	1 U	1 U	1 U	1.3 U	1 U	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2-Dichloroethane	5	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	5 U	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	2 U	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	2 U	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	6.7 U	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	0.2 U	0.2 U	**0.22**	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Bromodichloromethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Bromoform	NA	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	0.26 U	0.5 U	0.2 U	2.3 U	1 U	-	-	-	-	-	-	-
Carbon disulfide	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Chlorobenzene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Chlorobromomethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Chloroethane	NA	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	1.3 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	**0.62**	**0.45**	**0.53**	**0.47**	0.2 U	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Dibromomethane	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Ethylbenzene	700	0.2 U	0.2 U	**0.35**	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	NA	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-
Iodomethane	NA	1 U	4.5 U	1 U	1.7 U	2.5 U	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Tert Butyl Ether (MTBE)	20	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-
Naphthalene	160	1 U	-	1 U	1.4 U	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	0.2 U	**0.35**	**0.28**	**0.63**	0.2 U	-	-	-	-	-	-	-
Toluene	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**1.1**	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Trichloroethene	5	**0.31**	**0.25**	**0.3**	**0.27**	0.2 U	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
Vinyl acetate	NA	1 U	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	**0.54**	**0.69**	**0.63**	**0.82**	0.2 U	-	-	-	-	-	-	-
Xylene (Total)	1000	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-15											
Sample Name	MTCA Method A	KMW-15-20170815-GW	KMW-15-20181106-GW	KMW-15-20190507-GW	KMW15-20191105-GW	KMW-15-20200504-GW	KMW-15-20201102-GW	KMW15-20210503-GW	KMW-15-20211101-GW	KMW15-W-15-20231010	KMW-16-20150528-GW	KMW-16-20151103-GW	KMW16-20160202-GW
Sample Date		08/15/2017	11/06/2018	05/07/2019	11/05/2019	05/04/2020	11/02/2020	05/03/2021	11/01/2021	10/10/2023	05/28/2015	11/03/2015	02/02/2016
Lab Sample ID		1708-229-07	1811-054-05	1905-111-02	1911-058-04	2005-023-02	2011-020-01	2105-012-04	2111-027-02	2310-129-05	1505-282-05	1511-035-05	1602-026-07
Sample Depth (bgs)		-	-	-	-	-	-	-	15 (ft)	15 (ft)	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,1-Trichloroethane	200	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,2,2-Tetrachloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,2-Trichloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,3-Trichlorobenzene	NA	-	-	-	0.29 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-
1,2,3-Trichloropropane	NA	-	-	-	0.2 U	0.2 U	0.27 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,4-Trichlorobenzene	NA	-	-	-	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	1.5 U	1 U	1 U	1 U	1.3 U	1 U	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichloroethane	5	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,3-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,4-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2,2-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	5 U	5 U	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-
2-Chlorotoluene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	2 U	2 U	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	2 U	2 U	-	-	-	-	-	-	-
Acetone	NA	-	-	-	5 U	6.7 U	-	-	-	-	-	-	-
Benzene	5	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.3**	**60**	1 U	1 U
Bromobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Bromodichloromethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Bromoform	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Bromomethane (Methyl Bromide)	NA	-	-	-	0.2 U	0.26 U	0.5 U	0.2 U	2.3 U	1 U	-	-	-
Carbon disulfide	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chlorobromomethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chloroethane	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Chloroform (Trichloromethane)	NA	-	-	-	**0.49**	**0.51**	**0.49**	**0.53**	**0.49**	0.2 U	-	-	-
Chloromethane (Methyl Chloride)	NA	-	-	-	1 U	1.3 U	1 U	1 U	1 U	1 U	-	-	-
cis-1,2-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.37**	-	-	-
cis-1,3-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Dibromomethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Ethylbenzene	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**9.6**	1 U	1 U
Hexachlorobutadiene	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Iodomethane	NA	-	-	-	1.3 U	1 U	4.5 U	1 U	1.7 U	2.5 U	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
m,p-Xylenes	NA	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**4.6**	1 U	1 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Naphthalene	160	-	-	-	1.5 U	1 U	-	1 U	1.4 U	-	-	-	-
n-Butylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
o-Xylene	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Styrene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	**29**	**31**	**30**	**28**	**30**	**5.2**	-	-	-
Toluene	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
trans-1,3-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Trichloroethene	5	-	-	-	**0.52**	**0.66**	**0.61**	**0.57**	**0.63**	**1.8**	-	-	-
Trichlorofluoromethane (CFC-11)	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Vinyl acetate	NA	-	-	-	1 U	1 U	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**0.47**	-	-	-
Xylene (Total)	1000	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**4.6**	1 U	1 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		KMW-16									KMW-16		
Sample Name	MTCA Method A	KMW-16-20160509-GW	KMW-16-20160725-GW	KMW-16-20161107-GW	KMW-16-20170508-GW	KMW-16-20170815-GW	KMW-16-20181106-GW	KMW-16-20190507-GW	KMW16-20191105-GW	KMW-16-20200504-GW	KMW-16-20201102-GW	KMW16-20210503-GW	KMW-16-20211101-GW
Sample Date		05/09/2016	07/25/2016	11/07/2016	05/08/2017	08/15/2017	11/06/2018	05/07/2019	11/05/2019	05/04/2020	11/02/2020	05/03/2021	11/01/2021
Lab Sample ID		1605-094-01	1607-230-02	1611-106-02	1705-133-02	1708-229-06	1811-054-04	1905-111-04	1911-058-06	2005-023-03	2011-020-02	2105-012-05	2111-027-01
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	15 (ft)
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	0.29 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.27 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	0.2 U	**0.32**	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	1.5 U	1 U	1 U	1 U	1.3 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	5 U	5 U	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	-
2-Chlorotoluene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	2 U	2 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	**0.32**	**0.38**	-	-	-
4-Chlorotoluene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	2 U	2 U	-	-	-
Acetone	NA	-	-	-	-	-	-	-	5 U	6.7 U	-	-	-
Benzene	5	**7.6**	1 U	1 U	**2.9**	1 U	1 U	**2.6**	0.2 U	**29**	**0.62**	**33**	0.2 U
Bromobenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	0.2 U	0.26 U	0.5 U	0.2 U	2.3 U
Carbon disulfide	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
Carbon tetrachloride	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobromomethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	0.2 U	**0.37**	0.2 U	**0.48**	**0.29**
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	1 U	1.3 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	**0.39**	0.2 U	**0.47**	0.2 U	**0.47**
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
Dibromochloromethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromomethane	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethylbenzene	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	**4**	0.2 U	**0.88**	0.2 U
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Iodomethane	NA	-	-	-	-	-	-	-	1.3 U	1 U	4.5 U	1 U	1.7 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	0.2 U	**0.89**	-	-	-
m,p-Xylenes	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	**2.1**	0.4 U	**0.51**	0.4 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Naphthalene	160	-	-	-	-	-	-	-	1.5 U	**3.4**	-	1 U	1.4 U
n-Butylbenzene	NA	-	-	-	-	-	-	-	0.2 U	**0.42**	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	0.2 U	**0.95**	-	-	-
o-Xylene	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	**8**	**23**	**11**	**21**	**9.6**
Toluene	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	-	-	-	-	-	-	-	**0.75**	**0.62**	**0.97**	**0.66**	**1.2**
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl acetate	NA	-	-	-	-	-	-	-	1 U	1 U	-	-	-
Vinyl chloride	0.2	-	-	-	-	-	-	-	**0.51**	0.2 U	**0.3**	0.2 U	**0.39**
Xylene (Total)	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	**2.1**	0.4 U	**0.51**	0.4 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name			KMW-18	KMW-24		MW-7	MW-9							
Sample Name	MTCA Method A	KMW16-W-11-20231010	KMW-18-20150527-GW	KMW-24-20150529-GW	KMW-24-DUP-20150529-GW	MW7-20191106-GW	MW-9-20150528-GW	MW-9-20151103-GW	MW9-20160202-GW	MW-9-20160510-GW	MW-9-20160726-GW	MW-9-20161108-GW	MW-9-20170215-GW	MW-9-20170509-GW
Sample Date		10/10/2023	05/27/2015	05/29/2015	05/29/2015	11/06/2019	05/28/2015	11/03/2015	02/02/2016	05/10/2016	07/26/2016	11/08/2016	02/15/2017	05/09/2017
Lab Sample ID		2310-129-06	1505-282-02	1505-282-12	1505-282-13	1911-071-03	1505-282-11	1511-035-08	1602-026-11	1605-094-13	1607-230-12	1611-106-13	1702-152-14	1705-133-16
Sample Depth (bgs)		11 (ft)	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	5	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	**260**	1 U	1 U	**1.7**	**12**	**1200**	**1800**	**1800**	**1500**	**1400**	**810**	**390**	**300**
Bromobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	700	**370**	1 U	1 U	1 U	**850**	**740**	**720**	**850**	**960**	**1300**	**1300**	**1300**	**990**
Hexachlorobutadiene	NA	10 U	-	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	NA	25 U	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**79**	1 U	1 U	1 U	**3500**	**1800**	**1500**	**1700**	**1900**	**2300**	**2100**	**2000**	**1400**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	10 U	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	160	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	2 U	1 U	1 U	1 U	**770**	**980**	**740**	**970**	**910**	**1300**	**1200**	**1200**	**870**
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	1000	10 U	1 U	1 U	1 U	**150**	**1900**	**1400**	**1500**	**1700**	**2100**	**1300**	**960**	**760**
trans-1,2-Dichloroethene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	**2**	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (Total)	1000	**79**	1 U	1 U	1 U	**4270**	**2780**	**2240**	**2670**	**2810**	**3600**	**3300**	**3200**	**2270**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		MW-9				MW-10								
Sample Name	MTCA Method A	MW-9-20170816-GW	MW-9-20181107-GW	MW-9-20190508-GW	MW9-20191106-GW	MW-10-20151102-GW	MW10-20160203-GW	MW-10-20160510-GW	MW-10-20160726-GW	MW-10-20161107-GW	MW-10-20170214-GW	MW-10-20170509-GW	MW-10-20170816-GW	MW-10-20181108-GW
Sample Date		08/16/2017	11/07/2018	05/08/2019	11/06/2019	11/02/2015	02/03/2016	05/10/2016	07/26/2016	11/07/2016	02/14/2017	05/09/2017	08/16/2017	11/08/2018
Lab Sample ID		1708-229-15	1811-079-04	1905-124-08	1911-071-01	1511-035-01	1602-026-13	1605-094-07	1607-230-08	1611-106-08	1702-152-05	1705-133-10	1708-229-10	1811-095-06
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	**380**	**67**	**15**	**120**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	700	**860**	**1200**	**820**	**1200**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**1200**	**1300**	**760**	**1300**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	160	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	**600**	**550**	**380**	**330**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	1000	**460**	**220**	**99**	**120**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (Total)	1000	**1800**	**1850**	**1140**	**1630**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		MW-10						MW-11						
Sample Name	MTCA Method A	MW-10-20190508-GW	MW-10-20200505-GW	MW-10-20201103-GW	MW10-20210504-GW	MW-10-20211102-GW	MW10-W-15-20231011	MW-11-20160726-GW	MW-11-20161108-GW	MW-11-20170509-GW	MW-11-20170816-GW	MW11-W-13-20231011	MW-13-20150528-GW	MW-13-20170816-GW
Sample Date		05/08/2019	05/05/2020	11/03/2020	05/04/2021	11/02/2021	10/11/2023	07/26/2016	11/08/2016	05/09/2017	08/16/2017	10/11/2023	05/28/2015	08/16/2017
Lab Sample ID		1905-124-02	2005-036-05	2011-031-07	2105-024-02	2111-047-05	2310-129-07	1607-230-11	1611-106-14	1705-133-12	1708-229-12	2310-129-08	1505-282-10	1708-229-14
Sample Depth (bgs)		-	-	-	-	13.5 (ft)	15 (ft)	-	-	-	-	13 (ft)	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1,1-Trichloroethane	200	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1,2,2-Tetrachloroethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1,2-Trichloroethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1-Dichloroethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1-Dichloroethene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,1-Dichloropropene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2,3-Trichlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	100 U	-	-
1,2,3-Trichloropropane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2,4-Trichlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2,4-Trimethylbenzene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2-Dichlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2-Dichloroethane	5	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,2-Dichloropropane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,3,5-Trimethylbenzene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,3-Dichloropropane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
1,4-Dichlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
2,2-Dichloropropane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	5 U	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	2 U	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	2 U	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	5 U	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**110**	**93**	**57**	100 U	20 U	**32**	**6.5**
Bromobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Bromodichloromethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Bromoform	NA	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
Bromomethane (Methyl Bromide)	NA	-	0.3 U	0.46 U	0.2 U	2.3 U	1 U	-	-	-	-	100 U	-	-
Carbon disulfide	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Chlorobenzene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Chlorobromomethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Chloroethane	NA	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
Chloroform (Trichloromethane)	NA	-	**0.55**	**0.5**	**0.59**	**0.42**	**0.69**	-	-	-	-	20 U	-	-
Chloromethane (Methyl Chloride)	NA	-	1.4 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
cis-1,2-Dichloroethene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
cis-1,3-Dichloropropene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Cymene (p-Isopropyltoluene)	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Dibromomethane	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	0.25 U	0.2 U	0.27 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Ethylbenzene	700	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1400**	**1800**	**1900**	**1500**	**2600**	**1500**	**340**
Hexachlorobutadiene	NA	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
Iodomethane	NA	-	1.5 U	4.6 U	2 U	1.7 U	2.5 U	-	-	-	-	250 U	-	-
Isopropylbenzene (Cumene)	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**13000**	**12000**	**11000**	**6800**	**9600**	**8700**	**500**
Methyl Tert Butyl Ether (MTBE)	20	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	100 U	-	-
Naphthalene	160	-	1 U	-	1 U	1 U	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**2900**	**490**	**100**	**1700**	**79**	**3800**	**370**
Styrene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	**31**	**26**	**26**	**26**	**23**	-	-	-	-	20 U	-	-
Toluene	1000	1 U	1 U	1 U	1 U	1 U	1 U	**150**	**110**	50 U	100 U	100 U	**510**	**23**
trans-1,2-Dichloroethene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
trans-1,3-Dichloropropene	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Trichloroethene	5	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Trichlorofluoromethane (CFC-11)	NA	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Vinyl acetate	NA	-	1 U	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	20 U	-	-
Xylene (Total)	1000	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**15900**	**12490**	**11100**	**8500**	**9679**	**12500**	**870**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		MW-13						MWG-1	MWG-2					
Sample Name	MTCA Method A	MW-13-20181107-GW	MW-13-20190508-GW	MW13-20191106-GW	MW-13-20200505-GW	MW13-20210504-GW	MW13-W-15-20231011	MWG-1-20150528-GW	MWG2-20160203-GW	MWG-2-20160509-GW	MWG-2-20160726-GW	MWG-2-20161107-GW	MWG-2-20170214-GW	MWG-2-20170509-GW
Sample Date		11/07/2018	05/08/2019	11/06/2019	05/05/2020	05/04/2021	10/11/2023	05/28/2015	02/03/2016	05/09/2016	07/26/2016	11/07/2016	02/14/2017	05/09/2017
Lab Sample ID		1811-079-03	1905-124-09	1911-071-02	2005-036-10	2105-024-03	2310-129-16	1505-282-07	1602-026-14	1605-094-06	1607-230-07	1611-106-07	1702-152-01	1705-133-08
Sample Depth (bgs)		-	-	-	-	-	15 (ft)	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	-	-	-	-	0.2 U	4 U	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2-Dichloroethane	5	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	1 U	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	1 U	1 U	4 U	1 U	**0.32**	0.8 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Bromodichloromethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Bromoform	NA	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	-	-	-	-	0.2 U	4 U	-	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Chlorobenzene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Chlorobromomethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Chloroethane	NA	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	-	-	-	-	**2.9**	**2.9**	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Dibromomethane	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	0.27 U	0.8 U	-	-	-	-	-	-	-
Ethylbenzene	700	**69**	**18**	**62**	**9**	**2.4**	**110**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	NA	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
Iodomethane	NA	-	-	-	-	2 U	10 U	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**60**	**9.7**	**66**	**38**	**1.5**	**72**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	1 U	4 U	-	-	-	-	-	-	-
Naphthalene	160	-	-	-	-	**5.6**	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	**40**	**12**	**32**	**28**	**0.99**	**6**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	**1.2**	**4.3**	-	-	-	-	-	-	-
Toluene	1000	**2.2**	**1.1**	4 U	5 U	1 U	4 U	1 U	1 U	**2.1**	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Trichloroethene	5	-	-	-	-	**1.7**	**2.5**	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	0.2 U	0.8 U	-	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	-	-	-	**0.98**	**1.1**	-	-	-	-	-	-	-
Xylene (Total)	1000	**100**	**21.7**	**98**	**66**	**2.49**	**78**	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		MWG-2									MWG-3			
Sample Name	MTCA Method A	MWG-2-20170814-GW	MW-G2-20181106-GW	MWG-2-20190507-GW	MWG2-20191105-GW	MWG-2-20200505-GW	MWG-2-20201103-GW	MWG2-20210504-GW	MWG-2-20211102-GW	MWG2-W-10-20231010	MWG-3-20150528-GW	MWG-3-20170814-GW	MWG3-20191105-GW	MWG-3-20200505-GW
Sample Date		08/14/2017	11/06/2018	05/07/2019	11/05/2019	05/05/2020	11/03/2020	05/04/2021	11/02/2021	10/10/2023	05/28/2015	08/14/2017	11/05/2019	05/05/2020
Lab Sample ID		1708-229-01	1811-054-07	1905-111-07	1911-058-07	2005-036-04	2011-031-01	2105-024-04	2111-047-03	2310-129-09	1505-282-08	1708-229-02	1911-058-08	2005-036-03
Sample Depth (bgs)		-	-	-	-	-	-	-	12 (ft)	10 (ft)	-	-	-	-
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1,1-Trichloroethane	200	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1,2-Trichloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1-Dichloroethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,1-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,2,3-Trichlorobenzene	NA	-	-	-	0.29 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	15 U	2 U
1,2,3-Trichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,2,4-Trichlorobenzene	NA	-	-	-	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	13 U	2 U
1,2,4-Trimethylbenzene	NA	-	-	-	0.2 U	**0.23**	-	-	-	-	-	-	**590**	**490**
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	1.5 U	1 U	1 U	1 U	1 U	1 U	-	-	75 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,2-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,2-Dichloroethane	5	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,2-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,3,5-Trimethylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	**160**	**130**
1,3-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,3-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
1,4-Dichlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
2,2-Dichloropropane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	5 U	5 U	-	-	-	-	-	-	250 U	50 U
2-Chloroethyl vinyl ether	NA	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	50 U	10 U
2-Chlorotoluene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	2 U	2 U	-	-	-	-	-	-	100 U	20 U
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	**6.6**
4-Chlorotoluene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	2 U	2 U	-	-	-	-	-	-	100 U	20 U
Acetone	NA	-	-	-	5 U	5 U	-	-	-	-	-	-	250 U	50 U
Benzene	5	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**3300**	**1100**	**920**	**220**
Bromobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Bromodichloromethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Bromoform	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	50 U	10 U
Bromomethane (Methyl Bromide)	NA	-	-	-	0.2 U	0.3 U	0.46 U	0.2 U	2.3 U	1 U	-	-	100 U	3 U
Carbon disulfide	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	2 U
Carbon tetrachloride	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Chlorobenzene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Chlorobromomethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Chloroethane	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	50 U	10 U
Chloroform (Trichloromethane)	NA	-	-	-	**0.48**	**0.51**	**0.5**	**0.54**	**0.53**	**0.54**	-	-	10 U	2 U
Chloromethane (Methyl Chloride)	NA	-	-	-	1 U	1.4 U	1 U	1 U	1 U	1 U	-	-	50 U	14 U
cis-1,2-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	**2.9**
cis-1,3-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	**12**	**13 Y**
Dibromochloromethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Dibromomethane	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	0.2 U	0.25 U	0.2 U	0.27 U	0.2 U	0.2 U	-	-	10 U	2.5 U
Ethylbenzene	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**2700**	**1100**	**340**	**130**
Hexachlorobutadiene	NA	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	50 U	10 U
Iodomethane	NA	-	-	-	1.3 U	1.5 U	4.6 U	2 U	1.7 U	2.5 U	-	-	65 U	15 U
Isopropylbenzene (Cumene)	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	**14**	**10**
m,p-Xylenes	NA	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**6200**	**2200**	**1200**	**48**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	2 U
Methylene chloride (Dichloromethane)	5	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	-	50 U	10 U
Naphthalene	160	-	-	-	1.5 U	**1.6 Y**	-	1 U	1 U	-	-	-	**420 Y**	**280 Y**
n-Butylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	2 U
n-Propylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	**37**	**35**
o-Xylene	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1800**	**370**	**450**	**19**
Styrene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	2 U
tert-Butylbenzene	NA	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	10 U	2 U
Tetrachloroethene	5	-	-	-	**27**	**29**	**30**	**27**	**29**	**28**	-	-	**13**	**8.8**
Toluene	1000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**710**	50 U	**89**	10 U
trans-1,2-Dichloroethene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
trans-1,3-Dichloropropene	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Trichloroethene	5	-	-	-	**0.41**	**0.23**	**0.39**	**0.21**	**0.5**	**0.26**	-	-	10 U	2 U
Trichlorofluoromethane (CFC-11)	NA	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U
Vinyl acetate	NA	-	-	-	1 U	1 U	-	-	-	-	-	-	50 U	10 U
Vinyl chloride	0.2	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	10 U	**2.1**
Xylene (Total)	1000	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**8000**	**2570**	**1650**	**67**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name				OS-LLMIP02	OS-LLMIP03	OS-LLMIP05	OS-LLMIP07	OS-LLMIP09	S-1		
Sample Name	MTCA Method A	MWG-3-20211102-GW	MWG3-W-10-20231010	DSW-OS-LLMIP02-20210513-GW-17.0	DSW-OS-LLMIP03-20210513-GW-20.0	DSW-OS-LLMIP05-20210513-GW-22.0	DSW-OS-LLMIP07-20210513-GW-21.0	DSW-OS-LLMIP09-20210514-GW-19.0	S-1-20150528-GW	S-2-20150527-GW	S-2-20161107-GW
Sample Date		11/02/2021	10/10/2023	05/13/2021	05/13/2021	05/13/2021	05/13/2021	05/14/2021	05/28/2015	05/27/2015	11/07/2016
Lab Sample ID		2111-047-04	2310-129-10	2105-149-04	2105-149-02	2105-149-06	2105-149-08	2105-149-10	1505-282-09	1505-282-01	1611-106-05
Sample Depth (bgs)		10 (ft)	10 (ft)	17 (ft)	20 (ft)	22 (ft)	21 (ft)	19 (ft)	-	-	-
Volatile Organic Compounds (ug/L)											
1,1,1,2-Tetrachloroethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,1-Trichloroethane	200	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,2,2-Tetrachloroethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1,2-Trichloroethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloropropene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,3-Trichlorobenzene	NA	10 U	40 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,3-Trichloropropane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,4-Trichlorobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichlorobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichloroethane	5	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,2-Dichloropropane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,3-Dichlorobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,3-Dichloropropane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,4-Dichlorobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2,2-Dichloropropane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	**5.3**	5 U	5 U	5 U	**7.4**	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	1 U	1 U	1 U	1 U	1 U	-	-	-
2-Chlorotoluene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	2 U	2 U	2 U	2 U	2 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
4-Chlorotoluene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	2 U	2 U	2 U	2 U	2 U	-	-	-
Acetone	NA	-	-	**28**	**8.3**	5 U	5 U	**33**	-	-	-
Benzene	5	**1200**	**1200**	0.2 U	0.2 U	0.2 U	0.2 U	**0.34**	1 U	**1300**	**3000**
Bromobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Bromodichloromethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Bromoform	NA	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Bromomethane (Methyl Bromide)	NA	120 U	40 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Carbon disulfide	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	**0.32**	-	-	-
Carbon tetrachloride	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chlorobenzene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chlorobromomethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Chloroethane	NA	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Chloroform (Trichloromethane)	NA	10 U	8 U	**0.53**	**0.36**	**0.55**	**0.56**	**0.25**	-	-	-
Chloromethane (Methyl Chloride)	NA	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
cis-1,2-Dichloroethene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
cis-1,3-Dichloropropene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Dibromochloromethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Dibromomethane	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Ethylbenzene	700	**680**	**670**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**7.2**	**200**	**570**
Hexachlorobutadiene	NA	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Iodomethane	NA	85 U	100 U	2 U	2 U	2 U	2 U	2 U	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
m,p-Xylenes	NA	**2100**	**1300**	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**2**	**51**	**310**
Methyl Tert Butyl Ether (MTBE)	20	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Methylene chloride (Dichloromethane)	5	50 U	40 U	1 U	1 U	1 U	1 U	1 U	-	-	-
Naphthalene	160	**340**	-	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	-	-	-
n-Butylbenzene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
n-Propylbenzene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
o-Xylene	NA	**200**	**360**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.2**	10 U	**27**
Styrene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
tert-Butylbenzene	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Tetrachloroethene	5	**12**	8 U	**3**	**16**	**26**	**21**	**3.1**	-	-	-
Toluene	1000	**180**	**160**	1 U	1 U	1 U	1 U	1 U	1 U	10 U	**35**
trans-1,2-Dichloroethene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
trans-1,3-Dichloropropene	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Trichloroethene	5	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Trichlorofluoromethane (CFC-11)	NA	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Vinyl acetate	NA	-	-	1 U	1 U	1 U	1 U	1 U	-	-	-
Vinyl chloride	0.2	10 U	8 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
Xylene (Total)	1000	**2300**	**1660**	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**3.2**	**51**	**337**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		S-2						S-2					YMW-1			
Sample Name	MTCA Method A	S-2-20170214-GW	S-2-20170508-GW	S-2-20170814-GW	S-2-20181108-GW	S-2-20190507-GW	S2-20191105-GW	S-2-20200504-GW	S-2-20201102-GW	S2-20210503-GW	S-2-20211102-GW	S2-W-10-20231010	YMW-1-20151104-GW	YMW1-20160202-GW	YMW-1-20160510-GW	YMW-1-20160727-GW
Sample Date		02/14/2017	05/08/2017	08/14/2017	11/08/2018	05/07/2019	11/05/2019	05/04/2020	11/02/2020	05/03/2021	11/02/2021	10/10/2023	11/04/2015	02/02/2016	05/10/2016	07/27/2016
Lab Sample ID		1702-152-02	1705-133-07	1708-229-04	1811-095-03	1905-111-06	1911-058-09	2005-036-02	2011-020-05	2105-012-06	2111-047-01	2310-129-11	1511-035-09	1602-026-10	1605-094-09	1607-230-13
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	10 (ft)	10 (ft)	-	-	-	-
Volatile Organic Compounds (ug/L)																
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	20 U	-	-	-	-
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	1.4 U	1 U	4 U	4 U	-	-	-	-
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,2-Dichloroethane	5	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	5 U	5 U	-	-	-	-	-	-
2-Chlorotoluene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	**2800**	**3300**	**2400**	**1800**	**640**	**1400**	**1400**	**1500**	**170**	**920**	**470**	**990**	**2200**	**1600**	**2400**
Bromobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Bromodichloromethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Bromoform	NA	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	2.5 U	1 U	46 U	20 U	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Chlorobenzene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Chlorobromomethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Chloroethane	NA	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	**3.6**	**1.7**	4 U	4 U	-	-	-	-
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Dibromomethane	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Ethylbenzene	700	**530**	**710**	**500**	**510**	**280**	**520**	**610**	**590**	**88**	**550**	**340**	**470**	**840**	**750**	**930**
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
Iodomethane	NA	-	-	-	-	-	-	-	23 U	5 U	34 U	50 U	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**260**	**510**	**370**	**220**	**87**	**170**	**350**	**130**	**5.1**	**160**	**110**	**1000**	**2400**	**2100**	**2700**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	5 U	5 U	20 U	20 U	-	-	-	-
Naphthalene	160	-	-	-	-	-	-	-	-	**11**	**66**	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	**14**	100 U	50 U	**28**	4 U	10 U	10 U	**9.1**	1 U	4 U	**5.1**	**430**	**950**	**650**	**1100**
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Toluene	1000	**21**	100 U	50 U	**28**	**6.8**	50 U	50 U	**17**	5 U	20 U	20 U	**1400**	**3900**	**2500**	**3200**
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Trichloroethene	5	-	-	-	-	-	-	-	**1.9**	**1.4**	4 U	4 U	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	-	-	-	-	-	-	-	1 U	1 U	4 U	4 U	-	-	-	-
Xylene (Total)	1000	**274**	**510**	**370**	**248**	**87**	**170**	**350**	**139.1**	**5.1**	**160**	**115.1**	**1430**	**3350**	**2750**	**3800**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		YMW-1				YMW-1								
Sample Name	MTCA Method A	YMW-1-20161108-GW	YMW-1-20170215-GW	YMW-1-20170509-GW	YMW-1-20170817-GW	YMW-1-20181107-GW	YMW-1-20190508-GW	YMW-1-DUP-20190508-GW	YMW1-20191105-GW	YMWDUP-20191105-GW	YMW-1-20200505-GW	YMW-1-20201103-GW	YMW1-20210504-GW	YMW-1-20211102-GW
Sample Date		11/08/2016	02/15/2017	05/09/2017	08/17/2017	11/07/2018	05/08/2019	05/08/2019	11/05/2019	11/05/2019	05/05/2020	11/03/2020	05/04/2021	11/02/2021
Lab Sample ID		1611-106-10	1702-152-10	1705-133-09	1708-229-16	1811-079-02	1905-124-04	1905-124-06	1911-058-10	1911-058-12	2005-036-09	2011-031-05	2105-024-05	2111-047-10
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	-	15 (ft)
Volatile Organic Compounds (ug/L)														
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	15 U	15 U	10 U	2 U	4 U	4 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	13 U	13 U	10 U	2 U	4 U	4 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	**380**	**420**	**630**	**550**	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	75 U	75 U	50 U	10 U	20 U	20 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,2-Dichloroethane	5	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	**53**	**61**	**70**	**24**	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	250 U	250 U	250 U	50 U	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	20 U	-
2-Chlorotoluene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	100 U	100 U	100 U	20 U	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	**3.1**	-	-
4-Chlorotoluene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	100 U	100 U	100 U	20 U	-	-
Acetone	NA	-	-	-	-	-	-	-	250 U	250 U	250 U	50 U	-	-
Benzene	5	**3300**	**3200**	**4400**	**4500**	**920**	**630**	**610**	**880**	**1000**	**750**	**1200**	**680**	**870**
Bromobenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Bromodichloromethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Bromoform	NA	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	20 U	20 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	100 U	100 U	15 U	4.6 U	4 U	46 U
Carbon disulfide	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2.6 U	-	-
Carbon tetrachloride	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Chlorobenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Chlorobromomethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Chloroethane	NA	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	20 U	20 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	50 U	50 U	70 U	10 U	20 U	20 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	**2.1**	-	-
Dibromochloromethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Dibromomethane	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	10 U	10 U	13 U	2 U	5.4 U	4 U
Ethylbenzene	700	**1100**	**1500**	**1500**	**2100**	**670**	**490**	**480**	**720**	**800**	**800**	**860**	**580**	**950**
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	20 U	20 U
Iodomethane	NA	-	-	-	-	-	-	-	65 U	65 U	75 U	46 U	40 U	34 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	**21**	**24**	**28**	**22**	-	-
m,p-Xylenes	NA	**3100**	**3700**	**4100**	**5900**	**1500**	**870**	**860**	**1400**	**1600**	**1200**	**1300**	**970**	**1800**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	20 U	20 U
Naphthalene	160	-	-	-	-	-	-	-	**250 Y**	**280 Y**	**520 Y**	**490**	**300**	**410**
n-Butylbenzene	NA	-	-	-	-	-	-	-	10 U	10 U	**51 Y**	**8.5**	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	**58**	**63**	**83**	**63**	-	-
o-Xylene	NA	**1300**	**1400**	**1600**	**2100**	**110**	**68**	**69**	**80**	**97**	**22**	**23**	**17**	**46**
Styrene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	10 U	10 U	**19**	**15**	**15**	**11**
Toluene	1000	**3400**	**2900**	**2100**	**4100**	**140**	**44**	**45**	**61**	**71**	50 U	**69**	**58**	**130**
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Trichloroethene	5	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Vinyl acetate	NA	-	-	-	-	-	-	-	50 U	50 U	50 U	10 U	-	-
Vinyl chloride	0.2	-	-	-	-	-	-	-	10 U	10 U	10 U	2 U	4 U	4 U
Xylene (Total)	1000	**4400**	**5100**	**5700**	**8000**	**1610**	**938**	**929**	**1480**	**1697**	**1222**	**1323**	**987**	**1846**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name			YMW-2		YMW-2								
Sample Name	MTCA Method A	YMW1-W-15-20231010	YMW-2-20151104-GW	YMW-2-DUP-20151104-GW	YMW2-20160201-GW	YMW2-DUP-20160201-GW	YMW-2-20160510-GW	YMW-2-DUP-20160510-GW	YMW-2-20160727-GW	YMW-2-DUP-20160727-GW	YMW-2-20161108-GW	YMW-2-DUP-20161108-GW	YMW-2-20170215-GW
Sample Date		10/10/2023	11/04/2015	11/04/2015	02/01/2016	02/01/2016	05/10/2016	05/10/2016	07/27/2016	07/27/2016	11/08/2016	11/08/2016	02/15/2017
Lab Sample ID		2310-129-12	1511-035-10	1511-035-11	1602-026-01	1602-026-02	1605-094-11	1605-094-12	1607-230-14	1607-230-15	1611-106-11	1611-106-12	1702-152-12
Sample Depth (bgs)		15 (ft)	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloropropene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	5	8 U	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichloropropane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	**880**	**72**	**76**	**380**	**380**	**240**	**240**	**1200**	**1200**	**180**	**190**	**300**
Bromobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Bromoform	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Chlorobromomethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Dibromomethane	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	700	**1200**	**150**	**160**	**300**	**310**	**180**	**190**	**1500**	**1500**	**1000**	**1000**	**440**
Hexachlorobutadiene	NA	40 U	-	-	-	-	-	-	-	-	-	-	-
Iodomethane	NA	100 U	-	-	-	-	-	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**1100**	**590**	**640**	**1700**	**1800**	**770**	**800**	**5800**	**5900**	**2300**	**2300**	**1000**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	40 U	-	-	-	-	-	-	-	-	-	-	-
Naphthalene	160	-	-	-	-	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	**21**	**180**	**200**	**810**	**830**	**300**	**310**	**2200**	**2300**	**910**	**920**	**380**
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	**11**	-	-	-	-	-	-	-	-	-	-	-
Toluene	1000	40 U	**130**	**140**	**630**	**650**	**570**	**590**	**2800**	**2800**	**230**	**230**	**360**
trans-1,2-Dichloroethene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	8 U	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	8 U	-	-	-	-	-	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	8 U	-	-	-	-	-	-	-	-	-	-	-
Xylene (Total)	1000	**1121**	**770**	**840**	**2510**	**2630**	**1070**	**1110**	**8000**	**8200**	**3210**	**3220**	**1380**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		YMW-2											
Sample Name	MTCA Method A	YMW-2-DUP-20170215-GW	YMW-2-20170509-GW	YMW-2-DUP-20170509-GW	YMW-2-20170817-GW	YMW-2-DUP-20170817-GW	YMW-2-20181107-GW	YMW-2-20190508-GW	YMW2-20191105-GW	YMW-2-20200505-GW	YMW-2-DUP-20200505-GW	YMW-2-20201103-GW	YMW-2-DUP-20201103-GW
Sample Date		02/15/2017	05/09/2017	05/09/2017	08/17/2017	08/17/2017	11/07/2018	05/08/2019	11/05/2019	05/05/2020	05/05/2020	11/03/2020	11/03/2020
Lab Sample ID		1702-152-13	1705-133-14	1705-133-15	1708-229-17	1708-229-18	1811-079-01	1905-124-07	1911-058-11	2005-036-06	2005-036-07	2011-031-03	2011-031-04
Sample Depth (bgs)		-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1-Dichloroethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1-Dichloroethene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,1-Dichloropropene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	**150**	**170**	**720**	**710**
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2-Dichloroethane	5	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	**13**	**14**
1,3-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,3-Dichloropropane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
2,2-Dichloropropane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	250 U	250 U	50 U	50 U
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
2-Chlorotoluene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	100 U	100 U	20 U	20 U
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	10 U	10 U	**5.9**	**6.3**
4-Chlorotoluene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	100 U	100 U	20 U	20 U
Acetone	NA	-	-	-	-	-	-	-	-	250 U	250 U	50 U	50 U
Benzene	5	**340**	**380**	**370**	**69**	**67**	**39**	**410**	**41**	**360**	**370**	**320**	**320**
Bromobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Bromodichloromethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Bromoform	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	-	-	-	15 U	15 U	4.6 U	4.6 U
Carbon disulfide	NA	-	-	-	-	-	-	-	-	10 U	10 U	2.6 U	2.6 U
Carbon tetrachloride	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Chlorobenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Chlorobromomethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Chloroethane	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	-	-	-	70 U	70 U	10 U	10 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	10 U	10 U	**4.2**	**3.8**
cis-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	10 U	10 U	**3.9**	**4.1**
Dibromochloromethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Dibromomethane	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	-	-	-	13 U	13 U	2 U	2 U
Ethylbenzene	700	**500**	**330**	**320**	**650**	**630**	**380**	**810**	**340**	**1400**	**1400**	**1000**	**990**
Hexachlorobutadiene	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
Iodomethane	NA	-	-	-	-	-	-	-	-	75 U	75 U	46 U	46 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	**53**	**51**	**35**	**35**
m,p-Xylenes	NA	**1100**	**450**	**440**	**630**	**620**	**160**	**1600**	**79**	**1300**	**1300**	**1300**	**1300**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
Naphthalene	160	-	-	-	-	-	-	-	-	**460 Y**	**500 Y**	**350**	**340**
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	**14 Y**	**14 Y**	**13**	**13**
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	**150**	**150**	**93**	**97**
o-Xylene	NA	**430**	**360**	**350**	**110**	**110**	**29**	**600**	**31**	**23**	**23**	**85**	**88**
Styrene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Tetrachloroethene	5	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Toluene	1000	**420**	**150**	**140**	**14**	**13**	**8.8**	**110**	10 U	50 U	50 U	**55**	**54**
trans-1,2-Dichloroethene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Trichloroethene	5	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Vinyl acetate	NA	-	-	-	-	-	-	-	-	50 U	50 U	10 U	10 U
Vinyl chloride	0.2	-	-	-	-	-	-	-	-	10 U	10 U	2 U	2 U
Xylene (Total)	1000	**1530**	**810**	**790**	**740**	**730**	**189**	**2200**	**110**	**1323**	**1323**	**1385**	**1388**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name			YMW-2					YMW-3					
Sample Name	MTCA Method A	YMW2-20210504-GW	YMW2-DUP-20210504-GW	YMW-2-20211102-GW	YMW-2-DUP-20211102-GW	YMW2-W-15-20231010	YMW-DUP-W-DEPTH-20231011	YMW3-20160201-GW	YMW-3-20160510-GW	YMW-3-20160726-GW	YMW-3-20161109-GW	YMW-3-20170215-GW	YMW-3-20170509-GW
Sample Date		05/04/2021	05/04/2021	11/02/2021	11/02/2021	10/10/2023	10/11/2023	02/01/2016	05/10/2016	07/26/2016	11/09/2016	02/15/2017	05/09/2017
Lab Sample ID		2105-024-06	2105-024-08	2111-047-07	2111-047-08	2310-129-13	2310-129-15	1602-026-03	1605-094-10	1607-230-10	1611-106-16	1702-152-11	1705-133-13
Sample Depth (bgs)		-	-	16 (ft)	16 (ft)	15 (ft)	-	-	-	-	-	-	-
Volatile Organic Compounds (ug/L)													
1,1,1,2-Tetrachloroethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1,1-Trichloroethane	200	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1,2-Trichloroethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1-Dichloroethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1-Dichloroethene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,1-Dichloropropene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2,3-Trichlorobenzene	NA	4 U	4 U	2 U	2 U	5 U	10 U	-	-	-	-	-	-
1,2,3-Trichloropropane	NA	5 U	5 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	0.01	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2-Dichlorobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2-Dichloroethane	5	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,2-Dichloropropane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,3-Dichloropropane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
1,4-Dichlorobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
2,2-Dichloropropane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	NA	20 U	20 U	-	-	-	-	-	-	-	-	-	-
2-Chlorotoluene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
4-Chlorotoluene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	NA	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	5	**180**	**190**	**30**	**30**	**35**	**41**	**3100**	**2000**	**2000**	**2800**	**990**	**900**
Bromobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Bromodichloromethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Bromoform	NA	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
Bromomethane (Methyl Bromide)	NA	4 U	4 U	23 U	23 U	5 U	10 U	-	-	-	-	-	-
Carbon disulfide	NA	-	-	-	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Chlorobenzene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Chlorobromomethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Chloroethane	NA	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
Chloroform (Trichloromethane)	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Chloromethane (Methyl Chloride)	NA	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	NA	4 U	4 U	**7.6**	**7.4**	**7.5**	**7.3**	-	-	-	-	-	-
cis-1,3-Dichloropropene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Dibromomethane	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	NA	5 U	5 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Ethylbenzene	700	**810**	**860**	**470**	**470**	**200**	**250**	**1200**	**980**	**1400**	**2200**	**2400**	**1900**
Hexachlorobutadiene	NA	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
Iodomethane	NA	20 U	20 U	17 U	17 U	13 U	25 U	-	-	-	-	-	-
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	-	-	-	-	-	-	-
m,p-Xylenes	NA	**510**	**560**	**21**	**22**	**130**	**180**	**4000**	**2300**	**3600**	**6600**	**5700**	**2900**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	5	20 U	20 U	10 U	10 U	5 U	10 U	-	-	-	-	-	-
Naphthalene	160	**190**	**200**	**130**	**130**	-	-	-	-	-	-	-	-
n-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	NA	**21**	**26**	**2.4**	**2.3**	**5.8**	**7.5**	**1700**	**910**	**1500**	**2400**	**2500**	**1300**
Styrene	NA	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	**11**	**10**	2 U	2 U	**8.5**	**7.2**	-	-	-	-	-	-
Toluene	1000	20 U	20 U	10 U	10 U	**6.2**	10 U	**1800**	**1100**	**2100**	**4500**	**3600**	**1100**
trans-1,2-Dichloroethene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Trichloroethene	5	4 U	4 U	2 U	2 U	**3.5**	**3.1**	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	NA	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Vinyl acetate	NA	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.2	4 U	4 U	2 U	2 U	1 U	2 U	-	-	-	-	-	-
Xylene (Total)	1000	**531**	**586**	**23.4**	**24.3**	**136**	**188**	**5700**	**3210**	**5100**	**9000**	**8200**	**4200**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Location Name		YMW-3									
Sample Name	MTCA Method A	YMW-3-20170816-GW	YMW-3-20181108-GW	YMW-3-DUP-20181108-GW	YMW-3-20190508-GW	YMW3-20191106-GW	YMW-3-20200505-GW	YMW-3-20201103-GW	YMW3-20210504-GW	YMW-3-20211102-GW	YMW3-W-15-20231011
Sample Date		08/16/2017	11/08/2018	11/08/2018	05/08/2019	11/06/2019	05/05/2020	11/03/2020	05/04/2021	11/02/2021	10/11/2023
Lab Sample ID		1708-229-13	1811-095-04	1811-095-05	1905-124-05	1911-071-04	2005-036-08	2011-031-06	2105-024-07	2111-047-09	2310-129-14
Sample Depth (bgs)		-	-	-	-	-	-	-	-	15 (ft)	15 (ft)
Volatile Organic Compounds (ug/L)											
1,1,1,2-Tetrachloroethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1,1-Trichloroethane	200	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1,2-Trichloroethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1-Dichloroethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1-Dichloroethene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,1-Dichloropropene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,2,3-Trichlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	50 U
1,2,3-Trichloropropane	NA	-	-	-	-	-	10 U	2 U	13 U	10 U	10 U
1,2,4-Trichlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,2,4-Trimethylbenzene	NA	-	-	-	-	-	**960**	**820**	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	NA	-	-	-	-	-	50 U	10 U	50 U	50 U	50 U
1,2-Dibromoethane (Ethylene Dibromide)	0.01	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,2-Dichlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,2-Dichloroethane	5	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,2-Dichloropropane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,3,5-Trimethylbenzene	NA	-	-	-	-	-	**200**	**160**	-	-	-
1,3-Dichlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,3-Dichloropropane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
1,4-Dichlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
2,2-Dichloropropane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
2-Butanone (Methyl Ethyl Ketone)	NA	-	-	-	-	-	250 U	50 U	-	-	-
2-Chloroethyl vinyl ether	NA	-	-	-	-	-	50 U	10 U	50 U	-	-
2-Chlorotoluene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
2-Hexanone (Methyl Butyl Ketone)	NA	-	-	-	-	-	100 U	20 U	-	-	-
2-Phenylbutane (sec-Butylbenzene)	NA	-	-	-	-	-	10 U	**7.5**	-	-	-
4-Chlorotoluene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	NA	-	-	-	-	-	100 U	20 U	-	-	-
Acetone	NA	-	-	-	-	-	250 U	50 U	-	-	-
Benzene	5	**810**	**75**	**80**	**130**	**42**	**120**	**55**	**24**	**25**	**27**
Bromobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Bromodichloromethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Bromoform	NA	-	-	-	-	-	50 U	10 U	50 U	50 U	50 U
Bromomethane (Methyl Bromide)	NA	-	-	-	-	-	15 U	4.6 U	10 U	120 U	50 U
Carbon disulfide	NA	-	-	-	-	-	10 U	2.6 U	-	-	-
Carbon tetrachloride	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Chlorobenzene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Chlorobromomethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Chloroethane	NA	-	-	-	-	-	50 U	10 U	50 U	50 U	50 U
Chloroform (Trichloromethane)	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Chloromethane (Methyl Chloride)	NA	-	-	-	-	-	70 U	10 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	NA	-	-	-	-	-	10 U	**6.3**	10 U	10 U	10 U
cis-1,3-Dichloropropene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Cymene (p-Isopropyltoluene)	NA	-	-	-	-	-	10 U	**5.2**	-	-	-
Dibromochloromethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Dibromomethane	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Dichlorodifluoromethane (CFC-12)	NA	-	-	-	-	-	13 U	2 U	13 U	10 U	10 U
Ethylbenzene	700	**1800**	**1800**	**1900**	**1100**	**1300**	**1500**	**1200**	**1300**	**2600**	**1800**
Hexachlorobutadiene	NA	-	-	-	-	-	50 U	10 U	50 U	50 U	50 U
Iodomethane	NA	-	-	-	-	-	75 U	46 U	50 U	85 U	130 U
Isopropylbenzene (Cumene)	NA	-	-	-	-	-	**52**	**42**	-	-	-
m,p-Xylenes	NA	**5600**	**4400**	**4600**	**2400**	**3100**	**3700**	**2600**	**2100**	**2700**	**3900**
Methyl Tert Butyl Ether (MTBE)	20	-	-	-	-	-	10 U	2 U	-	-	-
Methylene chloride (Dichloromethane)	5	-	-	-	-	-	50 U	10 U	50 U	50 U	50 U
Naphthalene	160	-	-	-	-	-	**770 Y**	**580**	**460**	**1000**	-
n-Butylbenzene	NA	-	-	-	-	-	**92 Y**	**26**	-	-	-
n-Propylbenzene	NA	-	-	-	-	-	**160**	**110**	-	-	-
o-Xylene	NA	**1700**	**1400**	**1400**	**350**	**340**	**340**	**180**	**160**	**140**	**1300**
Styrene	NA	-	-	-	-	-	**11**	2 U	-	-	-
tert-Butylbenzene	NA	-	-	-	-	-	10 U	2 U	-	-	-
Tetrachloroethene	5	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Toluene	1000	**1300**	**450**	**470**	**140**	**130**	**91**	**89**	**110**	**110**	**460**
trans-1,2-Dichloroethene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Trichloroethene	5	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Trichlorofluoromethane (CFC-11)	NA	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Vinyl acetate	NA	-	-	-	-	-	50 U	10 U	-	-	-
Vinyl chloride	0.2	-	-	-	-	-	10 U	2 U	10 U	10 U	10 U
Xylene (Total)	1000	**7300**	**5800**	**6000**	**2750**	**3440**	**4040**	**2780**	**2260**	**2840**	**5200**

TABLE 7
SUMMARY OF GROUNDWATER VOCs QUALITY DATA
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

ABBREVIATIONS AND NOTES:

**Total xylenes is the sum of m,p-xylene and o-xylene. Non-detect results are summed at one-half the detection limit. When both results are non-detect, the higher detection limit is used.*

-: Not Analyzed

bgs: below ground surface

ft: feet

MTCA: Model Toxics Control Act

NA: No Action level established

U: not detected, value is the laboratory reporting limit

ug/L: micrograms per liter

VOCs: Volatile Organic Compounds

Y: result is an estimate

Bold *values indicate a detected concentration.*

Blue shading indicates a detected analyte concentration exceeding a MTCA Method A Cleanup Level.

TABLE 8
SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS
YAKIMA RA & LT MONITORING (TIGER OIL)
YAKIMA, WASHINGTON

Sample Location	Sample Depth	Sample Date	Sample Time	Carbon Dioxide, Field %	Methane %	Oxygen (O2) %	Comment
SVP-01(a)	SVP-01-Shallow	12/06/2018	11:06:00	1.5	0.8	20	Began purge at 11:01.
		05/08/2019	16:08:00	2.4	0	15.2	Began purge at 15:59.
		11/06/2019	12:17:00	1	0	17.7	Began purge at 12:05.
		05/05/2020	17:03:00	1.1	0	18.8	Began purge at 16:55.
		11/03/2020	13:55:00	0.7	0	20.8	Began purge at 13:43.
		05/04/2021	15:54:00	1.4	0	18.6	Began purge at 15:44.
		11/03/2021	09:40:00	1.4	0	19.3	Began purge at 09:29.
		10/09/2023	17:34:00	1.3	1	18.3	Began purge at 17:28
	SVP-01-Medium	12/06/2018	11:00:00	2.8	0.8	18	Began purge at 10:53.
		05/08/2019	16:16:00	3	0	13.5	Began purge at 16:09.
		05/05/2020	17:16:00	2.4	0	16.9	Began purge at 17:08.
		11/03/2020	14:11:00	2.4	0	19	Began purge at 13:59.
		11/06/2020	12:29:00	2	0	17.1	Began purge at 12:18.
		05/04/2021	16:06:00	2.9	0	17	Began purge at 15:56.
		11/03/2021	09:51:00	3	0	17	Began purge at 09:40.
		10/09/2023	17:41:00	4.1	1	15.5	Began purge at 17:35
	SVP-01-Deep	12/06/2018	11:12:00	3	0.8	18.3	Began purge at 11:09.
		05/08/2019	16:23:00	3.1	0	13	Began purge at 16:17.
		11/06/2019	12:41:00	2.6	0	16.4	Began purge at 12:30.
		05/05/2020	17:26:00	2.8	0	16.7	Began purge at 17:18.
		11/03/2020	14:24:00	2.6	0	19	Began purge at 14:12.
		05/04/2021	16:17:00	3.1	0	17	Began purge at 16:07.
		11/03/2021	10:03:00	4	0	15.7	Began purge at 09:52.
		10/09/2023	17:47:00	6.3	1	13	Began purge at 17:42
SVP-02(b)	SVP-02-Shallow	12/05/2018	16:05:00	7	1	12.1	Began purge at 15:59.
		05/08/2019	15:30:00	6.5	0.1	9.6	Began purge at 15:24.
		11/06/2019	13:53:00	2.4	0	16.2	Began purge at 13:40.
		05/05/2020	16:18:00	8	0	6.8	Began purge at 16:10.
		11/03/2020	15:30:00	4	0	15.8	Began purge at 15:15.
		05/04/2021	17:05:00	6.5	0	10.2	Began purge at 16:55.
		11/03/2021	08:08:00	5.7	0	12.6	Began purge at 07:58.
		10/09/2023	16:54:00	7	1	11.3	Began purge at 16:44
	SVP-02-Medium	12/05/2018	16:09:00	10.6	0.9	6.5	Began purge at 16:05.
		05/08/2019	15:39:00	7.5	0	8.9	Began purge at 15:31.
		11/06/2019	14:07:00	6.7	0	10.6	Began purge at 13:55.
		05/05/2020	16:28:00	8.6	0	6.3	Began purge at 16:20.
		11/03/2020	15:40:00	8.5	0	10	Began purge at 15:31.
		05/04/2021	17:12:00	7.6	0	8.6	Began purge at 17:06.
		11/03/2021	08:19:00	9	0	8.7	Began purge at 08:08.
		10/09/2023	16:59:00	15.5	1	3.9	Began purge at 16:56
	SVP-02-Deep	12/05/2018	16:12:00	15.7	1.3	11	Began purge at 16:10.
		05/08/2019	15:48:00	13.6	0	0	Began purge at 15:40.
		11/06/2019	14:17:00	15.5	0.1	0	Began purge at 14:08.
		05/05/2020	16:38:00	13.7	0	0	Began purge at 16:30.
		11/03/2020	15:50:00	17	0.1	0	Began purge at 15:41.
		05/04/2021	17:23:00	12.3	0	1.3	Began purge at 17:13.
		11/03/2021	08:30:00	15.8	0	0.2	Began purge at 08:19.
		10/09/2023	17:05:00	23.8	1	0	Began purge at 17:00
SVP-03(c)	SVP-03-Shallow	12/05/2018	16:30:00	0.5	0.9	17.2	Began purge at 16:26.
		11/06/2019	11:33:00	0.2	0	18.3	Began purge at 11:23.
		05/05/2020	17:43:00	0.1	0	20.8	Began purge at 17:35.
		11/03/2020	13:15:00	0.3	0	20.6	Began purge at 13:00.
		05/04/2021	15:19:00	0.1	0	19.7	Began purge at 15:11.
		11/03/2021	10:15:00	0.2	0	20.6	Began purge at 10:04.
		10/09/2023	17:54:00	0.2	1	19.5	Began purge at 17:48
	SVP-03-Medium	12/05/2018	16:32:00	2.1	0.9	17.1	Began purge at 16:30.
		05/08/2019	16:43:00	0.2	0	20.2	Began purge at 16:26.
		05/08/2019	16:43:00	0.8	0	19.3	Began purge at 16:35.
		11/06/2019	11:45:00	1.4	0	16.5	Began purge at 11:34.
		05/05/2020	17:53:00	0.7	0	19.1	Began purge at 17:45.
		11/03/2020	13:26:00	1.2	0	19.3	Began purge at 13:16.
		05/04/2021	15:30:00	1.3	0	17.9	Began purge at 15:20.
		11/03/2021	10:28:00	0.9	0	19.7	Began purge at 10:16.
		10/09/2023	18:00:00	1.2	1	18.2	Began purge at 17:55
	SVP-03-Deep	12/05/2018	16:34:00	2.3	0.9	20.6	Began purge at 16:32.
		05/08/2019	16:54:00	2.2	1.6	15.7	Began purge at 16:44.
		11/06/2019	11:58:00	4.3	0	13.1	Began purge at 11:47.
		05/04/2020	15:41:00	2.7	0	15.7	Began purge at 15:31.
		05/05/2020	18:06:00	3	0	16.8	Began purge at 17:58.
		11/03/2020	13:39:00	4.9	0.3	17	Began purge at 13:28.
		11/03/2021	10:39:00	2.3	0	16.9	Began purge at 10:28.
		10/09/2023	18:07:00	3.5	2	15.9	Began purge at 18:01
SVP-04(d)	SVP-04-Shallow	12/05/2018	16:18:00	0.4	1	16.5	Began purge at 16:14.
		05/08/2019	14:56:00	0.5	0	19	Began purge at 14:45.
		11/06/2019	13:00:00	0.2	0	19.3	Began purge at 12:50.
		05/05/2020	15:27:00	0.4	0	19.3	Began purge at 15:19.
		11/03/2020	14:39:00	0.3	0	21.2	Began purge at 14:27.
		05/04/2021	16:29:00	0.4	0	20.3	Began purge at 16:21.
		11/03/2021	08:59:00	0.3	0	20.6	Began purge at 08:48.
		10/09/2023	17:14:00	0.4	1	19.2	Began purge at 17:09
	SVP-04-Medium	12/05/2018	16:22:00	8.6	0.9	3.4	Began purge at 16:18.
		05/08/2019	15:02:00	10.9	0	0.7	Began purge at 14:57.
		11/06/2019	13:13:00	9.2	0	3.3	Began purge at 13:01.
		05/05/2020	15:38:00	6	0	9.9	Began purge at 15:30.
		11/03/2020	14:52:00	2	0	18.4	Began purge at 14:40.
		05/04/2021	16:40:00	1.6	0	18.4	Began purge at 16:30.
		11/03/2021	09:11:00	1	0	19.1	Began purge at 09:00. Water present in vapor line was removed.
		10/09/2023	17:21:00	5.7	1	12.2	Began purge at 17:15
	SVP-04-Deep	12/06/2018	11:19:00	6.3	11.9	11.4	Began purge at 11:14.
		05/08/2019	15:15:00	9.5	34.4	0	Began purge at 15:03.
		11/06/2019	13:30:00	12.2	44	0	Began purge at 13:14.
		05/05/2020	15:53:00	11.1	35.5	0	Began purge at 15:45.
		11/03/2020	15:05:00	14.2	32.6	0	Began purge at 14:53.
		05/04/2021	16:51:00	9.8	29.7	0	Began purge at 16:41.
		11/03/2021	09:23:00	13.7	45.4	0	Began purge at 09:12. Water present in vapor line was removed.
		10/09/2023	17:27:00	18.9	> 100	0	Began purge at 17:22

ABBREVIATIONS AND NOTES:

ND: Not Detected

SVP: Soil Vapor Probe

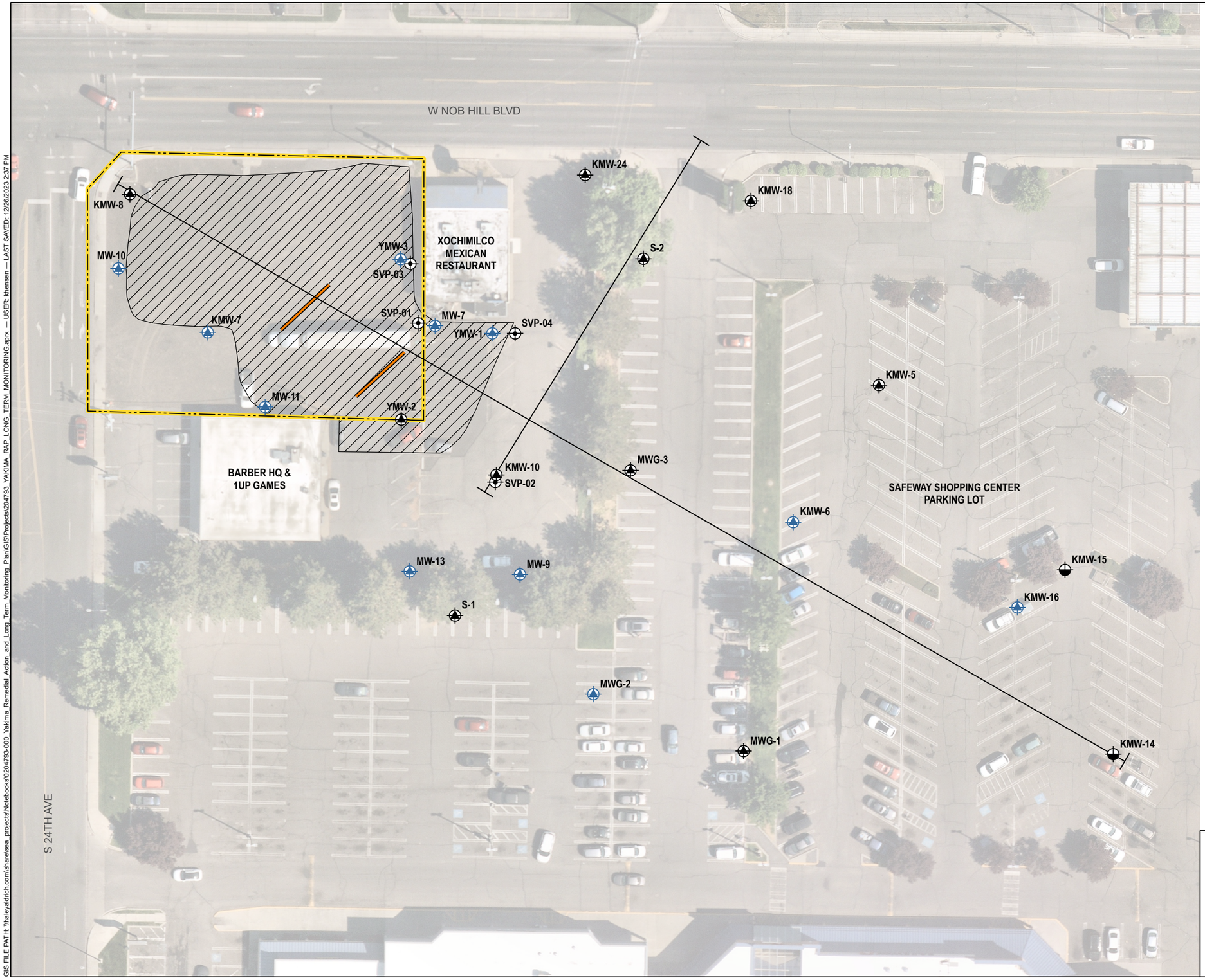
(a) SVP-01 contains shallow, medium, and deep vapor points at 1, 4, and 8 feet below ground surface (bgs), respectively.

(b) SVP-02 contains shallow, medium, and deep vapor points at 1, 5, and 9 feet bgs, respectively.

(c) SVP-03 contains shallow, medium, and deep vapor points at 1, 4.5, and 9 feet bgs, respectively.

(d) SVP-04 contains shallow, medium, and deep vapor points at 1, 4, and 7 feet bgs, respectively.

FIGURES



LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- SOIL VAPOR MONITORING WELL
- CROSS-SECTION
- INFILTRATION GALLERY
- INTERIM REMEDIAL EXCAVATION AREA, PLSA ENGINEERING & SURVEYING (MAY 2015)
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY
3. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016
4. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

N

0 50 100
SCALE IN FEET

HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE YAKIMA, WASHINGTON

SITE PLAN AND GROUNDWATER MONITORING WELL NETWORK

DECEMBER 2023

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\sea_projects\Notebooks\0204793-000_Yakima_Remedial_Action_and_Long_Term_Monitoring_Plan\GIS\Projects\204793_YAKIMA_RAP_LONG_TERM_MONITORING.aprx — USER: khensen — LAST SAVED: 12/26/2023 2:37 PM

LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- ESTIMATED RESIDUAL EXTENT OF LNAPL, HALEY & ALDRICH, 2022
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. LNAPL = LIGHT NON-AQUEOUS PHASE LIQUID
3. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY
4. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016
5. AERIAL IMAGERY SOURCE: NEARMAP, 11 MAY 2021

N

0 50 100
SCALE IN FEET

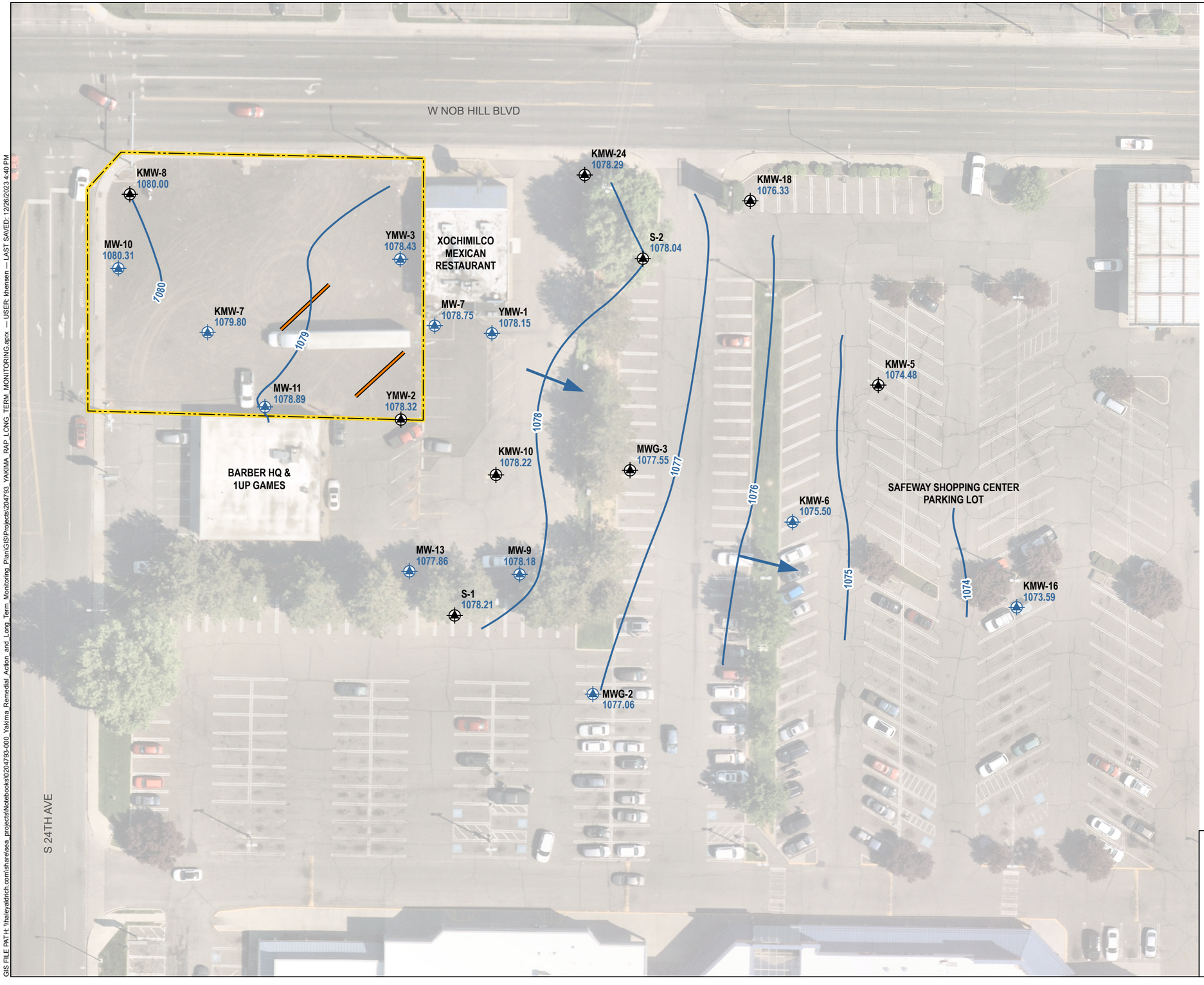
HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

ESTIMATED EXTENT OF RESIDUAL LNAPL

JUNE 2023

FIGURE 2



LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR, 1-FT INTERVAL
- GROUNDWATER FLOW DIRECTION
- INFILTRATION GALLERY
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. GROUNDWATER ELEVATION (IN FEET) INDICATED IN **BOLD BLUE TEXT**.
3. GROUNDWATER ELEVATION MEASUREMENTS RECORDED ON 9 AND 10 OCTOBER, 2023.
4. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY
5. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016
6. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

N

0 50 100
SCALE IN FEET

HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

GROUNDWATER POTENTIOMETRIC SURFACE MAP - OCTOBER 2023

DECEMBER 2023

FIGURE 3

LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- LIGHT NONAQUEOUS PHASE LIQUID (LNAPL) PRESENT
- INFILTRATION GALLERY
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. LNAPL THICKNESS (IN FEET) INDICATED IN **BOLD GREEN TEXT**.
3. LNAPL MEASUREMENTS RECORDED ON 9 AND 10 OCTOBER, 2023.
4. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY
5. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016
6. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

N

0 50 100
SCALE IN FEET

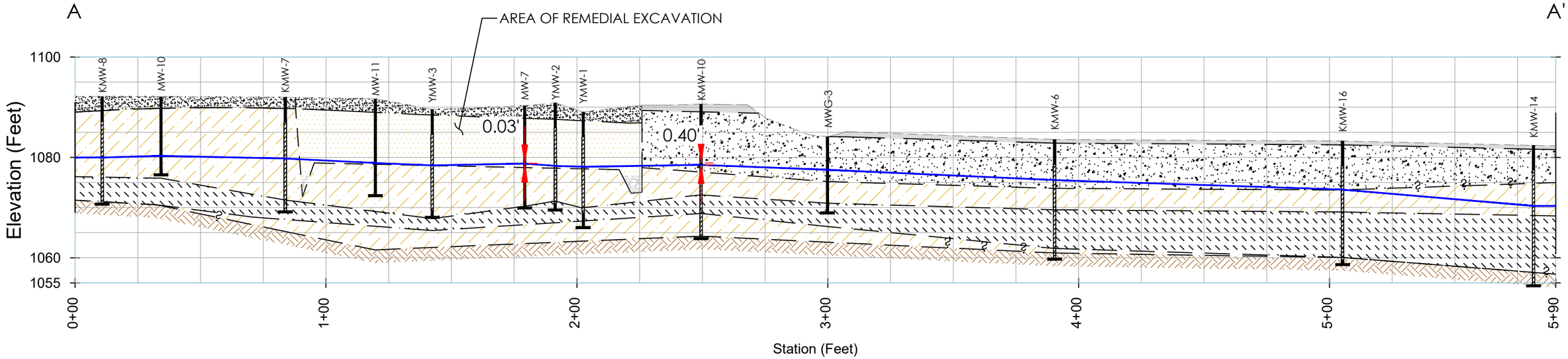
HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

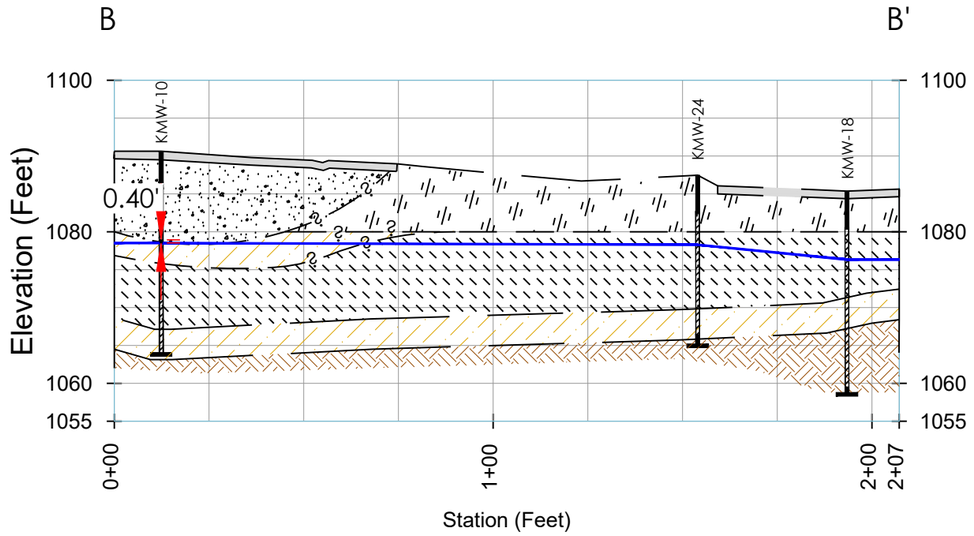
LNAPL THICKNESS - OCTOBER 2023

DECEMBER 2023

FIGURE 4



PROFILE VIEW OF SECTION NW-SE TRANSECT
HORIZONTAL SCALE: 1" = 40' VERTICAL SCALE: 1" = 20'
VERTICAL EXAGGERATION: 2



PROFILE VIEW OF SECTION SW-NE TRANSECT
HORIZONTAL SCALE: 1" = 40' VERTICAL SCALE: 1" = 20'
VERTICAL EXAGGERATION: 2

LEGEND

- ASPHALT
- ML
- SW/SM
- GM/SP MIX
- SM/ML
- O/CL
- GM/GP
- QUARRY SPALLS
- GROUNDWATER LEVEL
- X.XX' — LIGHT NONAQUEOUS-PHASE LIQUID (LNAPL) THICKNESS AT WELL LOCATION
- SCREEN WELL CASING

HORIZ. 0 40 80
VERT. 0 20 40
SCALE IN FEET

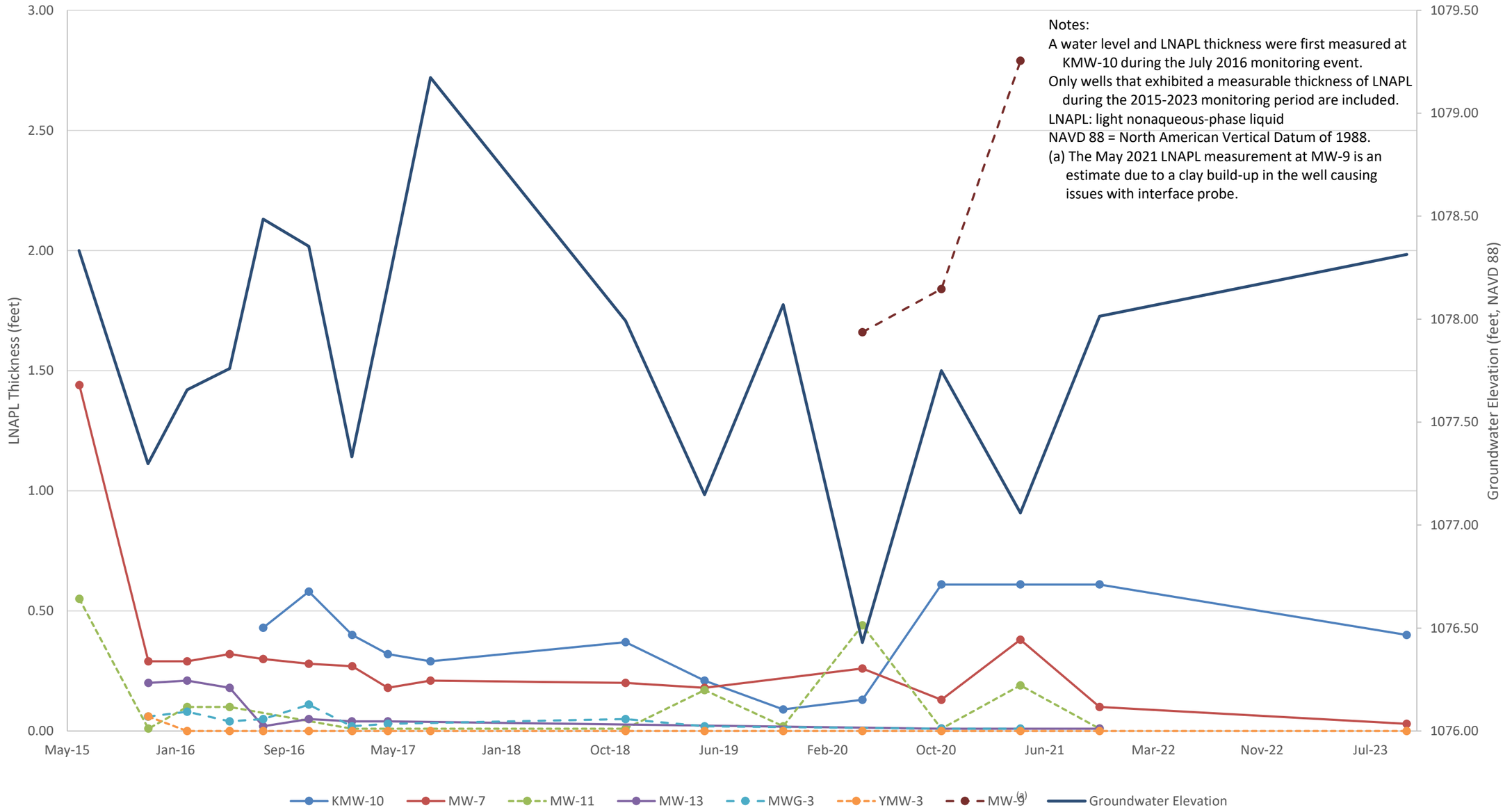
CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

WATER LEVEL AND LNAPL THICKNESS CROSS SECTIONS OCTOBER 2023

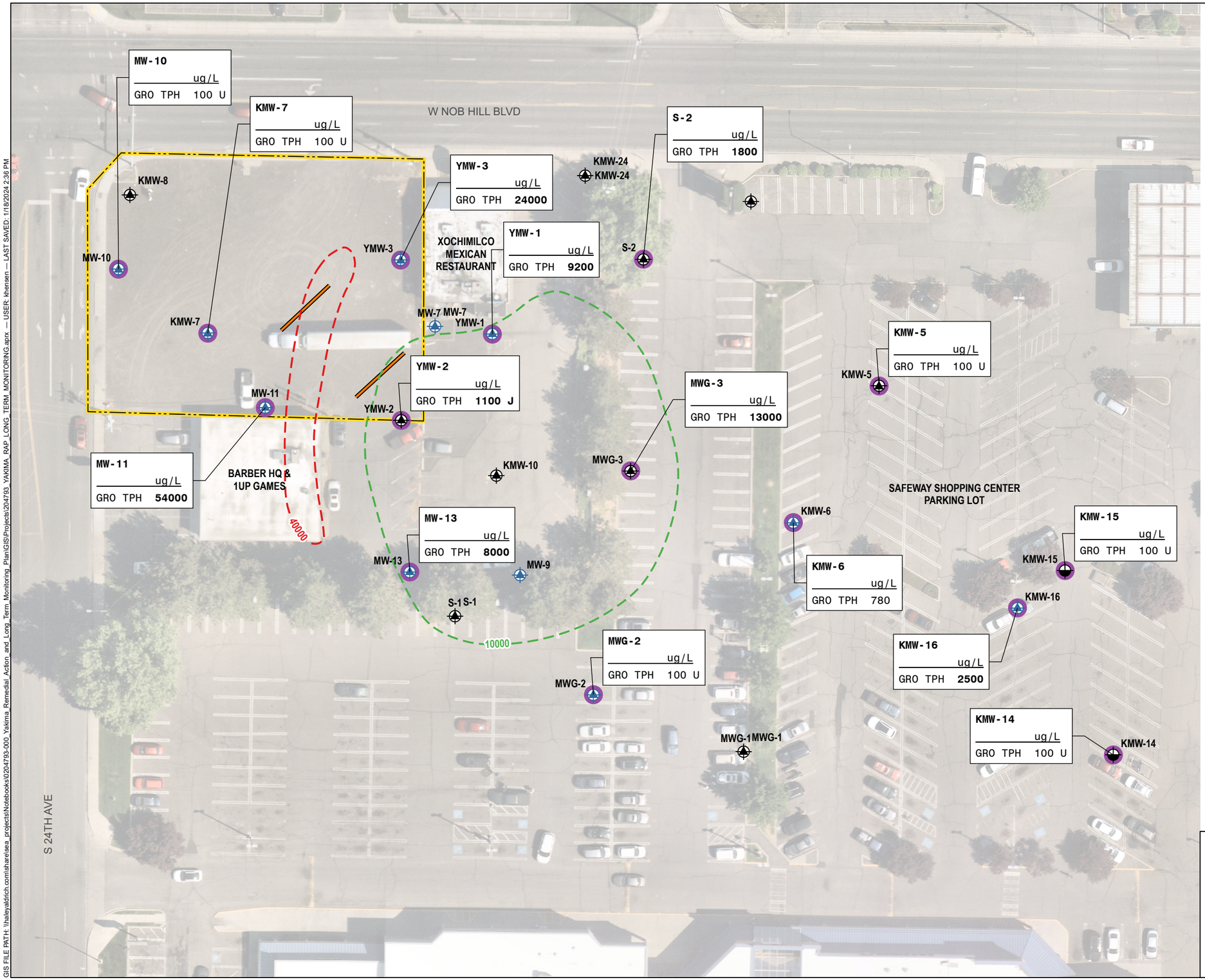
SCALE: AS SHOWN
JANUARY 2024

FIGURE 5

Figure 6
Post-Interim-Remedial-Action LNAPL Thickness
City of Yakima
Former Tiger Oil Site
Yakima, Washington



Notes:
A water level and LNAPL thickness were first measured at KMW-10 during the July 2016 monitoring event.
Only wells that exhibited a measurable thickness of LNAPL during the 2015-2023 monitoring period are included.
LNAPL: light nonaqueous-phase liquid
NAVD 88 = North American Vertical Datum of 1988.
(a) The May 2021 LNAPL measurement at MW-9 is an estimate due to a clay build-up in the well causing issues with interface probe.



LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- GRO TPH SAMPLE COLLECTED
- APPROXIMATE GRO TPH ISOCONCENTRATION CONTOUR, 10,000ug/L
- APPROXIMATE GRO TPH ISOCONCENTRATION CONTOUR, 40,000ug/L
- INFILTRATION GALLERY
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. DEFINITIONS:
J = ESTIMATED VALUE
U = NON-DETECT, VALUE IS LABORATORY REPORTING LIMIT
MTCA = MODEL TOXICS CONTROL ACT
GRO TPH= GASOLINE- RANGE ORGANICS, TOTAL PETROLEUM HYDROCARBONS
ug/L = MICROGRAMS PER LITER

3. VALUES INDICATED IN **BOLD TEXT** EXCEED THE MTCA METHODA A CLEANUP LEVELS

4. TPH-GRO MEASUREMENTS RECORDED ON 10 AND 11 OCTOBER, 2023.

5. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY

6. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016

7. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

N

0 50 100
SCALE IN FEET

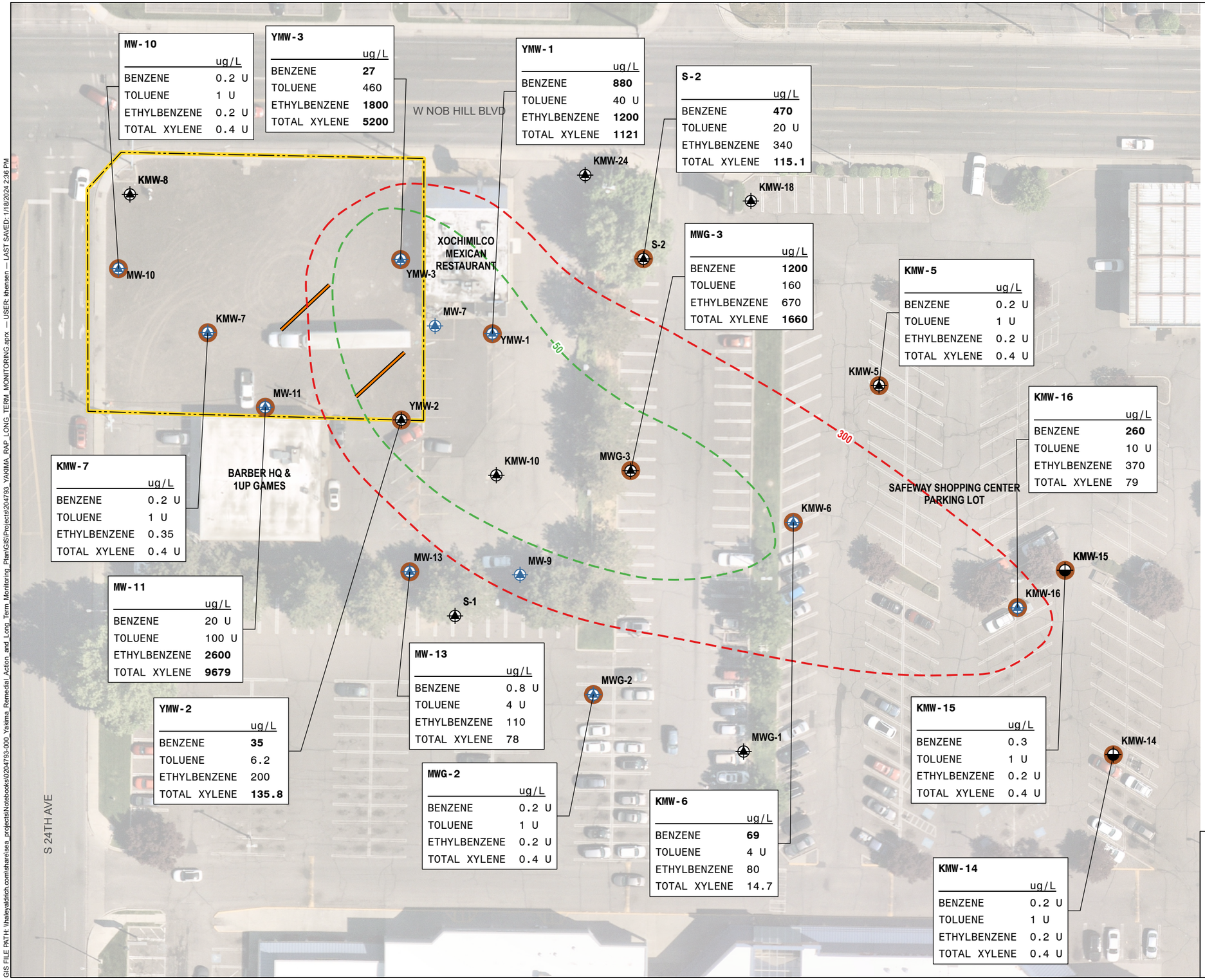
HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

GASOLINE-RANGE TPH ISOCONCENTRATION CONTOURS AND RESULTS - OCTOBER 2023

JANUARY 2024

FIGURE 7



HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

BENZENE ISOCONCENTRATION CONTOURS AND BTEX RESULTS - OCTOBER 2023

JANUARY 2024

FIGURE 8

GIS FILE PATH: \\haleyaldrich.com\share\sea_projects\Notebooks\0204793-000_Yakima_Remedial_Action_and_Long_Term_Monitoring_Plan\GIS\Projects\204793_YAKIMA_RAP_LONG_TERM_MONITORING.aprx — USER: khensen — LAST SAVED: 1/18/2024 2:36 PM

Figure 9
Post-Interim-Remedial-Action Dissolved-Phase Gasoline Concentrations—Core Plume Wells
City of Yakima
Former Tiger Oil Site
Yakima, Washington

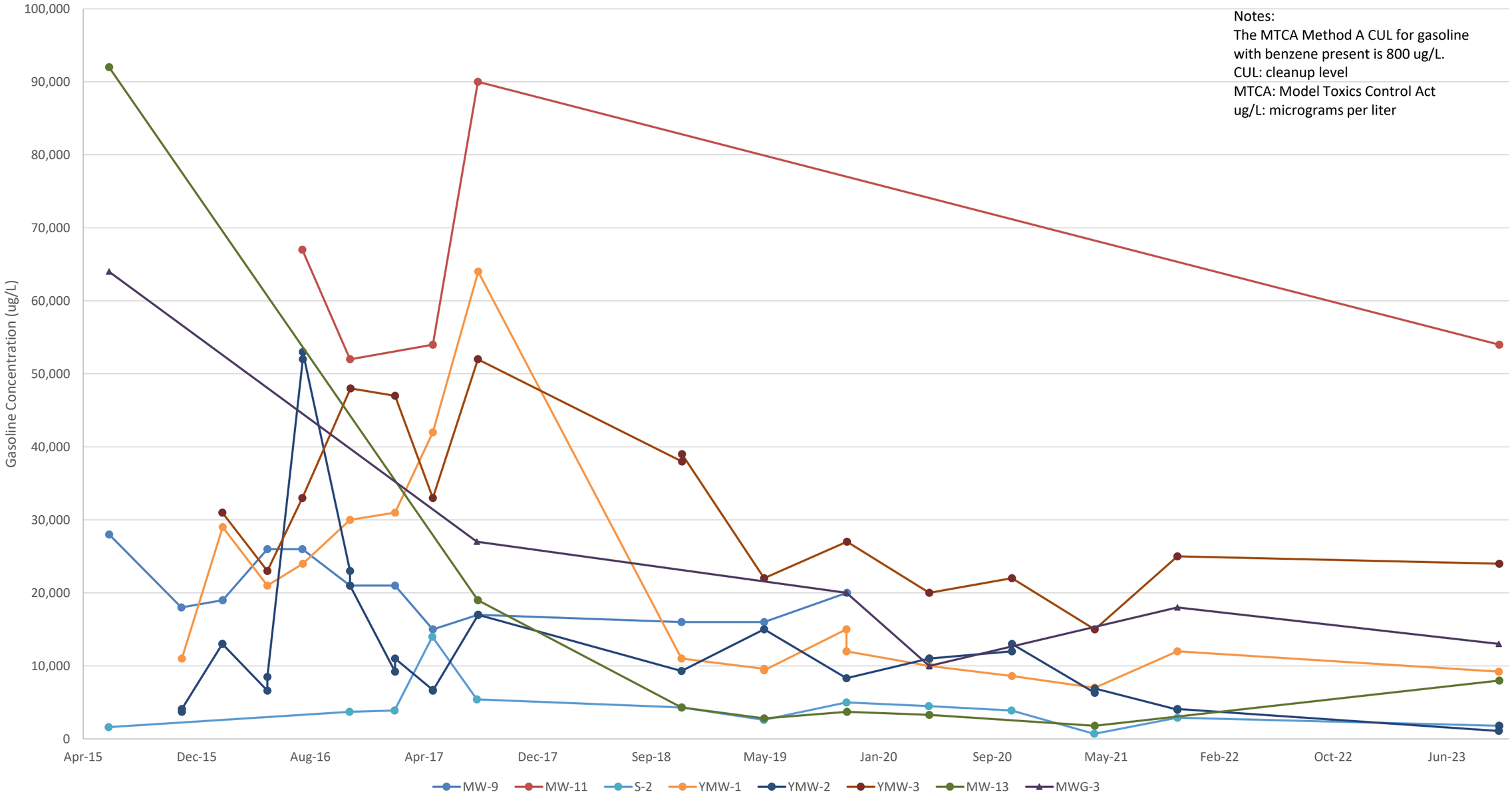


Figure 10
Post-Interim-Remedial-Action Dissolved-Phase Gasoline Concentrations—Periphery Wells
City of Yakima
Former Tiger Oil Site
Yakima, Washington

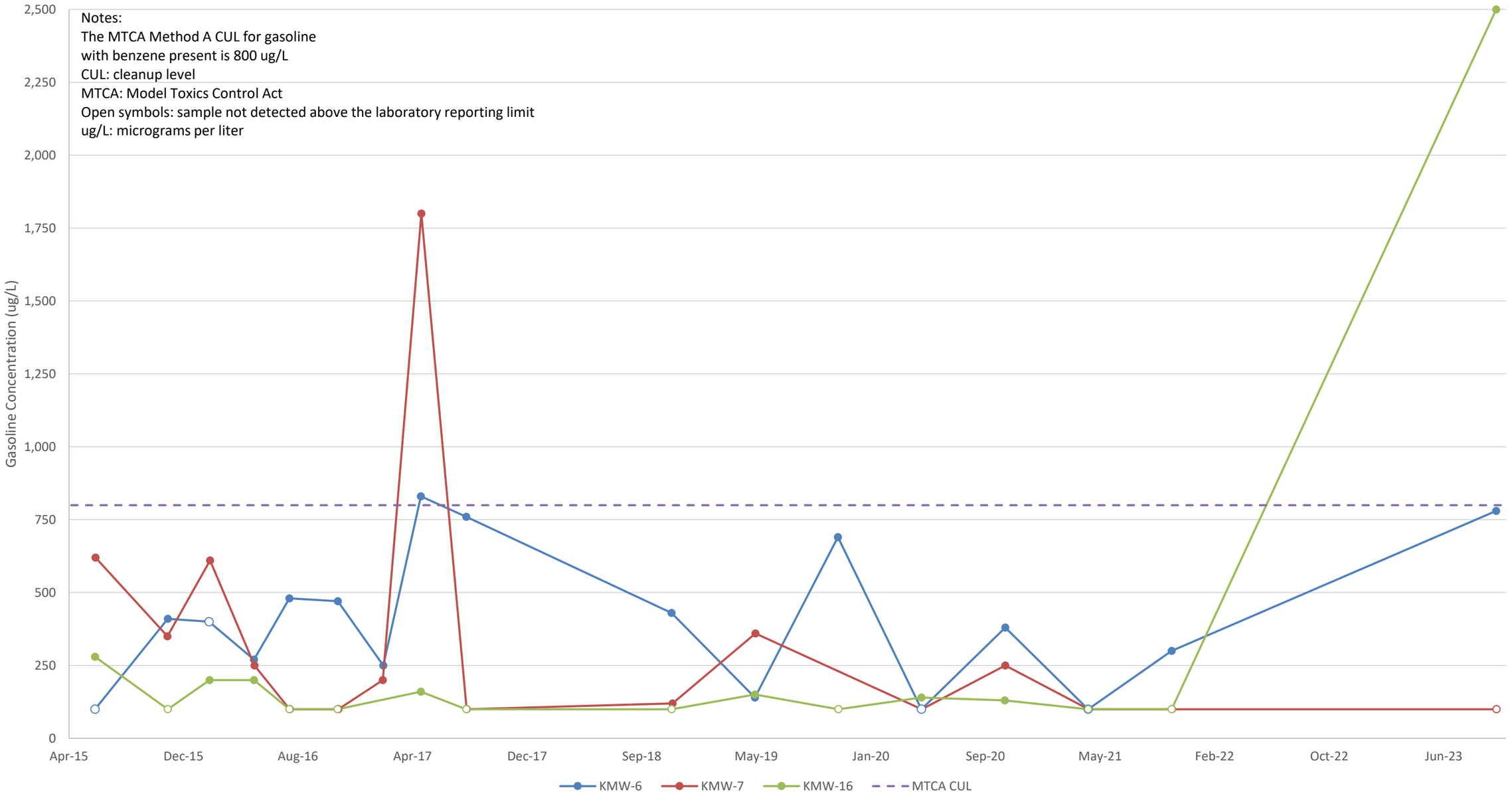


Figure 11
Post-Interim-Remedial-Action Dissolved-Phase Benzene Concentrations—Core Plume Wells
City of Yakima
Former Tiger Oil Site
Yakima, Washington

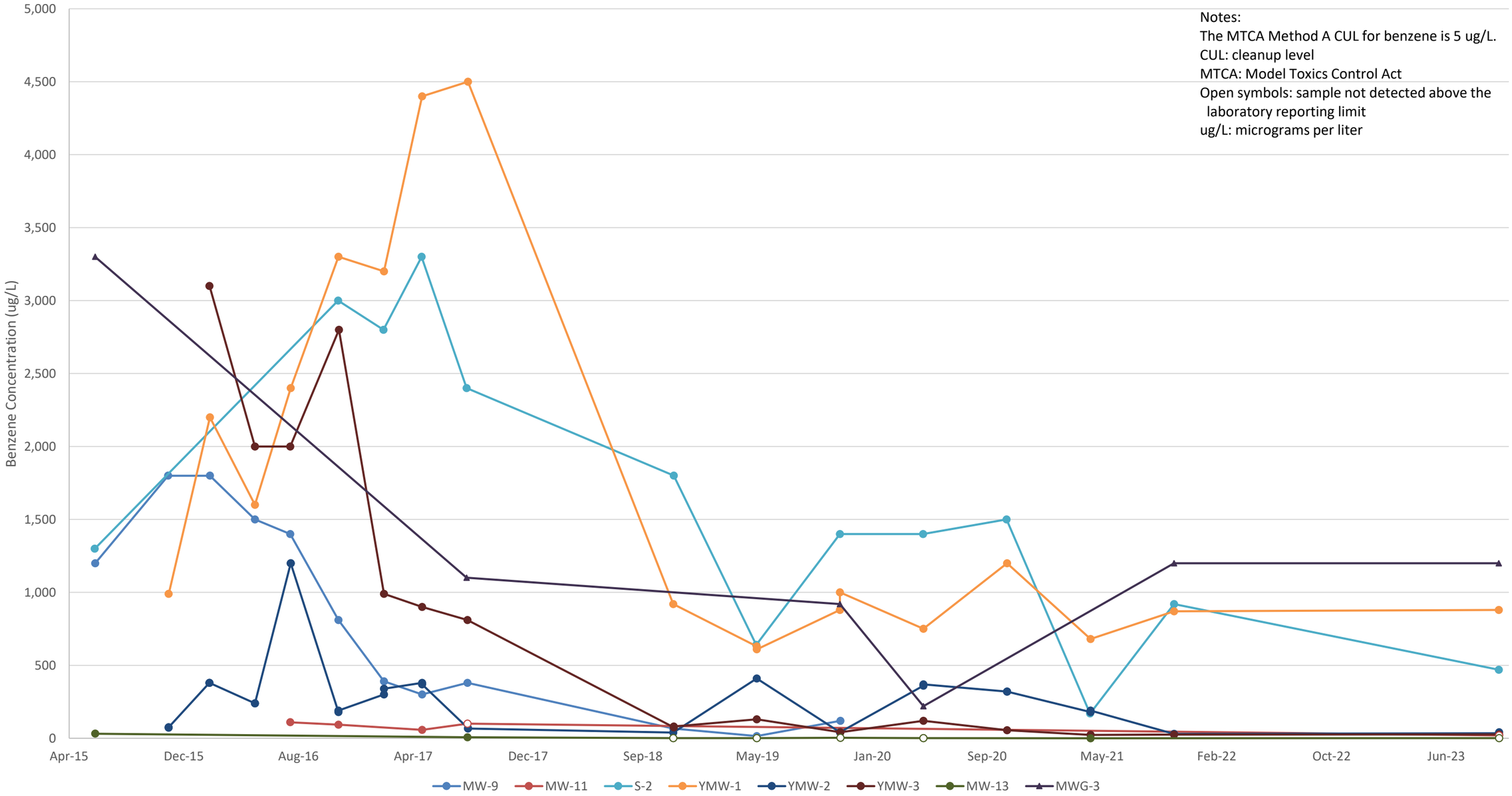
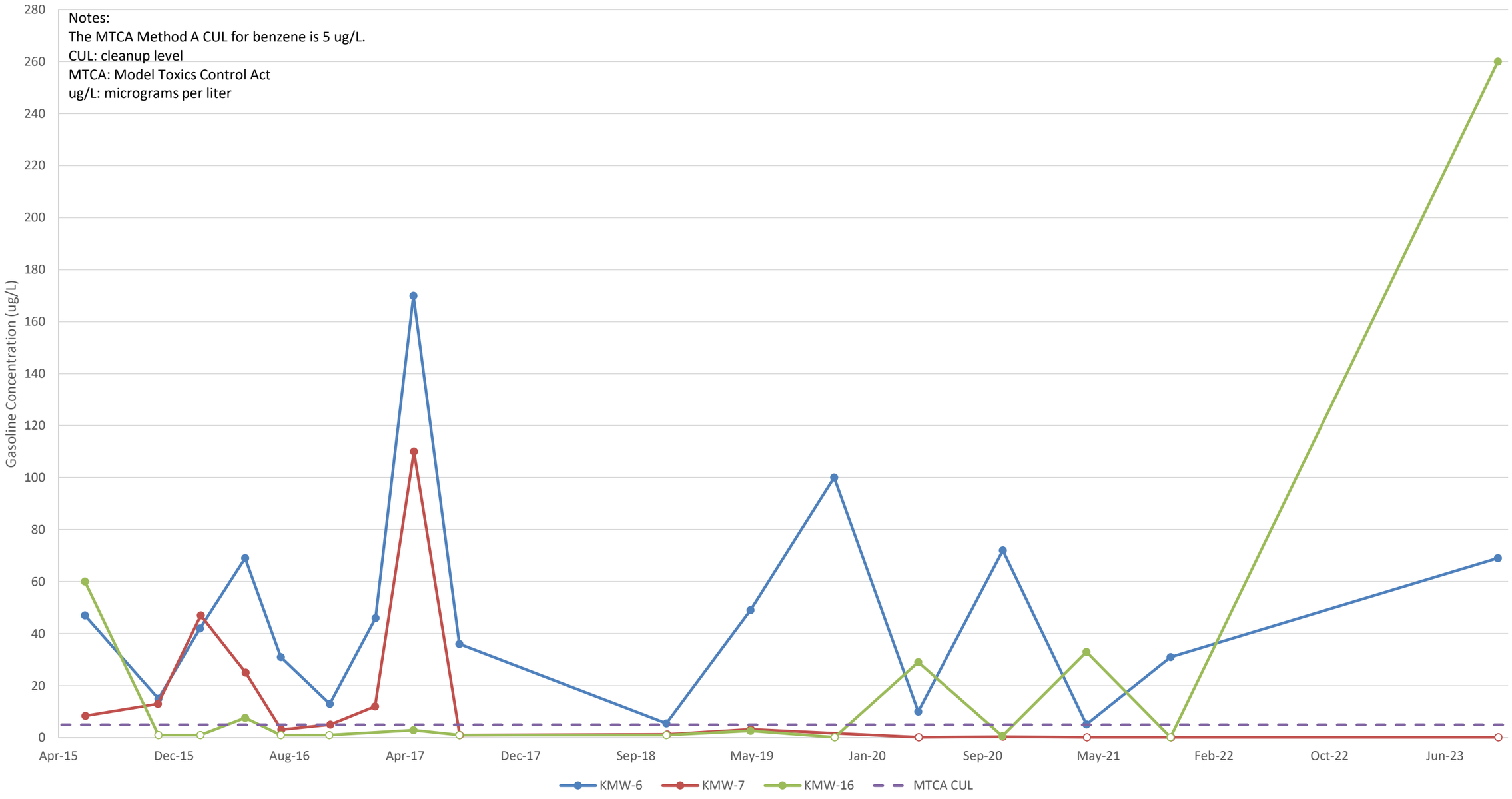
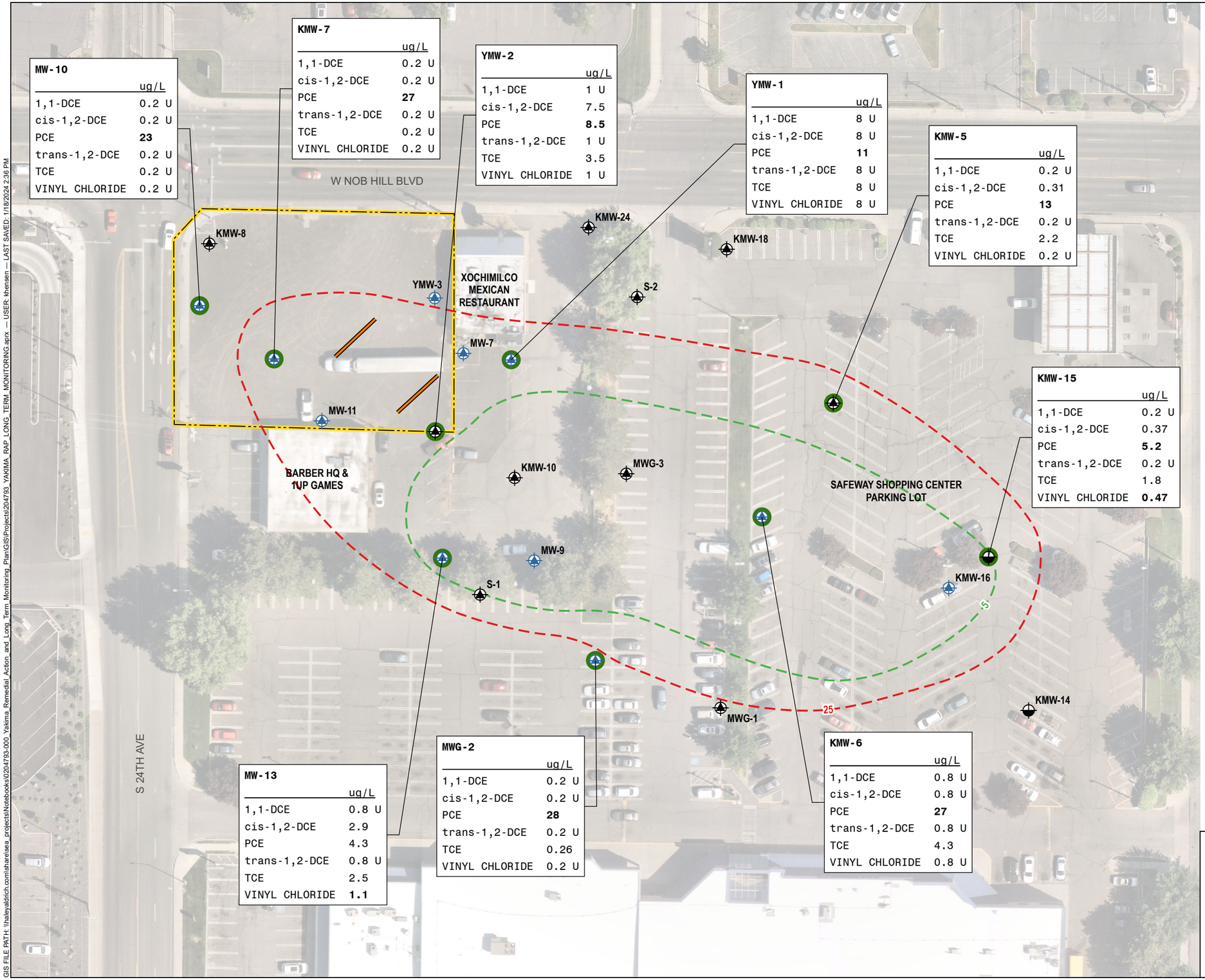


Figure 12
Post-Interim-Remedial-Action Dissolved-Phase Benzene Concentrations—Periphery Wells
City of Yakima
Former Tiger Oil Site
Yakima, Washington





LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- HVOC SAMPLE COLLECTED
- APPROXIMATE PCE ISCONCENTRATION CONTOUR, 5ug/L
- APPROXIMATE PCE ISOCONCENTRATION CONTOUR, 25ug/L
- INFILTRATION GALLERY
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. DEFINITIONS:
1,1-DCE = 1,1-DICHLORETHENE
cis-1,2-DCE = cis-1,2-DICHLOROETHENE
trans-1,2-DCE = trans-1,2-DICHLOROETHENE
PCE = TETRACHLOROETHENE
TCE = TRICHLOROETHENE
HVOC = HIGH VOLATILIY ORGANIC COMPOUND
U = NON-DETECT, VALUE IS LABORATORY REPORTING LIMIT
MTCA = MODEL TOXICS CONTROL ACT
ug/L = MICROGRAMS PER LITER

3. VALUES INDICATED IN **BOLD TEX** ARE ABOVE THE MTCA METHOD A CLEAN UP LEVEL

4. HVOC MEASUREMENTS RECORDED ON 10 AND 11 OCTOBER, 2023.

5. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY

6. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016

7. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

N

0 60 120
SCALE IN FEET

HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

PCE ISOCONCENTRATION CONTOURS AND HVOC RESULTS - OCTOBER 2023

JANUARY 2024

FIGURE 13

W NOB HILL BLVD

S 24TH AVE

KMW-8

YMW-3
ug/L
NAPHTHALENE 690

MW-10
ND

XOCHIMILCO MEXICAN RESTAURANT

KMW-24

KMW-18

S2

S-2
ug/L
NAPHTHALENE 58

KMW-7
ND

MW-7

YMW-1

YMW-1
ug/L
NAPHTHALENE 470

KMW-5
ND

MW-11

YMW-2

MWG-3
ug/L
NAPHTHALENE 390

KMW-6
ug/L
NAPHTHALENE 24

MW-11
ug/L
NAPHTHALENE 1500

BARBER HQ & 1UP GAMES

KMW-10

MWG-3

SAFEWAY SHOPPING CENTER PARKING LOT

KMW-6

YMW-2
ug/L
NAPHTHALENE 46

MW-13

MW-9

KMW-15
ND

KMW-16
ug/L
NAPHTHALENE 96

KMW-16

MW-13
ug/L
NAPHTHALENE 65

S-1

50

MWG-2
ND

MWG-1

KMW-14
ND

0 50 100
SCALE IN FEET

N

LEGEND

- GROUNDWATER MONITORING NETWORK WELL
- MONITORING WELL
- SENTRY MONITORING WELL
- NAPHTHALENE SAMPLE COLLECTED
- APPROXIMATE NAPHTHLALENE ISOCONCENTRATION CONTOUR, 50ug/L
- INFILTRATION GALLERY
- FORMER TIGER OIL FACILITY PROPERTY BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. DEFINITIONS:
   ND = NON-DETECT
   ug/L = MICROGRAMS PER LITER
3. VALUES INDICATED IN **BOLD TEX** ARE ABOVE THE MTCA METHOD A CLEAN UP LEVEL
4. NAPHTHALENE SAMPLES TAKEN ON 10 AND 11 OCTOBER, 2023.
5. ASSESSOR PARCEL DATA SOURCE: YAKIMA COUNTY
6. SITE DATA SOURCE: MAUL FOSTER & ALONGI, INC., 2016
7. AERIAL IMAGERY SOURCE: NEARMAP, 20 MAY 2023

HALEY ALDRICH

CITY OF YAKIMA
FORMER TIGER OIL WEST NOB HILL BOULEVARD SITE
YAKIMA, WASHINGTON

NAPHTHALENE ISOCONCENTRATION CONTOUR AND RESULTS - OCTOBER 2023

JANUARY 2024

FIGURE 14

Figure 15
Post-Interim-Remedial-Action Soil Gas Monitoring—Shallow Methane
City of Yakima
Former Tiger Oil Site
Yakima, Washington

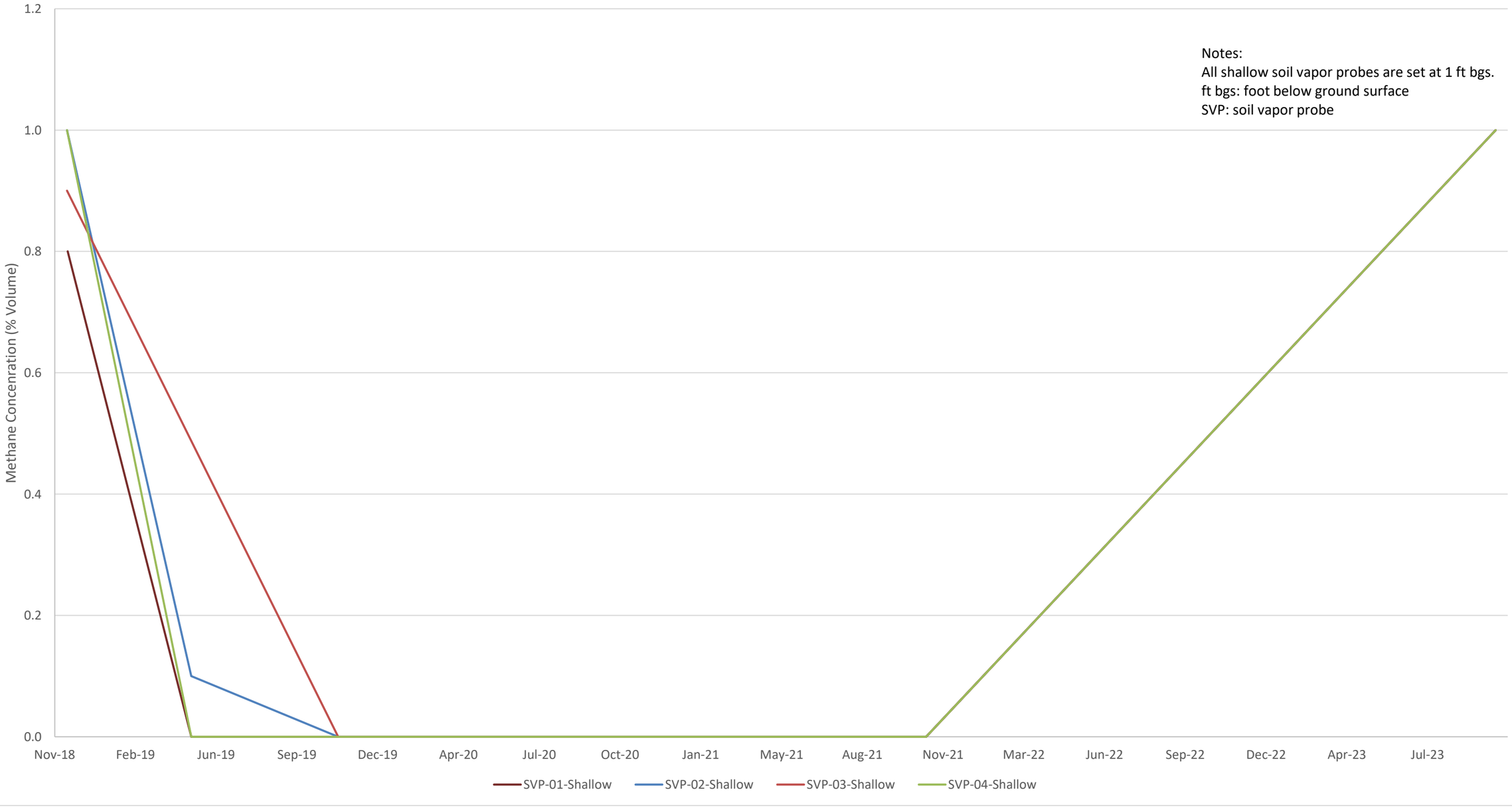


Figure 16
Post-Interim-Remedial-Action Soil Gas Monitoring—Medium Methane
City of Yakima
Former Tiger Oil Site
Yakima, Washington

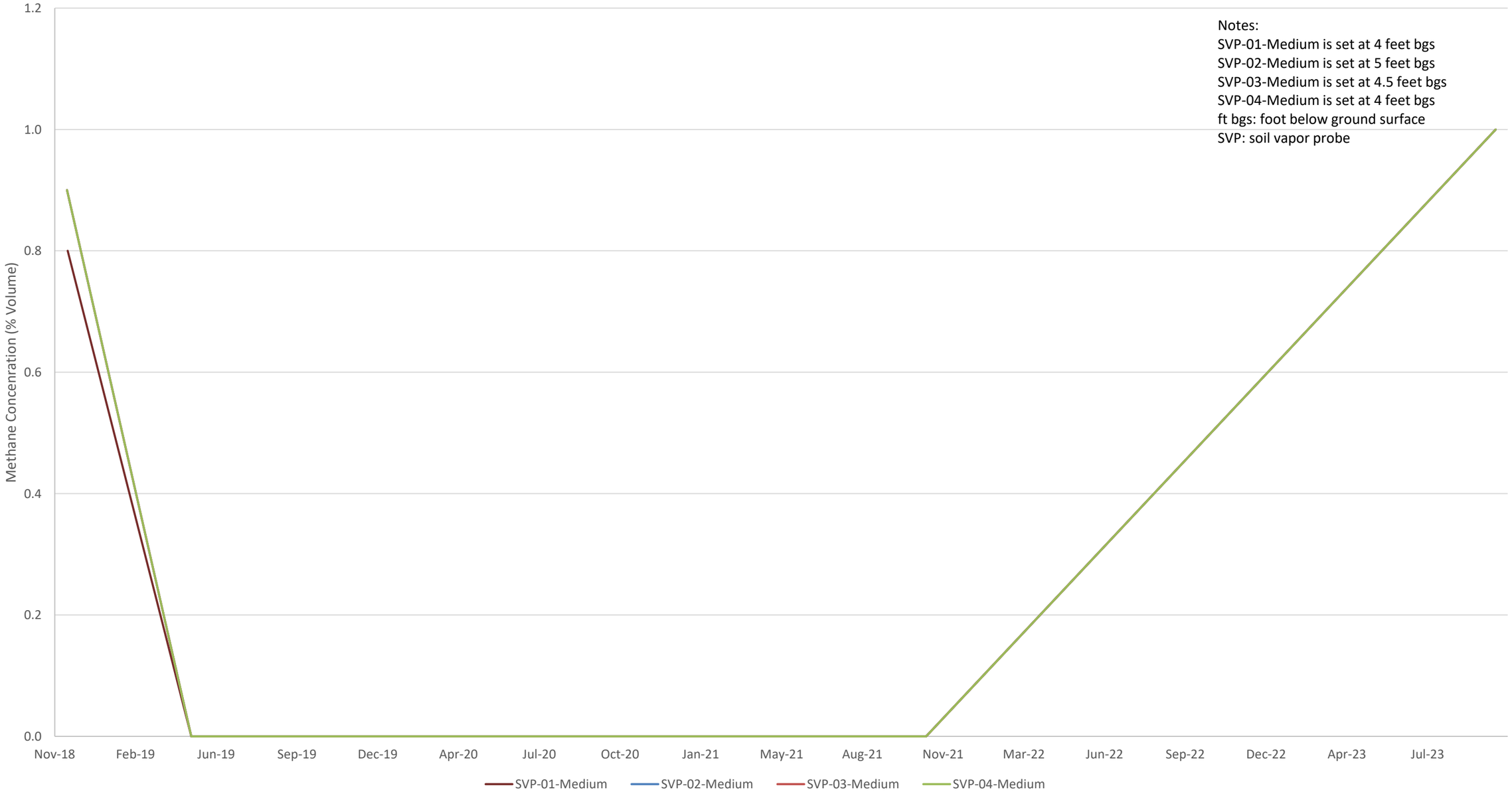


Figure 17
Post-Interim-Remedial-Action Soil Gas Monitoring—Deep Methane
City of Yakima
Former Tiger Oil Site
Yakima, Washington

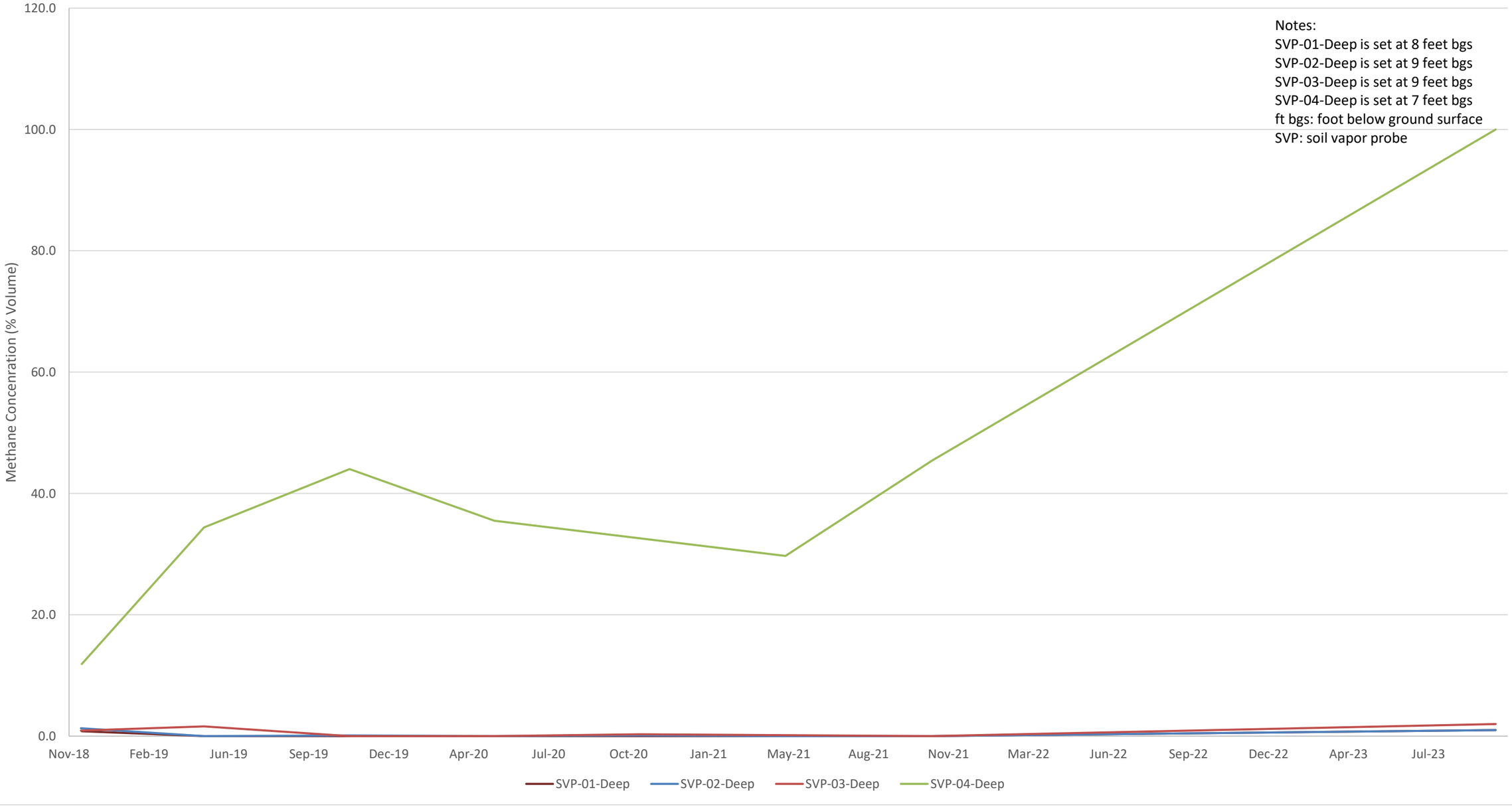
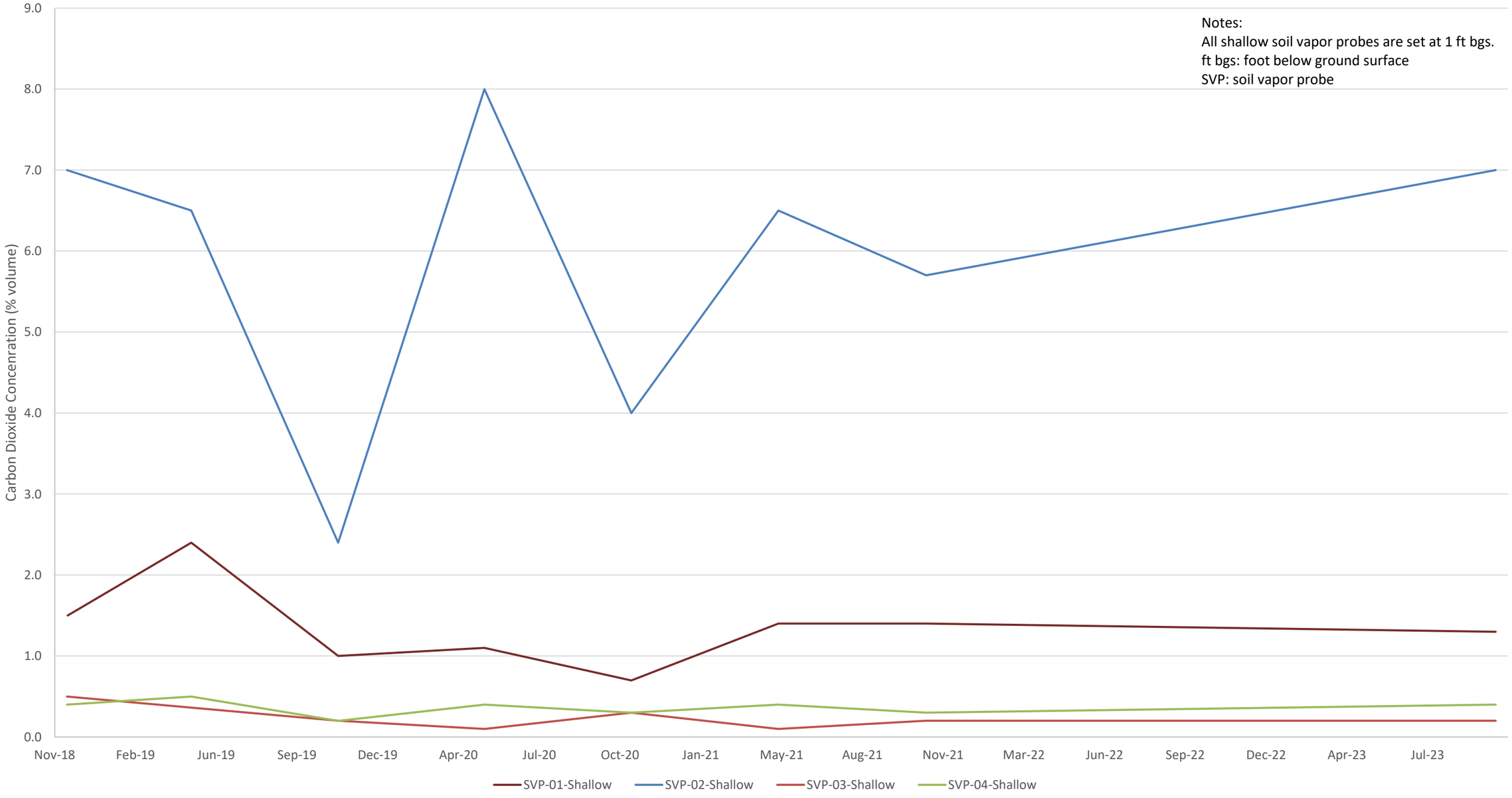


Figure 18
Post-Interim-Remedial-Action Soil Gas Monitoring—Shallow Carbon Dioxide
City of Yakima
Former Tiger Oil Site
Yakima, Washington



APPENDIX A
Field Sampling Data Sheets

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT: Tiger oil
LOCATION: Yakima, WA
CLIENT:
CONTRACTOR:

H&A FILE NO.:
PROJECT MGR.: Yen-Vy Van
FIELD REP: Zach Stephens
DATE: 10/10/23

Sampling Data:

Well ID: KMW-5
Start time: 1610
Finish Time: 1630
Well Depth: 18.86 ft
Depth To Top Of Screen: ft
Depth To Bottom Of Screen: ft
Initial Depth To Water: 8.39 ft
Depth Of Pump Intake: 13 ft
Purging Device: Peri-Pump
Tubing Present In Well: ☐ Yes ☒ No
Tubing Type:

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
1610			21.2	6.75	774	111	1.79	24	8.42	
1615			21.0	6.68	772	102	0.66	24	8.45	
1620			21.0	6.68	774	98	0.58	23	8.47	
1625			20.9	6.68	778	96	0.54	20	8.49	
1630		~1.0	20.9	6.69	781	94	0.54	17	8.49	Sample @ 1630 ~~KMW-5~~ "KMW5-W-13"
										Ferrous Iron : 0.0 mg/L Hach kit
										tubing in well

Form 9111

HALEY ALDRICH

WELL SAMPLING FORM

PROJECT: Tiger Oil
LOCATION: Yakima, WA
CLIENT:
CONTRACTOR:

H&A FILE NO.:
PROJECT MGR.: Yen-Uy Van
FIELD REP: Zach Stephens
DATE: 10/10/23

Sampling Data:

Well ID: KMW-6
Well Depth: ~~19.02~~ ft
Initial Depth To Water: 7.97 ft
Purging Device: Peri
Start time: ~0950
Depth To Top Of Screen: ft
Depth Of Pump Intake: 14 ft
Tubing Present In Well: ☐ Yes ☒ No
Finish Time: 1020
Depth To Bottom Of Screen: ft
Tubing Type:

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
0955			17.5	7.37	1106	-2.1	2.00	3.7	8.00	ODOR Present
1000			17.9	7.21	1110	-48	1.06	2.5	8.01	
1005			17.9	7.21	1112	-64	1.09	2.0	8.01	
1010		0.75	17.9	7.20	1118	-72	1.00	2.0	8.01	
1015			17.9	7.20	1124	-77	0.95	2.5	8.01	
1020			17.8	7.19	1132	-82	0.95	2.0	8.01	sample @ 1020 "KMW6-W-14"
~~1025~~										
~~1030~~										
										MI Purge start: 1031
										IL end : 1035
										Hach kit ferrous iron: 0.5 mg/L
										tubing left in well

Form 3111

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger oil	H&A FILE NO.	
LOCATION	Yakima, WA	PROJECT MGR.	Yen-Vy Van
CLIENT		FIELD REP	Zach S
CONTRACTOR		DATE	10/11/23

Sampling Data:

Well ID:	KMW-7	Well Depth:	20.0 ft	Initial Depth To Water:	12.13 ft	Purging Device:	Peri-Pump
Start time:	0855	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15 ft	Tubing Present In Well:	☐ Yes ☒ No
Finish Time:	0918	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
0855			7.324 17.4		850	114	7.55	7.6	12.19	
0900			17.5	7.28	836	122	7.41	2.1	12.21	
0905			17.5	7.32	837	123	7.43	2.4	12.20	
0910			17.5	7.33	837	124	7.45	3.1	12.20	
0915		~1.0	17.5	7.34	839	125	7.43	3.8	12.20	Sample @ 0915 w/ KMW7-W-15"
0920										tubing left in well
										Hach kit 0.0 mg/L ferrous iron

Form 3111

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT: tiger oil
LOCATION: Yakima, WA
CLIENT:
CONTRACTOR:

H&A FILE NO.:
PROJECT MGR.: Yen-Vy Vuu
FIELD REP: Zach Stephens
DATE: 10/10/23

Sampling Data:

Well ID: KMW-14
Start time: 1430
Finish Time: 1450
Well Depth: 18.68 ft
Depth To Top Of Screen: ft
Depth To Bottom Of Screen: ft
Initial Depth To Water: ~~11.98~~ ft
Depth Of Pump Intake: 15 ft
Purging Device: Peri
Tubing Present In Well: ☐ Yes ☒ No
Tubing Type:

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
1430			19.4	6.68	1430	70.6	0.93	17.4	12.07	
1435			19.4	6.64	1423	66.3	0.62	14.8	12.09	
1440			19.3	6.63	1415	65	0.52	13.7	12.10	
1445			19.4	6.63	1407	65	0.47	10.4	12.11	
1450		~1.0	19.3	6.64	1389	65	0.43	7.2	12.11	Sample @ 1450 "KMW-14-W-15"
										Hach kit : 0.0 mg/L ferrous iron

Form 3111

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	tiger oil	H&A FILE NO.	
LOCATION	Yakima, WA	PROJECT MGR.	Yen-Vy Van
CLIENT		FIELD REP	Zach Stephens
CONTRACTOR		DATE	10/10/23

Sampling Data:

Well ID:	KMW-15	Well Depth:	20.34 ft	Initial Depth To Water:	10.24 ft	Purging Device:	Peri-Pump
Start time:	1315	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15 ft	Tubing Present In Well:	☐ Yes ☒ No
Finish Time:	1335	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
1315			18.6	7.03	1116	-37	0.99	12.9	10.29	slight odor
1320			18.6	7.01	1114	-53	0.49	12.3	10.31	
1325			18.6	7.00	1113	-56	0.36	11.1	10.32	
1330			18.5	7.01	1112	-56	0.31	10.0	10.32	
1335		1.0	18.7	7.01	1113	-56	0.29	8.7	10.32	sample @ 1335 "KMW15-W-15"
										Hach kit: 1.0 mg/L ferous iron
										tubing 1 ft in well

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	tiger Oil	H&A FILE NO.	
LOCATION	Yakima, WA	PROJECT MGR.	Yen-Vy Van
CLIENT	/	FIELD REP	Zach Stephens
CONTRACTOR	/	DATE	10/10/23

Sampling Data:

Well ID:	KMW-16	Well Depth:	13.45 ft	Initial Depth To Water:	9.68 ft	Purging Device:	Peri Pump
Start time:	1115	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	11 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	1140	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
1115			18.6	6.98	1369	-139	0.79	6.7	9.77	ODOR Present
1120			19.2	6.92	1471	-139	0.43	9.2	9.81	
1125			19.3	6.90	1562	-135	0.35	7.8	9.84	
1130			19.4	6.89	1633	-133	0.29	5.1	9.87	
1135		~1.0	19.4	6.90	1653	-133	0.25	3.2	9.88	
1140		1.25	19.4	6.90	1653	-133	0.23	28	9.88	Sample @ 1140 "KMW16-W-11"
										Hack Kit ferrous iron: 0.0
										tubing left in well

Form 3111

WELL SAMPLING FORM

HALEY ALDRICH

Page of

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Vy Van
CLIENT	City of Yakima	FIELD REP	Y.F
CONTRACTOR		DATE	10-10-23

Sampling Data:

Well ID:	MW-9	Well Depth:	18.65 ft	Initial Depth To Water:	13.11 ft	Purging Device:	Peri
Start time:	14.45	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15.0 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	15:05	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
14:45			16.0	6.62	1224	70.0	1.38	35.30	13.86	Petroleum sheen, Gasoline odor
14.50			16.1	6.60	1222	13.5	0.45	770.1	14.50	
14:55			16.1	6.60	1224	-11.3	0.34	87.14	~~14.80~~ 14.90	Visible Petroleum bubbles Pumped
~~15:00~~			16.2	6.63	1238	-35.4	0.30	85.30	15.28	out of well (Scattered). GW level
15:05		0.75	16.1	6.68	1246	-54.5	0.24	72.90	sheen	dropped significantly despite slow flow
~~15:10~~									detected	rate. Tube was ~~added~~ extended 1ft
~~15:15~~										~~to~~ below 15 ft target depth.
										Noted in CoC there is slight sheen.
										15.10
										At ~~15.60~~ ft sheen (oil) was ~~not~~ detected
										Sheen stopped at 17.50 ft.
										Sample was not collected at this well
										DTW was measured again at the end
										of the event, water was detected at
										14.80 ft and no sheen. water
										recharge issue ?
										Oil was pumped out of tubing

WELL SAMPLING FORM

Page of

PROJECT	tiger oil	H&A FILE NO.	
LOCATION	Yakima, WA	PROJECT MGR.	Yen-Vy Van
CLIENT		FIELD REP	Zach Stephens
CONTRACTOR		DATE	10/10/23

Sampling Data:

Well ID:	MW-10	Well Depth:	ft	Initial Depth To Water:	11.76	ft	Purging Device:	Peri	
Start time:	0755	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	~15	ft	Tubing Present In Well:	☐ Yes	☒ No
Finish Time:	0820	Depth To Bottom Of Screen:	ft				Tubing Type:		

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
0755			17.2	7.26	1470	102	7.51	43	11.92	
0800			17.7	7.23	1720	110	7.28	10.8	11.96	
0805			17.7	7.23	1496	113	7.21	7.4	11.98	
0810			17.6	7.25	1459	115	7.18	6.5	12.00	
0815			17.7	7.26	1428	118	7.15	4.4	11.97	
0820		1.75	17.7	7.27	1399	119	7.13	3.4	11.98	Sample @ 0820 in MW10-W-15"
										ferrous iron Hach kit 0.0 mg/L

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Uy Van
CLIENT	City of Yakima	FIELD REP	Y.F
CONTRACTOR		DATE	10-11-23

Sampling Data:

Well ID:	MW-11	Well Depth:	15.24 ft	Initial Depth To Water:	12.80 ft	Purging Device:	Peri
Start time:	9:18	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	13 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	9:58	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
9:18			16.2	6.64	2191	343.4	2.33	6.50	13.00	Depth of pump intake increased 1 ft. due
9:23			16.5	6.66	2206	327.2	2.14	6.98	13.10	to drop in GW level
9:28			16.6	6.69	2213	71.1	2.10	8.72	13.25	slight
9:33			16.6	6.71	2205	13.9	2.10	18.54	13.35	Sheen, strong gasoline odor
9:38			16.6	6.72	2182	-24.1	2.11	31.85	13.40	
9:43			16.6	6.74	2136	-51.7	2.13	32.36	13.40	
9:48			16.5	6.75	2101	-64.6	2.15	23.61	13.45	
9:53			16.4	6.76	2082	-74.4	2.17	18.12	13.45	Sampled @ 9:58
9:58		1.5	16.5	6.76	2089	-80.2	2.20	14.58	13.45	I.D. MW11-W-13.
										Ethanol conc. 9.8 mg/L

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Uy Van
CLIENT	City of Yakima	FIELD REP	Y.F
CONTRACTOR		DATE	10-10-23

Sampling Data:

Well ID:	MW-13	Well Depth:	17.89 ft	Initial Depth To Water:	13.30 ft	Purging Device:	Peri
Start time:	15:50	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15.0 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	16:10	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
15.50			15.8	6.69	869	-1.0	0.95	17.67	14.33	Visible oil sheen gasoline odor
15:55			15.9	6.66	864	-37.8	0.30	18.60	15.23	Water level dropped rapidly, tubing
16:00			15.9	6.71	854	-48.8	0.30	22.27	15.90	was extended as needed
16:05			16.0	6.69	844	-49.3	0.28	22.67	16.30	
16 10.		0.5.	15.8	6.70	843	-53.6	0.25	12.12	16.55	Sampled ~~stop~~ @ 16:10 due to low water volume in the well
										I D MW13-W-15
										Ferrous conc. 2.1 mg/L

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Yu & Van
CLIENT	City of Yakima	FIELD REP	Y.F
CONTRACTOR		DATE	10-10-23

Sampling Data:

Well ID:	MWG-2	Well Depth:	13.96 ft	Initial Depth To Water:	8.41 ft	Purging Device:	Peri		
Start time:	11:40	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	10.0 ft	Tubing Present In Well:	☐ Yes	☑ No	
Finish Time:	1210	Depth To Bottom Of Screen:	ft			Tubing Type:			

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
11:40			19.0	7.34	813	471.4	6.63	3.04	8.48	No sheen, No odor
11:45			19.5	7.34	816	488.4	6.42	2.65	8.48	
11:50			19.7	7.37	817	457.0	6.32	2.20	8.48	
11:55			19.8	7.38	817	431.2	6.12	2.16	8.48	
12:00			19.8	7.38	817	409.1	5.99	2.14	8.48	
12:05			19.7	7.38	817	395.1	5.95	2.10	8.48	
12:10		1.25	19.7	7.37	818	383.2	5.81	2.42	8.48	sample @ 12:10
										I.D. MWG2-W-10
										Ferrous conc. 0.0 mg/L

Form 3011

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Vy Van
CLIENT	City of Yakima	FIELD REP	Y.T.
CONTRACTOR		DATE	

Sampling Data:

Well ID:	MW4-3	Well Depth:	14.22 ft	Initial Depth To Water:	6.64 ft	Purging Device:	Peri
Start time:	12:55	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	10.0 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	13:25	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
12:55			17.0	6.92	1265	86.0	0.96	5.60	6.65	Strong sewer odor. No sheen
13:00			17.1	6.91	1249	-19.7	0.47	8.55	6.71	
13:05			17.2	6.91	1221	-51.6	0.37	4.45	6.75	
13:10			17.3	6.92	1200	-67.0	0.32	4.27	6.75	
13:15			17.3	6.92	1193	-75.7	0.28	3.89	6.78	
13:20			17.3	6.92	1188	-80.9	0.27	4.01	6.78	
13:25		1.25	17.3	6.92	1189	-85.3	0.25	4.81	6.78	Sampled @ 13:25
										I.D. MW43-W-10
										Ferrous iron 4.7 mg/L

WELL SAMPLING FORM

HALEY ALDRICH

Page of

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Uy Van
CLIENT	City of Yakima	FIELD REP	Y.T.
CONTRACTOR		DATE	10-1-23

Sampling Data:

Well ID:	S-1	Well Depth:	13.81 ft	Initial Depth To Water:	10.60 ft	Purging Device:	Peri
Start time:	10:35	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	12.0 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	10:55	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
10:35			16.9	7.42	824	382.6	2.76	16.09	10.69	No Sheen, slight sewer odor
10:40			17.1	7.39	820	417.7	2.92	4.90	10.69	
10:45			17.2	7.38	819	422.3	3.11	2.78	10.70	
10:50			17.2	7.38	819	417.2	3.28	2.41	10.70	
10:55		1.0	17.3	7.38	818	408.7	3.43	2.20	10.70	Sampled @ 10:55 for M.I.
~~11:50~~										I.D ~~S1-W-12~~
										S1-MI-W-12
										Purging started @ 10:56. 1 L.
										Stopped @ 11:09

Form 3111

HALEY ALDRICH

WELL SAMPLING FORM

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima, WA	PROJECT MGR.	Yen-Vy Van
CLIENT		FIELD REP	Zach Stephens
CONTRACTOR	-	DATE	10/10/23

Sampling Data:

Well ID:	S-2	Well Depth:	12.91 ft	Initial Depth To Water:	7.73 ft	Purging Device:	Peri
Start time:	0800	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	~10 ft	Tubing Present In Well:	☐ Yes ☒ No
Finish Time:	0835	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Spec Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
0800			17.0	6.40	1115	-57.4	0.86	4.5	7.77	ODOR present
0805			17.2	6.49	1180	-90.4	0.52	3.3	7.79	
0810			17.2	6.57	1246	-108.0	0.42	3.7	7.81	
0815		~0.5	17.0	6.71	1328	-124	0.42	2.81	7.81	flow rate increased
0820			17.0	6.71	1315	-123	0.33	3.4	7.83	
0825			17.0	6.71	1322	-126	0.28	2.9	7.83	
0830			16.9	6.72	1338	-129	0.26	2.6	7.83	
0835		~1.75	16.9	6.73	1343	-131	0.25	2.6	7.84	
										Sample @ 0835
										"S2-W-10"
										* tubing left in well
										MI purge start: 0859
										purge 1L end:
										Hach kit ferrous iron: 6mg/L

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Yu Han
CLIENT	City of Yakima	FIELD REP	YF
CONTRACTOR		DATE	10/10/23

Sampling Data:

Well ID:	YMW-1	Well Depth:	19.52 ft	Initial Depth To Water:	11.00 ft	Purging Device:	Peri
Start time:	8:05	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15.00 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	8:35	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments slight visible
8:05			17.8	6.51	1353	185.2	1.03	4.47	11.00	slight gasoline odor, sheen
8:10			17.9	6.89	1358	-57.2	0.66	3.27	10.99	Field Rep misread the ORP reading
8:15			17.6	6.83	1271	-95	0.87	3.15	10.99	the initial ORP is not correct
8:20			17.6	6.78	1204	-83.9	0.99	3.16	10.99	
8:25			17.5	6.79	1185	-57.3	0.99	3.20	10.99	
8:30			17.5	6.82	1168	-88.0	1.08	3.28	10.99	
8:35		1.5	17.5	6.83	1149	-93.8	1.12	3.29	10.99	Sampled @ 9:32
										I.D YMW1-W-15
										8:40 Purging M.I 1.5 Volume.
										9:29 Sampling M.I Done
										9.6 mg/L Iron

Form 3111

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Vy Van
CLIENT	City of Yakima	FIELD REP	Y.F
CONTRACTOR		DATE	10-10-23

Sampling Data:

Well ID:	~~YMW-1~~ YMW-2	Well Depth:	19.74 ft	Initial Depth To Water:	12.54 ft	Purging Device:	Peri
Start time:	17:03	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15.0 ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	17:38	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
17:03			18.5	6.91	900	280.7	1.16	19.44	12.54	very slight oil sheen, strong gasoline odor
17:08			18.7	6.86	957	285.4	0.76	9.82	12.54	
17:13			18.8	6.84	1003	210.0	0.46	7.43	12.54	
17:18			18.8	6.83	1026	169.1	0.38	4.86	12.54	
17:23			18.8	6.82	1046	118.0	0.36	3.39	12.54	
17:28			18.7	6.81	1076	43.4	0.36	3.75	12.54	
17:33			18.7	6.81	1096	-10.5	0.37	3.26	12.54	
17:38			18.7	6.80	1121	-38.7	0.34	3.12	12.54	sampled @ 17:38.
										I.D. YMW2-W-15
										Ferrous Conc. 6.2 mg/L
										Dup. Collected @ same time
										Dup I.D. YMW-Dup-W-Depth

HALEY ALDRICH

WELL SAMPLING FORM

Page of

PROJECT	Tiger Oil	H&A FILE NO.	
LOCATION	Yakima	PROJECT MGR.	Yen-Uy Van
CLIENT	City of Yakima	FIELD REP	Y.F.
CONTRACTOR		DATE	10-11-23

Sampling Data:

Well ID:	YMW-3	Well Depth:	19.69 ft	Initial Depth To Water:	11.06 ft	Purging Device:	Peri
Start time:	8:00	Depth To Top Of Screen:	ft	Depth Of Pump Intake:	15. ft	Tubing Present In Well:	☐ Yes ☑ No
Finish Time:	8.35	Depth To Bottom Of Screen:	ft			Tubing Type:	

Time	Purge Rate (gal/min)	Cumulative Purge Vol. (gal)	Temp-erature (°C)	pH	Conduct-ivity (us/cm)	ORP/eH (mv)	Dissolved Oxygen (mg/L)	Turbidity (NTU)	DTW (feet btoc)	Comments
8:00			16.8	7.16	1494	417.6	2.06	9.82	11.14	Mixed gasoline & sewer odor, no sheen
8:05			16.9	7.27	1486	168.3	1.83	6.03	11.14	
8:10			17.1	7.26	1506	179.2	1.75	4.50	11.14	
8:15			17.1	7.22	1533	506.3	1.74	3.67	11.14	
8:20			17.1	7.23	1544	456.1	1.76	3.11	11.15	
8:25			17.1	7.23	1551	304.2	1.80	2.84	11.15	
8:30			17.0	7.23	1553	238.5	~~1.84~~	2.79	11.15	
8:35		1.0	17.0	7.23	1552	171.8	1.87	2.77	11.15	
										Sampled @ 8:35
										I.D. YMW3-W-15
										Ferrous conc. 6.1 mg/L

APPENDIX B
Analytical Laboratory Report

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

October 19, 2023

Yen-Vy Van
Hart Crowser, Inc.
A Division of Haley & Aldrich, Inc.
3131 Elliott Avenue, Suite 600
Seattle, WA 98121

Re: Analytical Data for Project 0204793-000
Laboratory Reference No. 2310-129

Dear Yen-Vy:

Enclosed are the analytical results and associated quality control data for samples submitted on October 11, 2023.

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

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

Sincerely,

David Baumeister
Project Manager

Enclosures

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

Case Narrative

Samples were collected on October 10 and 11, 2023 and received by the laboratory on October 11, 2023. They were maintained at the laboratory at a temperature of 2°C to 6°C.

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

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

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*85*	*65-122*				
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Gasoline	**780**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*65-122*				
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*78*	*65-122*				
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*80*	*65-122*				
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*77*	*65-122*				
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Gasoline	**2500**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*91*	*65-122*				
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*65-122*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Gasoline	**54000**	1000	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*65-122*				
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*78*	*65-122*				
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Gasoline	**13000**	1000	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*83*	*65-122*				
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Gasoline	**1800**	500	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*87*	*65-122*				
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Gasoline	**9200**	1000	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*88*	*65-122*				
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Gasoline	**1100**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*84*	*65-122*				
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Gasoline	**24000**	1000	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*81*	*65-122*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

GASOLINE RANGE ORGANICS
NWTPH-Gx

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Gasoline	**1800**	500	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*79*	*65-122*				
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Gasoline	**8000**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*93*	*65-122*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

GASOLINE RANGE ORGANICS
NWTPH-Gx
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1012W1					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*80*	*65-122*				
Laboratory ID:	MB1012W2					
Gasoline	**ND**	100	NWTPH-Gx	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Fluorobenzene	*81*	*65-122*				

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-129-01										
	ORIG	DUP									
Gasoline	**ND**	**ND**	NA	NA		NA		NA	NA	30	
Surrogate:											
Fluorobenzene						*85*	*75*	*65-122*			
Laboratory ID:	10-129-02										
	ORIG	DUP									
Gasoline	**784**	**767**	NA	NA		NA		NA	2	30	
Surrogate:											
Fluorobenzene						*93*	*90*	*65-122*			

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	0.31	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	0.34	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	2.2	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	13	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

VOLATILE ORGANICS EPA 8260D
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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*118*	*75-127*				
Toluene-d8	*112*	*80-127*				
4-Bromofluorobenzene	*93*	*78-125*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

VOLATILE ORGANICS EPA 8260D
page 1 of 2

Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Dichlorodifluoromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Benzene	69	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	4.3	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	27	0.80	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
1,1,1,2-Tetrachloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	80	0.80	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	13	1.6	EPA 8260D	10-12-23	10-12-23	
o-Xylene	1.7	0.80	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*119*	*75-127*				
Toluene-d8	*111*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	0.61	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	27	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	0.35	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*120*	*75-127*				
Toluene-d8	*111*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*120*	*75-127*				
Toluene-d8	*114*	*80-127*				
4-Bromofluorobenzene	*92*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	0.47	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	0.37	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	0.30	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	1.8	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	5.2	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*117*	*75-127*				
Toluene-d8	*112*	*80-127*				
4-Bromofluorobenzene	*90*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Dichlorodifluoromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	2.0	2.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	25	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	10	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Benzene	260	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	10	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	370	2.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	79	4.0	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	10	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	0.69	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	23	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*92*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Dichlorodifluoromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	100	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	100	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	100	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	250	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	100	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	100	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
1,1,1,2-Tetrachloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	2600	20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	9600	40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	79	20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	100	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	100	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	100	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	100	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*75-127*				
Toluene-d8	*113*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	0.54	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	0.26	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	28	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*92*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Dichlorodifluoromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	100	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	40	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Benzene	1200	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Toluene	160	40	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
1,1,1,2-Tetrachloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	670	8.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	1300	16	EPA 8260D	10-12-23	10-12-23	
o-Xylene	360	8.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	40	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	40	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	40	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	40	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*116*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*96*	*78-125*				

Date of Report: October 19, 2023
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Laboratory Reference: 2310-129
Project: 0204793-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Dichlorodifluoromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	20	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	50	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	20	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Benzene	470	4.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	20	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
1,1,1,2-Tetrachloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	340	4.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	110	8.0	EPA 8260D	10-12-23	10-12-23	
o-Xylene	5.1	4.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	20	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	20	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*75-127*				
Toluene-d8	*109*	*80-127*				
4-Bromofluorobenzene	*93*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Dichlorodifluoromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	40	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	100	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	40	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Benzene	880	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	40	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	11	8.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
1,1,1,2-Tetrachloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	1200	8.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	1100	16	EPA 8260D	10-12-23	10-12-23	
o-Xylene	21	8.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	40	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	8.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	40	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	8.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	40	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	40	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*75-127*				
Toluene-d8	*108*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

Date of Report: October 19, 2023
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Dichlorodifluoromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	5.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	5.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	5.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	13	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	5.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	7.5	1.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Benzene	35	1.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	3.5	1.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Toluene	6.2	5.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	8.5	1.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
1,1,1,2-Tetrachloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	200	1.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	130	2.0	EPA 8260D	10-12-23	10-12-23	
o-Xylene	5.8	1.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	5.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	5.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	5.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	5.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*107*	*75-127*				
Toluene-d8	*107*	*80-127*				
4-Bromofluorobenzene	*95*	*78-125*				

Date of Report: October 19, 2023
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Dichlorodifluoromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	50	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	10	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	50	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	50	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	10	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	130	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	50	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	10	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	10	EPA 8260D	10-12-23	10-12-23	
Benzene	27	10	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	10	EPA 8260D	10-12-23	10-12-23	
Toluene	460	50	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
1,1,1,2-Tetrachloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	1800	10	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	3900	20	EPA 8260D	10-12-23	10-12-23	
o-Xylene	1300	10	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	50	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	10	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	50	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	50	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	50	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*109*	*75-127*				
Toluene-d8	*111*	*80-127*				
4-Bromofluorobenzene	*98*	*78-125*				

Date of Report: October 19, 2023
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Laboratory Reference: 2310-129
Project: 0204793-000

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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Dichlorodifluoromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	25	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	10	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	7.3	2.0	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Benzene	41	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	3.1	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	10	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	7.2	2.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
1,1,1,2-Tetrachloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	250	2.0	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	180	4.0	EPA 8260D	10-12-23	10-12-23	
o-Xylene	7.5	2.0	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	10	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	2.0	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	2.0	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	10	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	10	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*114*	*75-127*				
Toluene-d8	*110*	*80-127*				
4-Bromofluorobenzene	*92*	*78-125*				

Date of Report: October 19, 2023
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Dichlorodifluoromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	1.1	0.80	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	10	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	2.9	0.80	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	2.5	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	4.3	0.80	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
1,1,1,2-Tetrachloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	110	0.80	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	72	1.6	EPA 8260D	10-12-23	10-12-23	
o-Xylene	6.0	0.80	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.80	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.80	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	4.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*111*	*75-127*				
Toluene-d8	*115*	*80-127*				
4-Bromofluorobenzene	*97*	*78-125*				

Date of Report: October 19, 2023
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TRIP BLANK**					
Laboratory ID:	10-129-17					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**TRIP BLANK**					
Laboratory ID:	10-129-17					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*120*	*75-127*				
Toluene-d8	*112*	*80-127*				
4-Bromofluorobenzene	*94*	*78-125*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
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Matrix: Water
Units: ug/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1012W1					
Dichlorodifluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloromethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Vinyl Chloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromomethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Chloroethane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Trichlorofluoromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Iodomethane	ND	2.5	EPA 8260D	10-12-23	10-12-23	
Methylene Chloride	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,2-Dichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chloroform	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,1-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Carbon Tetrachloride	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Benzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Trichloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromomethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromodichloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
(cis) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Toluene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
(trans) 1,3-Dichloropropene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2-Trichloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Tetrachloroethene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Dibromochloromethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromoethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Chlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	

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Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1012W1					
1,1,1,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Ethylbenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
m,p-Xylene	ND	0.40	EPA 8260D	10-12-23	10-12-23	
o-Xylene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Bromoform	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Bromobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,1,2,2-Tetrachloroethane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichloropropane	ND	0.20	EPA 8260D	10-12-23	10-12-23	
2-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
4-Chlorotoluene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,3-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,4-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
1,2-Dibromo-3-chloropropane	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,4-Trichlorobenzene	ND	0.20	EPA 8260D	10-12-23	10-12-23	
Hexachlorobutadiene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
1,2,3-Trichlorobenzene	ND	1.0	EPA 8260D	10-12-23	10-12-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
Dibromofluoromethane	*124*	*75-127*				
Toluene-d8	*111*	*80-127*				
4-Bromofluorobenzene	*91*	*78-125*				

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Matrix: Water
Units: ug/L

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1012W1									
	SB	SBD	SB	SBD	SB	SBD				
Dichlorodifluoromethane	**9.06**	**8.36**	10.0	10.0	91	84	34-166	8	21	
Chloromethane	**12.3**	**12.6**	10.0	10.0	123	126	63-138	2	18	
Vinyl Chloride	**10.3**	**9.68**	10.0	10.0	103	97	71-135	6	20	
Bromomethane	**11.6**	**12.3**	10.0	10.0	116	123	20-151	6	36	
Chloroethane	**9.99**	**9.37**	10.0	10.0	100	94	76-125	6	20	
Trichlorofluoromethane	**10.3**	**9.88**	10.0	10.0	103	99	75-131	4	19	
1,1-Dichloroethene	**9.89**	**9.45**	10.0	10.0	99	95	78-125	5	19	
Iodomethane	**7.95**	**10.1**	10.0	10.0	80	101	10-155	24	40	
Methylene Chloride	**9.04**	**8.60**	10.0	10.0	90	86	80-120	5	15	
(trans) 1,2-Dichloroethene	**9.88**	**9.61**	10.0	10.0	99	96	80-125	3	17	
1,1-Dichloroethane	**9.87**	**9.55**	10.0	10.0	99	96	80-125	3	17	
2,2-Dichloropropane	**11.6**	**11.3**	10.0	10.0	116	113	80-146	3	21	
(cis) 1,2-Dichloroethene	**10.5**	**9.79**	10.0	10.0	105	98	80-129	7	17	
Bromochloromethane	**10.2**	**10.2**	10.0	10.0	102	102	80-125	0	18	
Chloroform	**9.89**	**9.46**	10.0	10.0	99	95	80-123	4	16	
1,1,1-Trichloroethane	**9.89**	**9.62**	10.0	10.0	99	96	80-123	3	18	
Carbon Tetrachloride	**9.84**	**9.37**	10.0	10.0	98	94	80-126	5	17	
1,1-Dichloropropene	**9.88**	**9.48**	10.0	10.0	99	95	80-126	4	18	
Benzene	**9.81**	**9.57**	10.0	10.0	98	96	80-121	2	16	
1,2-Dichloroethane	**10.0**	**9.83**	10.0	10.0	100	98	80-124	2	15	
Trichloroethene	**9.93**	**9.77**	10.0	10.0	99	98	80-122	2	18	
1,2-Dichloropropane	**9.81**	**9.21**	10.0	10.0	98	92	80-123	6	15	
Dibromomethane	**9.72**	**9.73**	10.0	10.0	97	97	80-123	0	15	
Bromodichloromethane	**10.1**	**9.84**	10.0	10.0	101	98	80-125	3	15	
(cis) 1,3-Dichloropropene	**10.6**	**10.3**	10.0	10.0	106	103	80-129	3	15	
Toluene	**9.46**	**9.20**	10.0	10.0	95	92	80-120	3	18	
(trans) 1,3-Dichloropropene	**9.58**	**9.21**	10.0	10.0	96	92	80-134	4	17	
1,1,2-Trichloroethane	**10.5**	**10.2**	10.0	10.0	105	102	77-126	3	20	
Tetrachloroethene	**10.6**	**10.1**	10.0	10.0	106	101	80-124	5	18	
1,3-Dichloropropane	**10.3**	**10.0**	10.0	10.0	103	100	80-120	3	15	
Dibromochloromethane	**11.0**	**10.7**	10.0	10.0	110	107	80-128	3	15	
1,2-Dibromoethane	**10.9**	**10.4**	10.0	10.0	109	104	80-127	5	15	
Chlorobenzene	**10.4**	**10.1**	10.0	10.0	104	101	80-120	3	17	

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Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANKS										
Laboratory ID:	SB1012W1									
	SB	SBD	SB	SBD	SB	SBD				
1,1,1,2-Tetrachloroethane	**10.8**	**10.4**	10.0	10.0	108	104	80-125	4	17	
Ethylbenzene	**10.8**	**10.4**	10.0	10.0	108	104	80-125	4	18	
m,p-Xylene	**21.6**	**20.7**	20.0	20.0	108	104	80-127	4	18	
o-Xylene	**10.7**	**10.3**	10.0	10.0	107	103	80-126	4	18	
Bromoform	**10.9**	**10.9**	10.0	10.0	109	109	80-130	0	15	
Bromobenzene	**10.4**	**9.98**	10.0	10.0	104	100	76-128	4	16	
1,1,2,2-Tetrachloroethane	**9.99**	**9.88**	10.0	10.0	100	99	74-130	1	15	
1,2,3-Trichloropropane	**9.35**	**9.12**	10.0	10.0	94	91	71-129	2	25	
2-Chlorotoluene	**10.8**	**10.4**	10.0	10.0	108	104	80-128	4	18	
4-Chlorotoluene	**10.9**	**10.5**	10.0	10.0	109	105	80-130	4	19	
1,3-Dichlorobenzene	**10.7**	**10.5**	10.0	10.0	107	105	80-126	2	17	
1,4-Dichlorobenzene	**10.9**	**10.5**	10.0	10.0	109	105	80-121	4	17	
1,2-Dichlorobenzene	**10.6**	**10.2**	10.0	10.0	106	102	79-125	4	15	
1,2-Dibromo-3-chloropropane	**9.83**	**10.7**	10.0	10.0	98	107	73-133	8	15	
1,2,4-Trichlorobenzene	**11.1**	**11.0**	10.0	10.0	111	110	80-139	1	18	
Hexachlorobutadiene	**12.0**	**12.5**	10.0	10.0	120	125	80-151	4	18	
1,2,3-Trichlorobenzene	**8.72**	**8.77**	10.0	10.0	87	88	75-146	1	28	
Surrogate:										
Dibromofluoromethane					*118*	*119*	*75-127*			
Toluene-d8					*113*	*114*	*80-127*			
4-Bromofluorobenzene					*98*	*98*	*78-125*			

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NITRATE (as Nitrogen)
EPA 353.2

Matrix: Water
Units: mg/L-N

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Nitrate	**2.8**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Nitrate	**2.0**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Nitrate	**4.3**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Nitrate	**3.2**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Nitrate	**0.29**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Nitrate	**1.1**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Nitrate	**5.4**	0.10	EPA 353.2	10-11-23	10-11-23	
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Nitrate	**1.3**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Nitrate	**4.3**	0.050	EPA 353.2	10-11-23	10-11-23	

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NITRATE (as Nitrogen)
EPA 353.2

Matrix: Water
Units: mg/L-N

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Nitrate	**0.13**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Nitrate	**ND**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Nitrate	**1.6**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Nitrate	**0.76**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Nitrate	**ND**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Nitrate	**0.38**	0.050	EPA 353.2	10-11-23	10-11-23	
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Nitrate	**1.7**	0.050	EPA 353.2	10-11-23	10-11-23	

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NITRATE (as Nitrogen)
EPA 353.2
QUALITY CONTROL

Matrix: Water
Units: mg/L-N

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1011W1					
Nitrate	**ND**	0.050	EPA 353.2	10-11-23	10-11-23	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	10-129-01								
	ORIG	DUP							
Nitrate	**2.76**	**2.65**	NA	NA	NA	NA	4	19	
MATRIX SPIKE									
Laboratory ID:	10-129-01								
	MS		MS		MS				
Nitrate	**4.67**		2.00	2.76	96	85-121	NA	NA	
SPIKE BLANK									
Laboratory ID:	SB1011W1								
	SB		SB		SB				
Nitrate	**2.11**		2.00	NA	106	87-118	NA	NA	

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TOTAL MANGANESE
EPA 6010D

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Manganese	**13000**	100	EPA 6010D	10-17-23	10-19-23	
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Manganese	**1900**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Manganese	**ND**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Manganese	**520**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Manganese	**3700**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Manganese	**3300**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Manganese	**43**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Manganese	**4300**	10	EPA 6010D	10-17-23	10-18-23	

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TOTAL MANGANESE
EPA 6010D

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Manganese	**43**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Manganese	**950**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Manganese	**4800**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Manganese	**340**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Manganese	**2000**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Manganese	**1500**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Manganese	**2100**	10	EPA 6010D	10-17-23	10-18-23	
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Manganese	**960**	10	EPA 6010D	10-17-23	10-18-23	

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TOTAL MANGANESE
EPA 6010D
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1017WH2					
Manganese	**ND**	10	EPA 6010D	10-17-23	10-18-23	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-145-20										
	ORIG	DUP									
Manganese	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-145-20										
	MS	MSD	MS	MSD		MS	MSD				
Manganese	**495**	**504**	500	500	ND	**99**	**101**	75-125	2	20	
SPIKE BLANK											
Laboratory ID:	SB1017WH2										
Manganese	**500**		500		N/A	**100**		80-120			

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SULFATE
ASTM D516-11

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Sulfate	**27**	10	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Sulfate	**16**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Sulfate	**30**	10	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Sulfate	**68**	20	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Sulfate	**11**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Sulfate	**5.6**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Sulfate	**31**	10	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Sulfate	**99**	50	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Sulfate	**29**	10	ASTM D516-11	10-16-23	10-16-23	

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SULFATE
ASTM D516-11

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Sulfate	**ND**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Sulfate	**5.1**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Sulfate	**11**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Sulfate	**ND**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Sulfate	**ND**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Sulfate	**9.4**	5.0	ASTM D516-11	10-16-23	10-16-23	
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Sulfate	**17**	5.0	ASTM D516-11	10-16-23	10-16-23	

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SULFATE
ASTM D516-11
QUALITY CONTROL

Matrix: Water
Units: mg/L

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1016W1					
Sulfate	**ND**	5.0	ASTM D516-11	10-16-23	10-16-23	

Analyte	Result		Spike Level	Source Result	Percent Recovery	Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE									
Laboratory ID:	10-129-05								
	ORIG	DUP							
Sulfate	**11.4**	**11.7**	NA	NA	NA	NA	3	10	
MATRIX SPIKE									
Laboratory ID:	10-129-05								
	MS		MS		MS				
Sulfate	**20.7**		10.0	11.4	93	73-127	NA	NA	
SPIKE BLANK									
Laboratory ID:	SB1016W1								
	SB		SB		SB				
Sulfate	**9.56**		10.0	NA	96	85-114	NA	NA	

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DISSOLVED METHANE
RSK 175

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**KMW5-W-13**					
Laboratory ID:	10-129-01					
Methane	**1.7**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*87*	*50-150*				
Client ID:	**KMW6-W-14**					
Laboratory ID:	10-129-02					
Methane	**810**	11	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*82*	*50-150*				
Client ID:	**KMW7-W-15**					
Laboratory ID:	10-129-03					
Methane	**2.5**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*105*	*50-150*				
Client ID:	**KMW14-W-15**					
Laboratory ID:	10-129-04					
Methane	**3.4**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*96*	*50-150*				
Client ID:	**KMW15-W-15**					
Laboratory ID:	10-129-05					
Methane	**88**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*92*	*50-150*				
Client ID:	**KMW16-W-11**					
Laboratory ID:	10-129-06					
Methane	**2600**	17	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*90*	*50-150*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

DISSOLVED METHANE
RSK 175

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**MW10-W-15**					
Laboratory ID:	10-129-07					
Methane	**ND**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*84*	*50-150*				
Client ID:	**MW11-W-13**					
Laboratory ID:	10-129-08					
Methane	**220**	2.2	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*67*	*50-150*				
Client ID:	**MWG2-W-10**					
Laboratory ID:	10-129-09					
Methane	**ND**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*92*	*50-150*				
Client ID:	**MWG3-W-10**					
Laboratory ID:	10-129-10					
Methane	**3600**	28	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*77*	*50-150*				
Client ID:	**S2-W-10**					
Laboratory ID:	10-129-11					
Methane	**820**	5.5	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*79*	*50-150*				
Client ID:	**YMW1-W-15**					
Laboratory ID:	10-129-12					
Methane	**1100**	5.5	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*138*	*50-150*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

DISSOLVED METHANE
RSK 175

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**YMW2-W-15**					
Laboratory ID:	10-129-13					
Methane	**280**	1.7	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*126*	*50-150*				
Client ID:	**YMW3-W-15**					
Laboratory ID:	10-129-14					
Methane	**1200**	11	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*91*	*50-150*				
Client ID:	**YMW-DUP-W-Depth**					
Laboratory ID:	10-129-15					
Methane	**290**	1.7	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*138*	*50-150*				
Client ID:	**MW13-W-15**					
Laboratory ID:	10-129-16					
Methane	**790**	5.5	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*94*	*50-150*				

Date of Report: October 19, 2023
Samples Submitted: October 11, 2023
Laboratory Reference: 2310-129
Project: 0204793-000

DISSOLVED METHANE
RSK 175
QUALITY CONTROL

Matrix: Water
Units: ug/L (ppb)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1013W1					
Methane	**ND**	0.55	RSK 175	10-13-23	10-13-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*102*	*50-150*				
Laboratory ID:	MB1016W1					
Methane	**ND**	0.55	RSK 175	10-16-23	10-16-23	
Surrogate:	*Percent Recovery*	*Control Limits*				
1-Butene	*102*	*50-150*				

Analyte	Result		Spike Level		Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
SPIKE BLANK										
Laboratory ID:	SB1013W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	**47.8**	**45.9**	44.2	44.2	108	104	75-125	4	25	
Surrogate:										
1-Butene					*110*	*104*	*50-150*			
Laboratory ID:	SB1016W1									
	SB	SBD	SB	SBD	SB	SBD				
Methane	**44.2**	**44.2**	44.2	44.2	100	100	75-125	0	25	
Surrogate:										
1-Butene					*99*	*99*	*50-150*			

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

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

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

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

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

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

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

I - Compound recovery is outside of the control limits.

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

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

L - The RPD is outside of the control limits.

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

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

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

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

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

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

Q - Surrogate recovery is outside of the control limits.

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

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

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

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

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

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

X - Sample extract treated with a mercury cleanup procedure.

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

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

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

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

Z -

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

Chain of Custody

Page 1 of 2

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

Company: Haley & Aldrich, Inc
Project Number: 0204793-000
Project Name: tiger oil
Project Manager: Yen-Vu Van
Sampled by: Zach Stephens / Yida Fang

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

Laboratory Number: 10-129

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☒)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260☒	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Nitrate	total Mn	Sulfate	Methane	% Moisture
1	KMW5-W-13	10/10/23	1630	W	9		X				X												X	X	X	X	
2	KMW6-W-14	10/10/23	1020				X				X												X	X	X	X	
3	KMW7-W-15	10/11/23	0915				X				X												X	X	X	X	
4	KMW14-W-15	10/10/23	1450				X				X												X	X	X	X	
5	KMW15-W-15	10/10/23	1335				X				X												X	X	X	X	
6	KMW16-W-11	10/10/23	~~0~~ 1110				X				X												X	X	X	X	
(23)	~~MW9-W-15~~						X				X												X	X	X	X	
7	MW10-W-15	10/11/23	0820				X				X												X	X	X	X	
8	MW11-W-13	10/11/23	0958				X				X												X	X	X	X	
9	MWG2-W-10	10/10/23	1210				X				X												X	X	X	X	

	Signature	Company	Date	Time
Relinquished		H+A	10/11/23	1315
Received		CORE	10/11/23	1315
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
cc vpehlivan@haleyaldrich.com on all results.
Refer to email for analysis/method requests. Nitrate short hold

Data Package: Standard ☐ Level III ☐ Level IV ☐

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

Chain of Custody

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

Company: Haley & Aldrich, inc
Project Number: 0204793-000
Project Name: tiger oil
Project Manager: Jen-Vy Van
Sampled by: Zach S. / Yida F.

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

Laboratory Number: 10-129

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☑)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260 D	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664	Nitrate	total Mn	sulfate	Methane	% Moisture
10	MWG3-W-10	10/10/23	1325	W	9		X				X												X	X	X	X	
11	S2-W-10	10/10/23	0935				X				X												X	X	X	X	
12	MW1-W-15	10/10/23	0932				X				X												X	X	X	X	
13	MW2-W-15	10/10/23	1738				X				X												X	X	X	X	
14	MW3-W-15	10/11/23	0855				X				X												X	X	X	X	
15	MW-DUP-W-Depth	10/10/23	1200				X				X												X	X	X	X	
16	MW13-W-15	10/10/23	1610				X				X												X	X	X	X	
17	TRIP BLANK	—	—	W	1						X																

	Signature	Company	Date	Time
Relinquished		H+A	10/11/23	1315
Received		ORE	10/11/23	1315
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
See page 1

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

APPENDIX C
Quality Assurance Review

Haley & Aldrich, Inc.
600 South Meyer Ave
Suite 100
Tucson, AZ 85701
520.289.8621

Data Usability Summary Report

Project Name: Former Tiger Oil /0204793-000 Task 04

Project Description: Soil Gas Samples

Sample Date(s): 22 February 2023

Analytical Laboratory: H&P Mobile Geochemistry, Inc., Carlsbad, CA

Validation Performed by: Kristina Ilina

Validation Reviewed by: Katherine Miller

Validation Date: 29 March 2023

Haley & Aldrich, Inc. prepared this Data Usability Summary Report (DUSR) to summarize the review and validation of the analytical results for Sample Delivery Group(s) (SDG) listed. This DUSR is organized into the following sections:

1. **Sample Delivery Group Number HAL022823-10**
2. **Explanations**
3. **Glossary**
4. **Abbreviations**
5. **Qualifiers**

References

This data validation and usability assessment was performed per the guidance and requirements established by the United States Environmental Protection Agency (USEPA) using the following reference materials:

- Analysis of Volatile Organic Compounds (VOCs) in Air Contained in Canisters by Method TO-15.

Data reported in this sampling event were reported to the laboratory reporting limit (RL).

Sample data were qualified in accordance with the laboratory's standard operating procedures (SOP). The results presented in each laboratory report were found to be compliant with the data quality objectives (DQO) for the project and therefore usable; any exceptions are noted in the following pages.

1. Sample Delivery Group Number HAL022823-10

1.1 SAMPLE MANAGEMENT

This DUSR summarizes the review of SDG number HAL022823-10, dated 9 March 2023. Samples were collected, preserved, and shipped following standard chain of custody (COC) protocol.

Samples were also received appropriately, identified correctly, and analyzed according to the COC.

Analyses were performed on the following samples:

Sample ID	Sample Type	Lab ID	Sample Date	Matrix	Methods
VEP2 Flow 1-20230222	N	E303001-01	02/22/2023	GS	A
VEP1 Flow 1-20230222	N	E303001-02	02/22/2023	GS	A
Effluent VEP1-20230222	N	E303001-03	02/22/2023	AE	B
VEP2 Flow 2-20230222	N	E303001-04	02/22/2023	GS	A
Static VEP1-20230222	N	E303001-05	02/22/2023	GS	B

Method Holding Times			
A.	SW8260	Volatile Organic Compounds by Gas Chromatograph/Mass Spectrometry (GC/MS)	30 days
B.	TO15	Determination of VOC in Ambient Air Using Special Cannisters & GC/MS	30 days

1.2 CASE NARRATIVE

The laboratory report case narratives included the following issues:

- Due to elevated concentrations, samples VEP2 Flow 1, VEP1 Flow 1 and VEP2 Flow 2 were analyzed by H&P 8260SV rather than EPA Method TO-15. The following EPA Method TO-15 analytes are not reported by H&P 8260SV: Dichlorotetrafluoroethane, 4-Ethyltoluene. No qualification is necessary.

1.3 HOLDING TIMES/PRESERVATION

The samples arrived at the laboratory at the proper temperature and were prepared and analyzed within the holding time and preservation criteria specified per method protocol.

1.4 REPORTING LIMITS AND SAMPLE DILUTIONS

All sample dilutions were reviewed and found to be justified. Dilution of the project samples were required to bring calibration of target analytes within calibration range, matrix interference, foaming at the time of purging, or abundance of non-target analytes.

1.5 SURROGATE RECOVERY COMPLIANCE

Refer to section E 1.2. The percent recovery (%R) for each surrogate compound added to each project sample were determined to be within the laboratory specified quality control (QC) limits.

1.6 LABORATORY CONTROL SAMPLES

Refer to section E 1.3. Compounds associated with the laboratory control samples/laboratory control sample duplicates (LCS/LCSD) analyses associated with client samples exhibited recoveries and relative percent differences (RPDs) within the specified limits with the following exceptions:

Sample Type	Method	Batch ID	Analyte	%R	Qualifier	Affected Samples
LCS	SW8260	EC30714	Chloroethane	68.2%	J/UJ	E303001-01, E303001-02, E303001-04
			1,1,2,2-Tetrachloroethane	62%	J/UJ	E303001-01, E303001-02, E303001-04

1.7 BLANK SAMPLE ANALYSIS

Refer to section E 1.5. Method blank samples had no detections, indicating that no contamination from laboratory activities occurred with the following exceptions:

Blank Type	Batch ID	Analyte Detected in Blank	Concentration (µg/m³)	Qualifier	Affected Samples
MB	EC30715	Naphthalene	270	NA	None, samples are ND

1.8 DUPLICATE SAMPLE ANALYSIS

Refer to section E 1.6. The laboratory did not analyze any laboratory duplicates as per the method or laboratory SOP.

1.9 PRECISION AND ACCURACY

Refer to section E 1.7. Where required by the method, some measurement of analytical accuracy and precision was reported for each method with the site samples.

1.10 SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The results presented in this report were found to comply with the data quality objectives for the project and the guidelines specified by the analytical method. Based on the review of this report, the data are useable and acceptable. A summary of qualifiers applied to this data set is shown below.

Method	**Sample ID**	**Lab ID**	**Analyte**	**Reported Result**	**Validated Result**	**Reason for Qualifier**
SW8260	VEP1 Flow 1-20230222	E303001-02	1,1,2,2-Tetrachloroethane	U	UJ	LCS
SW8260	VEP1 Flow 1-20230222	E303001-02	Chloroethane	U	UJ	LCS
SW8260	VEP2 Flow 1-20230222	E303001-01	1,1,2,2-Tetrachloroethane	U	UJ	LCS
SW8260	VEP2 Flow 1-20230222	E303001-01	Chloroethane	U	UJ	LCS
SW8260	VEP2 Flow 2-20230222	E303001-04	1,1,2,2-Tetrachloroethane	U	UJ	LCS
SW8260	VEP2 Flow 2-20230222	E303001-04	Chloroethane	U	UJ	LCS

2. Explanations

The following explanations include more detailed information regarding each of the sections in the DUSR above. Not all sections in the Explanations are represented:

- E 1.2 Surrogate Recovery Compliance
  - Surrogates, also known as system monitoring compounds, are compounds added to each sample prior to sample preparation to determining the efficiency of the extraction procedure by evaluating the percent recovery (%R) of the compounds.
- E 1.3 Laboratory Control Samples
  - The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analyses are used to assess the precision and accuracy of the analytical method independent of matrix interferences.
- E 1.5 Blank Sample Analysis
  - Method blanks are prepared by the analytical laboratory and analyzed concurrently with the project samples to assess possible laboratory contamination.
- E 1.6 Laboratory and Field Duplicate Sample Analysis
  - The laboratory duplicate sample analysis is used by the laboratory at the time of the analysis to demonstrate acceptable method precision. The RPD or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
  - The field duplicate sample analysis is used to assess the precision of the field sampling procedures and analytical method. The relative percent difference (RPD) or absolute difference was evaluated for each duplicate sample pair to monitor the reproducibility of the data.
- E 1.7 Precision and Accuracy
  - Precision measures the reproducibility of repetitive measurements. In a laboratory environment, this will be measured by determining the relative percent difference (RPD) found between a primary and a duplicate sample. This can be an LCS/LCSD pair, a MS/MSD pair, a laboratory duplicate performed on a site sample, or a field duplicate collected and analyzed concurrently with a site sample.
  - Accuracy is a statistical measurement of the correctness of a measured value and includes components of random error (variability caused by imprecision) and systematic error. In a laboratory environment, this will be measured by determining the percent recovery (%R) of certain spiked compounds. This can be assessed using LCS, blank spike (BS), MS, and/or surrogate recoveries.

3. Glossary

Not all of the following symbols, acronyms, or qualifiers occur in this document.

- Sample Types:
  - EB Equipment Blank Sample
  - FB Field Blank Sample
  - FD Field Duplicate Sample
  - MB Method Blank
  - N Primary Sample
  - TB Trip Blank Sample
- Units:
  - µg/kg microgram per kilogram
  - µg/L microgram per liter
  - µg/m^3 microgram per cubic meter
  - mg/kg milligram per kilogram
  - mg/L milligram per liter
  - ppb v/v parts per billion volume/volume
  - pCi/L picocuries per liter
  - pg/g picograms per gram
- Matrices:
  - AA Ambient Air
  - GS Soil Gas
  - GW/WG Groundwater
  - QW Water Quality
  - IA Indoor Air
  - SE Sediment
  - SO Soil
  - WQ Water Quality control matrix
  - WS Surface Water
  - AE Air, Vapor Extraction Well Effluent
- Table Footnotes:
  - NA Not applicable
  - ND Non-detect
  - NR Not reported
- Common Symbols:
  - % percent
  - < less than
  - ≤ less than or equal to
  - > greater than
  - ≥ greater than or equal to
  - = equal
  - °C degrees Celsius
  - ± plus or minus
  - ~ approximately
  - x times (multiplier)

4. Abbreviations

%D	Percent Difference
%R	Percent Recovery
%RSD	Percent Relative Standard Deviation
%v/v	Percent volume by volume
µg/L	micrograms per liter
2s	2 sigma
4,4-DDT	4 4-dichlorodiphenyltrichloroethane
Abs Diff	Absolute Difference
amu	atomic mass unit
BPJ	Best Professional Judgement
BS	Blank Spike
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CCVL	Continuing Calibration Verification Low
COC	Chain of Custody
COM	Combined Isotope Calculation
Cr (VI)	Hexavalent Chromium
CRI	Collision Reaction Interface
DoD	Department of Defense
DQO	data quality objective
DUSR	Data Usability Summary Report
EMPC	Estimated Maximum Possible Concentration
FBK	Field Blank Contamination
FDP	Field Duplicate
GC	Gas Chromatograph
GC/MS	Gas Chromatography/Mass Spectrometry
GPC	Gel Permeation Chromatography
H2	Hydrogen gas
HCl	Hydrochloric Acid
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP/MS	Inductively Coupled Plasma/ Mass Spectrometry
ICV	Initial Calibration Verification
ICVL	Initial Calibration Verification Low
IPA	Isopropyl Alcohol
LC	Laboratory Control
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MBK	Method Blank Contamination
MDC	Minimum Detectable Concentration
MDL	Laboratory Method Detection Limit
mg/kg	milligrams per kilogram
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NA	not applicable
ND	Non-Detect
NFG	National Functional Guidelines
NH_3	Ammonia
NYSDEC	New York State Department of Environmental Conservation
PAH	polycyclic aromatic hydrocarbon
PCB	Polychlorinated Biphenyl
PDS	Post Digestion Spike
PEM	Performance Evaluation Mixture
PFAS	Per- and Polyfluoroalkyl Substances
PFBA	Perfluorbutanoic Acid
PFD	Perfluorodecalin
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane sulfonate
PFPeA	Perfluoropentanoic Acid
QAPP	Quality Assurance Project Plan
QC	Quality Control
QSM	Quality Systems Manual
R^2	R-squared value
Ra-226	Radium-226
Ra-228	Radium-228
RESC	Resolution Check Measure
RL	Laboratory Reporting Limit
RPD	Relative Percent Difference
RRF	Relative Response Factors
RT	Retention Time
SAP	sampling analysis plan
SDG	Sample Delivery Group
SIM	Selected ion monitoring
SOP	Laboratory Standard Operating Procedures
SPE	Solid Phase Extraction
SVOC	Semi-Volatile Organic Compounds
TIC	Tentatively Identified Compound
TKN	Total Kjeldahl Nitrogen
TPH	Total Petroleum Hydrocarbon
TPU	Total Propagated Uncertainty
amu	atomic mass unit
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compounds
WP	Work Plan

5. Qualifiers

The qualifiers below are from the USEPA National Functional Guidelines and the data in the DUSR may contain these qualifiers:

- Concentration (C) Qualifiers:

  U The compound was analyzed for but not detected. The associated value is either the compound quantitation limit if not detected by the analytical instrument or could be the reported or blank concentration if qualified by blank contamination. This can also be displayed as less than the associated compound quantitation limit (<RL or <MDL), or "ND".

  B The compound was found in the sample and its associated blank. Its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers:

  E The compound was quantitated above the calibration range.

  D The concentration is based on a diluted sample analysis.

- Validation Qualifiers:

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  J+ The result is an estimated quantity, but the result may be biased high.

  J- The result is an estimated quantity, but the result may be biased low.

  J/UJ as listed in exception tables J applies to detected data and UJ applies to non-detected data as reported by the laboratory.

  UJ The compound was not detected above the reported sample quantitation limit; however, the reported limit is estimated and may or may not represent the actual limit of quantitation.

  NJ The analysis indicated the presence of a compound for which there is presumptive evidence to make a tentative identification; the associated numerical value is an estimated concentration only.

  R The sample results were rejected as unusable; the compound may or may not be present in the sample.

  S Result is suspect. See DUSR for details.

References

1. United States Environmental Protection Agency, 2014. Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15, SOP NO. HW-31, Revision 6. June 2014.