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FINAL

2022 GROUNDWATER INVESTIGATION

Six Mile Richardson Highway

NORTH POLE, ALASKA

SHANNON & WILSON

July 2022

Shannon & Wilson No: 103822-003

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Submitted To: Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, AK 99709

Subject: FINAL 2022 GROUNDWATER INVESTIGATION, SIX MILE RICHARDSON HIGHWAY, NORTH POLE, ALASKA

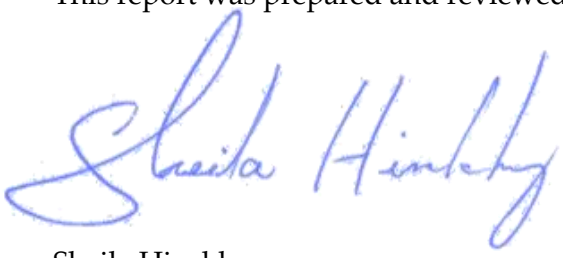
Shannon & Wilson prepared this report as specified in our approved work plan dated January 7, 2020, and Alaska Department of Environmental Conservation (DEC) Notice to Proceed Number 200000195, dated September 3, 2019.

We appreciate the opportunity to be of service to you on this project. If you have questions concerning this report, or we may be of further service, please contact us.

Sincerely,

SHANNON & WILSON, INC.

This report was prepared and reviewed by:



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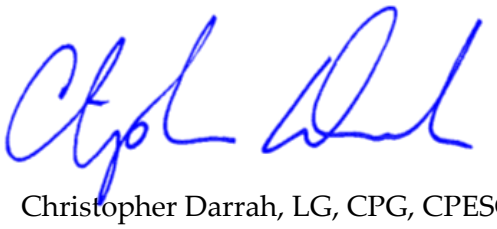

Christopher Darrah, LG, CPG, CPESC
Vice President
Role: Principle in Charge

SMH:CBD/smh

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ACRONYMS

bgs	below ground surface
COC	chain of custody
CS	Contaminated Sites
CUL	cleanup level
°C	degrees Celsius
DEC	Department of Environmental Conservation
DL	detection limit
GAC	granular activated carbon
LCS/LCSD	laboratory control sample/ laboratory control sample duplicate
LDRC	laboratory data review checklist
LOD	limit of detection
LOQ	limit of quantitation
MS/MSD	matrix spike/ matrix spike duplicate
µg/L	micrograms per liter
QA/QC	quality assurance/quality control
RPD	relative percent difference
SGS	SGS Environmental Services, Inc.
TCE	trichloroethane
VOC	volatile organic compound
Work Plan	*Six Mile Richardson Highway Groundwater Investigation Work Plan* (January 7, 2020)
1,2,3-TCP	1,2,3-trichloropropane
2020 Report	*Six Mile Richardson Highway 2020 Groundwater Investigation* Report (March 2021)

1 INTRODUCTION

This report presents the results of groundwater investigation activities in North Pole, Alaska. The site was listed on the Alaska Department of Environmental Conservation (DEC) Contaminated Sites (CS) Database (DEC File No.100.38.112) after a trichloroethane (TCE) groundwater contaminant plume was discovered in the Six Mile Richardson Highway area in the early 1990s (Figure 1).

We conducted this work in general accordance with our *Six Mile Richardson Highway Groundwater Investigation Work Plan* (Work Plan), approved by DEC on January 7, 2020, and the DEC's January 2022 *Field Sampling Guidance*.

1.1 Project Purpose and Goals

The project purpose is to obtain current information on groundwater conditions at the site to determine if further monitoring and/or corrective actions may be necessary. Our goals were to sample select existing monitoring wells and compare the analytical results to DEC groundwater cleanup levels (CULs).

1.2 Study Boundaries

The study boundary includes areas upgradient, downgradient, and encompassing the 2017 2.8 microgram per liter (µg/L) TCE plume (Figure 2).

1.3 Site Description

The Six Mile Richardson Highway TCE groundwater plume originates from several source areas and merges to form an area-wide plume. When discovered in 1995, the plume measured slightly over one mile long, up to 1,200 feet wide, and more than 100 feet deep. The site is located off the Richardson Highway near milepost 365, southeast of Fairbanks, Alaska (latitude 64.8026° north, longitude -147.5592° west).

The groundwater plume originates near Milepost 356 on the south side of the Richardson Highway and extends in a northwesterly direction across the highway to the Six Mile Village Subdivision. The plume area encompasses commercial properties and residential properties, including the Six Mile residential subdivision. The area is not served by public water or sewer service. Most businesses and residences have water wells and on-site wastewater treatment (septic tanks and leach fields). The magnitude and direction of the area's groundwater gradient shows little seasonal variability, and its flow direction is generally to the northwest.

2 BACKGROUND

Shannon & Wilson's earliest work on the Six Mile Richardson Highway project began in 1988, to conduct assessments of potential source areas and groundwater modeling for remedial alternatives at the suspected source-area site. We have been evaluating the extent and behavior of the plume, sources areas, and regional and local trends in TCE attenuation since that time.

Following an intensive private-well search and sampling effort, public outreach, and initial plume-delineation effort, DEC initiated a long-term groundwater monitoring program in 1996 and included the annual sampling of private water wells and groundwater-monitoring wells through 2017. Between 1996-2017, the DEC provided and maintained water-treatment systems for residents with impacted private water wells. The DEC released new groundwater CULs in November 2016 and TCE was lowered from 5 µg/L to 2.8 µg/L. This updated concentration for TCE is used as the threshold for continued private well sampling and/or treatment system maintenance in the Six Mile plume area.

We performed several vapor intrusion investigations from 2011 through 2015 at residences and commercial properties within and downgradient of the plume. The vapor intrusion investigations focused on permanent buildings within 100 feet of the TCE contaminant plume.

We have conducted several interrelated investigations to assess risks to residential receptors and evaluate appropriate remedial measures including calculating cumulative risks at wells where multiple contaminants were present. Although we recognize vapor intrusion is not part of this scope of services, our 2015 *Soil-Gas Sampling Report* (revised submittal dated March 23, 2018) indicated a need for follow-up sampling at five locations where the most recent results exceeded residential or commercial target levels. Groundwater results from the 2017 sampling event indicated TCE remained at detectable concentrations in all nine monitoring wells sampled, however over half of the wells in the monitoring network showed TCE concentrations were either decreasing or had no temporal trend.

In 2020, MW-8 was decommissioned, the condition of the remaining wells were assessed, and the conceptual site model was updated. A TCE trend analysis was performed on 23 of the 24 sampled wells. Our analysis showed that concentrations were decreasing or remaining stable; concentrations were not seen to be increasing. Analytical results were consistent with historical results and did not exceed groundwater CULs except for TCE from monitoring wells MW-17 and MW-19; and cis-1,2-dichloroethene from monitoring well MW-32.

3 FIELD ACTIVITIES

Our scope of services included sampling 24 monitoring wells for volatile organic compounds (VOCs). Shannon & Wilson performed the monitoring-well sampling May 23, 2022 through May 26, 2022.

We performed our field activities in general accordance with our Work Plan apart from the deviations described in Section 4. The locations of monitoring wells sampled are presented in Figure 2 alongside their respective TCE results in relation to the DEC CUL. Field notes and sampling logs are presented in Appendix B.

We measured groundwater levels, total well depths, top-of-casing to ground surfaces, and checked for operational well locks.

3.1 Groundwater Sampling

We sampled 22 of the 24 existing monitoring wells in the Six Mile Richardson Highway area on May 23 through May 26, 2022. MW-13 and MW-14 were frozen and could not be sampled. We collected twenty-five groundwater samples in total, including field-duplicate samples at monitoring wells MW-108 and MW-17, and an equipment blank sample at monitoring well MW-19. Monitoring well sample locations are presented in Figure 2.

Prior to purging each monitoring well, we measured the top-of-casing to ground surface, depths to groundwater (Exhibit 3-1), and total well depths to a precision of 0.01 foot from the top of the well casings. Well monuments and casings were in overall good condition with the exceptions listed in Table 1. We purged water from the wells using a battery-powered, portable stainless-steel submersible pump with new disposable tubing. Reusable sampling equipment was decontaminated prior to use and reuse at each monitoring well location.

Exhibit 3-1: Measuring depth to groundwater at MW-30.

Each well was purged at a rate of less than 0.5 gallon per minute, until four of the five water-quality parameters (temperature, conductivity, pH, dissolved oxygen, and oxidation/reduction potential) stabilized over three consecutive readings prior to sample collection. MW-103 did not reach stabilization, however, three well volumes were purged prior to sampling.

We measured water-quality parameters in the field using a YSI Professional Plus multiparameter, calibrated according to the manufacturers' instructions. We reduced the pump-flow rate to allow collection of water samples for VOC analysis into appropriate laboratory-prepared containers where necessary; we collected duplicate VOC samples for quality assurance (QA) purposes immediately after filling the sample container for the primary sample. Field parameters are presented in Table 1 as recorded on our field logs, included in Appendix B.

Our observations and results are specific to the locations, depths, and times noted in our field forms and are not a guarantee or warranty of conditions present at all areas of the site. No amount of sampling can precisely predict the characteristics, quality, or distribution of site conditions. Potential variation includes, but is not limited to:

- the passage of time or intervening causes (natural or manmade) that may result in changes to site conditions; and
- the concentrations of contaminants may change at any sampled or unsampled location in response to natural conditions, chemical reactions, and/or other events.

3.2 Investigation Derived Waste Management

For locations where the most recent trends were increasing or stable and where analytes exceeded DEC CULs, we filtered the purge and rinse water with granular activated carbon (GAC) adsorption before discharging to the ground surface near the monitoring well. The purge and rinse water from the remaining monitoring wells were discharged directly to the ground surface near the monitoring well. Other investigative derived waste such as nitrile gloves and pump tubing were disposed of at the Fairbanks North Star Borough landfill. Our GAC usage tracking log and procedures for estimating contaminant breakthrough are presented in Appendix A.

4 DEVIATIONS FROM THE WORK PLAN

Field activities for the May 2022 sampling event were conducted in accordance with the DEC approved Work Plan with the following exceptions:

- Snow removal equipment damaged MW-30 at an unknown time and was repaired by the landowner. According to the landowner, the monument was replaced, and the casing was repaired using a PVC coupler and additional length of 2-inch PVC casing.
- MW-13 and MW-14 were frozen and not sampled. DEC approved our recommendation of omitting samples from these locations in an e-mail dated May 27, 2022.
- Three well volumes were purged at MW-103.

- Samples were analyzed by the most updated method Environmental Protection Agency 8260D instead of 8260C as presented in the Work Plan.

In our opinion, the above listed deviations have no effect on data quality or usability.

5 RESULTS

The SGS Environmental Services, Inc. (SGS) laboratory report and corresponding DEC laboratory data review checklist (LDRC) are provided in Appendix E. A quality control (QC) and QA assessment of analytical results is presented in Appendix F.

The May 2022 analytical results are summarized in Table 2. Figure 2 depicts TCE results for all sampled wells and includes results of other VOCs exceeding their respective DEC CULs. A summary of historical detections for existing monitoring wells in the Six Mile Richardson Highway groundwater-monitoring network is presented in Table 3.

5.1 Data Quality Summary

Shannon & Wilson performed a QA/QC assessment of our sampling procedures and the laboratory report; this assessment is presented in Appendix F. By conducting our field activities in general accordance with our standard QA/QC procedures and the Work Plan, we consider the samples we collected representative of site conditions at the locations and times they were obtained. Based on our QA review, no datum was rejected as unusable due to QC failures, and our completeness goal of obtaining 85-percent useable data was met.

Our QA assessment in Appendix F identifies analytical results that were qualified due to QC failures reported by the laboratory. In our opinion, the data produced by SGS for this project are suitable for characterizing groundwater water quality at the locations sampled, with qualifications applied by Shannon & Wilson due to data affected by QC failures.

5.2 Analytical Summary

Five VOCs were detected in one or more project sample from the current sampling event (Table 2) and are overall consistent with historical results (Table 3). Analytical results do not exceed DEC CULs with the exception of TCE from monitoring well MW-17.

The reported laboratory limits of detection (LODs) for the requested analytes were within sensitivity requirements except for 1,2,3-trichloropropane (1,2,3-TCP). We cannot assess whether the non-detect 1,2,3-TCP results are present at concentrations below the LOD but greater than the DEC CUL. Non-detect results where LODs exceed the DEC CUL are displayed in Table 2 in "**Bold**".

6 DISCUSSION

The 2022 sampling event provides additional long-term groundwater-monitoring data for monitoring wells in the Six Mile area. Analytical results for the current sampling event are overall consistent with historical data and are presented in Table 2 and Table 3, respectively.

A QA/QC review of the analytical results indicated a few instances where sensitivity, accuracy, and precision requirements were not met and affected the data quality. These data are considered usable with qualifications to the analytical results as defined in Appendix F. The overall data quality and usability are sufficient for reporting purposes.

Our 2022 analytical results indicate TCE contamination exceeded regulatory limits in only one monitoring well:

- TCE was detected in monitoring well MW-17 at a concentration of 3.82 µg/L, exceeding the CUL of 2.8 µg/L.

MW-17 has a total depth of approximately 29 feet below ground surface (bgs). A second collocated well (MW-27) with a total depth of approximately 72 feet bgs, resulted in a TCE concentration of 0.55 µg/L (Exhibit 6-1).

Exhibit 6-1: Collocated monitoring wells MW-17 and MW-27; from left to right.

As discussed in the *Six Mile Richardson Highway 2020 Groundwater Investigation* Report (2020 Report), TCE trends at MW-17 are decreasing. Between 1996 and 2020, the TCE concentrations at MW-17 has varied between 66 µg/L and 6.05 µg/L. No other analytes were detected in exceedance of regulatory limits.

6.1 Recommendations

As TCE concentrations in the plume decrease, we recommend evaluating potential pathways to site closure to help refine future site activities. While the timeline for site closure may still be uncertain, it is our opinion that assessing contaminant trends, data gaps, and human-health and ecological exposure scenarios in light of the most recent sample results will provide focus to future efforts.

We recommend readdressing our initial source investigations completed in the 1990s. These investigations were completed on an expedited timeframe to facilitate the immediate actions required in order to reduce exposure to residential receptors. Our reporting from those investigations identified potential source areas on the McCall, Holder, Walsky, and 6-Mile

Truck Stop properties, including such possible features as floor drains or leach fields that could be considered injection wells under the U.S. Environmental Protection Agency's Underground Injection (UIC) well program.

In our 2020 Report we provided a number of recommendations for additional groundwater sampling, vapor-intrusion sampling, data evaluation, and monitoring-well decommissioning. In our opinion, those recommendations remain valid.

In addition to the recommendations discussed in the 2020 Report and based on our overall project understanding and the 2022 analytical results, we recommend continued sampling efforts at MW-17 until DEC CULs are reached and collecting samples from MW-13 and MW-14 when the wells are thawed.

7 CLOSURE

This data report was prepared for the exclusive use of the DEC, in accordance with our scope of services. No other parties may rely upon our reports. The contents of this report should not be considered a warranty of site surface water conditions. We do not guarantee that regulatory agencies will reach the same conclusions as Shannon & Wilson.

This report should not be used without our approval if any of the following occurs:

- Conditions change due to natural forces or human activity at or adjacent to the site.
- Assumptions stated in this report have changed.
- Project details change or new information becomes available that may affect our analyses, recommendations, or conclusions.
- Regulations or laws change such that our analyses, recommendations, or conclusions are affected.

If any of these occur, we should be retained to review the applicability of our analyses, recommendations, or conclusions. If conditions different from those described herein are encountered during the next sampling event, we will review these conditions and reconsider our recommendations and conclusions.

We conducted our services in a manner consistent with the level of care and skill ordinarily exercised by members of the environmental profession currently practicing in Alaska and under similar conditions as this project. We have prepared the document included at the end of this report Important Information about Your Environmental Report to assist you and others in understanding the use and limitations of this report.

Copies of documents that may be relied upon by our client are limited to the printed copies (also known as hard copies) signed or sealed by Shannon & Wilson. Text, data, or graphics files in electronic media format are furnished solely for the convenience of our client. Any conclusion or information obtained or derived from such electronic files shall be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

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8 REFERENCES

Alaska Administrative Code 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, October 2018.

Alaska Department of Environmental Conservation, Monitoring Well Guidance, September 2013.

Alaska Department of Environmental Conservation, Site Characterization Work Plan and Reporting Guidance for Investigation of Contaminated Sites, March 7, 2017.

Alaska Department of Environmental Conservation Field Sampling Guidance, January 2022.

Alaska Department of Environmental Conservation, Minimum Quality Assurance Requirements for Sample Handling, Reports, and Laboratory Data, October 2019.

Shannon & Wilson, Inc. Six Mile Richardson Highway Groundwater Investigation Work Plan, January 2020.

Shannon & Wilson, Inc. Six Mile Richardson Highway 202 Groundwater Investigation Report, March 2021.

Table 1 - May 2022 Field Parameters

Sample Date	Monitoring Well	Well Type	Expected TWD † (ft)	Screen Length (ft)	TWD (ft)	DTW from TOC (ft)	Groundwater-Quality Parameters						Purge Water Disposal	Stabilization Criteria	Well Location	Condition Notes
							Temperature (°C)	DO (mg/L)	Conductivity (µS/cm)	pH (s.u.)	ORP (mV)	Clarity (visual)				
5/25/2022	MW-4	Stickup	75.57	10	75.6	6.77	3.0	0.74	223.2	6.93	212.1	Clear	Ground	PS	1491 Richardson	Trimmed casing due to frostjacking
5/25/2022	MW-5	Stickup	25.5	10	25.20	7.26	1.8	0.36	238.5	7.09	-13.4	Clear	Ground	PS	1491 Richardson	Trimmed casing due to frostjacking
—	MW-13	Flushmount	48.90	10	—	—	—	—	—	—	—	—	—	—	NW of 1366 Sloan (right-of-way)	Frozen well not sampled
—	MW-14	Flushmount	28.57	10	—	—	—	—	—	—	—	—	—	—	NW of 1366 Sloan (right-of-way)	Frozen well not sampled
5/24/2022	MW-15A	Stickup	76.89	5	76.91	5.58	2.8	0.31	430.1	7.15	33.5	Clear	Ground	PS	1430 Richardson	Good
5/24/2022	MW-16A	Stickup	23.25	10	23.02	5.67	3.5	0.37	500.0	7.07	-12.3	Clear	Ground	PS	1430 Richardson	Good
5/26/2022	MW-17	Stickup	29.27	10	29.35	8.12	3.2	0.36	245.1	7.04	-30.9	Clear	GAC to Ground	PS	1455 Richardson	Trimmed casing due to frostjacking
5/25/2022	MW-18	Stickup	26.31	10	26.31	7.80	3.0	0.43	250.0	6.96	-12.1	Clear	Ground	PS	1517 Lu Anne	Trimmed casing due to frostjacking
5/26/2022	MW-19	Stickup	81.95	10	81.98	9.19	3.6	0.34	223.6	7.24	-27.9	Clear	GAC to Ground	PS	1455 Richardson	Good
5/26/2022	MW-26	Stickup	32.75	10	32.75	8.53	2.9	1.18	276.2	6.87	-2.9	Clear	Ground	PS	1455 Richardson	Good
5/26/2022	MW-27	Stickup	72.15	10	72.21	7.22	3.5	0.35	218.5	7.23	0.4	Clear	Ground	PS	1455 Richardson	Good
5/26/2022	MW-29	Stickup	72.75	10	71.81	8.18	3.5	0.66	224.8	7.18	-8.5	Clear	Ground	PS	1455 Richardson	Good
5/26/2022	MW-30	Stickup	32.65	10	* 31.79	8.46	3.6	0.80	254.1	7.01	32.4	Clear	Ground	PS	1455 Richardson	*Monument & casing repaired by landowner
5/25/2022	MW-31	Stickup	71.7	10	70.68	9.32	3.1	0.47	212.6	7.26	21.1	Clear	Ground	PS	1491 Richardson	Good
5/25/2022	MW-32	Stickup	19.72	10	19.84	8.58	2.6	0.29	257.5	6.89	-6.9	Clear	GAC to Ground	PS	1491 Richardson	Good
5/24/2022	MW-34	Flushmount	77.70	10	77.69	2.97	2.6	0.45	453.0	7.08	-2.6	Clear	Ground	PS	1410 Richardson	Good
5/24/2022	MW-35	Flushmount	38.19	10	38.24	3.04	2.4	0.35	474.4	7.01	37.2	Clear	Ground	PS	1410 Richardson	Good
5/23/2022	MW-38	Stickup	39.18	10	39.23	6.89	1.7	0.83	257.7	6.92	-14.3	Clear	Ground	PS	1335 Smithson (vacant)	Good
5/23/2022	MW-39	Stickup	27.57	10	27.69	5.77	0.9	0.74	259.7	7.00	-29.3	Clear	Ground	PS	1335 Smithson (vacant)	Good
5/24/2022	MW-103	Stickup	12.81	5	12.92	6.53	3.2	6.85	403.3	6.43	178.7	Clear	Ground	3 well volumes	869 Conley	Good
5/24/2022	MW-104	Stickup	22.73	5	22.79	6.59	2.5	0.32	549.0	6.99	-39.8	Clear	Ground	PS	869 Conley	Good
5/24/2022	MW-105	Stickup	32.76	10	32.83	6.57	2.7	0.36	476.0	6.93	10.0	Clear	Ground	PS	869 Conley	Good
5/23/2022	MW-107	Flushmount	33.75	5	33.87	2.93	1.8	0.36	236.0	7.06	2.2	Clear	Ground	PS	1366 Sloan	Good
5/23/2022	MW-108	Flushmount	42.62	5	42.71	3.80	2.2	0.47	235.5	7.08	34.5	Clear	Ground	PS	1366 Sloan	Good

NOTES: Three consecutive readings for at least 5 of the 6 above listed water quality parameters were within stabilization criteria prior to sample collection with the exception of MW-103.

† Expected TWD obtained from most recent Monitoring Well Sampling Log prior to 2022.

* Snow removal equipment damaged MW-30 at an unknown time and was repaired by the landowner. According to the landowner, the monument was replaced, and the casing was repaired using a PVC coupler and additional length of 2-inch PVC casing.

— not applicable

°C = degrees Celsius; DO = dissolved oxygen; DTW = depth to water; ft = feet; µS/cm = microSiemens per centimeter; GAC = granular activated carbon; mg/L = milligram per liter; mV = millivolt; ORP = oxidation-reduction potential; PS = parameters stabilized; s.u. = standard units; TOC = top of casing; TWD = total well depth

Table 2 - 2022 Groundwater Monitoring Event Summary

Analyte	Cleanup Level	Units	MW-4	MW-5	MW-15A	MW-16A	MW-17	MW-917 †	MW-18	MW-19	MW-26	MW-27	MW-29	MW-30	MW-31	MW-32	MW-34	MW-35	MW-38	MW-39	MW-103	MW-104	MW-105	MW-107	MW-108	MW-908 †
1,1,1,2-Tetrachloroethane	5.7	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
1,1,1-Trichloroethane	8,000	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1,2,2-Tetrachloroethane	0.76	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
1,1,2-Trichloroethane	0.41	µg/L	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
1,1-Dichloroethane	28	µg/L	<0.500	<0.500	<0.500	0.539 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.705 J	<0.500	<0.500	<0.500	0.485 J	0.382 J	0.366 J	<0.500	0.417 J	0.433 J	0.423 J	0.381 J	0.379 J
1,1-Dichloroethene	280	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,1-Dichloropropene	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichlorobenzene	7	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,3-Trichloropropane	0.0075	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trichlorobenzene	4	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2,4-Trimethylbenzene	56	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dibromo-3-chloropropane	—	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
1,2-Dibromoethane	0.075	µg/L	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375	<0.0375
1,2-Dichlorobenzene	300	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,2-Dichloroethane	1.7	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
1,2-Dichloropropane	8.2	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3,5-Trimethylbenzene	60	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3-Dichlorobenzene	300	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
1,3-Dichloropropane	—	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
1,4-Dichlorobenzene	4.8	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
2,2-Dichloropropane	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
2-Butanone (MEK)	5,600	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
2-Chlorotoluene	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
2-Hexanone	38	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
4-Chlorotoluene	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Benzene	4.6	µg/L	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200	<0.200
Bromobenzene	62	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromochloromethane	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromodichloromethane	1.3	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Bromoform	33	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Bromomethane	7.5	µg/L	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00
Carbon disulfide	810	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Carbon tetrachloride	4.6	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chlorobenzene	78	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Chloroethane	21,000	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloroform	2.2	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Chloromethane	190	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
cis-1,2-Dichloroethene	36	µg/L	<0.500	1.48	0.592 J	0.675 J	4.00	4.22	3.60	0.687 J	4.84	<0.500	<0.500	0.323 J	<0.500	25.4	0.912 J	0.681 J	0.500 J	0.565 J	<0.500	0.730 J	0.443 J	0.597 J	0.474 J	0.473 J

Table 2 - 2022 Groundwater Monitoring Event Summary

Analyte	Cleanup Level	Units	MW-4	MW-5	MW-15A	MW-16A	MW-17	MW-917 †	MW-18	MW-19	MW-26	MW-27	MW-29	MW-30	MW-31	MW-32	MW-34	MW-35	MW-38	MW-39	MW-103	MW-104	MW-105	MW-107	MW-108	MW-908 †
cis-1,3-Dichloropropene	4.7	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Dibromochloromethane	8.7	µg/L	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250	<0.250
Dibromomethane	8.3	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Dichlorodifluoromethane	200	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Ethylbenzene	15	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Hexachlorobutadiene	1.4	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Isopropylbenzene	450	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
m,p-xylenes	190	µg/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Methyl isobutyl ketone (MIBK)	6,300	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methylene chloride	110	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Methyl-t-butyl ether (MTBE)	140	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Naphthalene	1.7	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Butylbenzene	1,000	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
n-Propylbenzene	660	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
o-Xylene	190	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
p-Isopropyltoluene	—	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
sec-Butylbenzene	2,000	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Styrene	1,200	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
tert-Butylbenzene	690	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Tetrachloroethene (PCE)	41	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	0.318 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Toluene	1,100	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Total Xylenes	190	µg/L	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50	<1.50
trans-1,2-Dichloroethene	360	µg/L	<0.500	3.31	0.321 J	0.617 J	2.56	2.74	2.76	0.456 J	4.43	<0.500	<0.500	0.509 J	<0.500	2.10	0.712 J	0.631 J	0.575 J	0.735J	<0.500	1.07	0.538 J	0.735 J	0.429 J	0.419 J
trans-1,3-Dichloropropene	4.7	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichloroethene (TCE)	2.8	µg/L	0.583 J	1.18	1.71	1.99	**3.82**	**3.59**	1.17	1.84	1.80	0.550 J	0.417 J	1.23	1.43	1.74	2.11	1.78	0.758 J	0.616 J	<0.500	0.543 J	0.841 J	1.31	1.44	1.45
Trichlorofluoromethane	5,200	µg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Trichlorotrifluoroethane	10,000	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl acetate	410	µg/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Vinyl chloride	0.19	µg/L	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750	<0.0750

NOTES:
Results reported from SGS North America, Inc. work order 1222631, for VOCs by Method SW8260D
Cleanup Level — Alaska Department of Environmental Conservation (DEC) Cleanup Levels obtained from 18 AAC 75.341 Table C - Groundwater Cleanup Levels Table
† — *Sample MW-917* is a field duplicate of *MW-17* and sample *MW-908* is a field duplicate of *MW-108*
— Not applicable; DEC groundwater-cleanup level not yet established
< Analyte not detected; listed as less than the limit of detection (LOD) unless otherwise flagged due to quality-control failures.
J Estimated concentration, detected greater than the detection limit (DL) and less than the limit of quantitation (LOQ). Flag applied by the laboratory.
<BOLD The laboratory's LOD exceeds the regulatory limit.
BOLD The detected concentration exceeds the regulatory limit for the associated analyte.

DEC = Alaska Department of Environmental Conservation; LOD = limit of detection; LOQ = limit of quantitation; µg/L = microgram per liter; VOC = volatile organic compound

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-4	12/20/1994	**3.7**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/12/1996	**4.58**	0.33	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	<0.20	<0.30	<0.20	<0.40	<0.20	<0.20	<0.20
	11/22/1996	**3.64**	0.28	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	<0.20	<0.30	<0.20	<0.40	<0.20	<0.20	<0.20
	11/22/1996(dup)	**3.7**	0.25	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	<0.20	<0.30	<0.20	<0.40	<0.20	<0.20	<0.20
	3/13/1997	**3.5**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	7/28/1998	**3.2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/23/1999	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5 B	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/25/2000	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	0.55	<0.50	<0.50
	9/20/2001	2	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	10/7/2004	1.57	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	5/21/2020	0.660 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/25/2022	0.583 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-5	12/20/1994	**34 D**	1.8	<0.50	<0.50	<0.50	3.6	0.83	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	0.71	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/12/1996	**27.2**	2.31	0.57	<0.20	0.22	2.25	0.73	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	0.66	<0.30	<0.20	<0.40	<0.20	<0.20	<0.20
	8/12/1996(dup)	**27.2**	2.43	0.58	<0.20	0.22	2.39	0.78	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	0.69	<0.30	<0.20	<0.40	<0.20	<0.20	<0.20
	11/22/1996	**30.8**	1.97	0.49	<0.20	<0.20	1.49	0.57	<0.20	<1.00	<1.00	<0.30	<0.50	<0.50	0.52 B	<0.30	<0.20	<0.40	<0.20	<0.50	<0.20
	3/13/1997	**26**	1.6	0.44 J	<0.50	<0.50	0.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.47 J	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	7/28/1998	**23**	1.8	0.52	<0.50	<0.50	0.96	0.93	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/12/1999	**21**	1.7	0.63	<0.50	<0.50	0.77	0.81	<0.50	<0.50	<0.50	<0.50	<0.50	0.66 B	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/12/1999(dup)	**21**	1.7	0.61	<0.50	<0.50	0.78	0.78	<0.50	<0.50	<0.50	<0.50	<0.50	2.2 B	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	8/29/2000	**19**	1.5	0.6	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	9/20/2001	**17**	1.7	0.77	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50
	10/21/2003	**14.2**	1.59	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	10/7/2004	**11.9**	1.64	1.27	<1.00	<1.00	<1.00	<1.00	<0.500	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	4/27/2006	**8.77**	1.77	<1.00	<1.00	<1.00	<1.00	<1.00	<0.500	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	2/20/2009	**7.11**	2.12	3.24	<1.00	<1.00	<1.00	<1.00	<0.500	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	7/26/2011	**4.73**	2.28	4.05	<1.00	<1.00	<1.00	<1.00	<0.500	<1.00	<3.00	<1.00	<1.00	<5.00	<0.400	<1.00	<1.00	<3.00	<2.00	<1.00	<1.00
	2/23/2017	1.53	2.05	4.41	0.979 J	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.20	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2017(dup)	1.48	2.02	4.43	0.947 J	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.20	<0.50	<1.5	<0.50	<0.50	<0.50
	5/21/2020	1.33	1.67	3.67	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/25/2022	1.18	1.48	3.31	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-13	11/8/1995	1.7	0.61	<0.50	<0.50	<0.50	<0.50	0.95	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**31 D**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/1996	**3.67**	1.07	0.32	<0.20	<0.50	<0.50	1.71	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**63.3**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/1996(dup)	**3.84**	1.1	0.31	<0.20	<0.50	<0.50	1.8	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**67.2**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/19/1996	**3.24**	0.96	0.3	<0.20	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**57.6 B**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/19/1996(dup)	**3.55**	1.08	0.31	<0.20	<0.50	<0.50	1.83	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**60.6 B**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	5/15/1997	**4.6**	1.2	0.45 J	<0.50	<0.50	<0.50	2.3	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**43**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/1/1997	**4.03**	0.96 J	<1.0	<1.0	<0.50	<0.50	2.08	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	**35.5**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	7/24/1998	**4.2**	1.1	<0.50	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**15**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1999	**5.1**	1.1	0.56	<0.50	<0.50	<0.50	1.9	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**4.9**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-13 continued	9/8/2000	**5.3**	1.1	0.59	<0.50	<0.50	<0.50	1.9	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	2	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/24/2001	**5.6**	1.3	0.77	<0.50	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.1	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2002	**5.2**	1.2	<1.0	<1.0	<0.50	<0.50	1.4	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.77	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/23/2003	**5.52**	1.25	1.09	<1.00	<0.50	<0.50	1.15	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.45	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/14/2004	**5.19**	1.15	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/14/2004(dup)	**5.63**	1.28	1	<1.00	<0.50	<0.50	1.01	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/13/2006	**4.84**	1	1.14	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/13/2006(dup)	**5.18**	1.05	1.25	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/20/2007	**3.2**	1.1	1.4	<1.0	<0.50	<0.50	0.48 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	1/26/2009	**3.08**	1	1.4	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	1.87	1.22	4.12	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/3/2012	1.72	1.07	1.89	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/16/2013	2.07	1.34	2.45	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014	1.1	0.990 J	1.73	<1.00	<0.50	<0.50	<0.500	<0.25	<0.50	<2.5	<0.50	0.520 J	<2.5	<0.200	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014(dup)	1.32	1.17	1.74	<1.00	<0.50	<0.50	<0.500	<0.25	<0.50	<2.5	<0.50	0.520 J	<2.5	<0.200	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	0.473 J	0.865 J	1.54	<0.500	<0.500	<0.500	0.366 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	2022 Frozen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-14	11/8/1995	**4.8**	1.4	0.40 J	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**110 D**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/1996	**6.45**	1.43	0.51	<0.20	<0.50	<0.50	2.37	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**99.7**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/19/1996	**6.69**	1.39	0.53	<0.20	<0.50	<0.50	2.56	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**92.9 B**	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	5/15/1997	**6.2**	1.5	0.64	<0.50	<0.50	<0.50	2.6	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**48**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/1/1997	**5.66**	1.27	<1.0	<1.0	<0.50	<0.50	2.35	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	**55.6**	1.06	<0.50	<1.5	<0.50	<0.50	<0.50
	7/24/1998	**6.4**	1.4	0.66	<0.50	<0.50	<0.50	2.5	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**21**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1999	**6.2**	1.3	0.7	<0.50	<0.50	<0.50	2.2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**7.4**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/8/2000	**6**	1.3	0.76	<0.50	<0.50	<0.50	1.9	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	2.5	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/24/2001	**5.5**	1.5	0.93	<0.50	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.2	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2002	**4.8**	1.3	1	<1.0	<0.50	<0.50	1.3	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.86	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/23/2003	**4.41**	1.46	1.6	<1.00	<0.50	<0.50	1.2	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.56	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2004	**3.68**	1.15	1.43	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.42	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/13/2006	**3.53**	1.38	2.07	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	0.507 J	0.879 J	1.64	<0.500	<0.500	<0.500	0.399 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	2022 Frozen	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-15A	8/20/2007	2.7	0.40 J	0.15 J	<1.0	<0.50	<0.50	0.11 J	<0.25	<0.50	<2.5	<0.50	0.18 J	<2.5	<1.0	0.097 J	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**3.14**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	2.74	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2013	**3.06**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014	**2.87**	0.640 J	<0.500	<1.00	<0.50	<0.50	<0.500	<0.25	<0.50	<2.5	<0.50	0.790 J	<2.5	<0.200	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	1.86	0.522 J	<0.500	0.319 J	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<1.00 B*	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	1.71	0.592 J	0.321 J	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-16A	8/20/2007	**5.3**	0.78 J	0.33 J	<1.0	<0.50	<0.50	0.54 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**4.65**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	**4.3**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2013	**4.29**	1.12	0.560 J	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014	**3.81**	0.850 J	0.490 J	<1.00	<0.50	<0.50	0.390 J	<0.25	<0.50	<2.5	<0.50	0.500 J	<2.5	<0.200	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	2.49	0.736 J	0.613 J	<0.500	<0.500	<0.500	0.488 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	1.99	0.675 J	0.617 J	<0.500	<0.500	<0.500	0.539 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-17	2/16/1996	**66 D**	4.2	0.88	<0.50	<0.50	<0.50	12	<0.25	<0.50	<2.5	<0.50	0.85	<2.5	1.1	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1996	**55.6**	3.79	0.82	<0.20	<0.50	<0.50	11.9	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.1	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/20/1996	**58.2**	3.94	0.71	<0.20	<0.50	<0.50	11.5	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.09	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	3/4/1997	**61**	3.6	0.73	<0.50	<0.50	<0.50	9.2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.91	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/1998	**46**	3.1	0.56	<0.50	<0.50	<0.50	12	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.7	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/4/1999	**41**	2.9	0.56	<0.50	<0.50	<0.50	11	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.59	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/30/2000	**37**	2.8	<0.50	<0.50	<0.50	<0.50	7.5	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/30/2000(dup)	**38**	2.9	<0.50	<0.50	<0.50	<0.50	8	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/25/2001	**30**	3	0.53	<0.50	<0.50	<0.50	4.8	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/25/2001(dup)	**30**	3.1	0.54	<0.50	<0.50	<0.50	4.8	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/20/2003	**32**	2.46	<1.00	<1.00	<0.50	<0.50	2.5	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/20/2003(dup)	**32.2**	2.35	<1.00	<1.00	<0.50	<0.50	2.29	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006	**24.1**	2.57	<1.00	<1.00	<0.50	<0.50	2.29	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**18.3**	2.5	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009(dup)	**18.2**	2.53	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/25/2011	**16.6**	3.03	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/25/2011(dup)	**15.4**	2.92	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2013	**14.8**	4.07	1.27	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/21/2020	**6.00**	4.18	2.36	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/21/2020(dup)	**6.05**	4.12	2.38	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	**3.82**	4.00	2.74	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022(dup)	**3.59**	4.22	2.74	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-18	2/16/1996	**31 D**	1.9	0.46 J	<0.50	<0.50	<0.50	6.6	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.87	0.6	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1996	**29.6**	2.2	0.46	<0.20	<0.50	<0.50	6.37	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.65	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/20/1996	**30**	1.99	0.45	<0.20	<0.50	<0.50	5.62	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.6	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	3/4/1997	**28**	1.7	0.40 J	<0.50	<0.50	<0.50	4.8	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.48 J	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/1998	**21**	1.6	<0.50	<0.50	<0.50	<0.50	6	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/1998(dup)	**20**	1.6	<0.50	<0.50	<0.50	<0.50	6.1	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/4/1999	**19**	1.4	<0.50	<0.50	<0.50	<0.50	5	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/5/2000	**19**	1.4	<0.50	<0.50	<0.50	<0.50	3.4	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/27/2001	**16**	1.5	<0.50	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/22/2003	**16.4**	1.53	<1.00	<1.00	<0.50	<0.50	1.1	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006	**9.21**	1.04	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloroethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloroethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichlorobenzene
MW-18 continued	2/20/2009	**8.43**	1.19	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/26/2011	**6.42**	1.29	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/18/2013	**6.30**	<1.00	0.820 J	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/21/2020	1.3	2.94	2.32	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/25/2022	1.17	3.60	2.76	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-19	2/16/1996	**9.1**	0.51	<0.50	<0.50	<0.50	<0.50	1.1	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1996	**12.7**	0.69	<0.20	<0.20	<0.50	<0.50	1.27	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.25	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/20/1996	**10.7**	0.58	<0.20	<0.20	<0.50	<0.50	1.25	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.22	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/12/1999	**8.8**	0.55	<0.20	<0.20	<0.50	<0.50	1.3	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.20	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/25/2000	**9.9**	0.54	<0.50	<0.50	<0.50	<0.50	1.2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2001	**8.7**	0.58	<0.50	<0.50	<0.50	<0.50	0.7	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/24/2002	**7.45**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/6/2004	**7.91**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006	**6.28**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006(dup)	**5.99**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**4.43**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/25/2011	**4.05**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2017	**3.43**	0.609 J	<0.50	2.28	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/21/2020	**2.87**	0.731 J	0.455 J	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	1.84	0.687 J	0.456 J	0.318 J	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-20	2/16/1996	**3.5**	1.1	0.97	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	2/16/1996(dup)	**3.5**	1.1	1	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1996	**4.17**	1.47	1.1	<0.20	<0.50	<0.50	2.18	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.20	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/13/1996(dup)	**3.43**	1.25	0.97	<0.20	<0.50	<0.50	2.01	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.20	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	11/20/1996	**3.2**	1.17	0.9	<0.20	<0.50	<0.50	1.82	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.20	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/5/1999	**2.8**	0.89	0.68	<0.20	<0.50	<0.50	0.81	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.20	<0.30	<0.50	<1.5	<0.50	<0.50	<0.50
	8/30/2000	**2.8**	0.8	0.71	<0.50	<0.50	<0.50	0.94	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2001	2.6	0.92	0.71	<0.50	<0.50	<0.50	0.71	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/4/2004	1.72	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
MW-23	8/19/1999	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	6.2	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	8/23/2000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	7.6	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
MW-25	9/26/2001	**3.2**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/3/2002	2.61	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/21/2003	**3**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/4/2004	2.49	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/14/2006	2.7	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
MW-26	9/26/2001	**11**	6.1	1.8	<0.50	<0.50	<0.50	5.6	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	0.79	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/18/2002	**18.4**	4.17	1.94	<1.00	<0.50	<0.50	4.45	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.52	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/18/2002(dup)	**18.5**	4.12	1.87	<1.00	<0.50	<0.50	4.36	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.52	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/21/2003	**14.9**	2.82	1.43	<1.00	<0.50	<0.50	3.28	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-26 continued	10/4/2004	**12.3**	3.77	1.64	<1.00	<0.50	<0.50	2.85	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/14/2006	**13.8**	4.93	2.03	<1.00	<0.50	<0.50	2.5	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.41	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/2007	**8.2**	2.8	1.7	<1.0	<0.50	<0.50	0.68 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.35 J	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/2007(dup)	**8.3**	2.5	1.6	<1.0	<0.50	<0.50	0.56 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.38 J	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**7.31**	5.42	3.15	<1.00	<0.50	<0.50	1.10	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/26/2011	**4.19**	4.89	4.42	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/3/2012	**3.2**	4.89	4.89	<0.620	<0.50	<0.50	<0.620	<0.25	<0.50	<2.5	<0.50	<0.620	<2.5	<0.240	<0.620	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2017	1.94	7.67	6.13	1.55	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	0.157 J	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	1.98	5.55	4.99	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	0.138 J	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	1.80	4.84	4.43	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-27	9/25/2001	**3.4**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/23/2002	2.69	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/20/2003	**2.85**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/4/2004	1.76	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/4/2004(dup)	1.84	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/21/2020	0.840 J	<0.500	0.339 J	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	0.550 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-28	9/25/2001	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/23/2002	2.52	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/22/2003	2.05	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/4/2004	1.58	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
MW-29	9/27/2001	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/23/2002	1	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/21/2003	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/7/2004	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	0.509 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	0.417 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-30	9/27/2001	**8.8**	1	<0.50	<0.50	<0.50	<0.50	0.96	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/18/2002	**7.48**	<1.00	<1.00	<1.00	<0.50	<0.50	1.13	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/21/2003	**10**	1.07	<1.00	<1.00	<0.50	<0.50	1.41	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/7/2004	**7.18**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/14/2006	**7.97**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/19/2007	**6.9**	1.2	0.80 J	<1.0	<0.50	<0.50	0.34 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	1/27/2009	**5.31**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/26/2011	**5.43**	1.36	1.18	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2013	**5.68**	2.06	1.92	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/15/2013(dup)	**5.39**	2.04	1.83	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/20/2020	1.92	0.792 J	1.04	<0.500	<0.500	<0.500	0.536 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/26/2022	1.23	0.323 J	0.509 J	<0.500	<0.500	<0.500	0.705 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-31	9/20/2001	**7.1**	0.57	<0.50	<0.50	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/19/2002	**7.31**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.500	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/23/2003	**5.8**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/11/2004	**5.22**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/19/2005	**4.77**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/19/2005(dup)	**4.6**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006	**4.55**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/22/2020	1.94	0.314 J	<0.500	0.346 J	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/25/2022	1.43	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-32	9/20/2001	**360**	**77**	5.5	0.78	<0.50	<0.50	14	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.1	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/20/2001(dup)	**380**	**77**	5.5	0.78	<0.50	<0.50	14	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	1.1	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/19/2002	**320**	**87.5**	4.82	<1.00	<0.50	<0.50	10.5	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.79	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/21/2003	**230**	**59.5**	3.28	<1.00	<0.50	<0.50	5.63	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.52	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/11/2004	**225**	**69.6**	3.53	<1.00	<0.50	<0.50	3.01	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/19/2005	**204**	**62.3**	3.15	<1.00	<0.50	<0.50	2.76	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/27/2006	**163**	**63.4**	2.25	<1.00	<0.50	<0.50	1.54	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/20/2009	**59.6**	**99.9**	2.16	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/26/2011	**27**	**61.4**	1.39	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/18/2013	**11.4**	**59.7**	1.74	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/22/2020	2.04	**43.3**	2.44	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/25/2022	1.74	25.4	2.10	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-34	10/29/2003	**8.02**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	3.38	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004	**6.72**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/12/2006	**6.96**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/29/2006(dup)	**6.37**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/29/2006	**6.4**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/20/2007	**5.2**	0.68 J	0.28 J	<1.0	<0.50	<0.50	0.27 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2009	**5.55**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	**4.69**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2017	**3.55**	0.954 J	0.547 J	4.45	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	0.32 J	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	0.496 J	0.865 J	1.56	<0.500	<0.500	<0.500	0.411 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	2.11	0.912 J	0.712 J	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-35	10/29/2003	**9.2**	<1.00	<1.00	<1.00	<0.50	<0.50	1.07	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004	**8.59**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004(dup)	**8.64**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/12/2006	**10.2**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/29/2006(dup)	**9.06**	1.03	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/20/2007	**7.7**	1.1	0.46 J	<1.0	<0.50	<0.50	0.43 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	2/23/2009	**7.1**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	**5.43**	1.11	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-35 continued	8/8/2012	**5.4**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/14/2013	**5.9**	1.07	0.820 J	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	2.44	0.805 J	0.703 J	<0.500	<0.500	<0.500	0.444 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/19/2020(dup)	2.43	0.816 J	0.717 J	<0.500	<0.500	<0.500	0.439 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	1.78	0.681 J	0.631 J	<0.500	<0.500	<0.500	0.485 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-38	10/14/2004	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/11/2006	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/30/2006(dup)	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/17/2007	1.2	0.91 J	0.63 J	0.11 J	<0.50	<0.50	0.64 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.14 J	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	1.4	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/16/2013	1.28	1.03	0.940 J	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014	1.16	0.660 J	0.720 J	<1.00	<0.50	<0.50	0.510 J	<0.25	<0.50	<2.5	<0.50	0.660 J	<2.5	<0.200	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	0.899 J	0.534 J	0.640 J	<0.500	<0.500	<0.500	0.395 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<1.00 B*	<0.500	<1.50	<0.500	<0.500	<0.500
	5/23/2022	0.758 J	0.500 J	0.575 J	<0.500	<0.500	<0.500	0.382 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-39	10/14/2004	<1.00	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/11/2006	1.16	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/30/2006(dup)	1.31	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/17/2007	0.92 J	0.96 J	0.28 J	<1.0	<0.50	<0.50	0.58 J	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	0.14 J	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	1.31	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/16/2013	1.63	1.08	1.01	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	9/22/2014	1.09	0.870 J	0.910 J	<1.00	<0.50	<0.50	0.470 J	<0.25	<0.50	<2.5	<0.50	0.770 J	<2.5	0.140 J	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	0.781 J	0.603 J	0.801 J	<0.500	<0.500	<0.500	0.390 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/23/2022	0.616 J	0.565 J	0.735J	<0.500	<0.500	<0.500	0.366 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-103	10/24/1997	**4.03**	2.09	<1.0	<1.0	<0.50	<0.50	2.75	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	**185**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/23/1998	**5**	2.6	<1.0	<1.0	<0.50	<0.50	2.4	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	**210**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999	**4.03**	2.04	<1.0	<1.0	<0.50	<0.50	1.96	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	**40.5**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/24/2000	**3.2**	1.3	<0.50	<0.50	<0.50	<0.50	1.4	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	**7.4**	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/19/2001	**4.2**	1.8	0.93	<0.50	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.50	<2.5	4.2	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2002	**3.6**	1.4	<1.0	<1.0	<0.50	<0.50	1.5	<0.25	<0.50	<2.5	<0.50	<1.0	<2.5	1.7	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004	**3.25**	1.38	1.43	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.8	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	1.32	1.07	3.07	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<1.00	<2.5	0.56	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/22/2017	0.840 J	0.723 J	0.749 J	0.66 J	<0.50	<0.50	<0.50	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	0.381 J	0.318 J	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-104	8/6/1997	**9.06**	1.39	<1.0	<1.0	<0.50	<0.50	2.17	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**82.2**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	9/25/1997	**9.44**	1.53	<1.0	<1.0	<0.50	<0.50	2.26	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**76.8**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/24/1997	**8.63**	1.45	<1.0	<1.0	<0.50	<0.50	2.56	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**62.3**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/24/1997(dup)	**8.6**	1.48	<1.0	<1.0	<0.50	<0.50	2.68	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**61.5**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/23/1998	**9.7**	1.6	0.65	<1.0	<0.50	<0.50	<1.0	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**25**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999	**7.42**	1.22	<1.0	<1.0	<0.50	<0.50	1.61	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	3.32	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-104 continued	8/24/2000	**6.6**	1.1	0.84	<0.50	<0.50	<0.50	1.5	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	0.56	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/19/2001	**6.4**	1.5	1.2	<0.50	<0.50	<0.50	1.6	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004	**3.63**	1.11	1.39	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	1.32	1.2	3.41	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/22/2017	0.991 J	0.899 J	1.35	1.91	<0.50	<0.50	0.409 J	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	0.674 J	0.758 J	1.17	<0.500	<0.500	<0.500	0.419 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	0.543 J	0.730 J	1.07	<0.500	<0.500	<0.500	0.417 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-105	10/24/1997	**7.69**	1.14	<1.0	<1.0	<0.50	<0.50	1.95	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/23/1998	**8.8**	1.2	0.62	<1.0	<0.50	<0.50	1.6	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999	**6.69**	1.05	<1.0	<1.0	<0.50	<0.50	1.28	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/24/2000	**5.9**	0.94	0.71	<0.50	<0.50	<0.50	1.2	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/19/2001	**5.2**	1.1	0.97	<0.50	<0.50	<0.50	1.3	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/8/2004	**3.04**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/28/2011	1.59	<1.00	1.7	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/22/2017	1.3	0.466 J	0.53 J	1.58	<0.50	<0.50	0.415 J	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	1.02	0.404 J	0.500 J	<0.500	<0.500	<0.500	0.435 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/24/2022	0.841 J	0.443 J	0.538 J	<0.500	<0.500	<0.500	0.433 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-106	10/23/1997	**7.55**	1.35	<1.0	<1.0	<0.50	<0.50	2.39	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**31.3**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/24/1998	**9.2**	1.5	0.73	<1.0	<0.50	<0.50	2.3	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**16**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999	**7.23**	1.26	<1.0	<1.0	<0.50	<0.50	1.71	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	2.81	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	9/6/2000	**7.4**	1.4	1.1	<0.50	<0.50	<0.50	1.8	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	0.76	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/21/2001	**6.4**	1.4	1.3	<0.50	<0.50	<0.50	1.6	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	0.5	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/22/2003	**4.36**	1.42	2.09	<1.00	<0.50	<0.50	1.2	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/12/2006	2.22	1.43	1.96	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
MW-107	10/23/1997	**6.28**	1.23	<1.0	<1.0	<0.50	<0.50	2.45	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**8.55**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/24/1998	**8.9**	1.4	0.54	<1.0	<0.50	<0.50	2.5	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**6.5**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999	**7.83**	1.19	<1.0	<1.0	<0.50	<0.50	1.95	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	1.13	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	9/7/2000	**8.5**	1.2	0.74	<0.50	<0.50	<0.50	2	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/21/2001	**7.5**	1.3	0.9	<0.50	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	10/22/2003	**6.75**	1.19	1.19	<1.00	<0.50	<0.50	1.06	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	10/22/2003(dup)	**6.69**	1.35	1.37	<1.00	<0.50	<0.50	1.17	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/12/2006	**6.88**	1.06	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	8/17/2007	**5.2**	1.1	0.71 J	<1.0	<0.50	<0.50	0.52 J	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	1/26/2009	**4.6**	1.03	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	**3.85**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/22/2017	2.2	0.784 J	0.912 J	4.33	<0.50	<0.50	0.385 J	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	0.426 J	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	1.76	0.711 J	0.915 J	<0.500	<0.500	<0.500	0.415 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/23/2022	1.31	0.597 J	0.735 J	<0.500	<0.500	<0.500	0.423 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
MW-108	10/23/1997	**7.64**	1.25	<1.0	<1.0	<0.50	<0.50	2.57	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	**5.09**	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	6/24/1998	**10**	1.4	<1.0	<1.0	<0.50	<0.50	2.4	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	2.8	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50

Table 3 - Historical Summary of Groundwater Results (µg/L)

Analyte Type		Chlorinated Ethenes					Chlorinated Ethanes				Halomethanes				BTEX				VOCs		
Cleanup Level †		2.8	36	360	41	280	8,000	28	1.7	21,000	7.5	2.2	190	110	4.6	1,100	15	190	1.7	1,000	300
Monitoring Well	Sample Date	Trichloro-ethene (TCE)	cis-1,2-Dichloroethene (cDCE)	trans-1,2-Dichloroethene (tDCE)	Tetrachloro-ethene (PCE)	1,1-Dichloroethene (1,1-DCE)	1,1,1-Trichloroethane (TCA)	1,1-Dichloroethane (1,1-DCA)	1,2-Dichloroethane (1,2-DCA)	Chloroethane	Bromomethane	Chloroform	Chloromethane	Methylene Chloride (Dichloromethane)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	n-Butylbenzene	1,2-Dichloro-benzene
MW-108 continued	8/11/1999	**9.12**	1.17	<1.0	<1.0	<0.50	<0.50	1.96	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	8/11/1999(dup)	**8.78**	1.11	<1.0	<1.0	<0.50	<0.50	1.79	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<1.0	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	9/6/2000	**10**	1.2	<0.50	<0.50	<0.50	<0.50	2.1	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/6/2000(dup)	**10**	1.1	<0.50	<0.50	<0.50	<0.50	2.1	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/28/2001	**8.7**	1.3	0.56	<0.50	<0.50	<0.50	1.8	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/28/2001(dup)	**8.6**	1.3	0.52	<0.50	<0.50	<0.50	1.7	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	9/26/2002	**8**	1.1	<1.0	<1.0	<0.50	<0.50	1.5	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.50	<1.0	<0.50	<1.5	<0.50	<0.50	<0.50
	10/14/2004	**6.38**	<1.00	<1.00	<1.00	<0.50	<0.50	1.03	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	4/12/2006	**7**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	1/26/2009	**4.81**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	1/26/2009(dup)	**4.83**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011	**4.59**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	7/27/2011(dup)	**4.52**	<1.00	<1.00	<1.00	<0.50	<0.50	<1.00	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.400	<1.00	<0.50	<1.5	<0.50	<0.50	<0.50
	2/22/2017	2.36	0.694 J	0.583 J	4.9	<0.50	<0.50	0.357 J	<0.25	<0.50	<2.5	<0.50	<0.5 J*	<2.5	<0.20	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50
	5/19/2020	2.02	0.606 J	0.586 J	<0.500	<0.500	<0.500	0.403 J	<0.250	<0.500	<2.50	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/23/2022	1.44	0.474 J	0.429 J	<0.500	<0.500	<0.500	0.381 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500
	5/23/2022(dup)	1.45	0.473 J	0.419 J	<0.500	<0.500	<0.500	0.379 J	<0.250	<0.500	<3.00	<0.500	<0.500	<5.00	<0.200	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500

NOTES:
- Historically detected analytes are presented.
- † Cleanup Level obtained from 18 AAC 75.341 Table C - Groundwater Cleanup Levels Table
- **BOLD** Detected result exceeds DEC Groundwater Cleanup Level.
- < Analyte not detected; listed as less than the limit of detection (LOD) unless otherwise flagged due to quality-control failures.
- J Estimated concentration, detected greater than the detection limit (DL) and less than the limit of quantitation (LOQ). Flag applied by the laboratory.
- <J* Non-detected estimated concentration due to quality control failures. Flag applied by Shannon & Wilson, Inc.
- B Result is considered not detected due to potential bias identified in quality control samples. Flag applied by Shannon & Wilson, Inc. (*)
- D Secondary dilution required for result to fall within instrument calibration range.
- (dup) Field duplicate of preceding sample.

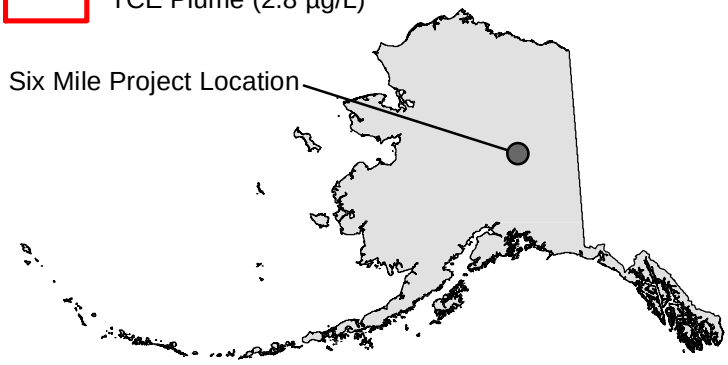
BTEX = benzene, toluene, ethylbenzene, and xylenes; DEC = Alaska Department of Environmental Conservation; LOD = limit of detection; LOQ = limit of quantitation; µg/L = microgram per liter; MW = monitoring well; VOC = volatile organic compound

Map adapted from aerial imagery provided by Pictometry International Corporation, 2017.

LEGEND

TCE Plume (2.8 µg/L)

Six Mile Project Location



0 0.5 1 1.5 2

Miles

N

Six Mile Richardson Highway
2022 Groundwater Investigation
North Pole, Alaska

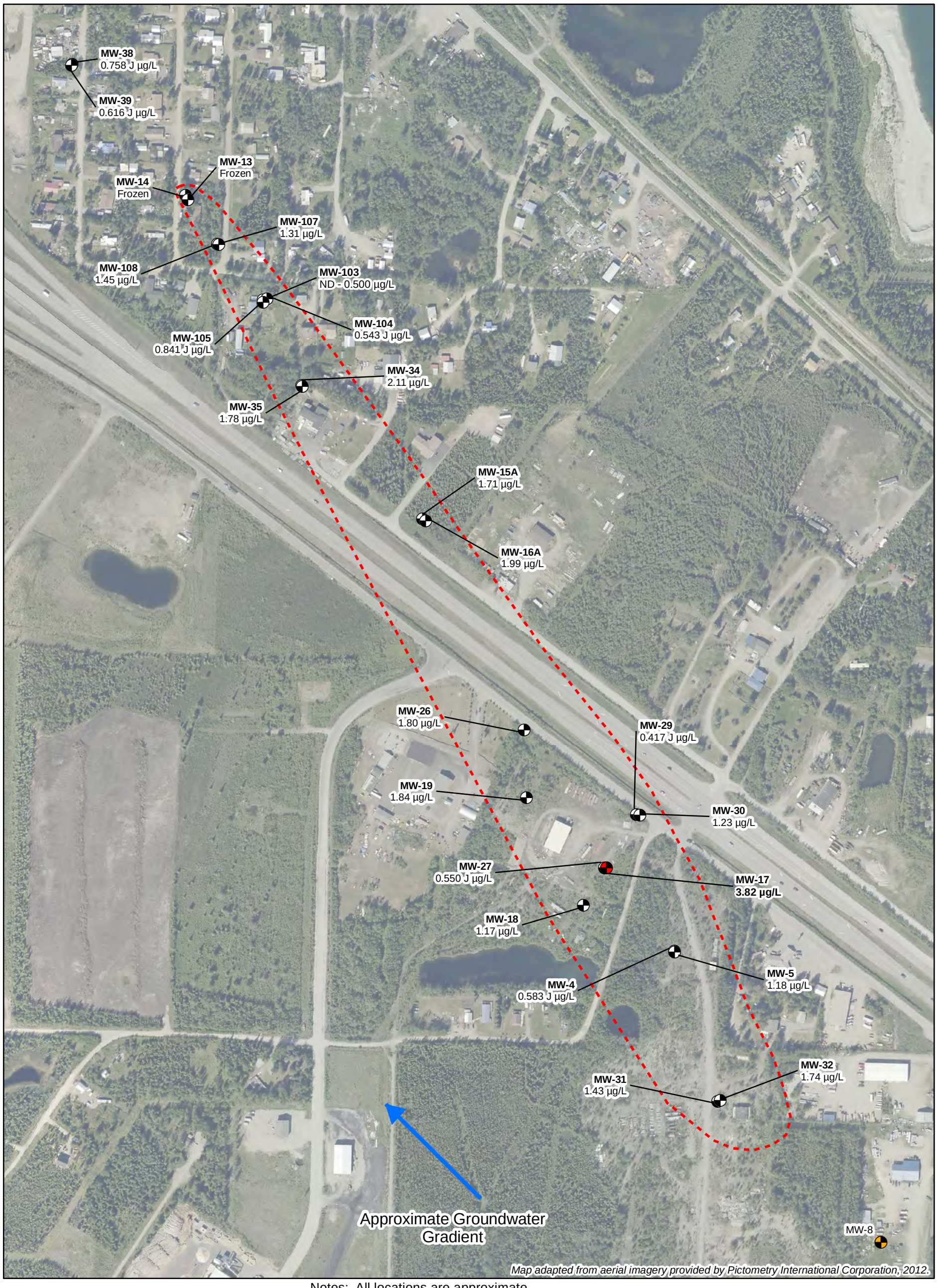
SITE VICINITY

July 2022

103822-003

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 1



LEGEND

2017 TCE Plume (2.8 µg/L)

Monitoring Wells

- Decommissioned
- Results Less Than Cleanup Level
- Results Exceed Cleanup Level

Notes: All locations are approximate.
No analytes exceed regulatory limits apart from TCE.
J - estimated concentration less than the LOQ.
ND - Analyte not detected; reported to the LOD.
TCE: Trichloroethene; µg/L: micrograms per liter
BOLD: Analyte exceeds cleanup level

0 500 1,000
Feet

N

Six Mile Richardson Highway
2022 Groundwater Investigation
North Pole, Alaska

2022 MONITORING WELL TCE RESULTS

July 2022 103822-003

SHANNON & WILSON, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 2

APPENDIX A: FIELD FORMS

Appendix A

Field Forms

CONTENTS

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: APM
Weather Conditions: Overcast Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/25/22
Well: MW-04
Time started: 1100
Time completed: 1228

Sample No.: MW-04 Time: 1203
Duplicate: — Time: —
Equipment Blank: ✓ Time: —

Pump: Hurricane A
Pumping Start: 1136
Purge Rate (gal./min.): 0.2 > 5.4 gallons
Pumping End: 1203

Pump Set Depth Below MP (ft.): 73
Tubing (ft.): 80

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 74.08 + 1.52 = 75.6
Depth to Water Below MP (ft.): 6.77
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 68.83
Gallons per foot: 0.17
Gallons in Well: 11.7
Purge Water Volume (gal.): 35.1
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: OK

Casing Condition: Frost jacked

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): -0.3 (casing above monument +)
Monument to ground surface (ft.): 2.55

☑ Lock present and operational: sticky
☑ Well No. legible on outside of well: No, Re-wrote w/ sharpie
☑ Evidence of frost-jacking? (explain if checked): yes,

Notes: Cut casing 5/26

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

~0.1 ~0.08 **FIELD PARAMETERS** [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1138	3.5	3.68	228.9	5.40	291.9	clear
1141	3.2	1.57	229.5	6.21	283.9	clear
1147	3.0 ·	0.92	~~389.2~~ 229.9	6.66	261.3	clear ·
1150	3.0 ·	0.85 x	224.8 ·	6.74 x	259.4 x	clear
1153	3.0 ·	0.78 x	223.8 ·	6.85 x	240.5 x	clear
1157	3.0 ·	0.73 ·	223.3 ·	6.91 ·	223.3 x	clear
1200	3.0	0.74 ·	223.2 ·	6.93 ·	212.1 x	clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-04

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: Aaron
Weather Conditions: overcast, breezy Air Temp. (°F) 60s

Project No. *103822-004*
Date 5/25/22
Well MW-05
Time started 1230
Time completed 1315

Sample No. MW-05 Time 1306
Duplicate — Time —
Equipment Blank — Time —

Pump Hurricane A
Pumping Start 1235
Purge Rate (gal./min.) 0.1 > 3.1 gallons
Pumping End 1306

Pump Set Depth Below MP (ft.) 23.0
Tubing (ft.) 25

Diameter and Type of Casing 2" PVC
Approximate Total Depth of Well Below MP (ft.) —
Measured Total Depth of Well Below MP (ft.) 23.68 + 1.52 = 25.2
Depth to Water Below MP (ft.) 7.26
Depth to Ice (if frozen) Below MP (ft.) —
Feet of Water in Well 17.94
Gallons per foot 0.17
Gallons in Well 3
Purge Water Volume (gal.) 9
Purge Water Disposal *GAC or (Purge to Ground)*

Monument Condition ~~good~~ OK
Casing Condition frost jacked

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *(Stickup) / Flushmount*
Measurement method: *Rod & level / (Tape measure)*

Top-of-casing to monument (ft.) -0.37 (casing jacked above monument)
Monument to ground surface (ft.) 2.71

- [x] Lock present and operational — frost jacked
- [x] Well No. legible on outside of well No, re-wrote w/ sharpie
- [x] Evidence of frost-jacking? (explain if checked) yes

Notes Cut casing 5/26

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	(2)	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations _____

Notes _____

~0.5 ~0.04

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1236	2.5	4.83	246.0	7.01	120.2	Silty
1239	2.2	1.01	242.7	6.96	~~459.4~~	clear, some sand/grit in line
1244	1.7	0.55	237.9	7.02	26.6	
1247	1.8 x	0.49 x	238.5	7.08	18.3	
1250	1.6	0.42 x	237.5	7.05	~~40~~ 9.9 x	
1253	1.6	0.38 x	237.5	7.06	3.3 x	
1256	[redacted]	0.35	237.9	7.07	-3.8	
1300	1.7	0.35	238.2	7.08	-9.7	
1303	1.8	0.36	238.5	7.09	-13.4	

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☑	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-05

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM
Weather Conditions: — Air Temp. (°F): —

Project No.: *103822-004*
Date: 5/23-5/25/22
Well: MW-13
Time started:
Time completed:

Sample No.: MW-13 Time: N/A
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump:
Pumping Start:
Purge Rate (gal./min.):
Pumping End:

Pump Set Depth Below MP (ft.):
Tubing (ft.):

Diameter and Type of Casing:
Approximate Total Depth of Well Below MP (ft.):
Measured Total Depth of Well Below MP (ft.):
Depth to Water Below MP (ft.):
Depth to Ice (if frozen) Below MP (ft.): ~ 7
Feet of Water in Well:
Gallons per foot:
Gallons in Well:
Purge Water Volume (gal.):
Purge Water Disposal: ~~GAC~~ or ~~Purge to Ground~~

Monument Condition:
Casing Condition:

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.):
Monument to ground surface (ft.):

- ☑ Lock present and operational
- ☑ Well No. legible on outside of well
- ☐ Evidence of frost-jacking? (explain if checked)

Notes: Frozen Well – No Sample
- Multiple attempts were made to break through the ice lens. (eg. chimney sticks [used for surging during MW development] to stab ice).

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument _____ Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations _____

Notes _____

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)

Frozen well
No sample

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☐	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-13

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM
Weather Conditions: — Air Temp. (°F): —

Project No. *103822-004*
Date: 5/23 - 5/25/22
Well: MW-14
Time started: /
Time completed: /

Sample No.: MW-14 Time: N/A
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: /
Pumping Start: /
Purge Rate (gal./min.): /
Pumping End: /

Pump Set Depth Below MP (ft.): /
Tubing (ft.): /

Diameter and Type of Casing: /
Approximate Total Depth of Well Below MP (ft.): /
Measured Total Depth of Well Below MP (ft.): /
Depth to Water Below MP (ft.): /
Depth to Ice (if frozen) Below MP (ft.): 7.26
Feet of Water in Well: /
Gallons per foot: /
Gallons in Well: /
Purge Water Volume (gal.): /
Purge Water Disposal: ~~GAC~~ or ~~Purge to Ground~~

Monument Condition: /
Casing Condition: /

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): /
Monument to ground surface (ft.): /

- ☑ Lock present and operational
- ☑ Well No. legible on outside of well
- ☐ Evidence of frost-jacking? (explain if checked)

Notes: Frozen Well
- Multiple attempts were made to break through the ice lens. (e.g. used chimney sticks [for surging during development] to stab ice).

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument ______ Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations ______

Notes ______

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)

No Sample

Frozen

Well

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☐	~~*VOCs*~~	~~*(3) 40-mL amber VOA vials*~~	~~*HCl, 0 to 6 °C*~~	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-14

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ALM, CZH
Weather Conditions: Sunny Air Temp. (°F): 70s

Project No.: *103822-004*
Date: 5/24/22
Well: MW-15A
Time started: 1545
Time completed: 1700

Sample No.: MW-15A Time: 1647
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1602
Purge Rate (gal./min.): 0.1
Pumping End: 1647

Pump Set Depth Below MP (ft.): ~75
Tubing (ft.): 85

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 76.5 + 0.41 = 76.91
Depth to Water Below MP (ft.): 5.58
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 71.33
Gallons per foot: 0.17
Gallons in Well: 12.1
Purge Water Volume (gal.): 36.4
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: good
Casing Condition: Fine - leaning against Monument

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.42
Monument to ground surface (ft.): 2.99

- [x] Lock present and operational
- [x] Well No. legible on outside of well inside
- [x] Evidence of frost-jacking? (explain if checked) leaning

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

Well No. MW-15A

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: (circled) Parameters stabilized or > 3 well volumes purged

Sample Observations

Notes

±.1 ± 0.05 **FIELD PARAMETERS** [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1605	3.0	1.7	~~[illegible]~~ 26.1	420.6	[illegible] 17.2	clear
1608	2.8	0.95	~~[illegible]~~ 417.2	~~417~~ 26.6	~~6~~ 147.2	clear
1611	3.8 x	0.72 x	426.9	6.87 x	124.2	clear
1618	3.2 ✓	0.52 x	423.5	7.04 x	99.6 x	clear
1623	3.1	0.46 ✓	423.1	7.09 ·	74.2 x	clear
1626	2.9 ·	0.42 x	425.0	7.11 ·	65.0 x	clear
1632	2.9 ·	0.36 ✓	427.5 ·	7.13 ·	52.6 x	clear
1635	3.0 ·	0.37 x	424.7 ·	7.14 ·	47.7 *	clear
1638	3.0 x	0.32 ·	432.4 ·	7.14 ·	41.9 ·	clear
1641	2.9 ✓	0.31 ·	431.7 ·	7.14 ·	37.6 ·	clear
1644	2.8	0.31 ·	430.1	7.15	33.5	clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-15A

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM, CZH
Weather Conditions: Sunny Air Temp. (°F):

Project No.: *103822-004*
Date: 5/24/22
Well: MW-16A
Time started: ~~1~~ 1700
Time completed: 1800

Sample No.: MW-16A Time: 1742
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1705
Purge Rate (gal./min.): .06
Pumping End: 1742

Pump Set Depth Below MP (ft.): ~20
Tubing (ft.): 32

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 22.61+0.4E
Depth to Water Below MP (ft.): 5.67 23.02
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 17.35
Gallons per foot: 0.17
Gallons in Well: ~3
Purge Water Volume (gal.): 9
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: Good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.73
Monument to ground surface (ft.): 3.25

- [x] Lock present and operational
- [x] Well No. legible on outside of well inside monument
- [ ] Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations _____

Notes _____

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1708	2.8	1.32	494.8	7.0	70.1	Cloudy
1711	3.4	0.90	502.0	7.02	45.0	Slightly cloudy
1714	4.7	0.75	517.0	7.02	28.9	Slightly cloudy
1717	2.4	0.59	484.5	7.06	15.3	Slightly cloudy
1720	3.5	0.51	501.0	7.06	4.8	Mostly clear
1723	1.9	0.41	477.2	7.07	-0.9	Clear
1726	4.0	0.38	501.0	7.07	-7.7	Clear
1729	3.2	0.40	495.9	7.07	-9.5	Clear
1732	4.1	0.36	503.0	7.05	-11.0	Clear
1736	4.0	0.36	506.8	7.06	-12.2	Clear
1739	3.5	0.37	500.0	7.07	-12.3	Clear
1742	Sample					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☑	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-16A

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM, CZH
Weather Conditions: Windy Air Temp. (°F): 60S

Project No.: *103822-004*
Date: 5/26/22
Well: MW-17
Time started: 1445
Time completed: 1545

Sample No.: MW-17 Time: 1534
Duplicate: MW-917 Time: 1524
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1457
Purge Rate (gal./min.): 0.1
Pumping End: 1534

Pump Set Depth Below MP (ft.): 27
Tubing (ft.): 30

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.):
Measured Total Depth of Well Below MP (ft.): 28.9 MT.41 =
Depth to Water Below MP (ft.): 8.12
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 21.23
Gallons per foot: 0.17
Gallons in Well: 36
Purge Water Volume (gal.): 10.8
Purge Water Disposal: (GAC) or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: (*Stickup*) / *Flushmount*
Measurement method: *Rod & level* / (*Tape measure*)

Top-of-casing to monument (ft.): 0.24
Monument to ground surface (ft.): 3.28

☒ Lock present and operational
☒ Well No. legible on outside of well
☒ Evidence of frost-jacking? (explain if checked) Casing leaning against monument

Notes: MW-5 cut 0.31' of casing

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations

Notes

~0.1 ~0.4 **FIELD PARAMETERS** [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1454	6.0	1.84	267.7	7.04	35.4	Silty
1502	6.0	1.23	266.0	7.04	15.5	Silty
1506	7.9	0.83	276.8	7.06	-2.1	Cloudy
1509	6.4	0.94	277.5	7.05	0.7 x	|
1513	7.1 x	0.61 x	269.3 x	7.06	-7.9	|
1516	3.9 x	0.55 x	253.6	7.08	-11.8	|
1519	3.5 x	0.45 x	246.8	7.08	-17.5	|
1522	3.3	0.43 x	244.0	7.06	-23.2	Clear
1525	3.3	0.39	245.2	7.08	-25.8	clear
1528	3.7 x	0.37	245.9	7.08	-28.7	clear
1531	3.2	0.36	245.1	7.04	-30.9	clear
1534	SAMPLES		SAMPLES			clear

Laboratory SGS North America Inc.

Analysis	Sample Containers	Preservation	DUP / EB
☑ VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐			☐
☐			☐
☐			☐
☐			☐

Well No. MW-17

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: AKM
Weather Conditions: Overcast Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/25/22
Well: MW-18
Time started: 1340
Time completed: 1500

Sample No.: MW-18 Time: 1439
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: HurricaneA
Pumping Start: 1403 (47 minutes)
Purge Rate (gal./min.): 0.2
Pumping End: 1439

Pump Set Depth Below MP (ft.): 24.5
Tubing (ft.): 30

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 24.79+1.52=26.31
Depth to Water Below MP (ft.): 7.8
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 18.51
Gallons per foot: 0.17
Gallons in Well: 3.1
Purge Water Volume (gal.): 9.4
Purge Water Disposal: GAC or *Purge to Ground*

Monument Condition: — — frost jacking evident
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): .09
Monument to ground surface (ft.): 3.9

☒ Lock present and operational Had to cut lock - replaced lock 5/26/22
☒ Well No. legible on outside of well yes
☒ Evidence of frost-jacking? (explain if checked) collar of monument is ~~bbb~~ skewed

Notes: Cut casing

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: Parameters stabilized or > 3 well volumes purged

Sample Observations

Notes Hard to get flow low w/o introducing air bubbles or stopping flow

~.1 ~.04

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1405	4.6	4.11	271.3	6.82	86.3	Very Silty/white
1408	3.1	1.68	261.8	6.86	37.4	Cloudy/silty
1413	3.0	1.27	259.4	6.87	26.5	cloudy
1416	2.7	0.99 x	253.9	6.90	14.8 x	cloudy
1419	2.7	0.79 x	252.3	6.93	3.5 x	cloudy
1422	3.0 x	0.69 x	252.2	6.94	-2.2 x	cloudy
~~1425~~	~~3.4 x~~					
1426	2.8 x	0.58 x	246.1	6.92	21.0 x	cloudy
1430	3.1	0.46 x	251.3	6.95	0.9 x	less cloudy
1433	3.0	0.43	249.3	6.96	-9.2 x	clear
1436	3.0	0.43	2500	6.96	-12.1	clear

Flow stopped

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☒	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-18

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: CZH, ARM
Weather Conditions: Partly Cloudy Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/26/22
Well: MW-19
Time started: 1415
Time completed: 1700

Sample No.: MW-19 Time: 1652
Duplicate: EB-19 Time: 1642
Equipment Blank: Time:

Pump: Hurricane A
Pumping Start: 1615
Purge Rate (gal./min.): 0.1
Pumping End: 1652

Pump Set Depth Below MP (ft.): 79
Tubing (ft.): 85

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.):
Measured Total Depth of Well Below MP (ft.): 81.57 + .41 = 81.98
Depth to Water Below MP (ft.): 9.19
Depth to Ice (if frozen) Below MP (ft.):
Feet of Water in Well: 72.79
Gallons per foot: 0.17
Gallons in Well: 12.37
Purge Water Volume (gal.): 37.12
Purge Water Disposal: (GAC) or Purge to Ground

Monument Condition: Good
Casing Condition: Good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: (Stickup) / Flushmount
Measurement method: Rod & level / (Tape measure)

Top-of-casing to monument (ft.): 0.22
Monument to ground surface (ft.): 2.86

- [x] Lock present and operational
- [x] Well No. legible on outside of well
- [x] Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations _____

Notes _____

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1618	5.7	2.15	237.2	7.20	80.3	Clear
1621	4.6	1.04	229.3	7.17	37.4 x	Clear
1626	3.3	0.50 x	219.4	7.20	12.4	Clear
1629	3.2	0.44 x	220.2	7.21	5.0 x	Clear
1632	3.2	0.36 x	221.4	7.23	-5.3 x	Clear
1635	4.9 x	0.35 x	227.1	7.23	-14.8	Clear
1640	3.9 x	0.42 x	225.2	7.24	-17.6	Clear
1643	3.7	0.36 x	223.3	7.24	-21.6	Clear
1646	3.7	0.35	223.8	7.24	-24.8	Clear
1649	3.6	0.34	223.6	7.24	-27.9	Clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-19

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: CZH
Weather Conditions: Overcast Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/26/22
Well: MW-26
Time started: 10:38
Time completed: 1107

Sample No.: MW-26 Time: 1102
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 10:38
Purge Rate (gal./min.): 0.16
Pumping End: 1107

Pump Set Depth Below MP (ft.): ~30
Tubing (ft.): 38

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 31.23 + 1.52 = 32.75
Depth to Water Below MP (ft.): 8.53
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 24.22
Gallons per foot: 0.17
Gallons in Well: 4.18
Purge Water Volume (gal.): 12.54
Purge Water Disposal: GAC or (Purge to Ground)

Monument Condition: Good
Casing Condition: Good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: (Stickup) / Flushmount
Measurement method: Rod & level / (Tape measure)

Top-of-casing to monument (ft.): 0.32
Monument to ground surface (ft.): 3.11

- [x] Lock present and operational
- [x] Well No. legible on outside of well under cap
- [x] Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI 6 C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
10:41	2.9	4.20	279.5	6.58	52.3	Slightly cloudy
10:44	4.1	1.90	287.2	6.72	32.4	Slightly cloudy
10:47	3.7	1.50	166.2	6.80	21.9	Clear
10:50	2.9	1.33	277.1	6.78	32.0	Clear
10:53	3.0	1.31	278.0	6.83	15.0	Clear
10:56	3.0	1.23	277.4	6.86	2.6	Clear
10:59	2.9	1.18	276.2	6.87	-2.9	Clear
11:02	Sample					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-26

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: CZH, ARM
Weather Conditions: overcast Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/26/22
Well: MW-27
Time started: 1345
Time completed: 1430

Sample No.: MW-27 Time: 1416
Duplicate: — Time: —
Equipment Blank: ✓ Time: —

Pump: Hurricane A
Pumping Start: 1345
Purge Rate (gal./min.): 0.2
Pumping End: 1416

Pump Set Depth Below MP (ft.): ~70
Tubing (ft.): 85

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 71.8 + .41 = 72.21
Depth to Water Below MP (ft.): 7.23
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 64.99
Gallons per foot: 0.17
Gallons in Well: 11.04
Purge Water Volume (gal.): 33.14
Purge Water Disposal: GAC or ~~Purge to Ground~~

Monument Condition: Good

Casing Condition: Good

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: ~~Stickup~~ / *Flushmount*
Measurement method: *Rod & level* / ~~*Tape measure*~~

Top-of-casing to monument (ft.): 0.72
Monument to ground surface (ft.): 2.78

☑ Lock present and operational
☒ Well No. legible on outside of well
☑ Evidence of frost-jacking? (explain if checked)

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations _____

Notes _____

≈.1 ≈0.4

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1344	2.9	1.43	215.8	7.18	115.2	cloudy
1353	4.0	0.69	220.8	7.18	69.2	cloudy
1356	3.7	0.60	220.4	7.19	38.8	cloudy
1400 1359	4.4	0.45	222.0	7.21	18.2	slightly cloudy
1404	4.4	0.45	226.1	7.23	10.7	slightly cloudy
1407	3.5	0.45	220.7	7.23	8.1	slightly cloudy
1410	3.6	0.38	219.5	7.22	4.5	less cloudy
1413	3.5	0.35	218.5	7.23	0.4	clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-27

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: CZH, ARM
Weather Conditions: Overcast Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/26/22
Well: MW-29
Time started: 12:02
Time completed: 1:30

Sample No.: MW-29 Time: 12 25
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 12:02
Purge Rate (gal./min.): 0.1
Pumping End: 12:36

Pump Set Depth Below MP (ft.): 2.0
Tubing (ft.): 80

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 71.4 + .41 =
Depth to Water Below MP (ft.): 8.18 71.81
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 63.63
Gallons per foot: 0.17
Gallons in Well: 10.8
Purge Water Volume (gal.): 32.4
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: Good
Casing Condition: Good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.26
Monument to ground surface (ft.): 2.32

- [x] Lock present and operational
- [x] Well No. legible on outside of well
- [x] Evidence of frost-jacking? (explain if checked)

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

Well No.
MW-29

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI #C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
12:07	3.6	1.53	227.9	7.10	24.3	Clear
12:10	3.5	1.07	225.8	7.12	14.0	Clear
12:13	3.4	0.87	225.4	7.15	5.6	Clear
12:16	3.5	0.77	224.7	7.16	-1.7	Clear
12:19	3.5	0.69	224.5	7.17	-6.3	Clear
12:22	3.5	0.66	224.8	7.18	-8.5	Clear
~~Sample~~						
12:25	Sample					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-29

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: CZH, ARM
Weather Conditions: Overcast Air Temp. (°F) 60s

Project No. *103822-004*
Date 5/26/22
Well MW-30
Time started 12:48
Time completed 1320

Sample No. MW-30 Time 1309
Duplicate — Time —
Equipment Blank — Time —

Pump Hurricane A
Pumping Start 12:48
Purge Rate (gal./min.) 0.2
Pumping End 1309

Pump Set Depth Below MP (ft.) 30
Tubing (ft.) 35

Diameter and Type of Casing 2" PVC
Approximate Total Depth of Well Below MP (ft.) —
Measured Total Depth of Well Below MP (ft.) 81.38 × .41 = 31.79
Depth to Water Below MP (ft.) 8.46
Depth to Ice (if frozen) Below MP (ft.) —
Feet of Water in Well 23.33
Gallons per foot 0.17
Gallons in Well ~4
Purge Water Volume (gal.) ~12
Purge Water Disposal *GAC or* Purge to Ground

Monument Condition good
Casing Condition good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup / Flushmount*
Measurement method: *Rod & level / Tape measure*

Top-of-casing to monument (ft.) .28
Monument to ground surface (ft.) 3.5

☑ Lock present and operational No - replaced
☑ Well No. legible on outside of well
☐ Evidence of frost-jacking? (explain if checked) No

Notes Mr. Mansfield indicated this well had been hit by snow remover. He replaced it. Well looks good PVC is connected w/ tubing coupler.

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI #C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1251	3.7	2.81	259.2	7.61	160.6	slightly cloudy
1254	4.2	1.84	261.0	6.96	60.3	cloudy
1257	4.5	1.69	262.4	6.96	49.4	cloudy
1300	3.5	1.01	254.4	7.00	39.6	clear
1303	3.5	0.96	254.1	7.01	32.7	clear
1306	3.6	0.80	254.6	7.01	31.4	clear
1309	Sample					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-30

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: Arcm
Weather Conditions: Overcast, windy Air Temp. (°F): 60's

Project No.: *103822-004*
Date: 5/25/22
Well: MW-~~30~~31
Time started: 1520
Time completed: 1610

Sample No.: MW-31 Time: 1607
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1530
Purge Rate (gal./min.): 0.3
Pumping End: ~~1607~~ 1607

Pump Set Depth Below MP (ft.): 68.68
Tubing (ft.): 75

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.):
Measured Total Depth of Well Below MP (ft.): 69.16 + 1.52 = 70.68
Depth to Water Below MP (ft.): 9.32
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 61.36
Gallons per foot: 0.17
Gallons in Well: 10.4
Purge Water Volume (gal.): 31
Purge Water Disposal: *GAC or (Purge to Ground)*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *~~Stickup~~ / Flushmount*
Measurement method: *Rod & level / Tape measure*

Top-of-casing to monument (ft.): 0.16
Monument to ground surface (ft.): 4.0'

☑ Lock present and operational
☒ Well No. legible on outside of well — Yes, re-wrote on front of collar
☑ Evidence of frost-jacking? (explain if checked) No

Notes: Very cloudy/silty/brown @ start

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: ~~Parameters stabilized~~ or > 3 well volumes purged

Sample Observations _____

Notes _____

~~±0.1~~ ~0.04 **FIELD PARAMETERS** [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1536	4.9	7.30	222.3	7.24	86.7	Slightly Cloudy
1540	3.0	0.74	212.0	7.23	59.5	Clear
1543	3.1	0.51	212.0	7.24	43.7	clear
1547	3.5	0.45	214.1	7.25	33.4	clear
1552	4.3	0.44	220.2	7.25	25.1	clear
1558	4.1	0.48	217.8	7.26	21.9	clear
~~1601~~	~~4.8~~					
1604	3.1	0.47	212.6	7.26	21.1	clear
1607	Sample					

Flow stopped

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☒	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-31

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: AMM
Weather Conditions: overcast, windy Air Temp. (°F): 60s

Project No.: *103822-004*
Date: 5/25/22
Well: ~~1630~~ MW-32
Time started: 1630
Time completed: ~~MW-32~~

Sample No.: MW-32 Time: 1723
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: HurricaneA
Pumping Start: 1635
Purge Rate (gal./min.): 0.2
Pumping End: 17:20

Pump Set Depth Below MP (ft.): 18
Tubing (ft.): 24

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 18.32 + 1.52 = 19.84
Depth to Water Below MP (ft.): 8.58
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 11.26
Gallons per foot: 0.17
Gallons in Well: 1.91
Purge Water Volume (gal.): ~~2.6~~ 5.74
Purge Water Disposal: (GAC) or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: (*Stickup*) / *Flushmount*
Measurement method: *Rod & level* / ~~*Tape measure*~~

Top-of-casing to monument (ft.): 0.17
Monument to ground surface (ft.): 3.2

- [x] Lock present and operational
- [x] Well No. legible on outside of well: yes
- [x] Evidence of frost-jacking? (explain if checked): No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or >3 well volumes purged*

Sample Observations _____

Notes _____

~.1 ~0.03

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1646	3.2	2.34	265.8	7.00	129.2	clear
1649	2.7	1.09	262.4	6.87	98.2	clear
1652	2.7	0.48	263.4	6.83	66.1	clear
1657	2.7.	0.31.	261.0.	6.86.	31.2	clear
1701	2.7.	0.33 x	260.2.	6.88.	16.9 x	clear
1704	2.7.	0.28 x	260.6.	6.88.	9.7.	clear
1707	2.7 x	0.33 x	259.6.	6.89.	4.0.	clear
1710	2.5 x	0.47 x	256.6.	6.89.	2.0 x	clear
1714	2.5	0.30 x	256.7.	6.89.	-3.8.	clear
1717	2.5 x	0.31.	255.4.	6.89.	-5.7.	clear
1720	2.6 x	0.29.	257.5.	6.89 -	-6.9	clear
1723	SAMPLE					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-32

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM, CZH
Weather Conditions: sunny Air Temp. (°F): 70's

Project No.: *103822-004*
Date: 5/24/22
Well: MW-~~16~~34
Time started: 1430
Time completed: 1515

Sample No.: MW-34 Time: 1508
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1435
Purge Rate (gal./min.): 0.05
Pumping End: 1508
} ~2 gallons

Pump Set Depth Below MP (ft.): 75.69
Tubing (ft.): 80

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 77.28 +0.41 = 77.69
Depth to Water Below MP (ft.): ~~0.00~~ 2.97
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 74.72
Gallons per foot: 0.17
Gallons in Well: 12.7
Purge Water Volume (gal.): 38
Purge Water Disposal: *GAC or Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup / Flushmount*
Measurement method: *Rod & level / Tape measure*

Top-of-casing to monument (ft.): 0.43
Monument to ground surface (ft.): —

☒ Lock present and operational ~~but~~ Rusty
☒ Well No. legible on outside of well inside well
☒ Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: Parameters stabilized or > 3 well volumes purged

Sample Observations

Notes

~0.1 0.05

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)	
1436	3.3	9.57	409.1	7.14	134.8	clear	
1439	3.1	3.71	403.1	7.02	135.2	clear	
1442	2.7	0.94	451.7	6.98	70.7	cloudy	
1447	2.5	0.67	452.9	7.02	33.3	clear	
1450	2.4	0.58	452.4	7.03	21.2	clear	
1453	2.4	0.51	452.6	7.05	10.9	clear	Flow started
1458	2.7	0.48	454.8	7.08	4.0	clear	
1501	2.7	0.45	455.1	7.07	1.1	clear	
1505	2.6	0.49	453.0	7.08	-2.6	clear	
1508		SAMPLE					

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☒	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-34

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM, CZH
Weather Conditions: Sunny Air Temp. (°F): 70s

Project No.: *103822-004*
Date: 5/24/22
Well: MW-~~05~~35
Time started: 1336
Time completed: 1430

Sample No.: MW-35 Time: 1416
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: ~~1300~~ 1335
Purge Rate (gal./min.): 0.1
Pumping End: 1416

Pump Set Depth Below MP (ft.): 38.7
Tubing (ft.): 40

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): ~~37.83 + 0.41 =~~ 38.24
Depth to Water Below MP (ft.): 3.04
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 35.2
Gallons per foot: 0.17
Gallons in Well: 6.0
Purge Water Volume (gal.): 18
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.33
Monument to ground surface (ft.): —

- [x] Lock present and operational
- [x] Well No. legible on outside of well — inside monument
- [x] Evidence of frost-jacking? (explain if checked) No

Notes: Changed purge rate multiple times. Started out very silty. With low-flow, flow stopped a few times. Purge rate is estimated

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

Well No. MW-35

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1343	2.4	0.98	475.0	6.16	115.6	Very silty
1346	2.3	0.66	474.0	6.62	74.1	Very silty
1350	2.8	0.54	481.9	6.83	45.2	cloudy
1357	2.6	0.51	479.8	6.94	23.2	Slightly cloudy
1400	2.5	0.46	470	6.96	16.3	clear
1403	2.5	0.43	477.0	6.98	22.3	clear
1406	2.4	0.38	475.5	7.00	35.1	clear
1410	2.4	0.36	474.2	7.00	33.5	Clear
1413	2.4	0.35	474.4	7.01	32.2	clear

Flow stopped and pump

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☒	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-35

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM
Weather Conditions: Sunny Air Temp. (°F): 70's

Project No.: *103822-004*
Date: 5/23/22
Well: MW-38
Time started: 1100
Time completed: 1200

Sample No.: MW-38 Time: 1150
Duplicate: —— Time: ——
Equipment Blank: —— Time: ——

Pump: Hurricane A
Pumping Start: 1113
Purge Rate (gal./min.): 0.2
Pumping End: 1150

Pump Set Depth Below MP (ft.): 38.23
Tubing (ft.): 43

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): ——
Measured Total Depth of Well Below MP (ft.): 39.23
Depth to Water Below MP (ft.): 6.89
Depth to Ice (if frozen) Below MP (ft.):
Feet of Water in Well: 32.34
Gallons per foot: 0.17
Gallons in Well: 5.5
Purge Water Volume (gal.): 16.5
Purge Water Disposal: GAC or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.61
Monument to ground surface (ft.): 3.37

- ☑ Lock present and operational
- ☑ Well No. legible on outside of well
- ☑ Evidence of frost-jacking? (explain if checked) No

Notes: Very overgrown; Prickly rose + other plants.

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

N.1

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1115	2.0	4.63	271.2	5.59	212.5	cloudy (very)
1119	1.5	1.24	261.9	6.37	88.2	cloudy
1122	2.1	0.96	272.7	6.57	61.5	cloudy white
1125	4.0	0.85	276.0	6.66	44.2	cloudy
1130	1.6	6.78	257.8	6.77	25.1	clear
1133	1.6	0.79	258.0	6.85	11.2	clear
1137	1.6	0.85	257.7	6.88	2.8	clear
1141	1.6	0.87	257.7	6.90	-6.4	clear
1144	1.7	0.85	257.7	6.92	-11.0	clear
1147	1.7	0.83	257.7	6.92	-14.3	clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☑	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-30

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: AJW
Weather Conditions: sunny Air Temp. (°F): 70's

Project No.: *103822-004*
Date: 5/23/22
Well: MW-39
Time started: 1215
Time completed: 1300

Sample No.: MW-39 Time: 1247
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1247
Purge Rate (gal./min.): 0.1 (10 min > 3)
Pumping End: 1247

Pump Set Depth Below MP (ft.): 26.19
Tubing (ft.): 30

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): ~~27.28 + 0.41~~ 27.69
Depth to Water Below MP (ft.): 5.77
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 21.92
Gallons per foot: 0.17
Gallons in Well: 3.7
Purge Water Volume (gal.): 11
Purge Water Disposal: GAC or (Purge to Ground)

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: (Stickup) / Flushmount
Measurement method: Rod & level / (Tape measure)

Top-of-casing to monument (ft.): 0.63
Monument to ground surface (ft.): 2.86

- ☒ Lock present and operational
- ☒ Well No. legible on outside of well inside + out
- ☒ Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	(2)	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: ~~Parameters stabilized~~ or > 3 well volumes purged

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1219	2.3	10.65	267.7	6.70	123.9	~~clear~~ cloudy/silty
1222	1.7	1.42	264.6	6.84	51.4	cloudy
1225	1.1	1.03	260.5	6.88	30.8	cloudy
1228	1.0	0.80	260.1	6.92	11.0	cloudy
1232	0.9	0.72	260.0	6.96	-4.5	cloudy
1235	1.0	0.75	260.2	6.97	-12.6	cloudy
1238	0.9	0.75	259.5	6.99	-20.7	clear
1241	0.9	0.76	259.9	6.99	-24.8	clear
1244	0.9	0.74	259.7	7.00	-29.3	clear

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☑	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-3A

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM, CZH
Weather Conditions: Clear Air Temp. (°F): 55

Project No.: *103822-004*
Date: 5/24/2022
Well: MW-103
Time started: 1200
Time completed: 1300

Sample No.: MW-103 Time: 1243
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1211
Purge Rate (gal./min.): 0.1
Pumping End: 1243

Pump Set Depth Below MP (ft.): 11.51
Tubing (ft.): 16.5

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): 12.51 +0.41 = 12.92
Depth to Water Below MP (ft.): 6.53
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 6.39
Gallons per foot: 0.17
Gallons in Well: 1.08
Purge Water Volume (gal.): 3.25
Purge Water Disposal: GAC or (Purge to Ground)

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: (Stickup) / Flushmount
Measurement method: Rod & level / (Tape measure)

Top-of-casing to monument (ft.): 0.54
Monument to ground surface (ft.): 2.95

☒ Lock present and operational: Stick
☐ Well No. legible on outside of well: inside monument
☐ Evidence of frost-jacking? (explain if checked): NO

Notes: locks for these 3 wells are rusted/hard to open
WD-40? or bolt cutters + extra locks might be a good idea

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

SMH SMH

Field Parameter Instrument YSI C Circle one: ~~Parameters stabilized~~ or > 3 well volumes purged

Sample Observations

Notes Did not stabalize

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1215	3.2	11.76	M 255.1	6.83	148.1	clear
1221	6.8	8.88	282.9	6.49	169.1	Clear
1225	2.9	8.71	299.6	6.46	175.1	Clear
1228	3.3	7.90	333.9	6.43	176.4	Clear
1231	3.8	7.29	365.9	6.43	176.6	Clear
1234	3.7	6.97	390.8	6.42	177.4	Clear
1237	3.7	6.83	402.3	6.42	178.0	Clear
1240	3.2	6.85	403.3	6.43	178.7	Clear

Laboratory SGS North America Inc.

	Analysis	Sample Containers	Preservation	DUP / EB
☑	VOCs	(3) 40-mL amber VOA vials	HCl, 0 to 6 °C	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-103

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: ARM CZH
Weather Conditions: Sunny Air Temp. (°F): 70s

Project No.: *103822-004*
Date: 5/24/22
Well: MW-104
Time started: 1115
Time completed: 1200

Sample No.: MW-104 Time: 1159
Duplicate: — Time: —
Equipment Blank: — Time: —

Pump: Hurricane A
Pumping Start: 1120
Purge Rate (gal./min.): .05
Pumping End: 1159

Pump Set Depth Below MP (ft.): 20
Tubing (ft.): 25

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): ~~22.38 + 0.41 = 22.79~~
Depth to Water Below MP (ft.): 6.59
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 16.2
Gallons per foot: 0.17
Gallons in Well: 2.7
Purge Water Volume (gal.): 8.3
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.39
Monument to ground surface (ft.): 2.73

☒ Lock present and operational Sticky
☒ Well No. legible on outside of well inside monument
☒ Evidence of frost-jacking? (explain if checked) No

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1121	4.7	~~10.5~~ 9.18	493.7	6.83	135.4	Slightly cloudy
1124	3.4	1.12	520.0	6.92	54.8	Clear
1127	2.9	0.76	514.0	6.96	24.3	Clear
1130	2.7	0.61	512.0	6.98	11.1	Clear
1133	2.6	0.52	510.0	6.98	0.4	Clear
1136	2.6	0.45	512.0	6.98	-8.6	Clear
1140	2.4	0.39	524.0	6.99	-18.6	Clear
1143	2.5	0.38	532.0	6.99	-24.6	Clear
1146	2.5	0.35	537.0	6.99	-29.1	Clear
1150	2.5	0.33	544.0	6.99	-34.4	Clear
1153	2.3	0.34	546.0	6.99	-36.3	Clear
1156	2.5	0.32	549.0	6.99	-39.8	Clear
1159	Sample					

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-104

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: Adam, CZH
Weather Conditions: Sunny Air Temp. (°F):

Project No.: *103822-004*
Date: 5/24/22
Well: MW-105
Time started: 1020
Time completed: 1110

Sample No.: MW-105 Time: 1106
Duplicate: — Time: —
Equipment Blank: / Time: /

Pump: Hurricane A
Pumping Start: 1023
Purge Rate (gal./min.): 0.1
Pumping End: 1106

Pump Set Depth Below MP (ft.): 30.83
Tubing (ft.): 36

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): ~~32.42+0.41~~ = 32.83
Depth to Water Below MP (ft.): 6.57
Depth to Ice (if frozen) Below MP (ft.): →
Feet of Water in Well: 26.26
Gallons per foot: 0.17
Gallons in Well: 4.5
Purge Water Volume (gal.): 13.4
Purge Water Disposal: *GAC* or *Purge to Ground*

Monument Condition: Good
Casing Condition: Good

Measuring Point (MP): *Top of Casing (TOC)*

Monument type: ~~*Stickup*~~ / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.44
Monument to ground surface (ft.): 2.5

☒ Lock present and operational – Sticky
☒ Well No. legible on outside of well inside well / No
☒ Evidence of frost-jacking? (explain if checked)

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument: YSI C

Circle one: *Parameters stabilized* (circled) or *> 3 well volumes purged*

Sample Observations:

Notes:

3%/3 0.09 ~.1   10%/ 5=0.05

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1025	3.3	5.01	466.0	5.56	246.7	clear
1030	5.3	1.19	516.0	6.39	100.7	clear
1034	4.1	1.05	495.6	6.58	74.2	clear
1037	3.2	0.81	483.3	6.70	56.7	clear
1040	2.9	0.66	476.8	6.75	45.9	clear
1043	3.3	0.55	481.7	6.80	36.8	clear
1047	3.5	0.50	487.1	6.83	29.9	clear
1050	3.1	0.48	481.6	6.86	26.5	clear
105[illegible]4	3.[illegible]	0.43	483.5	6.87	23.6	clear
1057	2.9	0.38	476.3	6.91	16.3	clear
1100	3.1	0.35	480.1	6.92	12.2	clear
1103	2.7	0.36	476.0	6.93	10.0	clear

– Flow inconsistent

Laboratory: *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW105

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: Amber Masters
Weather Conditions: Sunny Air Temp. (°F): 70s

Project No.: *103822-004*
Date: 5/23/22
Well: MW-107
Time started: 1500
Time completed: 1600

Sample No.: MW-107 Time: 1600
Duplicate: ~~MW-907~~ Time: ~~1557~~ → CANCELED
Equipment Blank: — Time:

Pump: Hurricane A
Pumping Start: 1529
Purge Rate (gal./min.): < 0.5
Pumping End: 1557

Pump Set Depth Below MP (ft.): 32.3
Tubing (ft.): 40

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.): —
Measured Total Depth of Well Below MP (ft.): ~~33.46~~ + 0.41
Depth to Water Below MP (ft.): 2.93
Depth to Ice (if frozen) Below MP (ft.): —
Feet of Water in Well: 30.94
Gallons per foot: 0.17
Gallons in Well: 5.3
Purge Water Volume (gal.): 15.8
Purge Water Disposal: GAC or *Purge to Ground*

Monument Condition: good
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.55
Monument to ground surface (ft.): —

☑ Lock present and operational
☐ Well No. legible on outside of well No, Mud covered, inside lid
☒ Evidence of frost-jacking? (explain if checked) No

Notes: Cancelled dup. only needed 1 from 108 & 107
Kept dup @ 108.

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized* or *> 3 well volumes purged*

Sample Observations _____

Notes _____

FIELD PARAMETERS [stabilization criteria]

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1527	1.8	11.59	212.0	7.26	130.5	clear
1530	1.9	0.98	237.7	7.00	69.9	clear
1535	2.2	0.62	238.9	7.03	42.2	clear
1538	2.0	0.57	237.4	7.03	34.6	clear
1542	2.1 X	0.53 X	237.6	7.05	25.3	clear
1545	2.3 X	0.49 X	237.9	7.05	19.5	clear
1548	1.7	0.55 X	235.9	7.04	16.4	clear
1551	1.8	0.38 X	235.9	7.05	10.8	clear
1554	1.8	0.36	236.0	7.05	5.3	clear
1557	1.8	0.36	236.0	7.06	2.2	clear

Flow stopped @ this point need to increase pump

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-107

MONITORING WELL SAMPLING LOG

Owner/Client: *Alaska Department of Environmental Conservation*
Location: *Six-Mile Richardson Highway*
Sampling Personnel: AM
Weather Conditions: Sunny Air Temp. (°F): 70s

Project No.: *103822-004*
Date: 5/23/22
Well: MW-108
Time started: 1630
Time completed: 1730

Sample No.: MW-108 Time: 1703
Duplicate: MW-908 Time: 1700
Equipment Blank: Time:

Pump: Hurricane A
Pumping Start: 1632
Purge Rate (gal./min.): 0.14
Pumping End: 1700

Pump Set Depth Below MP (ft.): 41.21
Tubing (ft.): 45

Diameter and Type of Casing: 2" PVC
Approximate Total Depth of Well Below MP (ft.):
Measured Total Depth of Well Below MP (ft.): 42.3 + 0.4 = 42.71
Depth to Water Below MP (ft.): 3.8
Depth to Ice (if frozen) Below MP (ft.):
Feet of Water in Well: 38.9
Gallons per foot: 0.17
Gallons in Well: 6.6
Purge Water Volume (gal.): 19.8
Purge Water Disposal: GAC or *Purge to Ground*

Monument Condition: N/A
Casing Condition: good

Measuring Point (MP): *Top of Casing (TOC)*
Monument type: *Stickup* / *Flushmount*
Measurement method: *Rod & level* / *Tape measure*

Top-of-casing to monument (ft.): 0.75
Monument to ground surface (ft.): 0.69

☑ Lock present and operational
☑ Well No. legible on outside of well inside monument
☑ Evidence of frost-jacking? (explain if checked)

Notes

WELL CASING VOLUMES

Diameter of Well [ID-inches]	CMT	1¼	2	3	4	6	8
Gallons per lineal foot	0.000253	0.08	0.17	0.38	0.66	1.5	2.6

Well No. MW-108

MONITORING WELL SAMPLING LOG

Field Parameter Instrument YSI C Circle one: *Parameters stabilized or > 3 well volumes purged*

Sample Observations

Notes

FIELD PARAMETERS [stabilization criteria] 4/5

Time	Temp. (°C) [± 3%]	Dissolved Oxygen (mg/L) [±10%]	Conductivity (µS/cm) [± 3%]	pH [± 0.1]	ORP (mV) [± 10]	Water Clarity (visual)
1633	2.7	19.13	216.8	7.38	143.4	clear
1636	2.2	2.55	230.5	7.07	118.4	clear
1639	2.2	1.04	233.7	7.07	90.9	clear
1644	2.1	0.66 x	232.7	7.07	70.1	clear
1648	2.1	0.53 x	233.6	7.08	56.2 x	clear
1651	2.0 x	0.49 x	233.6	7.08	48.2 x	clear
1654	2.3	0.46	234.5	7.08	41.7 x	clear
1657	2.3	0.44	235.7	7.08	37.3	clear
1700	2.2	0.43	235.5	7.08	34.5	clear

Laboratory *SGS North America Inc.*

	Analysis	Sample Containers	Preservation	DUP / EB
☒	*VOCs*	*(3) 40-mL amber VOA vials*	*HCl, 0 to 6 °C*	☐
☐				☐
☐				☐
☐				☐
☐				☐

Well No. MW-106

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

2355 Hill Road
Fairbanks, AK 99709
(907) 479-0600
www.shannonwilson.com

CHAIN-OF-CUSTODY RECORD

Laboratory SGS
Attn: J. Dawkins

MSA - SGS - 2016

Turn Around Time: ☒ Normal ☐ Rush
Please Specify

Quote No:

J-Flags: ☐ Yes ☐ No

Analytical Methods (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	VOCs	Total Number of Containers	Remarks/Matrix Composition/Grab? Sample Containers
MW-16A		1742	5/24/22	X	3	groundwater
MW-04		1203	5/25/22	X		
MW-05		1306	5/25/22	X		
MW-15A		1647	5/24/22	X		
MW-34		1508	5/24/22	X		
MW-35		1416	5/24/22	X		
MW-17		1534	5/26/22	X		
MW-917		1524	5/26/22	X		
MW-32		1723	5/25/22	X		
MW-31		1607	5/25/22	X		

Project Information	
Number:	103822-004
Name:	G-mw
Contact:	Shila Hinkley
Ongoing Project?	Yes ☐ No ☐
Sampler:	ADM, CZH

Sample Receipt	
Total No. of Containers:	
COC Seals/Intact? Y/N/NA	NA
Received Good Cond./Cold	Y
Temp:	3.6°C
Delivery Method:	Hand

Notes:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1223	Signature: Time:	Signature: Time:
Printed Name: A. Masters Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc.	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 12:24	Signature: Time:	Signature: Time:
Printed Name: Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company: SGS	Company:	Company:

No. _____

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
2355 Hill Road
Fairbanks, AK 99709
(907) 479-0600
www.shannonwilson.com

Laboratory SGS
Attn: J. Dawkins

Turn Around Time:	Quote No:
☐ Normal ☐ Rush	J-Flags: ☐ Yes ☐ No
Please Specify	

Analytical Methods (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	VOCs	Total Number of Containers	Remarks/Matrix Composition/Grab? Sample Containers
MW-27		1416	5/26/22	X	3	groundwater
EB-19		1642	5/26/22	X		Water
MW-[illegible]09		1700	5/23/22	X		groundwater
MW-105		1703	5/23/22	X		
MW-[illegible]18		1439	5/25/22	X		
MW-19		1652	5/26/22	X		
MW-105		1106	5/24/22	X		
MW-104		1159	5/24/22	X		
MW-103		1243	5/24/22	X		
MW-107		1600	5/23/22	X		

Project Information	
Number:	
Name:	
Contact:	Sel P. T
Ongoing Project? Yes ☐ No ☐	
Sampler:	

Sample Receipt	
Total No. of Containers:	
COC Seals/Intact? Y/N/NA	NA
Received Good Cond./Cold	Y
Temp:	3.6°C
Delivery Method:	Hand

Reliquished By: 1.	Reliquished By: 2.	Reliquished By: 3.
Signature: Time: 1223	Signature: Time:	Signature: Time:
Printed Name: A Masters Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company: Shannon & Wilson, Inc.	Company:	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 12:44	Signature: Time:	Signature: Time:
Printed Name: Alexandra Johnston-Cuevas Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company: SGS	Company:	Company:

Notes:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

No.

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
2355 Hill Road
Fairbanks, AK 99709
(907) 479-0600
www.shannonwilson.com

CHAIN-OF-CUSTODY RECORD

Page 3 of 3
Laboratory SGS
Attn: J. Dawkins

Turn Around Time: [X] Normal [ ] Rush
Please Specify

Quote No:

J-Flags: [ ] Yes [ ] No

Analytical Methods (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	VOCs							Total Number of Containers	Remarks/Matrix Composition/Grab? Sample Containers
MW-39		1247	5/23/22	X							3	groundwater
MW-38		1150	5/23/22	X							3	
MW-30		1309	5/26/22	X							3	
MW-29		1225	5/26/22	X							3	
MW-26		1102	5/26/22	X							3	

Project Information	
Number:	
Name:	Sel 1
Contact:	
Ongoing Project?	Yes [ ] No [ ]
Sampler:	

Sample Receipt	
Total No. of Containers:	
COC Seals/Intact? Y/N/NA	Y/NA
Received Good Cond./Cold	Y
Temp:	3.6 °C
Delivery Method:	Hand

	Reliquished By: 1.	Reliquished By: 2.	Reliquished By: 3.
Signature / Time:	[signature] / Time: [illegible]	Signature: Time:	Signature: Time:
Printed Name / Date:	A. Masters / Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company:	Shannon + Wilson, Inc.	Company:	Company:

	Received By: 1.	Received By: 2.	Received By: 3.
Signature / Time:	[signature] / Time: 12:24	Signature: Time:	Signature: Time:
Printed Name / Date:	Alexandra Johnston Carnes / Date: 5/27/22	Printed Name: Date:	Printed Name: Date:
Company:	SGS	Company:	Company:

Notes:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

No. ____________

GAC DRUM #3

Chlorinated Solvents

Quantity of GAC in Drum (lbs): 33

									To Be Completed Upon Receipt of Analytical Results			
Date	Initials	Project Name (for Submittal)	Project #	Gallons Treated	Running Total	Field Observations (turbidity etc.)	Pre-Treatment Sample Collected?	Analytical Laboratory	Laboratory Work Order(s)	Sum of Highest Concentrations of Organic Constituents (mg/L)	Total Mass Loading (mg)	Running Total Mass Loading (lbs)	Theoretical GAC Capacity Remaining (%)
10/24/2018	KLC	Removed for Privacy	101965	175.5	175.5		Yes	TestAmerica	320-44672-1	0.00409	10299.98	0.02271	98.28%
7/30/2018	CAB	Removed for Privacy	31-1-11735	18.5	194		Yes	TestAmerica	320-41848-1	0.000026	1085.47	0.02510	98.10%
9/25/2019	ARM	Removed for Privacy	101926	52	246		Yes	SGS	1199822	1.34	3314.81	0.03241	97.54%
9/26/2019	ARM	Removed for Privacy	101926	52	298		Yes	SGS	1199822	1.34	3314.81	0.03972	96.99%
5/22/2020	SMH	Removed for Privacy	103822	115	413		Yes	SGS	1209256	0.052672	6770.42	0.05464	95.86%
2/18/2021	FLG	Removed for Privacy	105746-001	27.5	440.5						1613.53	0.05820	95.59%
5/24/2022	DHF	Removed for Privacy	31-1-11729-095	80	520.5	turbid	Yes	SGS		0.016	4698.75	0.06856	94.81%
5/25-5/26/2022	SMH	Six-Mile Richardson Highway	103822	57.5	578		Yes	SGS	1222631	0.032278	3380.77	0.07601	94.24%
					578						0.00	0.07601	94.24%
					578						0.00	0.07601	94.24%
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					578						0.00	0.07601	94.24%
					578						0.00	0.07601	94.24%

See GAC Quantity and Usage Estimation (For Internal Use Only) Document, dated March 2, 2021

SHANNON & WILSON
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

March 2, 2021

DISCLAIMER: The following estimates derived by this method may not represent real world outcomes. The intent of this method is to generate overly conservative estimates when empirical data is not available and not practical to obtain. Whenever possible, a pilot study should be performed to generate an isotherm for the specific treatment system and waste stream.

GAC QUANTITY ESTIMATION AND USAGE TRACKING

Estimating the usage rate of granular activated carbon (GAC) to predict breakthrough relies on empirically derived data that is unique to the waste stream being treated and the properties of the GAC product employed. For this reason, pilot studies are typically performed during the design process for industrial or large scale GAC treatment systems. For small sites or rapid response efforts, conducting a pilot study is often cost and time prohibitive. Oftentimes, portable GAC treatment systems for small projects are used to treat investigation-derived waste that is generated during an investigation. The use of these portable systems at multiple sites with potentially variable types and concentrations of contaminants may also render a pilot study meaningless as the waste stream would not be consistent while the system is in operation. For this reason, it is necessary to develop a method of generating order-of-magnitude estimates of required GAC quantities for small-scale deployment of the portable GAC treatment system on remote sites. The following method relies on substituting general "ballpark" constants for variables that would typically be derived from a second-order differential analysis of empirical data. Due to the inherent error, a factor of safety is applied to ensure a conservative estimate. Below is a list of assumptions used to simplify the parameters.

Assumptions

- We assume that the GAC media adsorbs contaminants uniformly, such that channeling does not occur, and the entire capacity is utilized before breakthrough.
- The adsorptive capacity of GAC is influenced by temperature and other environmental factors. For the purpose of these estimates, we disregard minor losses due to environmental unknowns.
- The removal efficiency of GAC is affected by potential hydrogen (pH) to varying degrees depending on the particular compound being adsorbed. Typically, removal efficiency decreases as pH increases. We assume a near-neutral pH in our waste stream

for estimation purposes. However, a rule of thumb is to increase the carbon bed by 20 percent for every pH unit above neutral (7.0).

- We assume that the molecular weights of the target species are such that they can be readily removed from the waste stream and immobilized within the pore space of the carbon. The nature of the waste stream should be considered prior to selecting GAC as the primary treatment technology.
- We assume the target contaminants are dissolved within the waste stream and that free product is not being fed into the GAC media. Introduction of free product will dramatically increase GAC usage rates.
- We assume a typical density value for GAC media of 28 pounds per cubic foot.
- We assume that total suspended solids (TSS) and/or hard water deposits (Ca^{2+} and Mg^{2+}) are not coating the GAC particles or otherwise inhibiting adsorption of the target contaminants. Excluding deposits, we note that removal efficiency tends to be enhanced by hard water. For a short-term treatment event, only TSS clogging is a concern and may be addressed with in-line filters.
- Lacking available water quality data, we assume general background concentrations of non-target constituents that may compete with target contaminants for adsorption sites and increase the GAC usage rate. Examples of non-target constituents that can interact with GAC media include total organic carbon (TOC), free chlorine (Cl), chloride (Cl^-), total fluoride (F^-), nitrate (NO_3^{2-}), phosphate (PO_4^{3-}), and hydrogen sulfide (H_2S). The sum of these concentrations (if analyzed for the project) is used when estimating required GAC quantities for a project site or when estimating the GAC loading upon receipt of analytical data for target contaminants.
- We assume that the GAC media can immobilize roughly 4 to 10 percent of its total mass in organic constituents. This value is based on Frank DeSilva's article entitled *Activated Carbon Filtration* published in Water Quality Products Magazine in January 2000. In the article DeSilva states that "*Carbon filter capacity can be roughly estimated at 0.1 pound of organics per 1 pound of carbon at a flowrate of 1 to 2 gallons per minute per cubic foot (gpm/ft^3) and a bed depth of 3 feet.*" For higher flowrates and/or smaller bed depths, a more conservative value should be assumed.
- While estimating GAC usage, we assume that the volume of the GAC vessel employed is sufficient to ensure adequate contact time between the waste stream influent and the GAC media. The required GAC vessel volume should be sized according to the desired Empty bed contact time (EBCT). The EBCT is expressed as the volume of the vessel divided by the flowrate, as shown below. A typical EBCT for removal of hydrocarbons is five minutes.

$$\frac{X\ gallons}{Y\ gallons\ per\ minute} = Z\ minutes\ of\ contact$$

Conversion Factors

For the following relationships to be useful, the data inputs need to be consistent in their unit systems. Contaminant concentrations are often expressed in milligrams per liter (mg/L) while the waste stream volume is often communicated in gallons. Similarly, GAC media is typically supplied by the pound but the mass/concentrations of contaminants are usually reported in metric units. Table 1 provides common conversions between imperial and metric units.

Table 1: Common conversion factors

Imperial Unit	Multiply By	Metric Unit
Pound (lb)	0.45359	Kilogram (kg)
Pound (lb)	453,592	Milligram (mg)
Gallon (gal)	3.78541	Liters (L)
Cubic Feet (ft^3)	28.3168	Liters (L)
Pounds per Gallon (lbs/gal)	119,826	Milligrams per Liter (mg/L)

Estimating Mass Loading and Treatable Volume

To conservatively estimate the mass loading on the GAC, we take the sum of the highest concentrations of target species from prior analytical results and the known or assumed background concentrations of non-target species that may interact with the GAC media, and multiply the sum of these two concentrations by the volume of liquid treated. This yields the theoretical total mass of compounds to be adsorbed by the GAC media. The removal effectiveness is predominantly controlled by contact time, which we assume to be sufficient for complete immobilization of the target compounds.

$$Mass\ loading = (concentrations\ of\ target\ species + sum\ of\ additional\ inputs) \times volume\ treated$$

We typically treat contaminated water on sites with prior characterization. However, if prior analytical results are not available, we always assume a worst-case scenario based on prior experience at similar release sites. Shannon & Wilson has a considerable amount of historical analytical data from a wide variety of release sites and response efforts. A first step would be to locate analytical data from a similar site and apply a 50 to 100 percent factor of safety when totaling the concentrations of target species.

If the total concentrations of target species and relevant non-target species are known, and the GAC vessel is used only at the site in question, then it is possible to estimate the theoretical maximum volume of water that can be treated before the GAC capacity is exhausted.

$$Maximum\ volume\ of\ treatable\ liquid = \frac{(Quantity\ of\ GAC \times Adsorptive\ capacity)}{(Concentrations\ of\ target\ species + Additional\ inputs)}$$

Similarly, if the total volume of fluid requiring treatment is known, then the required quantity of GAC to treat that volume can be determined by using the following relationship.

$$Required\ Quantity\ of\ GAC = \frac{Mass\ loading}{Adsorptive\ capacity\ of\ the\ GAC}$$

Estimating Usage of GAC Media

To estimate the quantity of usable GAC remaining, we subtract the total mass loading from the total quantity of GAC in the vessel multiplied by the assumed adsorption capacity of the GAC media.

$$Remaining\ capacity\ of\ GAC = (Quantity\ of\ GAC\ \times Adsorptive\ capacity) - Mass\ loading$$

For ease of tracking, we then express this value as a percent of the total capacity of the GAC media by dividing the remaining capacity of the GAC by the total capacity of the GAC and multiplying by 100.

$$Percent\ of\ GAC\ remaining = \frac{Remaining\ capacity\ of\ GAC}{(Quantity\ of\ GAC \times Adsorptive\ capacity\ of\ GAC)} \times 100$$

If the GAC vessel is used several times before disposal, then the mass loading needs to be a running total from all treatment events. Shannon & Wilson's tracking spreadsheet will perform these calculations as a running total upon being supplied with volume and constituent concentration data.

Final Considerations

Because channeling, non-uniform GAC usage, and sediment coating are all likely occur, it is important to replace the GAC media once the theoretical remaining capacity gets below a certain threshold. This threshold can be somewhat subjective depending on the waste stream and how robust the treatment system is, but roughly 30 percent is recommended. It is Shannon & Wilson's policy to replace the GAC media annually regardless of utilization.

APPENDIX B: LABORATORY REPORT AND CORRESPONDING LDRC

Appendix B

Laboratory Report and Corresponding LDRC

CONTENTS

Laboratory Report of Analysis

To: Shannon & Wilson-Fairbanks
2355 Hill Rd
Fairbanks, AK 99707

Report Number: **1222631**

Client Project: **103822-004 6 Mile**

Dear Sheila Hinckley,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Jennifer at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Stephen C. Ede
2022.06.07
13:56:44 -08'00'

Jennifer Dawkins Date
Project Manager
Jennifer.Dawkins@sgs.com

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Case Narrative

SGS Client: **Shannon & Wilson-Fairbanks**
SGS Project: **1222631**
Project Name/Site: **103822-004 6 Mile**
Project Contact: **Sheila Hinckley**

Refer to sample receipt form for information on sample condition.

LCS for HBN 1837131 [VXX/38655 (1666703) LCS

8260D - LCS recovery for methylene chloride does not meet QC criteria. This analyte was not detected above the LOQ in the associated samples.

LCSD for HBN 1837131 [VXX/3865 (1666704) LCSD

8260D - LCSD recovery for methylene chloride does not meet QC criteria. This analyte was not detected above the LOQ in the associated samples.

LCS for HBN 1837180 [VXX/38660 (1666896) LCS

8260D - LCS recovery for methylene chloride does not meet QC criteria. This analyte was not detected above the LOQ in the associated samples.

LCSD for HBN 1837180 [VXX/3866 (1666897) LCSD

8260D - LCSD recovery for methylene chloride does not meet QC criteria. This analyte was not detected above the LOQ in the associated samples.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/31/2022 for Fluoride by EPA 300.0 and Nitrate as N by SM 4500NO3-F) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW-16A	1222631001	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-04	1222631002	05/25/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-05	1222631003	05/25/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-15A	1222631004	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-34	1222631005	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-35	1222631006	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-17	1222631007	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-917	1222631008	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-32	1222631009	05/25/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-31	1222631010	05/25/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-27	1222631011	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
EB-19	1222631012	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-908	1222631013	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-108	1222631014	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-18	1222631015	05/25/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-19	1222631016	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-105	1222631017	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-104	1222631018	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-103	1222631019	05/24/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-107	1222631020	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-39	1222631021	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-38	1222631022	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-30	1222631023	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-29	1222631024	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
MW-26	1222631025	05/26/2022	06/01/2022	Water (Surface, Eff., Ground)
Trip Blank	1222631026	05/23/2022	06/01/2022	Water (Surface, Eff., Ground)

Method	Method Description
SW8260D	Volatile Organic Compounds (W) FULL

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Detectable Results Summary

Client Sample ID: **MW-16A**
Lab Sample ID: 1222631001
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.539J	ug/L
cis-1,2-Dichloroethene	0.675J	ug/L
trans-1,2-Dichloroethene	0.617J	ug/L
Trichloroethene	1.99	ug/L

Client Sample ID: **MW-04**
Lab Sample ID: 1222631002
Volatile GC/MS

Parameter	Result	Units
Trichloroethene	0.583J	ug/L

Client Sample ID: **MW-05**
Lab Sample ID: 1222631003
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	1.48	ug/L
trans-1,2-Dichloroethene	3.31	ug/L
Trichloroethene	1.18	ug/L

Client Sample ID: **MW-15A**
Lab Sample ID: 1222631004
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	0.592J	ug/L
trans-1,2-Dichloroethene	0.321J	ug/L
Trichloroethene	1.71	ug/L

Client Sample ID: **MW-34**
Lab Sample ID: 1222631005
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	0.912J	ug/L
trans-1,2-Dichloroethene	0.712J	ug/L
Trichloroethene	2.11	ug/L

Client Sample ID: **MW-35**
Lab Sample ID: 1222631006
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.485J	ug/L
cis-1,2-Dichloroethene	0.681J	ug/L
trans-1,2-Dichloroethene	0.631J	ug/L
Trichloroethene	1.78	ug/L

Client Sample ID: **MW-17**
Lab Sample ID: 1222631007
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	4.00	ug/L
trans-1,2-Dichloroethene	2.56	ug/L
Trichloroethene	3.82	ug/L

Client Sample ID: **MW-917**
Lab Sample ID: 1222631008
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	4.22	ug/L
trans-1,2-Dichloroethene	2.74	ug/L
Trichloroethene	3.59	ug/L

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Detectable Results Summary

Client Sample ID: **MW-32**
Lab Sample ID: 1222631009
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	25.4	ug/L
trans-1,2-Dichloroethene	2.10	ug/L
Trichloroethene	1.74	ug/L

Client Sample ID: **MW-31**
Lab Sample ID: 1222631010
Volatile GC/MS

Parameter	Result	Units
Trichloroethene	1.43	ug/L

Client Sample ID: **MW-27**
Lab Sample ID: 1222631011
Volatile GC/MS

Parameter	Result	Units
Trichloroethene	0.550J	ug/L

Client Sample ID: **EB-19**
Lab Sample ID: 1222631012
Volatile GC/MS

Parameter	Result	Units
Toluene	0.518J	ug/L

Client Sample ID: **MW-908**
Lab Sample ID: 1222631013
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.379J	ug/L
cis-1,2-Dichloroethene	0.473J	ug/L
trans-1,2-Dichloroethene	0.419J	ug/L
Trichloroethene	1.45	ug/L

Client Sample ID: **MW-108**
Lab Sample ID: 1222631014
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.381J	ug/L
cis-1,2-Dichloroethene	0.474J	ug/L
trans-1,2-Dichloroethene	0.429J	ug/L
Trichloroethene	1.44	ug/L

Client Sample ID: **MW-18**
Lab Sample ID: 1222631015
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	3.60	ug/L
trans-1,2-Dichloroethene	2.76	ug/L
Trichloroethene	1.17	ug/L

Client Sample ID: **MW-19**
Lab Sample ID: 1222631016
Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	0.687J	ug/L
Tetrachloroethene	0.318J	ug/L
trans-1,2-Dichloroethene	0.456J	ug/L
Trichloroethene	1.84	ug/L

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Detectable Results Summary

Client Sample ID: **MW-105**
Lab Sample ID: 1222631017
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.433J	ug/L
cis-1,2-Dichloroethene	0.443J	ug/L
trans-1,2-Dichloroethene	0.538J	ug/L
Trichloroethene	0.841J	ug/L

Client Sample ID: **MW-104**
Lab Sample ID: 1222631018
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.417J	ug/L
cis-1,2-Dichloroethene	0.730J	ug/L
trans-1,2-Dichloroethene	1.07	ug/L
Trichloroethene	0.543J	ug/L

Client Sample ID: **MW-107**
Lab Sample ID: 1222631020
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.423J	ug/L
cis-1,2-Dichloroethene	0.597J	ug/L
trans-1,2-Dichloroethene	0.735J	ug/L
Trichloroethene	1.31	ug/L

Client Sample ID: **MW-39**
Lab Sample ID: 1222631021
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.366J	ug/L
cis-1,2-Dichloroethene	0.565J	ug/L
trans-1,2-Dichloroethene	0.735J	ug/L
Trichloroethene	0.616J	ug/L

Client Sample ID: **MW-38**
Lab Sample ID: 1222631022
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.382J	ug/L
cis-1,2-Dichloroethene	0.500J	ug/L
trans-1,2-Dichloroethene	0.575J	ug/L
Trichloroethene	0.758J	ug/L

Client Sample ID: **MW-30**
Lab Sample ID: 1222631023
Volatile GC/MS

Parameter	Result	Units
1,1-Dichloroethane	0.705J	ug/L
cis-1,2-Dichloroethene	0.323J	ug/L
trans-1,2-Dichloroethene	0.509J	ug/L
Trichloroethene	1.23	ug/L

Client Sample ID: **MW-29**
Lab Sample ID: 1222631024
Volatile GC/MS

Parameter	Result	Units
Trichloroethene	0.417J	ug/L

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Detectable Results Summary

Client Sample ID: **MW-26**
Lab Sample ID: 1222631025

Volatile GC/MS

Parameter	Result	Units
cis-1,2-Dichloroethene	4.84	ug/L
trans-1,2-Dichloroethene	4.43	ug/L
Trichloroethene	1.80	ug/L

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Results of **MW-16A**

Client Sample ID: **MW-16A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631001
Lab Project ID: 1222631

Collection Date: 05/24/22 17:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:13
1,1-Dichloroethane	0.539	J	1.00	0.310	ug/L	1		06/04/22 19:13
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:13
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 19:13
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 19:13
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:13
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:13
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:13
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:13
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 19:13
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:13
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:13
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:13

Results of **MW-16A**

Client Sample ID: **MW-16A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631001
Lab Project ID: 1222631

Collection Date: 05/24/22 17:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
cis-1,2-Dichloroethene	0.675 J		1.00	0.310	ug/L	1		06/04/22 19:13
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:13
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:13
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:13
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:13
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:13
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/04/22 19:13
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Styrene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Toluene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
trans-1,2-Dichloroethene	0.617 J		1.00	0.310	ug/L	1		06/04/22 19:13
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Trichloroethene	1.99		1.00	0.310	ug/L	1		06/04/22 19:13
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:13
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:13
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/04/22 19:13
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/04/22 19:13
Surrogates								
1,2-Dichloroethane-D4 (surr)	98.3		81-118		%	1		06/04/22 19:13
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/04/22 19:13
Toluene-d8 (surr)	99.2		89-112		%	1		06/04/22 19:13

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-16A**

Client Sample ID: **MW-16A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631001
Lab Project ID: 1222631

Collection Date: 05/24/22 17:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 19:13
Container ID: 1222631001-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-04**

Client Sample ID: **MW-04**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631002
Lab Project ID: 1222631

Collection Date: 05/25/22 12:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:28
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:28
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 19:28
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 19:28
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:28
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:28
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:28
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:28
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 19:28
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:28
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:28
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:28

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-04**

Client Sample ID: **MW-04**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631002
Lab Project ID: 1222631

Collection Date: 05/25/22 12:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:28
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:28
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:28
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:28
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:28
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/04/22 19:28
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Styrene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Toluene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Trichloroethene	0.583 J		1.00	0.310	ug/L	1		06/04/22 19:28
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:28
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:28
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/04/22 19:28
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/04/22 19:28
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.9		81-118		%	1		06/04/22 19:28
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 19:28
Toluene-d8 (surr)	98		89-112		%	1		06/04/22 19:28

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-04**

Client Sample ID: **MW-04**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631002
Lab Project ID: 1222631

Collection Date: 05/25/22 12:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 19:28
Container ID: 1222631002-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-05**

Client Sample ID: **MW-05**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631003
Lab Project ID: 1222631

Collection Date: 05/25/22 13:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:43
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:43
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 19:43
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 19:43
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:43
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:43
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:43
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:43
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 19:43
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:43
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:43
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:43

Results of **MW-05**

Client Sample ID: **MW-05**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631003
Lab Project ID: 1222631

Collection Date: 05/25/22 13:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
cis-1,2-Dichloroethene	1.48		1.00	0.310	ug/L	1		06/04/22 19:43
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:43
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/04/22 19:43
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:43
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:43
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:43
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/04/22 19:43
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Styrene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Toluene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
trans-1,2-Dichloroethene	3.31		1.00	0.310	ug/L	1		06/04/22 19:43
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Trichloroethene	1.18		1.00	0.310	ug/L	1		06/04/22 19:43
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 19:43
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/04/22 19:43
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/04/22 19:43
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/04/22 19:43
Surrogates								
1,2-Dichloroethane-D4 (surr)	97.1		81-118		%	1		06/04/22 19:43
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 19:43
Toluene-d8 (surr)	99.3		89-112		%	1		06/04/22 19:43

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-05**

Client Sample ID: **MW-05**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631003
Lab Project ID: 1222631

Collection Date: 05/25/22 13:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 19:43
Container ID: 1222631003-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-15A**

Client Sample ID: **MW-15A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631004
Lab Project ID: 1222631

Collection Date: 05/24/22 16:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:58
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 19:58
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 19:58
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 19:58
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 19:58
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58

Results of **MW-15A**

Client Sample ID: **MW-15A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631004
Lab Project ID: 1222631

Collection Date: 05/24/22 16:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
cis-1,2-Dichloroethene	0.592	J	1.00	0.310	ug/L	1		06/04/22 19:58
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 19:58
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 19:58
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
trans-1,2-Dichloroethene	0.321	J	1.00	0.310	ug/L	1		06/04/22 19:58
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Trichloroethene	1.71		1.00	0.310	ug/L	1		06/04/22 19:58
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 19:58
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 19:58
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 19:58
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 19:58
Surrogates								
1,2-Dichloroethane-D4 (surr)	98.9		81-118		%	1		06/04/22 19:58
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 19:58
Toluene-d8 (surr)	99.3		89-112		%	1		06/04/22 19:58

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-15A**

Client Sample ID: **MW-15A**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631004
Lab Project ID: 1222631

Collection Date: 05/24/22 16:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 19:58
Container ID: 1222631004-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-34**

Client Sample ID: **MW-34**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631005
Lab Project ID: 1222631

Collection Date: 05/24/22 15:08
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:13
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 20:13
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 20:13
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:13
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 20:13
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13

Results of **MW-34**

Client Sample ID: **MW-34**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631005
Lab Project ID: 1222631

Collection Date: 05/24/22 15:08
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
cis-1,2-Dichloroethene	0.912	J	1.00	0.310	ug/L	1		06/04/22 20:13
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:13
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 20:13
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
trans-1,2-Dichloroethene	0.712	J	1.00	0.310	ug/L	1		06/04/22 20:13
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Trichloroethene	2.11		1.00	0.310	ug/L	1		06/04/22 20:13
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:13
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:13
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 20:13
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 20:13
Surrogates								
1,2-Dichloroethane-D4 (surr)	96.9		81-118		%	1		06/04/22 20:13
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/04/22 20:13
Toluene-d8 (surr)	98.3		89-112		%	1		06/04/22 20:13

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-34**

Client Sample ID: **MW-34**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631005
Lab Project ID: 1222631

Collection Date: 05/24/22 15:08
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 20:13
Container ID: 1222631005-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-35**

Client Sample ID: **MW-35**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631006
Lab Project ID: 1222631

Collection Date: 05/24/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:28
1,1-Dichloroethane	0.485	J	1.00	0.310	ug/L	1		06/04/22 20:28
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 20:28
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 20:28
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:28
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 20:28
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28

Results of **MW-35**

Client Sample ID: **MW-35**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631006
Lab Project ID: 1222631

Collection Date: 05/24/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
cis-1,2-Dichloroethene	0.681	J	1.00	0.310	ug/L	1		06/04/22 20:28
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:28
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 20:28
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
trans-1,2-Dichloroethene	0.631	J	1.00	0.310	ug/L	1		06/04/22 20:28
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Trichloroethene	1.78		1.00	0.310	ug/L	1		06/04/22 20:28
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:28
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:28
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 20:28
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 20:28
Surrogates								
1,2-Dichloroethane-D4 (surr)	97.4		81-118		%	1		06/04/22 20:28
4-Bromofluorobenzene (surr)	106		85-114		%	1		06/04/22 20:28
Toluene-d8 (surr)	100		89-112		%	1		06/04/22 20:28

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-35**

Client Sample ID: **MW-35**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631006
Lab Project ID: 1222631

Collection Date: 05/24/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 20:28
Container ID: 1222631006-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-17**

Client Sample ID: **MW-17**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631007
Lab Project ID: 1222631

Collection Date: 05/26/22 15:34
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 20:59
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 20:59
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 20:59
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 20:59
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 20:59
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 20:59
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 20:59
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 20:59
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 20:59
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 20:59
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 20:59
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 20:59

Results of **MW-17**

Client Sample ID: **MW-17**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631007
Lab Project ID: 1222631

Collection Date: 05/26/22 15:34
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
cis-1,2-Dichloroethene	4.00		1.00	0.310	ug/L	1		06/06/22 20:59
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/06/22 20:59
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/06/22 20:59
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/06/22 20:59
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/06/22 20:59
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/06/22 20:59
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/06/22 20:59
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Styrene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Toluene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
trans-1,2-Dichloroethene	2.56		1.00	0.310	ug/L	1		06/06/22 20:59
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Trichloroethene	3.82		1.00	0.310	ug/L	1		06/06/22 20:59
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 20:59
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/06/22 20:59
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/06/22 20:59
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/06/22 20:59
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.2		81-118		%	1		06/06/22 20:59
4-Bromofluorobenzene (surr)	103		85-114		%	1		06/06/22 20:59
Toluene-d8 (surr)	98.4		89-112		%	1		06/06/22 20:59

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-17**

Client Sample ID: **MW-17**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631007
Lab Project ID: 1222631

Collection Date: 05/26/22 15:34
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 20:59
Container ID: 1222631007-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-917**

Client Sample ID: **MW-917**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631008
Lab Project ID: 1222631

Collection Date: 05/26/22 15:24
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 21:14
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 21:14
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 21:14
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 21:14
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 21:14
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-917**

Client Sample ID: **MW-917**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631008
Lab Project ID: 1222631

Collection Date: 05/26/22 15:24
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
cis-1,2-Dichloroethene	4.22		1.00	0.310	ug/L	1		06/06/22 21:14
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 21:14
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 21:14
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
trans-1,2-Dichloroethene	2.74		1.00	0.310	ug/L	1		06/06/22 21:14
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Trichloroethene	3.59		1.00	0.310	ug/L	1		06/06/22 21:14
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 21:14
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 21:14
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 21:14
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 21:14
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		06/06/22 21:14
4-Bromofluorobenzene (surr)	106		85-114		%	1		06/06/22 21:14
Toluene-d8 (surr)	99		89-112		%	1		06/06/22 21:14

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-917**

Client Sample ID: **MW-917**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631008
Lab Project ID: 1222631

Collection Date: 05/26/22 15:24
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 21:14
Container ID: 1222631008-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-32**

Client Sample ID: **MW-32**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631009
Lab Project ID: 1222631

Collection Date: 05/25/22 17:23
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:43
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 21:43
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 21:43
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:43
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 21:43
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43

Results of **MW-32**

Client Sample ID: **MW-32**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631009
Lab Project ID: 1222631

Collection Date: 05/25/22 17:23
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
cis-1,2-Dichloroethene	25.4		1.00	0.310	ug/L	1		06/04/22 21:43
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:43
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 21:43
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
trans-1,2-Dichloroethene	2.10		1.00	0.310	ug/L	1		06/04/22 21:43
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Trichloroethene	1.74		1.00	0.310	ug/L	1		06/04/22 21:43
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:43
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:43
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 21:43
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 21:43
Surrogates								
1,2-Dichloroethane-D4 (surr)	98.4		81-118		%	1		06/04/22 21:43
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/04/22 21:43
Toluene-d8 (surr)	98		89-112		%	1		06/04/22 21:43

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-32**

Client Sample ID: **MW-32**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631009
Lab Project ID: 1222631

Collection Date: 05/25/22 17:23
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 21:43
Container ID: 1222631009-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-31**

Client Sample ID: **MW-31**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631010
Lab Project ID: 1222631

Collection Date: 05/25/22 16:07
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:43
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 20:43
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 20:43
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:43
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 20:43
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43

Results of **MW-31**

Client Sample ID: **MW-31**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631010
Lab Project ID: 1222631

Collection Date: 05/25/22 16:07
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:43
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 20:43
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Trichloroethene	1.43		1.00	0.310	ug/L	1		06/04/22 20:43
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:43
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:43
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 20:43
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 20:43
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		81-118		%	1		06/04/22 20:43
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/04/22 20:43
Toluene-d8 (surr)	99.3		89-112		%	1		06/04/22 20:43

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-31**

Client Sample ID: **MW-31**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631010
Lab Project ID: 1222631

Collection Date: 05/25/22 16:07
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 20:43
Container ID: 1222631010-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-27**

Client Sample ID: **MW-27**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631011
Lab Project ID: 1222631

Collection Date: 05/26/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:13
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 18:13
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 18:13
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:13
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 18:13
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13

Results of **MW-27**

Client Sample ID: **MW-27**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631011
Lab Project ID: 1222631

Collection Date: 05/26/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:13
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 18:13
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Trichloroethene	0.550	J	1.00	0.310	ug/L	1		06/06/22 18:13
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:13
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:13
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 18:13
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 18:13
Surrogates								
1,2-Dichloroethane-D4 (surr)	100		81-118		%	1		06/06/22 18:13
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/06/22 18:13
Toluene-d8 (surr)	98.5		89-112		%	1		06/06/22 18:13

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-27**

Client Sample ID: **MW-27**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631011
Lab Project ID: 1222631

Collection Date: 05/26/22 14:16
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 18:13
Container ID: 1222631011-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **EB-19**

Client Sample ID: **EB-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631012
Lab Project ID: 1222631

Collection Date: 05/26/22 16:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:28
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 18:28
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 18:28
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:28
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 18:28
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28

Results of **EB-19**

Client Sample ID: **EB-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631012
Lab Project ID: 1222631

Collection Date: 05/26/22 16:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:28
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 18:28
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Toluene	0.518	J	1.00	0.310	ug/L	1		06/06/22 18:28
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Trichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:28
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:28
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 18:28
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 18:28
Surrogates								
1,2-Dichloroethane-D4 (surr)	101		81-118		%	1		06/06/22 18:28
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/06/22 18:28
Toluene-d8 (surr)	97.7		89-112		%	1		06/06/22 18:28

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J flagging is activated

Results of **EB-19**

Client Sample ID: **EB-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631012
Lab Project ID: 1222631

Collection Date: 05/26/22 16:42
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 18:28
Container ID: 1222631012-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-908**

Client Sample ID: **MW-908**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631013
Lab Project ID: 1222631

Collection Date: 05/23/22 17:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:20
1,1-Dichloroethane	0.379	J	1.00	0.310	ug/L	1		06/03/22 23:20
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/03/22 23:20
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/03/22 23:20
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Benzene	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:20
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/03/22 23:20
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20

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Results of **MW-908**

Client Sample ID: **MW-908**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631013
Lab Project ID: 1222631

Collection Date: 05/23/22 17:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
cis-1,2-Dichloroethene	0.473	J	1.00	0.310	ug/L	1		06/03/22 23:20
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:20
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/03/22 23:20
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Styrene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Toluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
trans-1,2-Dichloroethene	0.419	J	1.00	0.310	ug/L	1		06/03/22 23:20
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Trichloroethene	1.45		1.00	0.310	ug/L	1		06/03/22 23:20
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:20
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:20
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/03/22 23:20
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/03/22 23:20
Surrogates								
1,2-Dichloroethane-D4 (surr)	99.4		81-118		%	1		06/03/22 23:20
4-Bromofluorobenzene (surr)	102		85-114		%	1		06/03/22 23:20
Toluene-d8 (surr)	102		89-112		%	1		06/03/22 23:20

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Results of **MW-908**

Client Sample ID: **MW-908**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631013
Lab Project ID: 1222631

Collection Date: 05/23/22 17:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/03/22 23:20
Container ID: 1222631013-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-108**

Client Sample ID: **MW-108**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631014
Lab Project ID: 1222631

Collection Date: 05/23/22 17:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:37
1,1-Dichloroethane	0.381	J	1.00	0.310	ug/L	1		06/03/22 23:37
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/03/22 23:37
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/03/22 23:37
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Benzene	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:37
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/03/22 23:37
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37

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J flagging is activated

Results of **MW-108**

Client Sample ID: **MW-108**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631014
Lab Project ID: 1222631

Collection Date: 05/23/22 17:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
cis-1,2-Dichloroethene	0.474	J	1.00	0.310	ug/L	1		06/03/22 23:37
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:37
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/03/22 23:37
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Styrene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Toluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
trans-1,2-Dichloroethene	0.429	J	1.00	0.310	ug/L	1		06/03/22 23:37
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Trichloroethene	1.44		1.00	0.310	ug/L	1		06/03/22 23:37
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:37
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:37
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/03/22 23:37
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/03/22 23:37
Surrogates								
1,2-Dichloroethane-D4 (surr)	101		81-118		%	1		06/03/22 23:37
4-Bromofluorobenzene (surr)	103		85-114		%	1		06/03/22 23:37
Toluene-d8 (surr)	102		89-112		%	1		06/03/22 23:37

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-108**

Client Sample ID: **MW-108**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631014
Lab Project ID: 1222631

Collection Date: 05/23/22 17:03
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/03/22 23:37
Container ID: 1222631014-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-18**

Client Sample ID: **MW-18**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631015
Lab Project ID: 1222631

Collection Date: 05/25/22 14:39
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:43
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 18:43
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 18:43
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:43
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 18:43
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43

Results of **MW-18**

Client Sample ID: **MW-18**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631015
Lab Project ID: 1222631

Collection Date: 05/25/22 14:39
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
cis-1,2-Dichloroethene	3.60		1.00	0.310	ug/L	1		06/06/22 18:43
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:43
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 18:43
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
trans-1,2-Dichloroethene	2.76		1.00	0.310	ug/L	1		06/06/22 18:43
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Trichloroethene	1.17		1.00	0.310	ug/L	1		06/06/22 18:43
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:43
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:43
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 18:43
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 18:43
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		06/06/22 18:43
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/06/22 18:43
Toluene-d8 (surr)	98.9		89-112		%	1		06/06/22 18:43

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-18**

Client Sample ID: **MW-18**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631015
Lab Project ID: 1222631

Collection Date: 05/25/22 14:39
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 18:43
Container ID: 1222631015-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-19**

Client Sample ID: **MW-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631016
Lab Project ID: 1222631

Collection Date: 05/26/22 16:52
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:58
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 18:58
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 18:58
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 18:58
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 18:58
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-19**

Client Sample ID: **MW-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631016
Lab Project ID: 1222631

Collection Date: 05/26/22 16:52
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
cis-1,2-Dichloroethene	0.687	J	1.00	0.310	ug/L	1		06/06/22 18:58
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 18:58
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 18:58
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Tetrachloroethene	0.318	J	1.00	0.310	ug/L	1		06/06/22 18:58
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
trans-1,2-Dichloroethene	0.456	J	1.00	0.310	ug/L	1		06/06/22 18:58
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Trichloroethene	1.84		1.00	0.310	ug/L	1		06/06/22 18:58
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 18:58
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 18:58
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 18:58
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 18:58
Surrogates								
1,2-Dichloroethane-D4 (surr)	101		81-118		%	1		06/06/22 18:58
4-Bromofluorobenzene (surr)	103		85-114		%	1		06/06/22 18:58
Toluene-d8 (surr)	98.8		89-112		%	1		06/06/22 18:58

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-19**

Client Sample ID: **MW-19**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631016
Lab Project ID: 1222631

Collection Date: 05/26/22 16:52
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 18:58
Container ID: 1222631016-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-105**

Client Sample ID: **MW-105**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631017
Lab Project ID: 1222631

Collection Date: 05/24/22 11:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:58
1,1-Dichloroethane	0.433	J	1.00	0.310	ug/L	1		06/04/22 20:58
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 20:58
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 20:58
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 20:58
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 20:58
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-105**

Client Sample ID: **MW-105**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631017
Lab Project ID: 1222631

Collection Date: 05/24/22 11:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
cis-1,2-Dichloroethene	0.443	J	1.00	0.310	ug/L	1		06/04/22 20:58
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 20:58
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 20:58
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
trans-1,2-Dichloroethene	0.538	J	1.00	0.310	ug/L	1		06/04/22 20:58
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Trichloroethene	0.841	J	1.00	0.310	ug/L	1		06/04/22 20:58
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 20:58
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 20:58
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 20:58
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 20:58
Surrogates								
1,2-Dichloroethane-D4 (surr)	100		81-118		%	1		06/04/22 20:58
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 20:58
Toluene-d8 (surr)	98.7		89-112		%	1		06/04/22 20:58

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-105**

Client Sample ID: **MW-105**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631017
Lab Project ID: 1222631

Collection Date: 05/24/22 11:06
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 20:58
Container ID: 1222631017-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-104**

Client Sample ID: **MW-104**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631018
Lab Project ID: 1222631

Collection Date: 05/24/22 11:59
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:13
1,1-Dichloroethane	0.417	J	1.00	0.310	ug/L	1		06/04/22 21:13
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 21:13
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 21:13
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:13
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 21:13
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-104**

Client Sample ID: **MW-104**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631018
Lab Project ID: 1222631

Collection Date: 05/24/22 11:59
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
cis-1,2-Dichloroethene	0.730	J	1.00	0.310	ug/L	1		06/04/22 21:13
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:13
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 21:13
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
trans-1,2-Dichloroethene	1.07		1.00	0.310	ug/L	1		06/04/22 21:13
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Trichloroethene	0.543	J	1.00	0.310	ug/L	1		06/04/22 21:13
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:13
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:13
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 21:13
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 21:13
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		06/04/22 21:13
4-Bromofluorobenzene (surr)	106		85-114		%	1		06/04/22 21:13
Toluene-d8 (surr)	98.7		89-112		%	1		06/04/22 21:13

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-104**

Client Sample ID: **MW-104**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631018
Lab Project ID: 1222631

Collection Date: 05/24/22 11:59
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 21:13
Container ID: 1222631018-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
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Results of **MW-103**

Client Sample ID: **MW-103**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631019
Lab Project ID: 1222631

Collection Date: 05/24/22 12:43
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:28
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:28
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 21:28
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 21:28
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:28
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:28
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:28
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 21:28
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 21:28
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 21:28
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 21:28
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 21:28

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J flagging is activated

Results of **MW-103**

Client Sample ID: **MW-103**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631019
Lab Project ID: 1222631

Collection Date: 05/24/22 12:43
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/04/22 21:28
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/04/22 21:28
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/04/22 21:28
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/04/22 21:28
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/04/22 21:28
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/04/22 21:28
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Styrene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Toluene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/04/22 21:28
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/04/22 21:28
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/04/22 21:28
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/04/22 21:28
Surrogates								
1,2-Dichloroethane-D4 (surr)	101		81-118		%	1		06/04/22 21:28
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 21:28
Toluene-d8 (surr)	99.7		89-112		%	1		06/04/22 21:28

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J flagging is activated

Results of **MW-103**

Client Sample ID: **MW-103**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631019
Lab Project ID: 1222631

Collection Date: 05/24/22 12:43
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 21:28
Container ID: 1222631019-A

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 06/04/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-107**

Client Sample ID: **MW-107**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631020
Lab Project ID: 1222631

Collection Date: 05/23/22 16:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:52
1,1-Dichloroethane	0.423	J	1.00	0.310	ug/L	1		06/03/22 23:52
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/03/22 23:52
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/03/22 23:52
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Benzene	0.200	U	0.400	0.120	ug/L	1		06/03/22 23:52
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/03/22 23:52
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52

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J flagging is activated

Results of **MW-107**

Client Sample ID: **MW-107**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631020
Lab Project ID: 1222631

Collection Date: 05/23/22 16:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
cis-1,2-Dichloroethene	0.597	J	1.00	0.310	ug/L	1		06/03/22 23:52
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 23:52
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/03/22 23:52
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Styrene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Toluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
trans-1,2-Dichloroethene	0.735	J	1.00	0.310	ug/L	1		06/03/22 23:52
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Trichloroethene	1.31		1.00	0.310	ug/L	1		06/03/22 23:52
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 23:52
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/03/22 23:52
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/03/22 23:52
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/03/22 23:52
Surrogates								
1,2-Dichloroethane-D4 (surr)	98.2		81-118		%	1		06/03/22 23:52
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/03/22 23:52
Toluene-d8 (surr)	100		89-112		%	1		06/03/22 23:52

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Results of **MW-107**

Client Sample ID: **MW-107**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631020
Lab Project ID: 1222631

Collection Date: 05/23/22 16:00
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/03/22 23:52
Container ID: 1222631020-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-39**

Client Sample ID: **MW-39**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631021
Lab Project ID: 1222631

Collection Date: 05/23/22 12:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 00:08
1,1-Dichloroethane	0.366	J	1.00	0.310	ug/L	1		06/04/22 00:08
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 00:08
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 00:08
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 00:08
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 00:08
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **MW-39**

Client Sample ID: **MW-39**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631021
Lab Project ID: 1222631

Collection Date: 05/23/22 12:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
cis-1,2-Dichloroethene	0.565	J	1.00	0.310	ug/L	1		06/04/22 00:08
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:08
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 00:08
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
trans-1,2-Dichloroethene	0.735	J	1.00	0.310	ug/L	1		06/04/22 00:08
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Trichloroethene	0.616	J	1.00	0.310	ug/L	1		06/04/22 00:08
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:08
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:08
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 00:08
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 00:08
Surrogates								
1,2-Dichloroethane-D4 (surr)	97.4		81-118		%	1		06/04/22 00:08
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 00:08
Toluene-d8 (surr)	99		89-112		%	1		06/04/22 00:08

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J flagging is activated

Results of **MW-39**

Client Sample ID: **MW-39**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631021
Lab Project ID: 1222631

Collection Date: 05/23/22 12:47
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 00:08
Container ID: 1222631021-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-38**

Client Sample ID: **MW-38**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631022
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/04/22 00:23
1,1-Dichloroethane	0.382	J	1.00	0.310	ug/L	1		06/04/22 00:23
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/04/22 00:23
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/04/22 00:23
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Benzene	0.200	U	0.400	0.120	ug/L	1		06/04/22 00:23
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/04/22 00:23
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23

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J flagging is activated

Results of **MW-38**

Client Sample ID: **MW-38**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631022
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
cis-1,2-Dichloroethene	0.500	J	1.00	0.310	ug/L	1		06/04/22 00:23
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/04/22 00:23
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/04/22 00:23
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Styrene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Toluene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
trans-1,2-Dichloroethene	0.575	J	1.00	0.310	ug/L	1		06/04/22 00:23
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Trichloroethene	0.758	J	1.00	0.310	ug/L	1		06/04/22 00:23
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/04/22 00:23
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/04/22 00:23
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/04/22 00:23
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/04/22 00:23
Surrogates								
1,2-Dichloroethane-D4 (surr)	98.3		81-118		%	1		06/04/22 00:23
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/04/22 00:23
Toluene-d8 (surr)	100		89-112		%	1		06/04/22 00:23

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J flagging is activated

Results of **MW-38**

Client Sample ID: **MW-38**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631022
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/04/22 00:23
Container ID: 1222631022-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-30**

Client Sample ID: **MW-30**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631023
Lab Project ID: 1222631

Collection Date: 05/26/22 13:09
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:13
1,1-Dichloroethane	0.705	J	1.00	0.310	ug/L	1		06/06/22 19:13
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 19:13
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 19:13
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:13
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 19:13
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13

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J flagging is activated

Results of **MW-30**

Client Sample ID: **MW-30**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631023
Lab Project ID: 1222631

Collection Date: 05/26/22 13:09
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
cis-1,2-Dichloroethene	0.323	J	1.00	0.310	ug/L	1		06/06/22 19:13
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:13
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 19:13
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
trans-1,2-Dichloroethene	0.509	J	1.00	0.310	ug/L	1		06/06/22 19:13
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Trichloroethene	1.23		1.00	0.310	ug/L	1		06/06/22 19:13
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:13
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:13
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 19:13
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 19:13
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		81-118		%	1		06/06/22 19:13
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/06/22 19:13
Toluene-d8 (surr)	98.2		89-112		%	1		06/06/22 19:13

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J flagging is activated

Results of **MW-30**

Client Sample ID: **MW-30**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631023
Lab Project ID: 1222631

Collection Date: 05/26/22 13:09
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 19:13
Container ID: 1222631023-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-29**

Client Sample ID: **MW-29**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631024
Lab Project ID: 1222631

Collection Date: 05/26/22 12:25
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:28
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 19:28
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 19:28
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:28
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 19:28
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28

Results of **MW-29**

Client Sample ID: **MW-29**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631024
Lab Project ID: 1222631

Collection Date: 05/26/22 12:25
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:28
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/06/22 19:28
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Styrene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Toluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Trichloroethene	0.417	J	1.00	0.310	ug/L	1		06/06/22 19:28
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:28
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:28
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/06/22 19:28
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/06/22 19:28
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		81-118		%	1		06/06/22 19:28
4-Bromofluorobenzene (surr)	105		85-114		%	1		06/06/22 19:28
Toluene-d8 (surr)	98		89-112		%	1		06/06/22 19:28

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J flagging is activated

Results of **MW-29**

Client Sample ID: **MW-29**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631024
Lab Project ID: 1222631

Collection Date: 05/26/22 12:25
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 19:28
Container ID: 1222631024-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **MW-26**

Client Sample ID: **MW-26**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631025
Lab Project ID: 1222631

Collection Date: 05/26/22 11:02
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:43
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:43
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/06/22 19:43
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/06/22 19:43
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:43
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:43
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:43
Benzene	0.200	U	0.400	0.120	ug/L	1		06/06/22 19:43
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/06/22 19:43
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/06/22 19:43
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/06/22 19:43
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/06/22 19:43

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J flagging is activated

Results of **MW-26**

Client Sample ID: **MW-26**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631025
Lab Project ID: 1222631

Collection Date: 05/26/22 11:02
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Chloromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
cis-1,2-Dichloroethene	4.84		1.00	0.310	ug/L	1		06/06/22 19:43
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		06/06/22 19:43
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		06/06/22 19:43
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Freon-113	5.00 U		10.0	3.10	ug/L	1		06/06/22 19:43
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		06/06/22 19:43
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		06/06/22 19:43
Naphthalene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
o-Xylene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		06/06/22 19:43
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Styrene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Toluene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
trans-1,2-Dichloroethene	4.43		1.00	0.310	ug/L	1		06/06/22 19:43
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Trichloroethene	1.80		1.00	0.310	ug/L	1		06/06/22 19:43
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		06/06/22 19:43
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		06/06/22 19:43
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		06/06/22 19:43
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		06/06/22 19:43
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		81-118		%	1		06/06/22 19:43
4-Bromofluorobenzene (surr)	103		85-114		%	1		06/06/22 19:43
Toluene-d8 (surr)	97.6		89-112		%	1		06/06/22 19:43

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Results of **MW-26**

Client Sample ID: **MW-26**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631025
Lab Project ID: 1222631

Collection Date: 05/26/22 11:02
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/06/22 19:43
Container ID: 1222631025-A

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 06/06/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631026
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		06/03/22 18:57
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		06/03/22 18:57
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		06/03/22 18:57
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Benzene	0.200	U	0.400	0.120	ug/L	1		06/03/22 18:57
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
Bromoform	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Bromomethane	3.00	U	6.00	3.00	ug/L	1		06/03/22 18:57
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
Chloroethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57

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J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631026
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Chloroform	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Chloromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
cis-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
cis-1,3-Dichloropropene	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
Dibromochloromethane	0.250	U	0.500	0.150	ug/L	1		06/03/22 18:57
Dibromomethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Dichlorodifluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Freon-113	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Hexachlorobutadiene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Isopropylbenzene (Cumene)	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Methylene chloride	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Methyl-t-butyl ether	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Naphthalene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
n-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
n-Propylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
o-Xylene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		06/03/22 18:57
sec-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Styrene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
tert-Butylbenzene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Tetrachloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Toluene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
trans-1,2-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
trans-1,3-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Trichloroethene	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Trichlorofluoromethane	0.500	U	1.00	0.310	ug/L	1		06/03/22 18:57
Vinyl acetate	5.00	U	10.0	3.10	ug/L	1		06/03/22 18:57
Vinyl chloride	0.0750	U	0.150	0.0500	ug/L	1		06/03/22 18:57
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		06/03/22 18:57
Surrogates								
1,2-Dichloroethane-D4 (surr)	107		81-118		%	1		06/03/22 18:57
4-Bromofluorobenzene (surr)	104		85-114		%	1		06/03/22 18:57
Toluene-d8 (surr)	100		89-112		%	1		06/03/22 18:57

Print Date: 06/07/2022 1:17:07PM

J flagging is activated

Results of **Trip Blank**

Client Sample ID: **Trip Blank**
Client Project ID: **103822-004 6 Mile**
Lab Sample ID: 1222631026
Lab Project ID: 1222631

Collection Date: 05/23/22 11:50
Received Date: 06/01/22 08:40
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Analyst: JMG
Analytical Date/Time: 06/03/22 18:57
Container ID: 1222631026-A

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 06/03/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1836931 [VXX/38647]
Blank Lab ID: 1666566

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.200	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	3.00U	6.00	3.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Method Blank

Blank ID: MB for HBN 1836931 [VXX/38647]
Blank Lab ID: 1666566

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Chloromethane	0.500U	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	5.00U	10.0	3.10	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	106	81-118		%
4-Bromofluorobenzene (surr)	103	85-114		%
Toluene-d8 (surr)	99.9	89-112		%

Method Blank

Blank ID: MB for HBN 1836931 [VXX/38647]
Blank Lab ID: 1666566

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS21663
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: JMG
Analytical Date/Time: 6/3/2022 3:20:00PM

Prep Batch: VXX38647
Prep Method: SW5030B
Prep Date/Time: 6/3/2022 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38647]
Blank Spike Lab ID: 1666567
Date Analyzed: 06/03/2022 15:35

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38647]
Spike Duplicate Lab ID: 1666568
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	30	29.4	98	30	29.8	99	(78-124)	1.50	(< 20)
1,1,1-Trichloroethane	30	30.4	101	30	30.5	102	(74-131)	0.42	(< 20)
1,1,2,2-Tetrachloroethane	30	29.4	98	30	29.6	99	(71-121)	0.67	(< 20)
1,1,2-Trichloroethane	30	30.2	101	30	30.6	102	(80-119)	1.50	(< 20)
1,1-Dichloroethane	30	29.2	98	30	29.3	98	(77-125)	0.27	(< 20)
1,1-Dichloroethene	30	29.9	100	30	30.4	101	(71-131)	1.80	(< 20)
1,1-Dichloropropene	30	31.1	104	30	31.3	104	(79-125)	0.65	(< 20)
1,2,3-Trichlorobenzene	30	31.6	105	30	33.4	111	(69-129)	5.50	(< 20)
1,2,3-Trichloropropane	30	29.5	98	30	29.4	98	(73-122)	0.33	(< 20)
1,2,4-Trichlorobenzene	30	30.7	102	30	32.0	107	(69-130)	4.20	(< 20)
1,2,4-Trimethylbenzene	30	31.3	104	30	32.4	108	(79-124)	3.50	(< 20)
1,2-Dibromo-3-chloropropane	30	30.2	101	30	30.6	102	(62-128)	1.40	(< 20)
1,2-Dibromoethane	30	30.6	102	30	30.9	103	(77-121)	1.00	(< 20)
1,2-Dichlorobenzene	30	29.4	98	30	30.1	100	(80-119)	2.40	(< 20)
1,2-Dichloroethane	30	28.5	95	30	28.6	96	(73-128)	0.50	(< 20)
1,2-Dichloropropane	30	29.7	99	30	29.8	99	(78-122)	0.35	(< 20)
1,3,5-Trimethylbenzene	30	31.6	105	30	31.9	106	(75-124)	1.10	(< 20)
1,3-Dichlorobenzene	30	29.8	99	30	30.6	102	(80-119)	2.80	(< 20)
1,3-Dichloropropane	30	30.5	102	30	30.7	102	(80-119)	0.85	(< 20)
1,4-Dichlorobenzene	30	29.6	99	30	30.4	101	(79-118)	2.90	(< 20)
2,2-Dichloropropane	30	31.1	104	30	31.5	105	(60-139)	1.00	(< 20)
2-Butanone (MEK)	90	94.3	105	90	94.3	105	(56-143)	0.04	(< 20)
2-Chlorotoluene	30	30.4	101	30	30.4	101	(79-122)	0.13	(< 20)
2-Hexanone	90	96.1	107	90	95.6	106	(57-139)	0.53	(< 20)
4-Chlorotoluene	30	30.0	100	30	30.7	102	(78-122)	2.40	(< 20)
4-Isopropyltoluene	30	31.0	103	30	31.7	106	(77-127)	2.10	(< 20)
4-Methyl-2-pentanone (MIBK)	90	92.9	103	90	92.5	103	(67-130)	0.41	(< 20)
Benzene	30	29.7	99	30	30.1	100	(79-120)	1.30	(< 20)
Bromobenzene	30	29.2	97	30	30.2	101	(80-120)	3.30	(< 20)
Bromochloromethane	30	29.1	97	30	29.4	98	(78-123)	1.10	(< 20)
Bromodichloromethane	30	29.2	97	30	29.5	98	(79-125)	0.86	(< 20)
Bromoform	30	28.9	96	30	29.0	97	(66-130)	0.25	(< 20)
Bromomethane	30	24.2	81	30	25.6	85	(53-141)	5.50	(< 20)
Carbon disulfide	45	44.2	98	45	45.5	101	(64-133)	2.90	(< 20)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38647]
Blank Spike Lab ID: 1666567
Date Analyzed: 06/03/2022 15:35

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38647]
Spike Duplicate Lab ID: 1666568
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Carbon tetrachloride	30	30.9	103	30	31.0	103	(72-136)	0.39	(< 20)
Chlorobenzene	30	29.3	98	30	29.7	99	(82-118)	1.40	(< 20)
Chloroethane	30	27.8	93	30	28.5	95	(60-138)	2.60	(< 20)
Chloroform	30	28.9	96	30	29.0	97	(79-124)	0.46	(< 20)
Chloromethane	30	27.3	91	30	27.2	91	(50-139)	0.10	(< 20)
cis-1,2-Dichloroethene	30	28.7	96	30	29.3	98	(78-123)	2.00	(< 20)
cis-1,3-Dichloropropene	30	30.0	100	30	30.3	101	(75-124)	1.00	(< 20)
Dibromochloromethane	30	30.2	101	30	30.7	102	(74-126)	1.60	(< 20)
Dibromomethane	30	29.1	97	30	29.3	98	(79-123)	0.47	(< 20)
Dichlorodifluoromethane	30	31.0	103	30	31.0	103	(32-152)	0.29	(< 20)
Ethylbenzene	30	30.5	102	30	30.8	103	(79-121)	0.79	(< 20)
Freon-113	45	46.5	103	45	46.8	104	(70-136)	0.76	(< 20)
Hexachlorobutadiene	30	31.0	103	30	32.2	107	(66-134)	3.90	(< 20)
Isopropylbenzene (Cumene)	30	31.7	106	30	32.1	107	(72-131)	1.30	(< 20)
Methylene chloride	30	29.2	97	30	29.3	98	(74-124)	0.34	(< 20)
Methyl-t-butyl ether	45	45.7	102	45	45.7	102	(71-124)	0.06	(< 20)
Naphthalene	30	29.1	97	30	30.7	102	(61-128)	5.60	(< 20)
n-Butylbenzene	30	30.6	102	30	31.8	106	(75-128)	3.90	(< 20)
n-Propylbenzene	30	31.1	104	30	31.6	105	(76-126)	1.60	(< 20)
o-Xylene	30	30.6	102	30	31.0	103	(78-122)	1.30	(< 20)
P & M -Xylene	60	61.7	103	60	62.4	104	(80-121)	1.10	(< 20)
sec-Butylbenzene	30	31.5	105	30	32.3	108	(77-126)	2.40	(< 20)
Styrene	30	31.3	104	30	31.9	106	(78-123)	1.90	(< 20)
tert-Butylbenzene	30	30.9	103	30	31.4	105	(78-124)	1.70	(< 20)
Tetrachloroethene	30	30.4	101	30	30.8	103	(74-129)	1.60	(< 20)
Toluene	30	29.2	97	30	29.6	99	(80-121)	1.40	(< 20)
trans-1,2-Dichloroethene	30	29.5	98	30	29.8	99	(75-124)	0.98	(< 20)
trans-1,3-Dichloropropene	30	30.5	102	30	31.1	104	(73-127)	1.90	(< 20)
Trichloroethene	30	30.1	100	30	30.2	101	(79-123)	0.41	(< 20)
Trichlorofluoromethane	30	29.2	97	30	29.7	99	(65-141)	1.70	(< 20)
Vinyl acetate	30	30.6	102	30	30.5	102	(54-146)	0.50	(< 20)
Vinyl chloride	30	28.5	95	30	28.6	96	(58-137)	0.46	(< 20)
Xylenes (total)	90	92.3	103	90	93.4	104	(79-121)	1.20	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38647]
Blank Spike Lab ID: 1666567
Date Analyzed: 06/03/2022 15:35

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38647]
Spike Duplicate Lab ID: 1666568
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631013, 1222631014, 1222631020, 1222631021, 1222631022, 1222631026

Results by **SW8260D**

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		98	30		97	(81-118)	0.84	
4-Bromofluorobenzene (surr)	30		99	30		100	(85-114)	0.80	
Toluene-d8 (surr)	30		99	30		99	(89-112)	0.29	

Batch Information

Analytical Batch: **VMS21663**
Analytical Method: **SW8260D**
Instrument: **Agilent 7890-75MS**
Analyst: **JMG**

Prep Batch: **VXX38647**
Prep Method: **SW5030B**
Prep Date/Time: **06/03/2022 06:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1837131 [VXX/38655]
Blank Lab ID: 1666702

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.200	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	3.00U	6.00	3.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Method Blank

Blank ID: MB for HBN 1837131 [VXX/38655]
Blank Lab ID: 1666702

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Chloromethane	0.500U	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	5.00U	10.0	3.10	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	101	81-118		%
4-Bromofluorobenzene (surr)	105	85-114		%
Toluene-d8 (surr)	97.3	89-112		%

Method Blank

Blank ID: MB for HBN 1837131 [VXX/38655]
Blank Lab ID: 1666702

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS21668
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: JMG
Analytical Date/Time: 6/4/2022 3:41:00PM

Prep Batch: VXX38655
Prep Method: SW5030B
Prep Date/Time: 6/4/2022 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38655]
Blank Spike Lab ID: 1666703
Date Analyzed: 06/04/2022 15:56

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38655]
Spike Duplicate Lab ID: 1666704
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	30	29.4	98	30	30.1	100	(78-124)	2.20	(< 20)
1,1,1-Trichloroethane	30	30.2	101	30	30.6	102	(74-131)	1.40	(< 20)
1,1,2,2-Tetrachloroethane	30	28.1	94	30	28.0	93	(71-121)	0.42	(< 20)
1,1,2-Trichloroethane	30	28.8	96	30	29.3	98	(80-119)	1.60	(< 20)
1,1-Dichloroethane	30	29.1	97	30	29.6	99	(77-125)	1.50	(< 20)
1,1-Dichloroethene	30	30.2	101	30	30.8	103	(71-131)	2.10	(< 20)
1,1-Dichloropropene	30	30.9	103	30	31.3	104	(79-125)	1.10	(< 20)
1,2,3-Trichlorobenzene	30	29.0	97	30	30.1	100	(69-129)	3.90	(< 20)
1,2,3-Trichloropropane	30	27.6	92	30	27.7	92	(73-122)	0.39	(< 20)
1,2,4-Trichlorobenzene	30	29.5	98	30	30.3	101	(69-130)	2.60	(< 20)
1,2,4-Trimethylbenzene	30	31.5	105	30	31.8	106	(79-124)	1.10	(< 20)
1,2-Dibromo-3-chloropropane	30	26.4	88	30	26.8	89	(62-128)	1.30	(< 20)
1,2-Dibromoethane	30	28.7	96	30	29.3	98	(77-121)	2.00	(< 20)
1,2-Dichlorobenzene	30	29.3	98	30	29.8	99	(80-119)	1.60	(< 20)
1,2-Dichloroethane	30	27.6	92	30	27.9	93	(73-128)	1.10	(< 20)
1,2-Dichloropropane	30	29.4	98	30	29.7	99	(78-122)	1.20	(< 20)
1,3,5-Trimethylbenzene	30	31.3	104	30	31.5	105	(75-124)	0.62	(< 20)
1,3-Dichlorobenzene	30	29.8	99	30	30.1	100	(80-119)	0.78	(< 20)
1,3-Dichloropropane	30	28.9	96	30	29.5	98	(80-119)	2.10	(< 20)
1,4-Dichlorobenzene	30	30.1	100	30	30.3	101	(79-118)	0.67	(< 20)
2,2-Dichloropropane	30	30.6	102	30	31.1	104	(60-139)	1.80	(< 20)
2-Butanone (MEK)	90	80.9	90	90	80.5	90	(56-143)	0.52	(< 20)
2-Chlorotoluene	30	29.9	100	30	30.4	101	(79-122)	1.60	(< 20)
2-Hexanone	90	81.6	91	90	83.5	93	(57-139)	2.30	(< 20)
4-Chlorotoluene	30	30.5	102	30	30.4	101	(78-122)	0.18	(< 20)
4-Isopropyltoluene	30	30.7	102	30	30.8	103	(77-127)	0.23	(< 20)
4-Methyl-2-pentanone (MIBK)	90	83.8	93	90	84.4	94	(67-130)	0.70	(< 20)
Benzene	30	30.0	100	30	30.3	101	(79-120)	0.94	(< 20)
Bromobenzene	30	29.6	99	30	29.8	99	(80-120)	0.60	(< 20)
Bromochloromethane	30	29.2	97	30	29.7	99	(78-123)	1.50	(< 20)
Bromodichloromethane	30	29.0	97	30	29.3	98	(79-125)	1.20	(< 20)
Bromoform	30	27.0	90	30	27.7	92	(66-130)	2.60	(< 20)
Bromomethane	30	24.0	80	30	25.0	83	(53-141)	3.80	(< 20)
Carbon disulfide	45	45.3	101	45	46.0	102	(64-133)	1.50	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38655]
Blank Spike Lab ID: 1666703
Date Analyzed: 06/04/2022 15:56

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38655]
Spike Duplicate Lab ID: 1666704
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

	Blank Spike (ug/L)				Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)		Spike	Result	Rec (%)		CL	RPD (%)	RPD CL
Carbon tetrachloride	30	30.6	102		30	31.1	104		(72-136)	1.80	(< 20)
Chlorobenzene	30	29.2	97		30	29.7	99		(82-118)	1.90	(< 20)
Chloroethane	30	27.5	92		30	28.4	95		(60-138)	3.40	(< 20)
Chloroform	30	28.9	96		30	29.2	98		(79-124)	1.30	(< 20)
Chloromethane	30	26.3	88		30	26.8	90		(50-139)	1.90	(< 20)
cis-1,2-Dichloroethene	30	29.0	97		30	29.6	99		(78-123)	1.90	(< 20)
cis-1,3-Dichloropropene	30	29.6	99		30	29.9	100		(75-124)	1.20	(< 20)
Dibromochloromethane	30	29.1	97		30	29.8	99		(74-126)	2.50	(< 20)
Dibromomethane	30	28.3	94		30	28.7	96		(79-123)	1.30	(< 20)
Dichlorodifluoromethane	30	30.8	103		30	31.3	104		(32-152)	1.80	(< 20)
Ethylbenzene	30	29.6	99		30	30.5	102		(79-121)	3.10	(< 20)
Freon-113	45	46.5	103		45	47.3	105		(70-136)	1.90	(< 20)
Hexachlorobutadiene	30	30.3	101		30	30.7	102		(66-134)	1.40	(< 20)
Isopropylbenzene (Cumene)	30	30.7	102		30	31.3	104		(72-131)	1.90	(< 20)
Methylene chloride	30	38.7	129	*	30	39.1	130	*	(74-124)	1.30	(< 20)
Methyl-t-butyl ether	45	43.2	96		45	43.9	98		(71-124)	1.50	(< 20)
Naphthalene	30	25.2	84		30	27.3	91		(61-128)	7.80	(< 20)
n-Butylbenzene	30	30.4	101		30	30.7	102		(75-128)	1.10	(< 20)
n-Propylbenzene	30	31.3	104		30	31.1	104		(76-126)	0.55	(< 20)
o-Xylene	30	29.7	99		30	30.4	101		(78-122)	2.40	(< 20)
P & M -Xylene	60	59.5	99		60	60.9	101		(80-121)	2.20	(< 20)
sec-Butylbenzene	30	31.4	105		30	31.6	105		(77-126)	0.55	(< 20)
Styrene	30	30.4	101		30	31.2	104		(78-123)	2.40	(< 20)
tert-Butylbenzene	30	31.0	103		30	31.3	104		(78-124)	1.10	(< 20)
Tetrachloroethene	30	30.5	102		30	31.0	103		(74-129)	1.40	(< 20)
Toluene	30	29.2	97		30	29.8	99		(80-121)	2.00	(< 20)
trans-1,2-Dichloroethene	30	29.6	99		30	30.1	100		(75-124)	1.60	(< 20)
trans-1,3-Dichloropropene	30	29.1	97		30	29.8	100		(73-127)	2.50	(< 20)
Trichloroethene	30	30.0	100		30	30.2	101		(79-123)	0.78	(< 20)
Trichlorofluoromethane	30	29.0	97		30	29.9	100		(65-141)	3.20	(< 20)
Vinyl acetate	30	27.7	92		30	28.1	94		(54-146)	1.70	(< 20)
Vinyl chloride	30	28.4	95		30	29.1	97		(58-137)	2.30	(< 20)
Xylenes (total)	90	89.2	99		90	91.3	101		(79-121)	2.30	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38655]
Blank Spike Lab ID: 1666703
Date Analyzed: 06/04/2022 15:56

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38655]
Spike Duplicate Lab ID: 1666704
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631001, 1222631002, 1222631003, 1222631004, 1222631005, 1222631006, 1222631009, 1222631010, 1222631017, 1222631018, 1222631019

Results by **SW8260D**

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		95	30		95	(81-118)	0.52	
4-Bromofluorobenzene (surr)	30		101	30		100	(85-114)	1.80	
Toluene-d8 (surr)	30		99	30		100	(89-112)	1.00	

Batch Information

Analytical Batch: **VMS21668**
Analytical Method: **SW8260D**
Instrument: **Agilent 7890-75MS**
Analyst: **JMG**

Prep Batch: **VXX38655**
Prep Method: **SW5030B**
Prep Date/Time: **06/04/2022 06:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1837180 [VXX/38660]
Blank Lab ID: 1666895

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.200	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	3.00U	6.00	3.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

Method Blank

Blank ID: MB for HBN 1837180 [VXX/38660]
Blank Lab ID: 1666895

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units
Chloromethane	0.500U	1.00	0.310	ug/L
cis-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
cis-1,3-Dichloropropene	0.250U	0.500	0.150	ug/L
Dibromochloromethane	0.250U	0.500	0.150	ug/L
Dibromomethane	0.500U	1.00	0.310	ug/L
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Freon-113	5.00U	10.0	3.10	ug/L
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L
Methylene chloride	5.00U	10.0	3.10	ug/L
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Butylbenzene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
sec-Butylbenzene	0.500U	1.00	0.310	ug/L
Styrene	0.500U	1.00	0.310	ug/L
tert-Butylbenzene	0.500U	1.00	0.310	ug/L
Tetrachloroethene	0.500U	1.00	0.310	ug/L
Toluene	0.500U	1.00	0.310	ug/L
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L
Trichloroethene	0.500U	1.00	0.310	ug/L
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L
Vinyl acetate	5.00U	10.0	3.10	ug/L
Vinyl chloride	0.0750U	0.150	0.0500	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	102	81-118		%
4-Bromofluorobenzene (surr)	105	85-114		%
Toluene-d8 (surr)	98.4	89-112		%

Method Blank

Blank ID: MB for HBN 1837180 [VXX/38660]
Blank Lab ID: 1666895

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS21672
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: JMG
Analytical Date/Time: 6/6/2022 2:55:00PM

Prep Batch: VXX38660
Prep Method: SW5030B
Prep Date/Time: 6/6/2022 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38660]
Blank Spike Lab ID: 1666896
Date Analyzed: 06/06/2022 15:10

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38660]
Spike Duplicate Lab ID: 1666897
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
1,1,1,2-Tetrachloroethane	30	30.0	100	30	28.4	95	(78-124)	5.50	(< 20)
1,1,1-Trichloroethane	30	31.5	105	30	31.8	106	(74-131)	0.98	(< 20)
1,1,2,2-Tetrachloroethane	30	27.5	92	30	27.9	93	(71-121)	1.40	(< 20)
1,1,2-Trichloroethane	30	29.0	97	30	28.4	95	(80-119)	2.10	(< 20)
1,1-Dichloroethane	30	30.4	101	30	30.5	102	(77-125)	0.33	(< 20)
1,1-Dichloroethene	30	31.4	105	30	31.7	106	(71-131)	0.92	(< 20)
1,1-Dichloropropene	30	31.9	106	30	32.1	107	(79-125)	0.62	(< 20)
1,2,3-Trichlorobenzene	30	28.7	96	30	31.3	104	(69-129)	8.60	(< 20)
1,2,3-Trichloropropane	30	27.1	91	30	27.8	93	(73-122)	2.40	(< 20)
1,2,4-Trichlorobenzene	30	29.9	100	30	31.0	103	(69-130)	3.60	(< 20)
1,2,4-Trimethylbenzene	30	32.3	108	30	32.0	107	(79-124)	1.00	(< 20)
1,2-Dibromo-3-chloropropane	30	25.5	85	30	26.8	89	(62-128)	4.70	(< 20)
1,2-Dibromoethane	30	28.9	96	30	28.7	96	(77-121)	0.63	(< 20)
1,2-Dichlorobenzene	30	30.1	100	30	29.9	100	(80-119)	0.54	(< 20)
1,2-Dichloroethane	30	28.3	95	30	29.0	97	(73-128)	2.40	(< 20)
1,2-Dichloropropane	30	30.1	100	30	30.5	102	(78-122)	1.30	(< 20)
1,3,5-Trimethylbenzene	30	32.1	107	30	31.8	106	(75-124)	0.89	(< 20)
1,3-Dichlorobenzene	30	30.4	101	30	30.4	101	(80-119)	0.03	(< 20)
1,3-Dichloropropane	30	29.1	97	30	28.9	96	(80-119)	0.61	(< 20)
1,4-Dichlorobenzene	30	30.6	102	30	30.4	101	(79-118)	0.44	(< 20)
2,2-Dichloropropane	30	32.5	108	30	32.9	110	(60-139)	1.30	(< 20)
2-Butanone (MEK)	90	77.6	86	90	81.6	91	(56-143)	5.00	(< 20)
2-Chlorotoluene	30	30.8	103	30	31.3	104	(79-122)	1.60	(< 20)
2-Hexanone	90	79.4	88	90	83.8	93	(57-139)	5.40	(< 20)
4-Chlorotoluene	30	30.9	103	30	30.5	102	(78-122)	1.40	(< 20)
4-Isopropyltoluene	30	31.2	104	30	30.9	103	(77-127)	0.80	(< 20)
4-Methyl-2-pentanone (MIBK)	90	81.6	91	90	84.9	94	(67-130)	4.00	(< 20)
Benzene	30	31.5	105	30	31.2	104	(79-120)	0.98	(< 20)
Bromobenzene	30	30.3	101	30	30.1	100	(80-120)	0.52	(< 20)
Bromochloromethane	30	30.2	101	30	30.9	103	(78-123)	2.40	(< 20)
Bromodichloromethane	30	29.9	100	30	30.3	101	(79-125)	1.30	(< 20)
Bromoform	30	27.6	92	30	27.0	90	(66-130)	2.00	(< 20)
Bromomethane	30	29.9	100	30	28.1	94	(53-141)	6.40	(< 20)
Carbon disulfide	45	47.4	105	45	47.5	105	(64-133)	0.19	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38660]
Blank Spike Lab ID: 1666896
Date Analyzed: 06/06/2022 15:10

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38660]
Spike Duplicate Lab ID: 1666897
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

	Blank Spike (ug/L)				Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)		Spike	Result	Rec (%)		CL	RPD (%)	RPD CL
Carbon tetrachloride	30	31.8	106		30	32.0	107		(72-136)	0.64	(< 20)
Chlorobenzene	30	30.0	100		30	29.5	98		(82-118)	1.50	(< 20)
Chloroethane	30	28.1	94		30	28.7	96		(60-138)	2.30	(< 20)
Chloroform	30	29.9	100		30	30.2	101		(79-124)	0.87	(< 20)
Chloromethane	30	27.4	91		30	27.0	90		(50-139)	1.20	(< 20)
cis-1,2-Dichloroethene	30	30.2	101		30	30.7	102		(78-123)	1.70	(< 20)
cis-1,3-Dichloropropene	30	30.3	101		30	30.9	103		(75-124)	2.10	(< 20)
Dibromochloromethane	30	29.7	99		30	29.5	98		(74-126)	0.67	(< 20)
Dibromomethane	30	28.9	96		30	29.7	99		(79-123)	2.60	(< 20)
Dichlorodifluoromethane	30	30.5	102		30	30.2	101		(32-152)	1.00	(< 20)
Ethylbenzene	30	30.6	102		30	30.3	101		(79-121)	0.93	(< 20)
Freon-113	45	47.6	106		45	48.1	107		(70-136)	1.00	(< 20)
Hexachlorobutadiene	30	31.8	106		30	31.9	106		(66-134)	0.39	(< 20)
Isopropylbenzene (Cumene)	30	31.4	105		30	31.3	104		(72-131)	0.50	(< 20)
Methylene chloride	30	38.9	130	*	30	39.5	132	*	(74-124)	1.40	(< 20)
Methyl-t-butyl ether	45	42.9	95		45	44.8	100		(71-124)	4.30	(< 20)
Naphthalene	30	24.6	82		30	27.4	91		(61-128)	10.50	(< 20)
n-Butylbenzene	30	31.1	104		30	30.6	102		(75-128)	1.60	(< 20)
n-Propylbenzene	30	31.7	106		30	31.5	105		(76-126)	0.85	(< 20)
o-Xylene	30	30.6	102		30	30.5	102		(78-122)	0.47	(< 20)
P & M -Xylene	60	61.3	102		60	61.6	103		(80-121)	0.47	(< 20)
sec-Butylbenzene	30	31.9	106		30	31.5	105		(77-126)	1.20	(< 20)
Styrene	30	31.3	104		30	31.3	104		(78-123)	0.25	(< 20)
tert-Butylbenzene	30	31.4	105		30	31.1	104		(78-124)	0.94	(< 20)
Tetrachloroethene	30	31.5	105		30	29.7	99		(74-129)	6.00	(< 20)
Toluene	30	30.2	101		30	29.0	97		(80-121)	4.10	(< 20)
trans-1,2-Dichloroethene	30	30.8	103		30	31.2	104		(75-124)	1.30	(< 20)
trans-1,3-Dichloropropene	30	29.6	99		30	29.4	98		(73-127)	0.64	(< 20)
Trichloroethene	30	30.9	103		30	31.0	103		(79-123)	0.07	(< 20)
Trichlorofluoromethane	30	29.8	99		30	30.4	101		(65-141)	2.20	(< 20)
Vinyl acetate	30	27.6	92		30	28.9	96		(54-146)	4.40	(< 20)
Vinyl chloride	30	29.4	98		30	29.2	97		(58-137)	0.79	(< 20)
Xylenes (total)	90	91.9	102		90	92.1	102		(79-121)	0.16	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1222631 [VXX38660]
Blank Spike Lab ID: 1666896
Date Analyzed: 06/06/2022 15:10

Spike Duplicate ID: LCSD for HBN 1222631 [VXX38660]
Spike Duplicate Lab ID: 1666897
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222631007, 1222631008, 1222631011, 1222631012, 1222631015, 1222631016, 1222631023, 1222631024, 1222631025

Results by **SW8260D**

	Blank Spike (%)			Spike Duplicate (%)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		95	30		98	(81-118)	2.60	
4-Bromofluorobenzene (surr)	30		102	30		101	(85-114)	0.37	
Toluene-d8 (surr)	30		100	30		97	(89-112)	2.80	

Batch Information

Analytical Batch: **VMS21672**
Analytical Method: **SW8260D**
Instrument: **Agilent 7890-75MS**
Analyst: **JMG**

Prep Batch: **VXX38660**
Prep Method: **SW5030B**
Prep Date/Time: **06/06/2022 06:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

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SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

2355 Hill Road
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www.shannonwilson.com

CHAIN-OF-CUSTODY RECORD

Laboratory SGS
Attn: J. Dawkins

MSA - SGS - 2016

Turn Around Time: [X] Normal [ ] Rush — Please Specify

Quote No:

J-Flags: [ ] Yes [ ] No

Analytical Methods (include preservative if used)

1222631

Sample Identity	Lab No.	Time	Date Sampled	VOCs	Total N	Remarks/Matrix Composition/Grab? Sample Containers
MW-16A	(1) AC	1742	5/24/22	X	3	groundwater
MW-04	(2) AC	1203	5/25/22	X		
MW-05	(3) AC	1306	5/25/22	X		
MW-15A	(4) AC	1647	5/24/22	X		
MW-34	(5) AC	1508	5/24/22	X		
MW-35	(6) AC	1416	5/24/22	X		
MW-17	(7) AC	1534	5/26/22	X		
MW-917	(8) AC	1524	5/26/22	X		
MW-32	(9) AC	1723	5/25/22	X		
MW-31	(10) AC	1607	5/25/22	X		

Project Information

Number: 103822-004
Name: 6-mile
Contact: Sheila Hinkley
Ongoing Project? Yes [X] No [ ]
Sampler: ARM, CZH

Sample Receipt

Total No. of Containers:
COC Seals/Intact? Y/N/NA: NA
Received Good Cond./Cold: Y
Temp: 3.6°C
Delivery Method: Hand

Notes:

Relinquished By: 1.	Relinquished By: 2.	Relinquished By: 3.
Signature: Time: 1223	Signature: Time: 1450	Signature: Time:
Printed Name: A. Masters Date: 5/27/22	Printed Name: Alexandra Johnston-Carnes Date: 5/31/22	Printed Name: Date:
Company: Shannon & Wilson, Inc	Company: SGS	Company:

Received By: 1.	Received By: 2.	Received By: 3.
Signature: Time: 12:24	Signature: Time:	Signature: Time: 1640
Printed Name: Alexandra Johnston-Carnes Date: 5/27/22	Printed Name: Date:	Printed Name: Daniel Bz Date: 6/1/22
Company: SGS	Company:	Company: SGS

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

No.

CHAIN-OF-CUSTODY RECORD

SHANNON & WILSON, INC.
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www.shannonwilson.com

Laboratory SGS
Attn: J. Dewkins

Analytical Methods (include preservative if used)

1222631

Turn Around Time:	Quote No:	J-Flags:
☐ Normal ☐ Rush		☐ Yes ☐ No
Please Specify		

Sample Identity	Lab No.	Time	Date Sampled	VOCs	Total Nu	Remarks/Matrix Composition/Grab? Sample Containers
MW-27	(11) AC	1416	5/26/22	X	3	groundwate
EB-19	(12) AC	1642	5/26/22	X		Water
MW-90[illegible]	(13) AC	1700	5/23/22	X		groundwater
MW-10[illegible]	(14) AC	1703	5/23/22	X		
MW-[illegible]18	(15) AC	1439	5/25/22	X		
MW-19	(16) AC	1652	5/26/22	X		
MW-10S	(17) AC	1106	5/24/22	X		
MW-104	(18) AC	1159	5/24/22	X		
MW-103	(19) AC	1243	5/24/22	X		
MW-107	(20) AC	1600	5/23/22	X		

Project Information	Sample Receipt	Reliquished By: 1.	Reliquished By: 2.	Reliquished By: 3.
Number:	Total No. of Containers:	Signature: Time: 1223	Signature: Time: 1450	Signature: Time:
Name:	COC Seals/Intact? Y/N/NA: N/A	Printed Name: A. Masters Date: 5/27/22	Printed Name: Alexandra Johnston-Carnes Date: 5/31/22	Printed Name: Date:
Contact: Sel P. 1	Received Good Cond./Cold: Y	Company: Shannon & Wilson, Inc	Company: SGS	Company:
Ongoing Project? Yes ☐ No ☐	Temp: 3.6°C	**Received By: 1.**	**Received By: 2.**	**Received By: 3.**
Sampler:	Delivery Method: Hand	Signature: Time: 12:44	Signature: Time:	Signature: Time: 0840
		Printed Name: Alexandra Johnston-Carnes Date: 5/27/22	Printed Name: Date:	Printed Name: Date: 6/1/22
		Company: SGS	Company:	Company: SGS

Notes:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
2355 Hill Road
Fairbanks, AK 99709
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www.shannonwilson.com

CHAIN-OF-CUSTODY RECORD

Laboratory SGS
Attn: J. Dawkins

1222631

Turn Around Time: [X] Normal [ ] Rush
Please Specify

Quote No:

J-Flags: [ ] Yes [ ] No

Analytical Methods (include preservative if used)

Sample Identity	Lab No.	Time	Date Sampled	VOCs							Total Number of Containers	Remarks/Matrix Composition/Grab? Sample Containers
MW-39	(21) AC	1247	5/23/22	X							3	groundwater
MW-38	(22) AC	1150	5/23/22	X							3	↓
MW-30	(23) AC	1309	5/26/22	X							3	
MW-29	(24) AC	1225	5/26/22	X							3	
MW-26	(25) AC	1102	5/26/22	X							3	
	(26) AF											

Project Information	
Number:	Gel 1
Name:	
Contact:	
Ongoing Project?	Yes [ ] No [ ]
Sampler:	

Sample Receipt	
Total No. of Containers:	
COC Seals/Intact? Y/N/NA	(NA) HD
Received Good Cond./Cold	Y
Temp:	3.6°C
Delivery Method:	Hand

	Reliquished By: 1.	Reliquished By: 2.	Reliquished By: 3.
Signature / Time	[signature] Time: 1223	[signature] Time: 1450	Signature: Time:
Printed Name / Date	A. Mastes Date: 5/27/22	Alexandra Johnston-Carnes Date: 5/31/22	Printed Name: Date:
Company	Shannon+Wilson, Inc.	SGS	Company:

	Received By: 1.	Received By: 2.	Received By: 3.
Signature / Time	[signature] Time: 12:24	Signature: Time:	[signature] Time: 0840
Printed Name / Date	Alexandra Johnston-Carnes Date: 5/27/22	Printed Name: Date:	Danielle BR Date: 6/1/22
Company	SGS	Company:	SGS

Notes:

Distribution: White - w/shipment - returned to Shannon & Wilson w/ laboratory report
Yellow - w/shipment - for consignee files
Pink - Shannon & Wilson - job file

e-Sample Receipt Form FBK

SGS Workorder #:	S&W	S&W

Review Criteria	Condition (Yes, No, N/A	Exceptions Noted below
Chain of Custody / Temperature Requirements		Yes — Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	

☐ **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required

Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID:	1	@	3.6	°C	Therm. ID:	D065
		Cooler ID:		@		°C	Therm. ID:	
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID:		@		°C	Therm. ID:	
		Cooler ID:		@		°C	Therm. ID:	

*If >6°C, were samples collected <8 hours ago?		
If <0°C, were sample containers ice free?		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	N/C	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were samples in good condition (no leaks/cracks/breakage)?	Yes	
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	Yes	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	Yes	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	
For Rush/Short Hold Time, was RUSH/Short HT email sent?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

SGS Profile #	362915	362915

e-Sample Receipt Form

SGS Workorder #:	1222631	1222631

Review Criteria	Condition (Yes, No, N/A	Exceptions Noted below
Chain of Custody / Temperature Requirements	*Note:* Temperature and COC seal information is found on the chain of custody form	
DOD only: Did all sample coolers have a corresponding COC?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note containers received with ice:		
Identify any containers received at non-compliant temperature: *(Use form FS-0029 if more space is needed)*		
Holding Time / Documentation / Sample Condition Requirements	*Note:* Refer to form F-083 "Sample Guide" for specific holding times and sample containers.	
Were samples received within analytical holding time?	Yes	
Do sample labels match COC? Record discrepancies.	Yes	
Note: *If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.*		
Were analytical requests clear? *(i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)*	Yes	
Were proper containers (type/mass/volume/preservative)used? Note: Exemption for metals analysis by 200.8/6020 in water.	Yes	
Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)		
Were all soil VOAs received with a corresponding % solids container?	N/A	
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples?	Yes	
Were all water VOA vials free of headspace (e.g., bubbles ≤ 6mm)?	Yes	
Were all soil VOAs field extracted with Methanol+BFB?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition
1222631001-A	HCL to pH < 2	OK
1222631001-B	HCL to pH < 2	OK
1222631001-C	HCL to pH < 2	OK
1222631002-A	HCL to pH < 2	OK
1222631002-B	HCL to pH < 2	OK
1222631002-C	HCL to pH < 2	OK
1222631003-A	HCL to pH < 2	OK
1222631003-B	HCL to pH < 2	OK
1222631003-C	HCL to pH < 2	OK
1222631004-A	HCL to pH < 2	OK
1222631004-B	HCL to pH < 2	OK
1222631004-C	HCL to pH < 2	OK
1222631005-A	HCL to pH < 2	OK
1222631005-B	HCL to pH < 2	OK
1222631005-C	HCL to pH < 2	OK
1222631006-A	HCL to pH < 2	OK
1222631006-B	HCL to pH < 2	OK
1222631006-C	HCL to pH < 2	OK
1222631007-A	HCL to pH < 2	OK
1222631007-B	HCL to pH < 2	OK
1222631007-C	HCL to pH < 2	OK
1222631008-A	HCL to pH < 2	OK
1222631008-B	HCL to pH < 2	OK
1222631008-C	HCL to pH < 2	OK
1222631009-A	HCL to pH < 2	OK
1222631009-B	HCL to pH < 2	OK
1222631009-C	HCL to pH < 2	OK
1222631010-A	HCL to pH < 2	OK
1222631010-B	HCL to pH < 2	OK
1222631010-C	HCL to pH < 2	OK
1222631011-A	HCL to pH < 2	OK
1222631011-B	HCL to pH < 2	OK
1222631011-C	HCL to pH < 2	OK
1222631012-A	HCL to pH < 2	OK
1222631012-B	HCL to pH < 2	OK
1222631012-C	HCL to pH < 2	OK
1222631013-A	HCL to pH < 2	OK
1222631013-B	HCL to pH < 2	OK
1222631013-C	HCL to pH < 2	OK
1222631014-A	HCL to pH < 2	OK
1222631014-B	HCL to pH < 2	OK
1222631014-C	HCL to pH < 2	OK
1222631015-A	HCL to pH < 2	OK
1222631015-B	HCL to pH < 2	OK
1222631015-C	HCL to pH < 2	OK
1222631016-A	HCL to pH < 2	OK
1222631016-B	HCL to pH < 2	OK
1222631016-C	HCL to pH < 2	OK
1222631017-A	HCL to pH < 2	OK
1222631017-B	HCL to pH < 2	OK
1222631017-C	HCL to pH < 2	OK
1222631018-A	HCL to pH < 2	OK
1222631018-B	HCL to pH < 2	OK
1222631018-C	HCL to pH < 2	OK
1222631019-A	HCL to pH < 2	OK
1222631019-B	HCL to pH < 2	OK
1222631019-C	HCL to pH < 2	OK
1222631020-A	HCL to pH < 2	OK
1222631020-B	HCL to pH < 2	OK
1222631020-C	HCL to pH < 2	OK
1222631021-A	HCL to pH < 2	OK
1222631021-B	HCL to pH < 2	OK
1222631021-C	HCL to pH < 2	OK
1222631022-A	HCL to pH < 2	OK
1222631022-B	HCL to pH < 2	OK
1222631022-C	HCL to pH < 2	OK
1222631023-A	HCL to pH < 2	OK
1222631023-B	HCL to pH < 2	OK
1222631023-C	HCL to pH < 2	OK
1222631024-A	HCL to pH < 2	OK
1222631024-B	HCL to pH < 2	OK
1222631024-C	HCL to pH < 2	OK
1222631025-A	HCL to pH < 2	OK
1222631025-B	HCL to pH < 2	OK
1222631025-C	HCL to pH < 2	OK
1222631026-A	HCL to pH < 2	OK
1222631026-B	HCL to pH < 2	OK
1222631026-C	HCL to pH < 2	OK
1222631026-D	HCL to pH < 2	OK
1222631026-E	HCL to pH < 2	OK
1222631026-F	HCL to pH < 2	OK

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Justin Risley and Michael Jaramillo

Title:

Engineering Staff and Chemist

Date:

06/14/2022

Consultant Firm:

Shannon and Wilson, Inc.

Laboratory Name:

SGS North America, Inc.

Laboratory Report Number:

1222631

Laboratory Report Date:

06/07/2022

CS Site Name:

Six Mile Richardson Highway Groundwater Investigation

ADEC File Number:

100.38.112

Hazard Identification Number:

25660

1222631

Laboratory Report Date:

06/07/2022

CS Site Name:

Six Mile Richardson Highway Groundwater Investigation

Note: Any N/A or No box checked must have an explanation in the comments box.

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   Yes☒ No☐ N/A☐ Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   Yes☐ No☐ N/A☒ Comments:

   All analyses were performed by SGS North America in Anchorage, AK. The SGS Anchorage laboratory maintains ADEC CS approval for the requested analyses.

2. Chain of Custody (CoC)

   a. CoC information completed, signed, and dated (including released/received by)?

   Yes☒ No☐ N/A☐ Comments:

   b. Correct analyses requested?

   Yes☒ No☐ N/A☐ Comments:

   Analytical method was not clearly identified by the laboratory reported the results by the appropriate analytical method.

3. Laboratory Sample Receipt Documentation

   a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

   Yes☒ No☐ N/A☐ Comments:

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   Yes☒ No☐ N/A☐ Comments:

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c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

Yes☒ No☐ N/A☐ Comments:

The sample receipt form notes the samples arrived properly preserved and in good condition.

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes☐ No☐ N/A☒ Comments:

The sample receipt form does not note any sample handling or receipt discrepancies.

e. Data quality or usability affected?

Comments:

There was no effect on data quality/usability.

4. Case Narrative

a. Present and understandable?

Yes☒ No☐ N/A☐ Comments:

b. Discrepancies, errors, or QC failures identified by the lab?

Yes☐ No☐ N/A☒ Comments:

The VOC LCS and LCSD samples associated with preparation batches VXX38655 and VXX38660 had recovery failures for methylene chloride. This analyte was not detected above the LOQ in the associated samples. Refer to Section 6.b. for further assessment.

c. Were all corrective actions documented?

Yes☐ No☐ N/A☒ Comments:

Corrective actions were not required; see above.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

There is no effect on data quality/usability documented in the case narrative.

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5. Samples Results

a. Correct analyses performed/reported as requested on COC?

Yes☒ No☐ N/A☐ Comments:

b. All applicable holding times met?

Yes☒ No☐ N/A☐ Comments:

c. All soils reported on a dry weight basis?

Yes☐ No☐ N/A☒ Comments:

Soil samples were not submitted with this work order.

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes☐ No☒ N/A☐ Comments:

The laboratory limit of detection (LOD) for 1,2,3-trichloropropane is greater than the DEC groundwater cleanup level.

e. Data quality or usability affected?

We cannot assess whether 1,2,3-trichloropropane is present in the field samples at concentrations greater than the DEC Groundwater Cleanup Level but less than the LOD.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes☒ No☐ N/A☐ Comments:

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iii. If above LOQ or project specified objectives, what samples are affected?

Comments:

None; target analytes were not detected in the method blank samples.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

No samples are affected. Qualification of the data was not required.

v. Data quality or usability affected?

Comments:

The data quality/usability are not affected; see above.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes☒ No☐ N/A☐ Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes☐ No☐ N/A☒ Comments:

Metals/inorganics analyses were not requested for these samples.

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes☐ No☒ N/A☐ Comments:

Methylene chloride was outside laboratory control limits, biased high, in the LCS and LCSD associated with preparation batches VXX38655 and VXX38660. Methylene chloride was not detected in any project samples; therefore, the results are unaffected, and no qualification is required.

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iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from LCS/LCSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes☒ No☐ N/A☐ Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

See above.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

No samples are affected. Qualification of the data is not required. See above.

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

The data quality/usability are not affected.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Note: Leave blank if not required for project

i. Organics – One MS/MSD reported per matrix, analysis and 20 samples?

Yes☐ No☐ N/A☒ Comments:

MS/MSD samples were not required for this project.

ii. Metals/Inorganics – one MS and one MSD reported per matrix, analysis and 20 samples?

Yes☐ No☐ N/A☒ Comments:

Metals/inorganics analyses were not requested for these samples.

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iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes☐ No☐ N/A☒ Comments:

MS/MSD samples were not required for this project.

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes☐ No☐ N/A☒ Comments:

MS/MSD samples were not required for this project.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

Not applicable, MS/MSD samples were not required for this project.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

MS/MSD samples were not required for this project.

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

Not applicable, MS/MSD samples were not required for this project.

d. Surrogates – Organics Only or Isotope Dilution Analytes (IDA) – Isotope Dilution Methods Only

i. Are surrogate/IDA recoveries reported for organic analyses – field, QC and laboratory samples?

Yes☒ No☐ N/A☐ Comments:

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ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes☒ No☐ N/A☐ Comments:

iii. Do the sample results with failed surrogate/IDA recoveries have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

There were no surrogate recovery failures associated with this work order.

iv. Data quality or usability affected?

Comments:

The data quality/usability is not affected.

e. Trip Blanks

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes☒ No☐ N/A☐ Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes☒ No☐ N/A☐ Comments:

All samples were transported in a single cooler with the trip blanks.

iii. All results less than LOQ and project specified objectives?

Yes☒ No☐ N/A☐ Comments:

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples are affected. Target analytes were not detected in the trip blank samples associated with this work order.

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v. Data quality or usability affected?

Comments:

The data quality/usability are not affected; see above.

f. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes☒ No☐ N/A☐ Comments:

ii. Submitted blind to lab?

Yes☒ No☐ N/A☐ Comments:

The field duplicate samples *MW-17* / *MW-917* and *MW-108* / *MW-908* were submitted with this work order.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

Yes☒ No☐ N/A☐ Comments:

The relative precision demonstrated between the detected results of both sets of field-duplicate samples was within the recommended DQO of 30%, where calculable.

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

The data quality/usability are not affected; see above.

g. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below)?

Yes☒ No☐ N/A☐ Comments:

The equipment blank sample *EB-19* was submitted with this sample set.

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i. All results less than LOQ and project specified objectives?

Yes☒ No☐ N/A☐ Comments:

However, toluene was detected at estimated concentrations below the LOQ in the equipment blank sample.

ii. If above LOQ or project specified objectives, what samples are affected?

Comments:

Toluene was not detected in the project samples; therefore, no qualification is required.

iii. Data quality or usability affected?

Comments:

The data quality/usability are not affected; see above.

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

Yes☐ No☐ N/A☒ Comments:

There were no other flags/qualifiers required.

APPENDIX C: QUALITY CONTROL AND QUALITY ASSESSMENT SUMMARY

Appendix C

Quality Control and Quality Assurance Assessment Summary

APPENDIX C: QUALITY CONTROL AND QUALITY ASSESSMENT SUMMARY

OVERVIEW

QC/QA procedures assist in producing data of acceptable quality and reliability. We reviewed the analytical results for laboratory QC samples and conducted our own QA assessment for this project. We reviewed the chain of custody (COC) records and laboratory receipt forms to check that custody was not breached, sample-holding times were met, and the samples were kept chilled (between 0 degrees Celsius [°C] and 6 °C) during shipping. Our QA-review procedures allowed us to document the accuracy and precision of the analytical data, as well as check that the analyses were sufficiently sensitive to meet project-specific sensitivity requirements

Laboratory QC procedures included evaluating surrogate recovery, performing continuing calibration checks, and analyzing method blanks, laboratory control samples (LCS), and matrix spikes (MS) to assess accuracy and precision. LCS, LCS duplicate (LCSD), MS, MS duplicate (MSD), and surrogate recovery analyses were performed to evaluate the accuracy of the analytical process. Analytical precision was assessed by comparing the results of duplicate analyses performed on LCS/LCSD, MS/MSD, and duplicate-sample pairs.

QC procedures in the field included using single-use equipment to reduce the potential for sample cross-contamination. We used a new, clean pair of nitrile gloves when sampling at each sampling point. The laboratory report contains a case narrative and forms documenting sample-receipt conditions. Details regarding the results of our QA review are presented below. Refer to the laboratory report and corresponding DEC LDRC for additional information (Appendix E).

SAMPLE HANDLING

The sampled were hand-delivered to the SGS receiving office in Fairbanks, Alaska. We completed COC forms, which were signed upon delivery to the SGS Fairbanks office. The samples were then repackaged by SGS and shipped to the SGS laboratory in Anchorage, Alaska. The SGS Fairbanks office noted samples were received in good condition and within the acceptable temperature range of 0 °C to 6 °C. The Sample Receipt Checklist noted that the project samples were received in good condition and properly preserved. There were no additional sample handling or receipt discrepancies noted by the laboratory; refer to the DEC LDRC for details (Appendix E).

ANALYTICAL SENSITIVITY

The laboratory's detection limit (DL) is the lowest analyte concentration that can be measured. The laboratory's limit of quantitation (LOQ) is the lowest analyte concentration

that can be routinely measured in the sampled matrix with confidence, the point at which a concentration is considered quantitative. Sample matrix, instrument performance, sample dilutions, and other factors may affect the DL and LOQ. Analytes may be present in samples at concentrations below the DL. In cases where analytes were not detected at concentrations above their DL, the analytical results are presented in our data-summary table with reference to their LODs. If the analyte is detected between the DL and the LOQ, its concentration is considered an estimate; in our tables and the laboratory data packet, this value is flagged with a 'J'. The flag is applied by the laboratory. The laboratory LOD for the requested analytes were sufficiently sensitive for reporting purposes for all analytes, except for 1,2,3-TCP.

To evaluate the potential for cross-contamination between samples or introduction of contamination from an outside source, laboratory-supplied trip blanks were carried with the samples in their cooler during sampling and shipping. Two trip blanks were analyzed as part of this sampling event for VOCs. Project analytes were not detected in the trip blank samples.

Laboratory method blanks were also analyzed in association with samples collected for this project to check for contributions to the analytical results possibly attributable to laboratory-based contamination. Project analytes were not detected in the method blank samples.

Reusable equipment was used in the collection of the samples for this work order; thus, collection of an equipment black sample was necessary for this work order. Toluene was detected at estimated concentrations below the LOQ in the equipment blank sample. Toluene was not detected in the project samples; therefore, no qualifications were required.

ACCURACY

Accuracy refers to determining the correct analyte concentration and is a comparison between the measured value and a known or expected value. Laboratory analytical accuracy may be assessed through the analyte recoveries from LCS/LCSD analyses and MS/MSD analyses, and the recovery of analyte surrogates (for organic analytes) added to project samples. The LCS/LCSDs are spikes of known analyte concentrations added to a clean matrix; the MS/MSDs are spikes of known analyte concentrations in a matrix similar to field samples. No MS/MSD samples were reported as a part of this work order. Percent recovery for methylene chloride was outside laboratory control limits, biased high, in the LCS and LCSD associated with a number of the samples. Methylene chloride was not detected in any project samples; therefore, the results were unaffected, and no qualification was required.

PRECISION

We collected field-duplicate samples at a frequency of approximately ten percent the total number of samples to evaluate the precision of analytical measurements and reproducibility of our sampling technique. Two field duplicate samples were collected; one from monitoring well MW-17, and one from monitoring well MW-108. The field duplicate samples were submitted "blind" (i.e., the laboratory could not identify it as a duplicate) with a sample name of *MW-917* and *MW-908*, respectively. The duplicates were analyzed by the same test methods as the original samples. To evaluate the precision of the data, we calculated the relative percent difference (RPD; difference between the sample and its duplicate divided by the mean of the two). RPDs can be evaluated only if the results of the analyses for both the primary sample and its duplicate are reported at concentrations greater than the DL. The data quality objective for water samples' RPD is 30 percent. Where concentrations were reported in both samples, we calculated the RPDs. The RPDs were within acceptance criteria.

Laboratory analytical precision can also be assessed by comparing the results of duplicate analyses performed on LCS/LCSD, MS/MSD, and laboratory-duplicate samples, and evaluating the associated RPDs. The data quality objective is 30 percent for the laboratory QC samples. The LCS/LCSD and laboratory-duplicate sample RPDs were within laboratory acceptance criteria.

DATA QUALITY SUMMARY

By conducting our field activities in general accordance with our standard QC/QA procedures, the samples we collected are considered representative of site conditions at the locations and times they were obtained. Based on our QA review, no datum was rejected as unusable due to QC failures, and our completeness goal of obtaining 90-percent useable data was met. In our opinion, the data produced by SGS laboratory for this project are suitable for characterizing groundwater quality at the locations sampled.

IMPORTANT INFORMATION

Important Information

About Your Environmental Report

IMPORTANT INFORMATION

CONSULTING SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

Consultants prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your consultant prepared your report expressly for you and expressly for the purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the consultant. No party should apply this report for any purpose other than that originally contemplated without first conferring with the consultant.

THE CONSULTANT'S REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

A geotechnical/environmental report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. Depending on the project, these may include the general nature of the structure and property involved; its size and configuration; its historical use and practice; the location of the structure on the site and its orientation; other improvements such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask the consultant to evaluate how any factors that change subsequent to the date of the report may affect the recommendations. Unless your consultant indicates otherwise, your report should not be used (1) when the nature of the proposed project is changed (for example, if an office building will be erected instead of a parking garage, or if a refrigerated warehouse will be built instead of an unrefrigerated one, or chemicals are discovered on or near the site); (2) when the size, elevation, or configuration of the proposed project is altered; (3) when the location or orientation of the proposed project is modified; (4) when there is a change of ownership; or (5) for application to an adjacent site. Consultants cannot accept responsibility for problems that may occur if they are not consulted after factors that were considered in the development of the report have changed.

SUBSURFACE CONDITIONS CAN CHANGE.

Subsurface conditions may be affected as a result of natural processes or human activity. Because a geotechnical/environmental report is based on conditions that existed at the time of subsurface exploration, construction decisions should not be based on a report whose adequacy may have been affected by time. Ask the consultant to advise if additional tests are desirable before construction starts; for example, groundwater conditions commonly vary seasonally.

Construction operations at or adjacent to the site and natural events such as floods, earthquakes, or groundwater fluctuations may also affect subsurface conditions and, thus, the continuing adequacy of a geotechnical/environmental report. The consultant should be kept apprised of any such events and should be consulted to determine if additional tests are necessary.

MOST RECOMMENDATIONS ARE PROFESSIONAL JUDGMENTS.

Site exploration and testing identifies actual surface and subsurface conditions only at those points where samples are taken. The data were extrapolated by your consultant, who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your consultant can work together to help reduce their impacts. Retaining

IMPORTANT INFORMATION

your consultant to observe subsurface construction operations can be particularly beneficial in this respect.

A REPORT'S CONCLUSIONS ARE PRELIMINARY.

The conclusions contained in your consultant's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Actual subsurface conditions can be discerned only during earthwork; therefore, you should retain your consultant to observe actual conditions and to provide conclusions. Only the consultant who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations based on those conclusions are valid and whether or not the contractor is abiding by applicable recommendations. The consultant who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

THE CONSULTANT'S REPORT IS SUBJECT TO MISINTERPRETATION.

Costly problems can occur when other design professionals develop their plans based on misinterpretation of a geotechnical/environmental report. To help avoid these problems, the consultant should be retained to work with other project design professionals to explain relevant geotechnical, geological, hydrogeological, and environmental findings, and to review the adequacy of their plans and specifications relative to these issues.

BORING LOGS AND/OR MONITORING WELL DATA SHOULD NOT BE SEPARATED FROM THE REPORT.

Final boring logs developed by the consultant are based upon interpretation of field logs (assembled by site personnel), field test results, and laboratory and/or office evaluation of field samples and data. Only final boring logs and data are customarily included in geotechnical/environmental reports. These final logs should not, under any circumstances, be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process.

To reduce the likelihood of boring log or monitoring well misinterpretation, contractors should be given ready access to the complete geotechnical engineering/environmental report prepared or authorized for their use. If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared, and that developing construction cost estimates was not one of the specific purposes for which it was prepared. While a contractor may gain important knowledge from a report prepared for another party, the contractor should discuss the report with your consultant and perform the additional or alternative work believed necessary to obtain the data specifically appropriate for construction cost estimating purposes. Some clients hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems and the adversarial attitudes that aggravate them to a disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY.

Because geotechnical/environmental engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims

being lodged against consultants. To help prevent this problem, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where the consultant's responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

The preceding paragraphs are based on information provided by the ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland