November 15, 2022

Ms. Arika Garcia
Alaska Department of Environmental Conservation-SPAR
555 Cordova St.
Anchorage, AK 99501

Email: arika.garcia@alaska.gov

RE: 2022 Groundwater Monitoring at the Transformer Shop Site; 1130 E. First Ave., Anchorage, Alaska (Hazard ID: 23842)

Dear Ms. Garcia:

This report presents the results of groundwater monitoring conducted in 2022 at the Transformer Shop Site at 1130 E. First Avenue (formerly 1201 E. Third Ave.), in Anchorage, Alaska. The Site is listed with the Alaska Department of Environmental Conservation (ADEC) as File # 2100.26.302, Record Key # 90210001102, and Hazard ID 23842. The Site was operated by Anchorage Municipal Light and Power's (ML&P) until October 2020 when Chugach Electric association (Chugach) took ownership of the property and responsibility for site operations.

Past work conducted at this Site has identified petroleum hydrocarbon concentrations in excess of Alaska Department of Environmental Conservation (ADEC) cleanup levels for groundwater. The petroleum hydrocarbon contamination in the groundwater is attributed to leaking underground storage tanks that were removed in 1989. Groundwater monitoring for petroleum hydrocarbon related parameters has been conducted at the Site since 2000 at least annually up to 2016 and then biannually starting in 2018. Additional volatile organic compounds (VOCs) associated with chlorinated solvents have been monitored since 2018. All of the groundwater monitoring wells are flush-mounted and located in an asphalt paved lot adjacent to the Transformer Shop Building (Figures 1 and 2). Groundwater flow is toward the north based on prior and current groundwater level measurements. MW-9 is located where the former USTs were removed and is the presumed source area .

In November 2018, a vapor intrusion assessment of the indoor air quality in the Transformer Shop Building was conducted in accordance with an ADEC approved Work Plan. The measured concentration of compounds in the indoor air in the building did not exceed the ADEC vapor intrusion target levels for commercial or residential use. Based on the air sample results, it was concluded the vapor intrusion pathway is incomplete and not a concern at the Site (SLR 2018b).

2022 Groundwater Sampling

The sampling activities were conducted by International Corporation (SLR) in accordance with the ADEC 2018 Work Plan Addendum (SLR, 2018a) which is an addendum to the 2002 Work Plan (ML&P, 2002). SLR personnel collected groundwater samples at four monitoring wells (MW-5, MW-6, MW-7, and MW-9) on July 28, 2022. The sampling effort was completed by Kate O'Malley and Evan Tyler, who meet the criteria of ADEC-qualified environmental professionals per 18 AAC 75.333. A photograph log is included documenting the site conditions during the sampling event (Appendix A). Groundwater sampling forms documenting the sampling of the wells are included in Appendix B of this report.

Prior to the collection of the groundwater samples, the water levels in all wells were measured using an electronic water level indicator. At MW-5, MW-6 and MW-7, groundwater samples were collected using the low-flow sampling method using a peristaltic pump. The low-flow sampling method has been used for the annual monitoring at the site since 2011 and consists of purging at a low flow rate (between 0.05 and 0.5 liters per minute [L/min]), while maintaining a drawdown of less than 0.3 feet, if possible. While purging, up to six water quality parameters are measured (temperature, pH, conductivity, oxidation-reduction potential (ORP), dissolved oxygen (DO), and turbidity) at three to five-minute intervals. Water quality parameters are considered stable when three consecutive readings of at least three parameters (or four if temperature is used) are within:

- ± 3% for temperature (minimum of ± 0.2 º C),
- ± 0.1 for pH,
- ± 3% for conductivity,
- ± 10 mv for ORP,
- ± 10% for DO, and
- ± 10% for turbidity.

MW-5, MW-6 and MW-7 sustained near constant water levels during purging, at flow rates of 0.15 to 0.25 L/min. While purging MW-5, MW-6, and MW-7, water quality parameters were measured using a YSI 556 multi-parameter instrument. Turbidity was measured quantitatively using a turbidity meter. Stability criteria were met for all wells except MW-9. Water level data and final water quality parameters are presented in Table 1. Purge water generated during sampling activities was placed in labeled containers and disposed of by Chugach following the receipt of analytical results.

MW-9 has typically been a poor yielding well and has repeatedly gone dry when purging and attempting to achieve stable parameters, even at very low flow rates. Since 2015, the standard sampling protocol for MW-9 has been to purge the well dry and collect samples at least 24 hours later. On July 26, 2022, MW-9 was intentionally purged dry without attempting to achieve stable parameters, generating approximately 5 gallons of purge water. The water in the well was allowed to recover for approximately 48 hours and analytical samples were collected on July 28 without additional purging. At that time, the water level well had recovered 76%. Water quality parameters were measured on July 26.

Laboratory Analyses

Groundwater samples were collected from the four monitoring wells, including a duplicate sample from well MW-9, and submitted to SGS North America in Anchorage using chain-of-custody procedures. Groundwater samples were analyzed for residual range organics (RRO) by AK

Method (AK) 103, diesel range organics (DRO) by AK 102, gasoline range organics (GRO) by AK101, and VOCs by United States Environmental Protection Agency (USEPA) Method SW8260D.

Analytical data was reviewed for consistency with the ADEC Technical Memorandum, *Guidelines for Data Reporting* (ADEC, 2022). Appendices C, D, and E contain a Data Quality Assessment (DQA), ADEC Laboratory Data Review Checklist, and the laboratory analytical data package, respectively. Based on the DQA, the data were considered to be of good quality and acceptable for use with the noted qualifications and limitation. No data were rejected. The most notable items are discussed below (see Appendix D for further details):

- For DRO by Method AK102, the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) recovered at 72% and 67%, slightly below the lower control limit of 75%. Consequently, samples were re-extracted past the method allowed hold time with the second analysis producing satisfactory recoveries and confirming results (as noted in the case narrative). The initial extraction and analysis were reported and used in this report (Table 2). All samples in this work order were associated with the failing LCS/LCSD. DRO results for all samples were qualified, "Q-" and should be considered estimated values with a potential low bias. Since a slightly low bias was indicated by the LCS/LCSD and all affected data were either well above or well below the applicable cleanup level of 1.5 mg/L, data usability was not impacted.

- The primary sample/field duplicate relative percent differences (RPDs) for GRO, m,p-xylene, and total xylenes exceeded the recommended ADEC limit of 30% for waters. As all associated samples had results of undetectable for the impacted analytes, only the parent samples were affected. GRO, m,p-xylene, and total xylenes results for samples MW-9 and MW-99 were qualified "Q" to indicate estimated values with unknown bias. The GRO result for primary sample MW-9 exceeded the ADEC cleanup level while the duplicate result was below. The higher of the values were used for identifying exceedances of cleanup levels. GRO data is considered an exceedance of ADEC criteria and is usable.

- The limit of detection (LOD) for SW8260D analyte 1,2,3-trichloropropane did not meet the ADEC cleanup level for any samples. This was due to typical laboratory methodology limitations. The LODs for several VOC analytes in samples MW-9 and duplicate MW-99 did not meet ADEC cleanup levels due to a necessary dilution due to high target analyte concentration. For the noted compounds, it is not possible to state with certainty the absence of target analyte below the laboratory LOD, but above the ADEC cleanup level. Overall, data usability was considered minimally impacted, and all data were usable without qualification.

Analytical Results

The 2022 analytical results are provided in Table 2 and Figure 2. Table 3 provides a summary of current and historical analytical results for DRO, GRO, benzene, and total BTEX analytes. The results were screened against the current ADEC ground water cleanup levels defined in 18 AAC 75.345, Table C (ADEC, 2021). Of the four wells sampled, monitoring well MW-9 was the only well with detected concentrations of analytes above applicable groundwater cleanup levels.

Groundwater cleanup levels at MW-9 were exceeded for GRO, DRO, RRO, benzene, 1,2-Dichloroethane (1,2-DCA) and naphthalene, as shown on Table 2 and summarized below:

- GRO was detected at 3.5 milligrams per liter (mg/L) in the primary sample and 1.64 mg/L in the duplicate, with the primary exceeding the groundwater cleanup level of 2.2 mg/L. The primary and duplicate results were Q-flagged;
- DRO was 3.87 mg/L in the primary sample 3.56 mg/L in the duplicate, exceeding the groundwater cleanup level of 1.5 mg/L, both samples were Q-flagged and presumed to be biased low;
- RRO was 3.95 mg/L in the primary sample 3.44 mg/L in the duplicate, exceeding the groundwater cleanup level of 1.1 mg/L;
- Benzene was 597 ug/L in the primary sample and 476 ug/L in the duplicate, exceeding the groundwater cleanup level of 0.0046 mg/L;
- 1,2-DCA was 6.2 ug/L in the primary sample and 6.06 ug/L in the duplicate, exceeding the groundwater cleanup level of 1.7 ug/L;
- Naphthalene was 17.3 ug/L in the primary sample and 10.4 ug/L in the duplicate when analyzed by SW8260D, exceeding the groundwater cleanup level of 1.7 ug/L.

In MW-9, all sample results for perchloroethylene (PCE) and related daughter products were below detection limits, except for 1,2-DCAas listed above. However, the detection limits for Trichloroethylene (TCE) and vinyl chloride are above their respective groundwater cleanup levels. PCE daughter products are considered to be TCE, 1,1,1-trichloroethane (1,1,1-TCA), 1,1,2-TCA, 1,1-dichloroethane (1,1-DCA), 1,2-DCA, 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride. 1,2-DCA also exceeded groundwater cleanup levels in 2020, with a concentration of 36.2 in the primary sample and 29.8 ug/L in the duplicate (SLR, 2020).

As noted above, MW-9 is located where the former USTs were removed and is the presumed source area. MW-6 and MW-7 are located less than 150 feet down gradient from MW-9 and monitoring results indicate essentially no petroleum hydrocarbon-impacted groundwater at these locations. Samples from the down gradient monitoring wells had contaminant concentrations well below groundwater cleanup levels. These two downgradient wells contained low-level detections of DRO and RRO (concentrations were between the detection limit (DL) and limit of quantitation (LOQ)). This is consistent with the historical dataset for DRO (Table 3) and indicates that the plume of petroleum hydrocarbon-impacted groundwater is localized around MW-9. MW-9 has historically contained the highest concentrations of BTEX, GRO and DRO, with the two down gradient wells consistently showing no detections or trace detections well below groundwater cleanup levels.

A plot of historical data from monitoring well MW-9 shows the long-term trend of petroleum hydrocarbon concentrations (Figure 3). A primary and a duplicate sample have been collected at MW-9 beginning in 2011 and at each sampling event thereafter. The higher of the two results (primary or duplicate) are plotted on the figure making it a conservative (biased high) data presentation. As illustrated by the graph, between 2000 and 2022 the overall trend has been a decrease in petroleum hydrocarbon concentrations. In 2003, a large increase in DRO may have been the result of free product in the sample, which was occasionally observed in the well during

that period. Since 2004 the groundwater concentrations have been relatively steady state, with relatively minor fluctuations between sample events.

The changes in sampling protocol may account for a portion of the fluctuations in the data set. In 2011 the sampling method was changed from purging three volumes with a bailer prior to sampling, to low-flow sampling with a peristaltic pump. In 2013 and 2014, samples were collected without prior purging of the well. As noted, since 2015 the sampling protocol for MW-9 has been to purge the well dry and collect the sample approximately 24 -72 hours later.

Groundwater data was also compared against ADEC's vapor intrusion target level for the vapor intrusion pathway for commercial site use as defined by *Vapor Intrusion Guidance for Contaminated Sites* (ADEC, 2017).The target levels for benzene, ethylbenzene, and 1,2,4-Trimethylbenzene were exceeded in the water sample from MW-9, as shown on Table 2. However, the vapor intrusion assessment of the adjacent Transformer Shop Building concluded the vapor intrusion pathway is incomplete and not a concern at the Site (SLR 2018b).

Conclusions

The results from groundwater monitoring at the Transformer Shop Site in 2022 indicate that petroleum hydrocarbons in the groundwater have decreased but still exceed ADEC groundwater cleanup levels at MW-9 for some petroleum hydrocarbon related analytes (GRO, DRO, RRO, benzene and naphthalene).

The extent of petroleum hydrocarbon impacted groundwater is localized around MW-9, the presumed source area. The long-term trend based on the cumulative data set (2000 to 2022) indicates that the petroleum hydrocarbon concentrations initially decreased but have remained relatively steady state since 2004. A pronounced downward trend since 2004 is not evident. However, natural attenuation of the petroleum hydrocarbons is presumably occurring at a slow rate. There appears to be minimal groundwater movement in the immediate area of the plume, as evidenced by the poor recharge in MW-9 and downgradient sample results (non-detected concentrations of GRO and BTEX, and trace detection of DRO). Dissolved oxygen levels are also depressed relative to the upgradient well (MW-5) (Table 1), indicating that biological degradation is occurring.

As noted, compound typically considered associated with chlorinated solvents (1-2-DCA) has been detected above groundwater cleanup levels in MW-9 starting in 2018 (when it was first analyzed). The concentrations are undetectable in the downgradient wells (MW-7 and MW-6). This indicates 1-2-DCA is not migrating from the presumed source area, similar to the petroleum hydrocarbons.

In accordance with the January 10, 2019 letter from ADEC to ML&P (ADEC File: 2404.26.302) and related correspondence, the next monitoring event is scheduled for 2024, and will include analysis of GRO by AK101, DRO by AK102, RRO by AK103, and full suite VOCs by SW8260D for all four monitoring wells.

However, given the Site's history and monitoring results it is recommended that consideration is given to discontinuing groundwater monitoring and changing the status of the Site under 18 AAC 75 to cleanup complete with institutional controls. The institutional controls would consist of

restrictions on groundwater use and the offsite transport of soil without ADEC approval. The basis for this management change includes the following:

- The source of the contamination was removed in 1989 and a vapor extraction system and a treatment (vapor extraction and air sparge) system was operated in the 1990s until no no longer considered effective.
- There is approximately 30 years of groundwater monitoring data which indicates the concentrations of contaminants of concern have decreased and their current state is relatively steady state.
- Exceedances of groundwater cleanup levels are localized to a single well (MW-9) where the former USTs were located. Wells located a relatively short distance downgradient are not being impacted (concentrations of analytes are trace or non-detectable).
- The 2018 vapor intrusion study concluded the vapor intrusion pathway is incomplete and not a concern at the Site.
- With institutional controls the Site would not pose a risk to human heath or the environment.

If you have any questions or concerns, please contact Marty Freeman (Chugach, 907-762-4545) or Bret Berglund (SLR, 907-563-2128).

Sincerely,

Kate O'Malley
Project Scientist

Bret Berglund
Project Manager, C.P.G.

CC: Marty Freeman, Chugach

References

Alaska Department of Environmental Conservation (ADEC), 2021. 18 AAC 75, Oil and Other Hazardous Substances Pollution Control, as amended through November 18.

ADEC, 2022. ADEC Technical Memorandum, Guidelines for Data Reporting. August 15.

ADEC, 2017. Vapor Intrusion Guidance for Contaminated Sites. November.

Municipal Light and Power (ML&P) 2002. Work Plan for Groundwater Monitoring at 1201 E. 3rd Ave. Anchorage; File #L69.07, Fac ID Fac ID #1420, Event ID #133, Reckey # 90210001102. August 26. Note: The site address is now referred to as 1130 E. First Avenue.

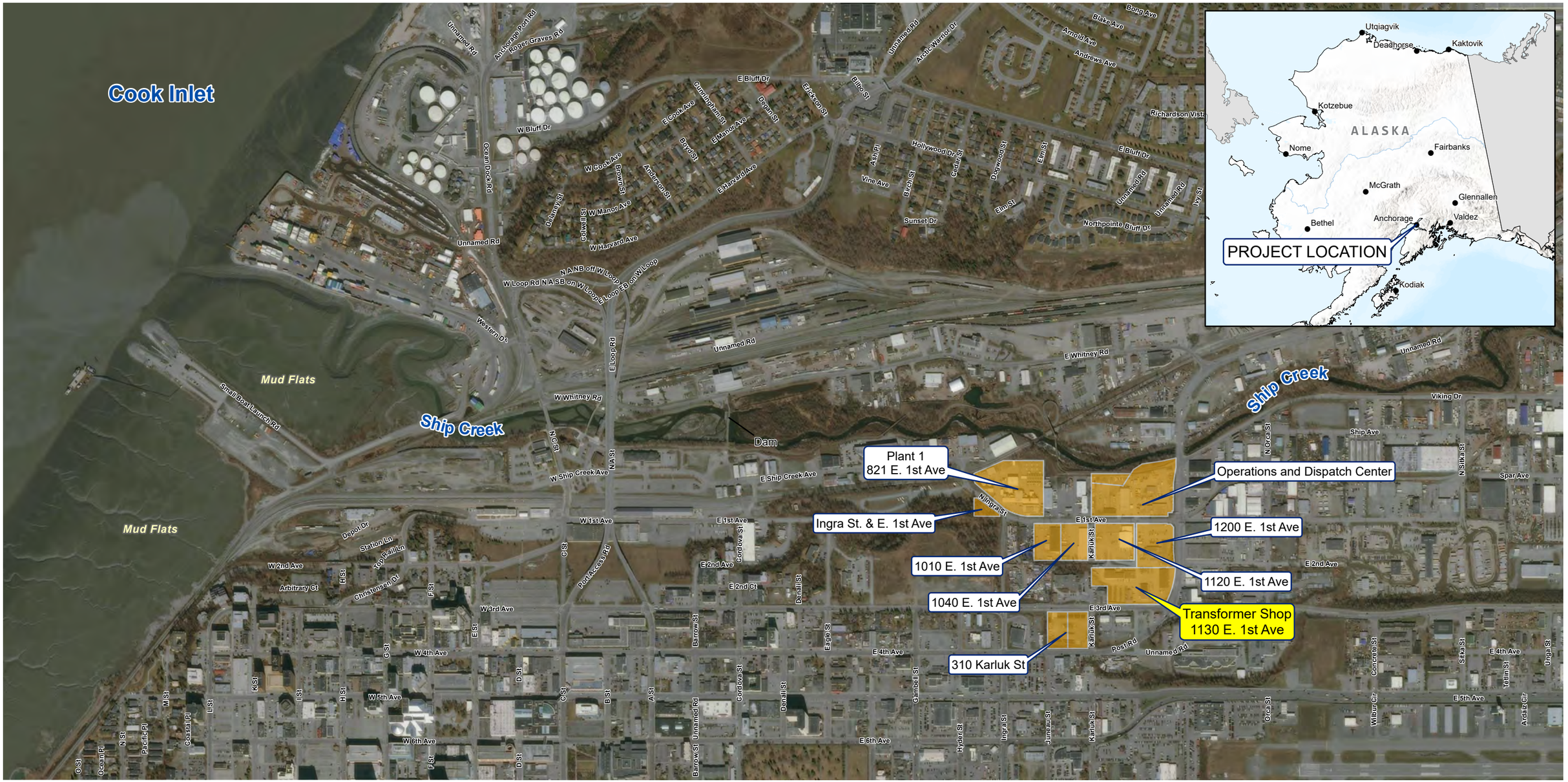
SLR International Corporation (SLR). 2018a. Work Plan Addendum for Groundwater Monitoring at the ML&P Transformer Shop; 1130 E. First Ave., Anchorage, Alaska (Hazard ID: 23842). July 9.

SLR. 2018b. Vapor Intrusion Assessment Report. ML&P Transformer Shop; Anchorage, Alaska. December 27.

Figures

Tables

Appendices



Legend

Chugach Electric Association, Inc. (Chugach) Owned and / or Managed Property

N

800 400 0 800 Feet

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY.
ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.

SLR CHUGACH

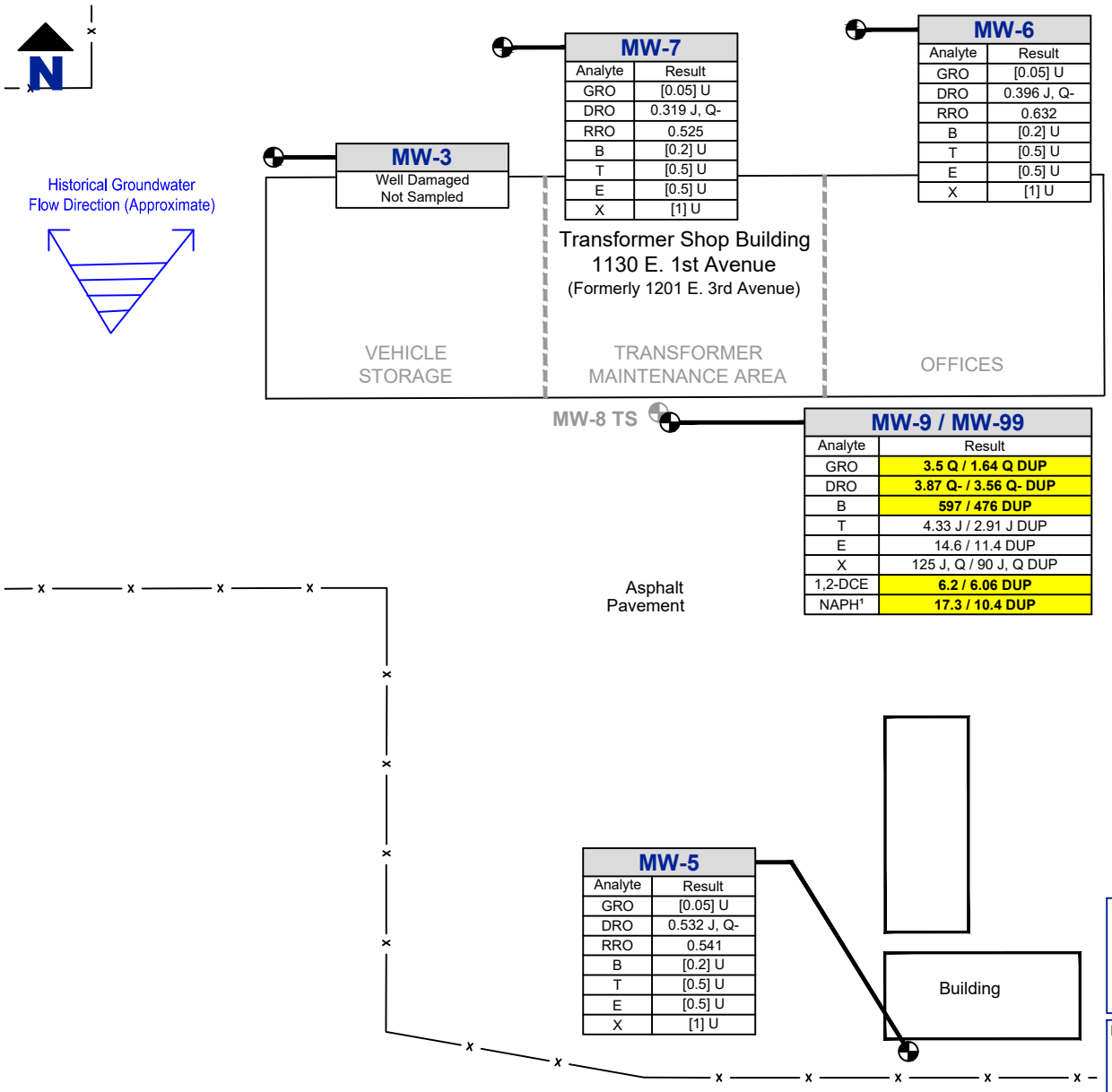
CHUGACH ELECTRIC ASSOCIATION, INC.

Report: 2022 GROUNDWATER MONITORING REPORT
TRANSFORMER SHOP
1130 E. 1ST AVENUE
ANCHORAGE, ALASKA

Drawing: PROJECT LOCATION MAP

Date	October 2022	Scale	1" = 800 Feet
File Name	F1 CEA_TransformerShop_GW_RPT_22_v1.aprx	Project No.	105.00015.22005

Fig. No. 1



SCALE: 1" = 50'
WHEN PLOTTED AT 8.5 x 11 PAGE SIZE
0 50' 100' 150'

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.

Legend

- GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL - SAMPLING DISCONTINUED IN 2003
- CHAIN-LINK FENCE

Sampling Results Guidelines

AAC	ALASKA ADMINISTRATIVE CODE
ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DRO	DIESEL RANGE ORGANICS
GRO	GASOLINE RANGE ORGANICS
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
1,2-DCE	1,2-DICHLOROETHANE
NAPH	NAPHTHALENE
DUP	DUPLICATE SAMPLE
J	ESTIMATED CONCENTRATION BETWEEN THE LOQ AND DL.
Q	THE RESULT IS ESTIMATED, DUE TO A LABORATORY QUALITY CONTROL FAILURE OR A MATRIX EFFECT. WHERE APPLICABLE, A "+" OR "-" WAS APPENDED TO INDICATE A HIGH OR LOW BIAS.
U	NONDETECT, LOD IS SHOWN IN BRACKETS
UJ	THE ANALYTE WAS NOT DETECTED. THE REPORTED QUANTITATION LIMIT IS APPROXIMATE AND MAY BE INACCURATE OR IMPRECISE.
LOD	LIMIT OF DETECTION
LOQ	LIMIT OF QUANTITATION
DL	DETECTION LIMIT

0.00249 SAMPLE HAS **EXCEEDED** ADEC CLEANUP LEVEL LISTED IN 18 AAC 75.345 TABLE C [NOVEMBER 2021]

0.005 SAMPLE **DOES NOT EXCEED** ADEC CLEANUP LEVEL LISTED IN 18 AAC 75.345 TABLE C [NOVEMBER 2021]

[1] NAPTHALENE WAS ANALYZED BY BOTH SW8260D AND SW8270D LV. ONLY THE HIGHEST CONCENTRATIONS ARE INCLUDED IN THIS FIGURE.

CHUGACH ELECTRIC ASSOCIATION, INC.

Report
2022 GROUNDWATER MONITORING REPORT
TRANSFORMER SHOP
1130 E. 1ST AVENUE
ANCHORAGE, ALASKA

Drawing
2022 GROUNDWATER SAMPLING RESULTS

Date	October 2022	Scale	1" = 50 Feet
File Name	F2 Trans Shop GW Results_22	Project No.	105.00528.22005

Fig. No. 2

Figure 3: Historical Concentrations of GRO, DRO, and BTEX in Monitoring Well MW-9

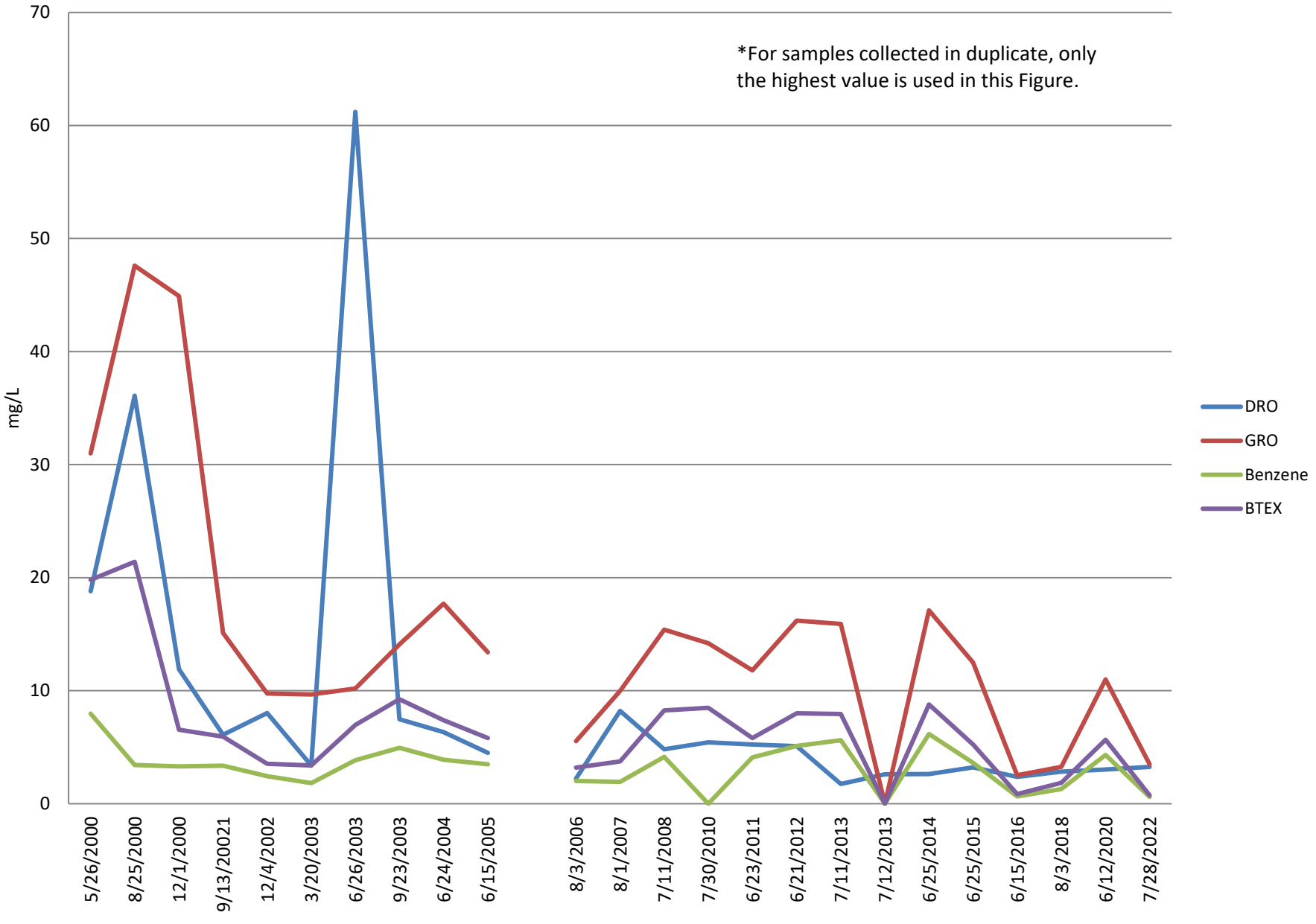


TABLE 1 - 2022 WATER SAMPLING LOG
CEA TRANSFORMER SHOP

Well Number[1,2,3]	MW-5 TS	MW-6 TS	MW-7 TS	MW-9 TS
Water Level & Well Purging Data				
Date Water Level Measured	7/28/2022	7/28/2022	7/28/2022	7/26/2022
Time Water Level Measured	9:00	10:00	10:51	13:20
TOC Elevation, ft	Unknown	51.51	49.23	51.23
Depth to Water Below TOC, ft	4.85	15.03	16.89	4.37
Water Level Elevation, ft	NC	36.48	32.34	46.86
Depth of Well Below Top of Casing, ft	13.77	20.93	21.93	8.85
Water Column in Well, ft	8.92	5.90	5.04	4.48
Diameter of Well Casing, inch	2	2	2	2
Gallons per Foot	0.163	0.163	0.163	0.163
Gallons in Well	1.45	0.96	0.82	0.73
Total Gallons Purged (Low Flow)	4.3	2.0	2.5	4.0
Sampling/Water Parameters				
Date Sampled	7/28/2022	7/28/2022	7/28/2022	7/28/2022
Time Sampled	9:25	10:26	11:20	11:45
Temperature, C	10.7	9.20	10.90	15.90
Specific Conductance, µS/cm	505.3	787	1127	1676
Turbidity (NTU)	5.05	8.95	1.53	L
pH	7.09	6.52	6.64	7.20
Dissolved Oxygen, mg/L	6.04	0.53	0.98	0.27
Sample Number	MW-5 TS	MW-6 TS	MW-7 TS	MW-9 TS, MW-99 TS (duplicate)

Abbreviations:

C Celsius
ft feet
mg/L milligrams per liter
NC Not calculated (TOC elevation not known).
µS/cm microsiemens per centimeter
TOC Top of casing

Notes

1 Sampled By SLR: Evan Tyler and Kate Omalley

2 All wells were purged and sampled using a peristaltic pump. MW-9 was purged dry on 7/26/2022, and was sampled just under 48 hours later on 7/28/2022 without additional purging. Water level recovered 76%.

3 All wells are flush-mounted in paved areas surrounding the Transformer Shop. Top of casing well elevation has not been surveyed since 2005, or longer, and is considered approximate.

Table 2 - 2022 Groundwater Sampling Analytical Results

Compound in milligrams per Liter (mg/L) or micrograms per liter (µg/L)	Screening Criteria		Sample Location[3]					Trip Blank	
	18 AAC 75, Table C Groundwater Cleanup Level (µg/L)[1]	Vapor Intrusion Target Level for Groundwater, Commercial Site Use[2,6] (µg/L)	MW-5 28-Jul-22 1224326001	MW-6 28-Jul-22 1224326002	MW-7 28-Jul-22 1224326003	**Primary:** MW-9 28-Jul-22 1224326006	**Duplicate:** MW-99 28-Jul-22 1224326007	Trip Blank #1 28-Jul-22 1224326004	Trip Blank #2 28-Jul-22 1224326005
			Conc.[4]	Conc.[4]	Conc.[4]	Conc.[4]	Conc.[4]	Conc.[4]	Conc.[4]
Fuels (AK101 and 102) in mg/L									
Gasoline Range Organics	2.2	--	[0.05] U	[0.05] U	[0.05] U	**3.5 Q**	1.64 Q	[0.05] U	--
Diesel Range Organics	1.5	--	0.532 J, Q-	0.396 J, Q-	0.319 J, Q-	**3.87 Q-**	**3.56 Q-**	--	--
Residual Range Organics	1.1	--	0.541	0.632	0.525	**3.95**	**3.44**	--	--
VOCs (SW8260D) in µg/L									
1,1,1,2-Tetrachloroethane	5.7	160	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
1,1,1-Trichloroethane	8000	31000	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,1,2,2-Tetrachloroethane	0.76	140	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
1,1,2-Trichloroethane	0.41	26	[0.2] U	[0.2] U	[0.2] U	[2] U	[1] U	--	[0.2] U
1,1-Dichloroethane	28	330	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,1-Dichloroethene	280	820	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,1-Dichloropropene	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,2,3-Trichlorobenzene	7	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,2,3-Trichloropropane	0.0075	94	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,2,4-Trichlorobenzene	4	150	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,2,4-Trimethylbenzene	56	120	[0.5] U	[0.5] U	[0.5] U	41.2	30.8	--	[0.5] U
1,2-Dibromo-3-chloropropane	--	--	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
1,2-Dibromoethane	0.075	7.7	[0.0375] U	[0.0375] U	[0.0375] U	[0.375] U	[0.188] U	--	[0.0375] U
1,2-Dichlorobenzene	300	11000	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,2-Dichloroethane (1,2-DCA)	1.7	98	[0.25] U	[0.25] U	[0.25] U	**6.2**	**6.06**	--	[0.25] U
1,2-Dichloropropane	8.2	110	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,3,5-Trimethylbenzene	60	--	[0.5] U	[0.5] U	[0.5] U	19.6	17	--	[0.5] U
1,3-Dichlorobenzene	300	8100	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
1,3-Dichloropropane	--	--	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
1,4-Dichlorobenzene	4.8	110	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
2,2-Dichloropropane	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
2-Butanone (MEK)	5600	9400000	[5] U	[5] U	[5] U	97.9 J	114	--	[5] U
2-Chlorotoluene	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
2-Hexanone	38	34000	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
4-Chlorotoluene	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
4-Isopropyltoluene	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
4-Methyl-2-pentanone (MIBK)	6300	2300000	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Benzene	4.6	69	[0.2] U	[0.2] U	[0.2] U	**597**	**476**	--	[0.2] U
Bromobenzene	62	2600	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Bromochloromethane	--	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Bromodichloromethane	1.3	38	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
Bromoform	33	5100	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Bromomethane	7.5	73	[3] U	[3] U	[3] U	[30] U	[15] U	--	[3] U
Carbon disulfide	810	5200	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Carbon tetrachloride	4.6	18	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Chlorobenzene	78	1700	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
Chloroethane	21000	97000	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Chloroform	2.2	36	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Chloromethane	190	1100	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
cis-1,2-Dichloroethene	36	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
cis-1,3-Dichloropropene	4.7	--	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
Dibromochloromethane	8.7	--	[0.25] U	[0.25] U	[0.25] U	[2.5] U	[1.25] U	--	[0.25] U
Dibromomethane	8.3	520	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Dichlorodifluoromethane	200	31	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Ethylbenzene	15	150	[0.5] U	[0.5] U	[0.5] U	14.6	11.4	--	[0.5] U
Freon-113	10000	--	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Hexachlorobutadiene	1.4	13	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Isopropylbenzene (Cumene)	450	3700	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Methylene chloride	110	20000	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Methyl-t-butyl ether	140	20000	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Naphthalene	1.7	200	[0.5] U	[0.5] U	[0.5] U	**17.3**	**10.4**	--	[0.5] U
n-Butylbenzene	1000	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
n-Propylbenzene	660	10000	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
o-Xylene	--	--	[0.5] U	[0.5] U	[0.5] U	4.96 J	3.98 J	--	[0.5] U
P & M -Xylene	--	--	[1] U	[1] U	[1] U	120 Q	86 Q	--	[1] U
sec-Butylbenzene	2000	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Styrene	1200	39000	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
tert-Butylbenzene	690	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Tetrachloroethene	41	240	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Toluene	1100	81000	[0.5] U	[0.5] U	[0.5] U	4.33 J	2.91 J	--	[0.5] U
trans-1,2-Dichloroethene	360	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
trans-1,3-Dichloropropene	4.7	210	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Trichloroethene	2.8	21	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Trichlorofluoromethane	5200	--	[0.5] U	[0.5] U	[0.5] U	[5] U	[2.5] U	--	[0.5] U
Vinyl acetate	410	42000	[5] U	[5] U	[5] U	[50] U	[25] U	--	[5] U
Vinyl chloride	0.19	25	[0.075] U	[0.075] U	[0.075] U	[0.75] U	[0.375] U	--	[0.075] U
Xylenes (total)[5]	190	1600	[1] U	[1] U	[1] U	125 J, Q	90 J, Q	--	[1] U

Yellow and Bold	Value exceeds Method Two cleanup level
Shaded green	Un-detectable result with the LOD above the ADEC cleanup level.
Shaded Blue	Groundwater result for this analyte exceeds the ADEC vapor intrusion target level for groundwater (commercial site use).

Notes:

1 - The cleanup level corresponds to those listed in 18 AAC 75.345, Method Two, Table C, Groundwater Cleanup Levels (ADEC, November 18, 2021).

2 - The level corresponds to the target level listed in ADEC Vapor Intrusion Guidance for Contaminated Sites (January 2017), Appendix G.

3 - The sample type, field sample identification number, date collected, and laboratory sample identification number are provided.

4 - For detected results, the sample result is listed in this column. For undetectable results, the Limit of Detection (LOD) is listed in brackets in this column. Associated flag(s) are shown to the right.

5 - Total values were the summation of detected compounds only. If compounds were not detected, then the highest LOD was listed.

6 - The ADEC Vapor Intrusion Guidance for Contaminated Sites (January 2017), Appendix F, states these chemicals should be investigated as chemicals of potential concern for vapor intrusion when petroleum is present.

Data Flags

J	Estimated concentration between the LOQ and DL.
Q	The result is estimated, due to a laboratory quality control failure or a matrix effect. Where applicable, a "+" or "-" was appended to indicate a high or low bias.
U	Nondetect, LOD is shown in brackets.

Abbreviations

--	Not applicable or screening criteria does not exist for this compound	LOD	limit of detection
AAC	Alaska Administrative Code	LOQ	limit of quantitation
ADEC	Alaska Department of Environmental Conservation	LV	low volume
AK	Alaska	µg/L	micrograms per liter
DL	detection limit	VOCs	volatile organic compounds

TABLE 3 - HISTORICAL GROUNDWATER ANALYTICAL RESULTS
CEA TRANSFORMER SHOP

Compound (mg/L)		DRO	GRO	Benzene	Total BTEX
October 2018 Cleanup Level (18 AAC 75.345, Table C)		1.5	2.2	0.0046	--
Monitoring Well	Date[1]				
MW-3	8/27/1998	0.206	--	--	--
	12/31/1998	0.669	--	--	--
	3/19/1999	ND [0.333]	--	--	--
	6/23/1999	0.427	--	--	--
	9/30/1999	**4.42**	--	--	--
	2/2/2000	ND [0.395]	ND [0.0900]	ND [0.00050]	--
	5/26/2000	0.700	ND [0.0900]	ND [0.00050]	--
	8/25/2000	0.622	ND [0.0900]	ND [0.00050]	0.0194
	12/1/2000	ND [0.326]	ND [0.0900]	ND [0.00050]	0.00303
	6/24/2004	ND [0.300]	ND [0.0900]	ND [0.00050]	ND
	6/15/2005	ND [0.337]	ND [0.0900]	ND [0.00050]	ND
	8/3/2006	0.465	ND [0.100]	ND [0.00050]	ND
	8/1/2007	ND [0.357]	ND [0.100]	ND [0.00050]	ND
	7/10/2008	0.495 B	ND [0.100]	ND [0.00050]	ND
	7/29/2010	ND [0.574]	ND [0.062]	ND [0.0003]	ND
	6/23/2011	ND [0.266]	ND [0.031]	0.00029 J	0.00029 J
	6/22/2012	ND [0.382]	ND [0.0620]	ND [0.0003]	ND
	7/12/2013	ND [0.360]	ND [0.0620]	ND [0.0003]	ND
	6/25/2014	Well damaged, not sampled.			
MW-5 (upgradient well)	7/16/2004	0.352	ND [0.0900]	ND [0.00050]	ND
	6/15/2005	ND [0.333]	ND [0.0900]	ND [0.00050]	ND
	8/2/2006	ND [0.370]	ND [0.100]	ND [0.00050]	ND
	8/1/2007	ND [0.328]	ND [0.100]	ND [0.00050]	ND
	7/11/2008	0.276 J, B	ND [0.100]	ND [0.00050]	ND
	7/29/2010	ND [0.526]	ND [0.062]	ND [0.0003]	ND
	6/22/2011	ND [0.266]	ND [0.031]	ND [0.00015]	ND
	6/22/2012	ND [0.392]	ND [0.0620]	0.00016 J	0.00016 J
	7/11/2013	0.236 J	ND [0.0620]	ND [0.0003]	ND
	6/25/2014	ND [0.308]	ND [0.0500]	ND [0.00025]	ND
	6/25/2015	0.423 J	ND [0.05]	ND [0.00025]	ND
	6/15/2016	ND [0.294]	ND [0.05]	ND [0.0002]	ND
	7/31/2018	0.208 J	ND [0.05]	ND [0.0002]	ND
	6/10/2020	0.249 J	ND [0.05]	ND [0.0002]	ND
	7/28/2022	0.532 J, Q-	[0.05] U	ND [0.0002]	ND
MW-6	8/27/1998	0.282	--	--	--
	12/31/1998	0.759	--	--	--
	3/19/1999	1.21	--	--	--
	6/23/1999	**2.17**	--	--	--
	9/30/1999	1.43	--	--	--
	2/2/2000	0.419	ND [0.0900]	ND [0.00050]	ND
	5/26/2000	ND [0.674]	ND [0.0900]	ND [0.00050]	ND
	8/25/2000	ND [0.323]	ND [0.0900]	ND [0.00050]	ND
	12/1/2000	1.29	ND [0.0900]	ND [0.00050]	ND
	6/24/2004	ND [0.366]	ND [0.0900]	ND [0.00050]	ND
	6/15/2005	ND [0.333]	ND [0.0900]	ND [0.00050]	ND
	8/3/2006	ND [0.366]	ND [0.100]	ND [0.00050]	ND
	8/1/2007	0.519	ND [0.100]	ND [0.00050]	ND
	7/11/2008	0.407 B	ND [0.100]	ND [0.00050]	ND
	7/29/2010	ND [0.544]	ND [0.062]	ND [0.0003]	ND
	6/22/2011	ND [0.260]	ND [0.031] QN	ND [0.00015]	ND
	6/21/2012	ND [0.378]	ND [0.0620]	ND [0.0003]	ND
	7/12/2013	0.185 J	ND [0.0620]	ND [0.0003]	ND
	6/25/2014	0.189 J	ND [0.0500]	ND [0.00025]	ND
	6/25/2015	0.223 J	ND [0.05]	ND [0.00025]	ND
	6/15/2016	0.191 J	ND [0.05]	ND [0.0002]	ND
	7/31/2018	0.419 J	ND [0.05]	ND [0.0002]	ND
	6/10/2020	0.356 J	ND [0.05]	ND [0.0002]	ND
	7/28/2022	0.396 J, Q-	[0.05] U	ND [0.0002]	ND

TABLE 3, Continued - HISTORICAL GROUNDWATER ANALYTICAL RESULTS
CEA TRANSFORMER SHOP

Compound (mg/L)		DRO	GRO	Benzene	Total BTEX
Oct 2018 Cleanup Level (18 AAC 75.345, Table C)		1.5	2.2	0.0046	--
Monitoring Well	Date				
MW-7	8/27/1998	ND [0.104]	--	--	--
	12/31/1998	0.158	--	--	--
	3/19/1999	ND [0.309]	--	--	--
	6/23/1999	ND [0.297]	--	--	--
	9/30/1999	ND [0.319]	--	--	--
	2/2/2000	ND [0.357]	ND [0.0900]	ND [0.00050]	ND
	5/26/2000	ND [0.674]	ND [0.0900]	ND [0.00050]	ND
	8/25/2000	ND [0.333]	ND [0.0900]	ND [0.00050]	ND
	12/1/2000	ND [0.330]	ND [0.0900]	ND [0.00050]	ND
	6/24/2004	ND [0.361]	ND [0.0900]	ND [0.00050]	ND
	6/15/2005	ND [0.375]	ND [0.0900]	ND [0.00050]	ND
	8/3/2006	ND [0.368]	ND [0.100]	ND [0.00050]	ND
	8/1/2007	ND [0.321]	ND [0.100]	ND [0.00050]	ND
	7/11/2008	ND [0.621] B	ND [0.100]	ND [0.00050]	ND
	7/29/2010	ND [0.538]	ND [0.062]	ND [0.0003]	ND
	6/23/2011	ND [0.266]	ND [0.031]	0.00035 J	0.00035 J
	6/21/2012	ND [0.378]	ND [0.0620]	ND [0.0003]	ND
	7/11/2013	0.465 J	ND [0.0620]	ND [0.0003]	ND
	6/25/2014	0.211 J	ND [0.0500]	ND [0.00025]	ND
	6/25/2015	0.878	ND [0.05]	ND [0.00025]	ND
	6/15/2016	ND [0.3]	ND [0.05]	ND [0.0002]	0.00055 J
	7/31/2018	0.276 J	ND [0.05]	ND [0.0002]	ND
	6/10/2020	0.529 J	ND [0.05]	ND [0.0002]	ND
	7/28/2022	0.319 J, Q-	[0.05] U	ND [0.0002]	ND
MW-8	6/23/1999	**7.53**	0.25	**0.103**	0.109
	9/30/1999	**5.34**	0.22	**0.0599**	0.0759
	2/2/2000	**12**	0.33	**0.172**	0.177
	5/26/2000	**4.73**	0.94	**0.473**	0.473
	9/13/2002[2]	**3.06**	0.464	**0.0158**	0.160
	12/4/2002	**2.31**	1.40	**0.00677**	0.449
	3/20/2003	**3.02**	1.04	**0.00489**	0.364
	6/26/2003	**4.78**	0.862	**0.726**	0.762
	9/23/2003	**2.37**	1.410	**0.019**	0.7762

TABLE 3, Continued - HISTORICAL GROUNDWATER ANALYTICAL RESULTS
CEA TRANSFORMER SHOP

Compound (mg/L)		DRO	GRO	Benzene	Total BTEX
Oct 2018 Cleanup Level (18 AAC 75.345, Table C)		1.5	2.2	0.0046	--
Monitoring Well	Date				
MW-9[4]	5/26/2000	**18.8**	**31**	**7.97**	19.8
	8/25/2000	**36.1**	**47.6**	**3.42**	21.4
	12/1/2000	**11.92**	**44.9**	**3.3**	6.55
	9/13/2002[2]	**6.11**	**15.1**	**3.36**	5.94
	12/4/2002	**8.03**	**9.76**	**2.44**	3.52
	3/20/2003	**3.39**	**9.67**	**1.82**	3.38
	6/26/2003	**61.2**	**10.2**	**3.84**	6.97
	9/23/2003	**7.47**	**14.1**	**4.95**	9.25
	6/24/2004	**6.33**	**17.7**	**3.89**	7.40
	6/15/2005	**4.51**	**13.4**	**3.50**	5.81
	8/3/2006	**2.23**	**5.53**	**2.01**	3.20
	8/1/2007	**8.22**	**9.99**	**1.93**	3.74
	7/11/2008	**4.81**	**15.4**	**4.14**	8.26
	7/30/2010	**5.44**	**14.2**	**6.01 Q+**	8.49
	6/23/2011	**5.25/4.07**	**11.2/11.8**	**3.94/4.10**	5.71/5.80
	6/21/2012	**5.09/3.89**	**14.5/16.2**	**4.97/5.12**	7.18 QN/7.99 QN
	7/11/2013[3]	0.871 QN /**1.75 QN**	**8.31 QN/15.9 QN**	**2.14 QN/5.62 QN**	3.47 QN/7.94 QN
	7/12/2013	**2.61**	--	--	--
	6/25/2014[3]	**2.63/1.97**	**17.1 QN/2.87 QN**	**6.16 QN/0.996 QN**	8.79 QN/1.45 QN
	6/25/2015	**3.22/2.83**	**12.5/9.85**	**3.62 QH/2.79 QH**	5.24 QH/4.24 QH
	6/15/2016	**2.16/2.38**	**2.34/2.52**	**0.645/0.5**	0.8609 MN/0.7033 MN
	8/3/2018	**2.69/2.84**	**3.25/2.59 Q+**	**1.3/1.2**	1.8419 Q/ 1.5237 Q
	6/12/2020	**3.03/2.71**	**11/9.53**	**4.31/3.25**	5.6596 Q/4.3189 Q
	7/28/2022	**3.87 Q-/3.56 Q-**	**3.5 Q**/1.64 Q	**0.597/0.476**	0.741 J, Q/0.580 J, Q

Notes:

1. Sampling method prior to 2011 was purging 3 casing volumes with a bailer, followed by sample collection with a bailer. Starting in 2011, the sampling method switched to a low-flow sampling technique with purging and sampling performed with a peristaltic pump and tubing.

2. Analytical results are suspected to have been mislabeled or switched for monitoring wells MW-8 and MW-9 during sampling handling of 9/13/2002 samples. Analytical results in this table have been placed in corrected locations.

3. Monitoring well MW-9 sample was collected without prior purging in 2013 and 2014.

4. MW-9 is a poor producer of groundwater and typically was purged dry when trying to achieve standard parameters using a low-flow sampling technique. Since 2015, the standard sampling protocol for MW-9 is to purge the well dry and collect the sample approximately 24 -72 hours later. Water level recovery has been on the order of 40 to 80% at the time of sampling.

Coding

0.377 / 0.364	Primary sample concentration followed by duplicate sample concentration
4.81	Bold and Shaded - Concentration exceeded the 18 AAC 75.345, Table C groundwater cleanup level (October, 2018 or November 2021).
ND [0.0900]	Analyte not detected above the practical quantitation limit (limit of quantitation, or LOQ). Data prior to 2012 analytes were not detect above the Detection Limit (DL).

Abbreviations:

AAC	Alaska Administration Code
B	Compound was positively identified in the trip blank or method blank.
BTEX	benzene, toluene, ethylbenzene, and total xylenes
DRO	diesel range organics
J	Compound was positively identified, above the detection limit, but below the Limit of Quantitation.
GRO	gasoline range organics
Q	The quantitation is an estimate. An "H/+", "L/-", or "N" indicates a potential high, low, or unknown bias respectively.
mg/L	milligrams/liter
M	The quantitation is an estimate due to a sample matrix quality control failure. An "H", "L", or "N" indicates a potential high, low, or unknown bias respectively.
ND	not detected
--	Sample not analyzed for parameter

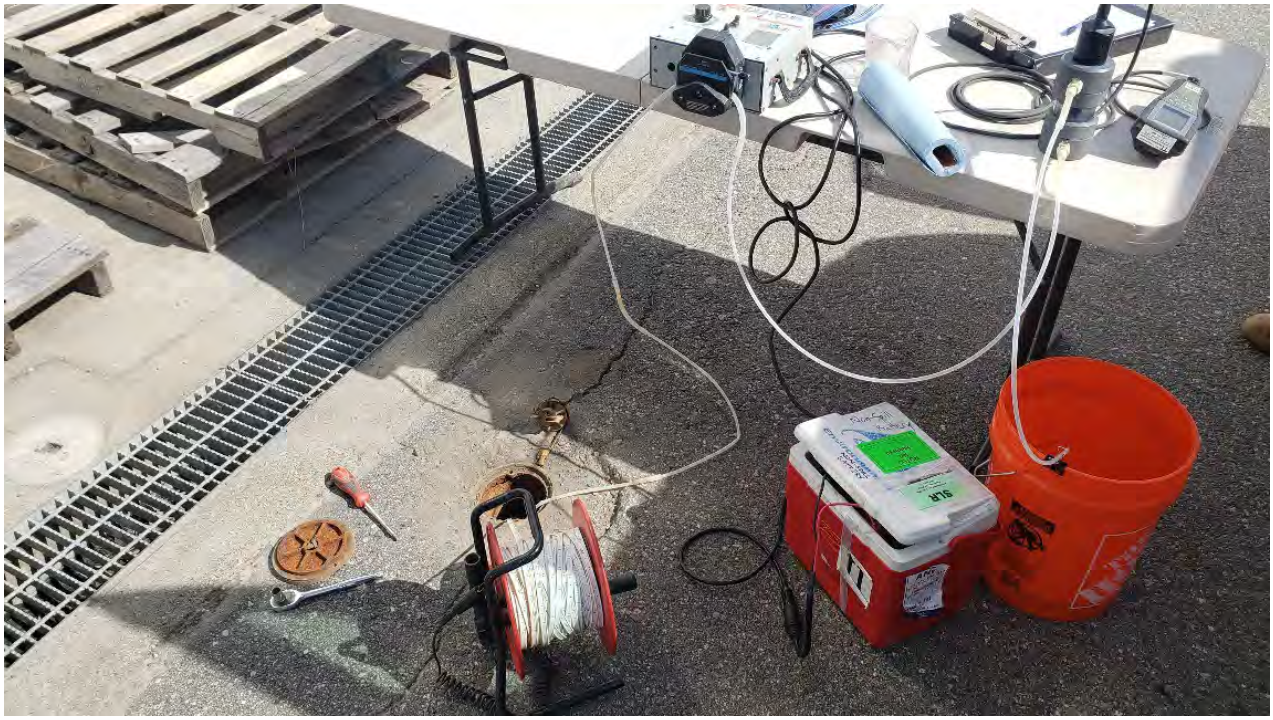


Photo 1: Monitoring Well MW-9 TS, located south of the Transformer shop, being purged dry. (7/26/2022)

Photo 2: Monitoring Well MW-5 TS, located under the stairs. (7/28/2022)

SLR	Transformer Shop Groundwater Sampling Chugach Electric Association Anchorage, Alaska
SITE PHOTOGRAPHS July 26 & 28, 2022	Job No: 105.00015.22008

Photo 3: Monitoring Well MW-6 TS as it is being purged. (7/28/2022)

Photo 4: Purge water containerized and dropped off inside the Transformer Shop at end of project. Photo on 7/28/2022.

SLR	Transformer Shop Groundwater Sampling Chugach Electric Association Anchorage, Alaska
SITE PHOTOGRAPHS July 26 & 28, 2022	Job No: 105.00015.22008

SLR

Groundwater Sampling Form

Site/Client Name: MLBP	**Well ID:** MW-9
Project # : 105.00015.22008	Sample ID: MW-9
Sampled By: E Tyler K O'Malley	Sample Time: 1145 Sample Date: 7/28/22
Weather Conditions: 62°F, clear	Duplicate ID: — MW-99
Sampling Method: ☐ Low Flow ☑ Other Purge Dry	MS/MSD ☐ Yes ☑ No Trip Blank Required: ☑ Yes ☐ No

Well Information

Well Type: ☑ Permanent ☐ Temporary	Well Diameter 2" in.	Screen Interval: _____ ft BGS to _____ ft BGS
Well Condition: ☑ Good ☐ Fair ☐ Poor (if fair or poor explain in Notes)		Stickup ☐ Yes ☑ No; If yes, _____ ft above ground

Gauging/Purging Information

Depth to Water (ft BTOC): 4.37	Tubing/Pump Depth (ft. BTOC): ~8'
Total Depth (ft BTOC): 8.85	Purge Start Time (24-hr) 1320
Depth to Product (ft. BTOC) —	Purge End Time (24-hr) 1440
Product Thickness (ft) —	Total Purge Time (min) 80

LOW FLOW: **Max Draw Down** = (Tubing Depth – Top of Screen Depth)_____ X 0.25 = _____(ft); if screen interval is not known or water table is below top of screen, then use default value of 0.3 ft. **1 gal = 3.785L, 1L = 0.264 gal**

Min. purge volume if required: purge volume (gal) = volume of water/ft_____(gal/ft) X Water column thickness_____(ft) X # of casing volumes_____ =_____gal

Well Diameter – gal/ft	1" – 0.041 gal/ft	2" – 0.163 gal/ft	4" – 0.653 gal/ft	6" – 1.469 gal/ft

Water Quality Parameters

(Achieve stable parameters for 3 consecutive reading, 4 parameters if practical [each reading taken after pumping a minimum of 1 flow through cell volume])

Time (24-hr)	Flow Rate (mL/minute)	Purge Volume (L or gal Circle one)	Temp (°C) (± 3 %)	Specific Conductance (µS/cm°) (± 3%)	DO (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10mV)	Turbidity (NTU) (± 10%, or <5 NTU)	DTW (ft BTOC)	Drawdown (ft) (Max____ft)
1324			15.4	1683	0.79	6.48	171.9	L		
1329	150		15.7	1626	47	6.48	86.7	L	5.01	
1334	↓		16.1	1619	1.13	6.45	52.8	L	5.20	
1339			16.3	1619	0.78	6.42	41.3	L	5.43	
1344			16.3	1625	0.63	6.43	28.7	L	5.68	
1349			16.4	1630	0.51	6.47	12.0	L	5.85	
1354	275		16.4	1623	0.41	6.54	-5.7	L	6.11	
1404			15.8	1627	0.29	6.72	-32.2	L	6.73	
1409			16.3	1616	0.27	6.76	-48.3	L	7.07	
1414			16.0	1621	0.27	6.87	-54.3	L	7.33	
1419	↓		15.8	1620	0.25	6.91	-61.8	L	7.62	
1424		↓	16.1	1626	0.25	6.99	-66.6	L	7.90	
Parameter Stable (Check applicable)										

Sample Color: Clear	**Sample Odor:** None	**Sheen:** None

Analytical Sampling

Analyses	Check Applicable	Comments
PCB Total	✓	
PCB Dissolved	✓	

Notes: Purged dry on 7/26/22
76 L. recharged on 7/28/22

Equipment:

Tubing: ☐ Polyethylene ☑ PFTE-Lined ☐ Other _____ O.D. ☑ 1/4" ☐ 3/8" ☐ 1/2" Left in well ☐ Yes ☐ No

Pump/Bailer — Multi-Parameter Meter make/SN#) YSI pro plus 19G100470

W.L. Indicator Solinst int./wl Turbidity Meter (Make/SN#) — Filtered ☑ Yes ☐ No Lot #_____

Purge Water Handling: ☐ Discharged to surface ☑ Containerized ☐ Treated (how?) Given to transformer shop

BGS = Below Ground Surface, BTOC= Below Top of Casing, NA = Not Applicable

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SLR

Groundwater Sampling Form

Site/Client Name: Same as pg 1	**Well ID:** MW-9
Project # :	**Sample ID:** MW-9
Sampled By:	**Sample Time:** 1145 **Sample Date:** 7/28/22
Weather Conditions:	**Duplicate ID:** MW-99
Sampling Method: ☑ Low Flow ☐ Other_____	**MS/MSD** ☐ Yes ☑ No **Trip Blank Required:** ☑ Yes ☒ No

Well Information

Well Type: ☑ Permanent ☐ Temporary	**Well Diameter** 2 in.	**Screen Interval:** _____ ft BGS to _____ ft BGS
Well Condition: ☑ Good ☐ Fair ☐ Poor (if fair or poor explain in Notes)		**Stickup** ☐ Yes ☑ No; If yes, _____ ft above ground

Gauging/Purging Information

Depth to Water (ft BTOC): 4.37	**Tubing/Pump Depth (ft. BTOC):** ~8'
Total Depth (ft BTOC): 8.85	**Purge Start Time (24-hr)** 1320
Depth to Product (ft. BTOC) —	**Purge End Time (24-hr)** 1440
Product Thickness (ft) —	**Total Purge Time (min)** 80

LOW FLOW: **Max Draw Down** = (Tubing Depth – Top of Screen Depth)_____ X 0.25 = _____(ft); if screen interval is not known or water table is below top of screen, then use default value of 0.3 ft. **1 gal = 3.785L, 1L = 0.264 gal**

Min. purge volume if required: purge volume (gal) = volume of water/ft_____(gal/ft) X Water column thickness_____(ft) X # of casing volumes_____ =_____gal

Well Diameter – gal/ft	1" – 0.041 gal/ft	2" – 0.163 gal/ft	4" – 0.653 gal/ft	6" – 1.469 gal/ft

Water Quality Parameters

(Achieve stable parameters for 3 consecutive reading, 4 parameters if practical [each reading taken after pumping a minimum of 1 flow through cell volume])

Time (24-hr)	Flow Rate (mL/minute)	Purge Volume (L or gal) Circle one	Temp (°C) (± 3 %)	Specific Conductance (µS/cm°) (± 3%)	DO (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10mV)	Turbidity (NTU) (± 10%, or <5 NTU)	DTW (ft BTOC)	Drawdown (ft) (Max____ft)
1429	275	1	15.4	1633	0.25	7.04	-74.7	L	8.22	
1434	↓	↓	15.7	1640	0.24	7.05	-81.4	L	8.50	
1439			15.8	1641	0.25	7.03	-85.7	L	8.81	
1444		5 gal	15.9	1676	0.27	7.20	-86.1	L	8.85	
Parameter Stable (Check applicable)										

Sample Color: Clear	**Sample Odor:** None	**Sheen:** None

Analytical Sampling

Analyses	Check Applicable	Comments
PCB Total		
PCB Dissolved		

Notes:

Equipment:

Tubing: ☐ Polyethylene ☑ PFTE-Lined ☐ Other _____ O.D. ☑ 1/4" ☐ 3/8" ☐ 1/2" Left in well ☑ Yes ☐ No

Pump/Bailer — Multi-Parameter Meter make/SN#) YSI Pro Plus 09G100470

W.L. Indicator Solinst Turbidity Meter (Make/SN#) HACH 2100Q Filtered ☐ Yes ☑ No Lot #_____

Purge Water Handling: ☐ Discharged to surface ☑ Containerized ☐ Treated (how?)_____

BGS = Below Ground Surface, BTOC= Below Top of Casing, NA = Not Applicable

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SLR

Groundwater Sampling Form

Site/Client Name: ML & P	**Well ID:** MW-5
Project # : 105.00156.22008	Sample ID: MW-5
Sampled By: E. Tyler, K. OMalley	Sample Time: 0925 Sample Date: 7/28/22
Weather Conditions: Sunny	Duplicate ID: —
Sampling Method: ☑ Low Flow ☐ Other_____	MS/MSD ☐ Yes ☐ No Trip Blank Required: ☐ Yes ☒ No

Well Information

Well Type: ☑ Permanent ☐ Temporary	Well Diameter 2 in.	Screen Interval: _____ ft BGS to _____ ft BGS
Well Condition: ☑ Good ☐ Fair ☐ Poor (if fair or poor explain in Notes)		Stickup ☐ Yes ☑ No; If yes, _____ ft above ground

Gauging/Purging Information

Depth to Water (ft BTOC): 4.85	Tubing/Pump Depth (ft. BTOC): ~5.5'
Total Depth (ft BTOC): 13.11	Purge Start Time (24-hr) 0900
Depth to Product (ft. BTOC) —	Purge End Time (24-hr) 0921
Product Thickness (ft) —	Total Purge Time (min) 21

LOW FLOW: **Max Draw Down** = (Tubing Depth – Top of Screen Depth)_____ X 0.25 = _____(ft); if screen interval is not known or water table is below top of screen, then use default value of 0.3 ft. **1 gal = 3.785L, 1L = 0.264 gal**

Min. purge volume if required: purge volume (gal) = volume of water/ft_____(gal/ft) X Water column thickness_____(ft) X # of casing volumes_____ =_____gal

Well Diameter – gal/ft	1" – 0.041 gal/ft	2" – 0.163 gal/ft	4" – 0.653 gal/ft	6" – 1.469 gal/ft

Water Quality Parameters

(Achieve stable parameters for 3 consecutive reading, 4 parameters if practical [each reading taken after pumping a minimum of 1 flow through cell volume])

Time (24-hr)	Flow Rate (mL/minute)	Purge Volume (L or gal) Circle one	Temp (°C) (± 3 %)	Specific Conductance (µS/cm°) (± 3%)	DO (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10mV)	Turbidity (NTU) (± 10%, or <5 NTU)	DTW (ft BTOC)	Drawdown (ft) (Max___ft)
0905	225		9.2	620.8	6.13	6.88	222.3	6.77	5.00	.15
0910	↓		10.6	516.2	5.92	7.03	226.0	5.81	5.02	.17
0915			10.8	506.1	6.04	7.08	234.0	2.30	5.05	.20
0918		↓	10.8	505.5	6.03	7.08	238.3	2.61	5.06	.21
0921	↓	2.5 gal	10.7	505.3	6.04	7.09	244.1	1.46	5.05	.20
~~09~~										
Parameter Stable (Check applicable)			✓	✓	✓	✓		✓		

Sample Color: Clear	**Sample Odor:** None	**Sheen:** None

Analytical Sampling

Analyses	Check Applicable	Comments
VOCs	✓	
GRO	✓	
DRO / RRO	✓	

Notes: rectangular metal cover under stairs

Equipment:

Tubing: ☐ Polyethylene ☑ PFTE-Lined ☐ Other _____ O.D. ☐ 1/4" ☐ 3/8" ☐ 1/2" Left in well ☑ Yes ☐ No

Pump/Bailer Peri Multi-Parameter Meter make/SN#) YSI 09610047D

W.L. Indicator Solinst Turbidity Meter (Make/SN#) Hach 2100Q Filtered ☐ Yes ☑ No Lot #_____

Purge Water Handling: ☐ Discharged to surface ☑ Containerized ☐ Treated (how?)_____

BGS = Below Ground Surface, BTOC= Below Top of Casing, NA = Not Applicable REV. 9/2020 Page 1 of 1

SLR

Groundwater Sampling Form

Site/Client Name: ML & P	**Well ID:** MW-6
Project # : 105.00015.22008	Sample ID: MW-6
Sampled By: E. Tyler, K. OMalley	Sample Time: 1026 Sample Date: 7/25/22
Weather Conditions: Sunny	Duplicate ID: —
Sampling Method: ☑ Low Flow ☐ Other_____	MS/MSD ☐ Yes ☑ No Trip Blank Required: ☑ Yes ☐ No

Well Information

Well Type: ☑ Permanent ☐ Temporary	Well Diameter 2 in.	Screen Interval: _____ ft BGS to _____ ft BGS
Well Condition: ☑ Good ☐ Fair ☐ Poor (if fair or poor explain in Notes)		Stickup ☐ Yes ☑ No; If yes, _____ ft above ground

Gauging/Purging Information

Depth to Water (ft BTOC): 15.03	Tubing/Pump Depth (ft. BTOC): ~16'
Total Depth (ft BTOC): 20.93	Purge Start Time (24-hr) 1000
Depth to Product (ft. BTOC) —	Purge End Time (24-hr) 1024
Product Thickness (ft) —	Total Purge Time (min) 24

LOW FLOW: **Max Draw Down** = (Tubing Depth – Top of Screen Depth)_____ X 0.25 = _____(ft); if screen interval is not known or water table is below top of screen, then use default value of 0.3 ft. **1 gal = 3.785L, 1L = 0.264 gal**

Min. purge volume if required: purge volume (gal) = volume of water/ft_____(gal/ft) X Water column thickness_____(ft) X # of casing volumes_____ =_____gal

Well Diameter – gal/ft	1" – 0.041 gal/ft	2" – 0.163 gal/ft	4" – 0.653 gal/ft	6" – 1.469 gal/ft

Water Quality Parameters

(Achieve stable parameters for 3 consecutive reading, 4 parameters if practical [each reading taken after pumping a minimum of 1 flow through cell volume])

Time (24-hr)	Flow Rate (mL/minute)	Purge Volume (L or gal) Circle one	Temp (°C) (± 3 %)	Specific Conductance (µS/cm°) (± 3%)	DO (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10mV)	Turbidity (NTU) (± 10%, or <5 NTU)	DTW (ft BTOC)	Drawdown (ft) (Max____ft)
1005	225	1	9.3	785	0.73	6.47	153.1	86	15.05	-.02
1010	↓	↓	9.3	786	0.37	6.45	84.0	51.9	15.04	-.01
1015	↓	↓	9.3	791	0.76	6.48	65.5	24.6	15.06	.03
1018	↓	↓	9.3	784	0.73	6.50	58.8	15.9	15.06	.03
1021	↓	↓	9.3	786	0.61	6.54	54.2	10.6	15.06	.03
1024	V	2.5 gal	9.2	787	0.53	6.57	49.6	8.95	15.06	.03
Parameter Stable (Check applicable)			✓	✓		✓	✓			

Sample Color: None **Sample Odor:** None **Sheen:** None

Analytical Sampling

Analyses	Check Applicable	Comments
VOCs	✓	
GRO	✓	
DRO/ORO	✓	

Notes:

Equipment:

Tubing: ☐ Polyethylene ☑ PFTE-Lined ☐ Other _____ O.D ☑ 1/4" ☐ 3/8" ☐ 1/2" Left in well ☐ Yes ☐ No

Pump/Bailer Peri Multi-Parameter Meter make/SN#) YSI 09G100470

W.L. Indicator Solinst Turbidity Meter (Make/SN#) Hach 2100Q Filtered ☐ Yes ☑ No Lot #_____

Purge Water Handling: ☐ Discharged to surface ☑ Containerized ☐ Treated (how?)_____

SLR

Groundwater Sampling Form

Site/Client Name: ML & P	**Well ID:** MW-7
Project # : 105.00015.22008	Sample ID: MW-7
Sampled By: E. Tyler, K. OMalley	Sample Time: 1120 Sample Date: 7/28/22
Weather Conditions: sunny	Duplicate ID: —
Sampling Method: ☑ Low Flow ☐ Other_____	MS/MSD ☐ Yes ☑ No Trip Blank Required: ☑ Yes ☐ No

Well Information

Well Type: ☑ Permanent ☐ Temporary	Well Diameter 2 in.	Screen Interval: _____ ft BGS to _____ ft BGS
Well Condition: ☑ Good ☐ Fair ☐ Poor (if fair or poor explain in Notes)		Stickup ☐ Yes ☑ No; If yes, _____ ft above ground

Gauging/Purging Information

Depth to Water (ft BTOC): 16.89	Tubing/Pump Depth (ft. BTOC): ~17.5
Total Depth (ft BTOC): 21.93	Purge Start Time (24-hr) 1051
Depth to Product (ft. BTOC) —	Purge End Time (24-hr) 1117
Product Thickness (ft) —	Total Purge Time (min) 26

LOW FLOW: **Max Draw Down** = (Tubing Depth – Top of Screen Depth)_____ X 0.25 = _____(ft); if screen interval is not known or water table is below top of screen, then use default value of 0.3 ft. **1 gal = 3.785L, 1L = 0.264 gal**

Min. purge volume if required: purge volume (gal) = volume of water/ft_____(gal/ft) X Water column thickness_____(ft) X # of casing volumes_____ =_____gal

Well Diameter – gal/ft	1" – 0.041 gal/ft	2" – 0.163 gal/ft	4" – 0.653 gal/ft	6" – 1.469 gal/ft

Water Quality Parameters

(Achieve stable parameters for 3 consecutive reading, 4 parameters if practical [each reading taken after pumping a minimum of 1 flow through cell volume])

Time (24-hr)	Flow Rate (mL/minute)	Purge Volume (L or gal Circle one)	Temp (°C) (± 3 %)	Specific Conductance (µS/cm°) (± 3%)	DO (mg/L) (± 10%)	pH (± 0.1)	ORP (mV) (± 10mV)	Turbidity (NTU) (± 10%, or <5 NTU)	DTW (ft BTOC)	Drawdown (ft) (Max___ft)
1056	150		11.0	1165	0.77	6.59	144.0	OVR	16.91	02
~~1101~~			10.9	1148	0.86	6.60	138.5	25.2	16.93	.04
1106			11.1	1136	0.97	6.60	135.2	10.8	16.91	.02
1111			10.9	1129	0.80	6.60	132.4	3.48	16.93	.04
1114		↓	11.0	1129	0.91	6.63	131.2	2.37	16.93	.04
1117	↓	2gal	10.9	1127	0.98	6.64	130.6	1.53	16.93	.04
Parameter Stable (Check applicable)			✓	✓		✓	✓	✓		

Sample Color: Clear **Sample Odor:** None **Sheen:** None

Analytical Sampling

Analyses	Check Applicable	Comments
VOCs	✓	
GRO	✓	
DRO/ORO	✓	

Notes: OVR = over range for meth
– monument cover has one eye, bolt stuck in monument eyelit.

Equipment:

Tubing: ☐ Polyethylene ☑ PFTE-Lined ☐ Other _____ O.D. ☑ 1/4" ☐ 3/8" ☐ 1/2" Left in well ☑ Yes ☐ No

Pump/Bailer Peri Multi-Parameter Meter make/SN#) YSI 09G100470

W.L. Indicator Solinst Turbidity Meter (Make/SN#) Hach 2100Q Filtered ☐ Yes ☑ No Lot #_____

Purge Water Handling: ☐ Discharged to surface ☑ Containerized ☐ Treated (how?)_____

BGS = Below Ground Surface, BTOC= Below Top of Casing, NA = Not Applicable REV. 9/2020 Page 1 of 1

LABORATORY DATA
QUALITY ASSURANCE REVIEW
CHUGACH ELECTRIC ASSOCIATION

2022 GROUNDWATER MONITORING
AT THE CHUGACH ELECTRIC ASSOCIATION
TRANSFORMER SHOP
(1130 EAST 1ST AVE., ANCHORAGE, AK)

November 2022

Prepared by: Jennifer McLean
Reviewed by: Kate O'Malley

SLR Project Number: 105.00528.22009
ADEC Number: 2100.26.302
ADEC Hazard ID: 23842

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Anchorage, AK 99503

ACRONYMS AND ABBREVIATIONS

AAC	Alaska Administrative Code
AK	Alaska
ADEC	Alaska Department of Environmental Conservation
°C	degrees Celsius
CCV	continuing calibration verification
COC	chain of custody
DL	detection limit
DRO	diesel range organics
EDD	electronic data deliverable
GRO	gasoline range organics
LCL	lower control limit
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
LOD	limit of detection
LOQ	limit of quantitation
LV	low volume
µg/L	micrograms per liter
mg/L	milligrams per liter
MS	matrix spike
MSD	matrix spike duplicate
NA	not applicable
NFG	National Functional Guidelines
QA	quality assurance
QAR	quality assurance review
QC	quality control
RPD	relative percent difference
RRO	residual range organics
SDG	sample delivery group
SLR	SLR International Corporation
SGS	SGS North America, Inc.
USEPA	United States Environmental Protection Agency
VOCs	volatile organic compounds

This report summarizes a review of analytical data for samples collected on July 28, 2022, in support of Chugach Electric Association Transformer Shop Area groundwater monitoring activities. Samples were collected by SLR International Corporation (SLR). SGS North America, Inc (SGS) provided analytical support to the project. SGS maintains a current Alaska Department of Environmental Conservation (ADEC) Contaminated Sites approval number (17-021) for analytical methods of interest, as applicable. Table 1 provides a summary of the work order, sample receipt, analytical methods, and analytes.

Table 1 Sample Summary

SDG	Date Collected	Date Received by Laboratory	Temp. Blank	Matrix	Analytical Method	Analyte	Trip Blank[1]
1224326	7/28/2020	7/28/2020	5.0°C	GW	SW8260D AK101 AK102 LV AK 103 LV	VOCs GRO DRO RRO	Required Required NA NA

Notes:
1 – This type of sample requires a trip blank to be included in the cooler, with the trip blank noted on the chain of custody.

Acronyms:
AK – Alaska
°C – degrees Celsius
DRO – diesel range organics
GRO – gasoline range organics
GW – groundwater
LV – low volume
RRO – residual range organics
SDG – sample delivery group
VOCs – volatile organic compounds

The laboratory final report was presented as a Level II deliverable and included documentation of the delivery group chain-of-custody (COC) and sample receipt condition. A Microsoft Access compatible electronic data deliverable (EDD) was also provided. The PDF laboratory report is provided electronically as Appendix E.

Quality Assurance Program

A quality assurance (QA) program was followed for this project that addressed project administration, sampling, quality control (QC), and data review. SLR adhered to required and established sampling and COC protocols. The selected laboratory maintains an internal quality assurance program and standard operating procedures.

The analytical data was reviewed for consistency with any project-specific requirements in the Work Plan Addendum (SLR 2018), ADEC Technical Memorandum *Guidelines for Data Reporting* (ADEC, 2022), National Functional Guidelines for Organic Methods Superfund Methods Data Review (NFG, United States Environmental Protection Agency [USEPA] 2020), analytical method criteria, and laboratory criteria. An ADEC Laboratory Data Review Checklist was completed for the SDG, and is included as Appendix D. A review for any anomalies to the project requirements for precision, accuracy, bias, comparability, sensitivity, representativeness, and completeness are noted in this QAR, and any data qualifications discussed.

The data review included the following, as applicable:

- Reviewing COC records for completeness, signatures, and dates;
- Identifying any sample receipt or preservation anomalies that could impact data quality;
- Verifying that trip blanks were properly prepared, identified, and analyzed;
- Evaluating whether laboratory reporting limits met project goals; Reviewing calibration verification recoveries, to include confirming that the laboratory did not identify that any Calibration Verification (CCV) recoveries or other calibration related criteria were outside applicable acceptance limits;
- Verifying that surrogate analyses were within recovery acceptance limits;
- Verifying that Laboratory Control Samples (LCS) and Laboratory Control Sample Duplicates (LCSD) were within recovery acceptance limits;
- Evaluating the result relative percent difference (RPD) between primary and duplicate field samples and LCS/LCSD; and
- Providing an overall assessment of laboratory data quality and qualifying sample results as necessary.

Data Qualifications

As part of this QAR, qualifiers were applied to datum as determined necessary based on specified criteria or professional judgement. In all cases, the basis for qualification and the applied data flag are discussed in this QAR. Table 2 provides a list of potential qualifiers (i.e., flags). These data flags were appended to the data as appropriate.

Table 2 Data Qualifiers

Lab Qualifier (Flag)	NFG Qualifier (Flag)	Equivalent Project Qualifier (Flag)[1,2]	Definition
U	U	**U**	The analyte was analyzed for, but was not detected above the limit of detection (LOD). This qualifier is appended by the laboratory.
J	NJ	**J**	The analyte has been "tentatively" or "presumptively" identified as present and the associated numerical value is the estimated concentration in the sample between the limit of quantitation (LOQ) and the Detection Limit (DL). This qualifier is appended by the laboratory.
--	J	**Q**	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample, due to one or more laboratory quality control criteria failures (e.g., LCS recovery, surrogate spike recovery) or a matrix effect. Where applicable, a "+" or "-" was appended to indicate a high or low bias, respectively.
--	UJ	UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
--	R	R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
--	--	B	Blank contamination: The analyte was positively identified in the blank (e.g., trip blank and/or method blank) associated with the sample and the concentration reported for the sample was less than five times that of the blank (ten times for metals and common laboratory contaminants methylene chloride and acetone). Where applicable, "U" was appended prior to the "B" to indicate the blank detection was greater than the sample detection and the result is likely a false positive or both the blank detection and sample detection were below the LOQ. The greater of the sample detection or LOQ was reported in brackets.

Notes:
1 - Flags were appended to the data where applicable. The table presents laboratory, NFG and project equivalent qualifiers.
2 - Only flags in **bold** were applicable and appended to data for this project.

A discussion of the project data quality and summary of any anomalies or failures requiring data qualifiers follows.

Data Validation

Data Packages
The data package was checked for transcription errors, omissions, or other anomalies. No issues were noted with regard to the data package.

Sample Receipt
The sample receipt documentation was checked for anomalies. The only issue noted with regards to the receipt of samples is noted below.

- The date and time samples were relinquished to the laboratory was not noted on the COC but the date and time of receipt at the laboratory were recorded. As samples were in the custody of the sampler until they were hand delivered to laboratory personnel, data integrity was not compromised.

Holding Times and Preservation
Samples were appropriately preserved and were submitted to SGS. No issues were noted with regards to sample preservation. Sample analyses were conducted within holding time criteria, except as noted below.

- All samples were initially extracted within hold time; however, due to low LCS/LCSD recoveries for DRO by Method AK 102, samples re-extracted on August 18, 2022, seven days past the method allowed two-week hold time with confirming results. The initial extraction and analysis were reported. Refer to the LCS/LCSD section of this QAR for further discussion.

Laboratory Method Blanks
Laboratory method blanks were analyzed at the appropriate frequencies. Analytes were not detected at or above the LOD or DL in any method blanks.

Trip Blanks
One trip blank was analyzed for VOCs by Method SW8260D and one trip blank was analyzed for GRO by Method AK101. Analytes were not detected at or above the LOD or DL in either trip blank.

Reporting Limits
For non-detectable results, LODs were compared to applicable regulatory criteria for the site. LODs were compared to 18 Alaska Administrative Code (AAC) 75.345 Table C, *Groundwater Cleanup Levels* (ADEC, 2021). Except as noted below, all analytes with results of non-detect had LODs at or below applicable regulatory criteria.

For SW8260D, the 1,2,3-trichloropropane LOD of 0.5 µg/L did not meet the ADEC cleanup level of 0.0075 µg/L for any samples including the trip blank. This was due to typical laboratory methodology limitations.

Additionally, the LODs for several VOC analytes (listed below) by Method SW8260D, for samples MW-9 and duplicate MW-99, did not meet ADEC cleanup levels. This was due to a necessary 5-fold or 10-fold dilutions due to high target analyte concentration.

- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,2,4-Trichlorobenzene
- 1,2-Dibromoethane
- 2-Hexanone
- Bromodichloromethane

- Bromomethane
- Carbon tetrachloride
- Hexachlorobutadiene
- trans-1,3-Dichloropropene
- Trichloroethene
- Vinyl chloride

For the noted compounds, it is not possible to state with certainty the absence of target analyte below the laboratory LOD, but above the ADEC cleanup level. The data for the impacted analytes are limited in usability for that purpose. Overall, data usability was considered minimally impacted, and all data were usable without qualification.

Calibration Verifications
CCVs were analyzed at the appropriate frequencies. CCV data was included only in the EDD, not in the case narrative. All CCV recoveries were within acceptable limits as reviewed in the EDD.

Internal Standards
No internal standards were noted in the case narrative as being outside of acceptance limits. Internal standard performance was not otherwise presented in the report or in the electronic data deliverable. Internal standards criteria were considered met.

Surrogate Recovery Results
Surrogate analysis was performed at the required frequencies. All surrogate recoveries were within analytical method and SGS percent recovery acceptance limits.

Laboratory Control Samples and Laboratory Control Duplicate Samples done
LCS and LCSDs were analyzed at the appropriate frequencies. All LCS/LCSD RPDs were within acceptable limits. LCS/LCSD recovery exceedances are limited to those noted below.

- For DRO by Method AK102, the LCS and LCSD recovered at 72% and 67%, below the lower control limit of 75%. Samples were re-extracted on August 18, 2022, seven days past the method allowed two-week hold time with confirming results. The initial extraction and analysis were reported. All samples in this work order were associated with the failing LCS/LCSD. DRO results for all samples were qualified, “Q-“ and should be considered estimated values with a potential low bias. Since a slightly low bias was indicated by the LCS/LCSD and all affected data were either well above or well below the applicable cleanup level of 1.5 mg/L, data usability was not impacted.

Matrix Spike and Matrix Spike Duplicate Samples
No MS and/or MSDs were analyzed in association with these samples. Accuracy and precision were established by LCS/LCSDs for all methods.

Field Duplicates
The field duplicate sample frequency is presented in Table 3. Parent sample and field duplicates are presented in Table 4. For all methods and analytes, the duplicate frequency satisfied the requirement of one per 10 samples or less per matrix and analyte. Field duplicates were submitted blind to the laboratory.

All primary sample/field duplicate RPDs were within the ADEC required 30% for waters, except as noted in Table 5. Data were qualified as shown in the table.

All samples included in this work order were chronologically associated with the primary/duplicate pair; however, all impacted samples had results of undetectable for the affected analytes. Undetectable results were considered not impacted by field precision error, as precision measures quantity, not presence or absence of an analyte. No data for any associated samples were affected.

For all impacted analytes in the primary/duplicate samples, laboratory precision was established by an LCS/LCSD with RPDs within acceptable limits, thus the impact to data was considered minimal. Both the primary sample and duplicate results for m,p-xylene and total xylenes were below the applicable ADEC cleanup level; therefore, data usability was not impacted. The GRO result for primary sample MW-9 exceeded the ADEC cleanup level while the duplicate result was below. The higher of the values should be used for reporting purposes. GRO data is considered an exceedance of ADEC criteria and is usable.

Parent sample/field duplicate pairs with both results below the LOQ were considered acceptable without qualification.

Table 3 Field Duplicate Count

Number of Primary Samples	Number of Field Duplicates	Method	Analytes
4	1	AK101	GRO
4	1	AK 102	DRO
4	1	AK 103	RRO
4	1	SW8260D	VOCs

Table 4 Parent Samples and Field Duplicates

Matrix	Parent Sample	Field Duplicate	Method	Analytes
Groundwater	MW-9	MW-99	AK101 AK102 AK 103 SW8260D	GRO DRO AK 103 VOCs

Table 5 Field Duplicate RPD Exceedances

Method	Analyte	Primary: MW-9	Duplicate: MW-99	RPD (%)	Flag	ADEC Cleanup Level[1]
		Result	Result			
AK 101	GRO	**3.5 mg/L**	1.64 mg/L	72%	Q/Q	2.2
SW8260D	m,p-xylene	120 µg/L	86 µg/L	33%	Q/Q	--
	total xylenes	125 J µg/L	90 J µg/L	30%	Q/Q	190 µg/L

Bold indicates an exceedance of ADEC criteria.
Notes:
1 – Limits shown are 18 AAC 75, Table C (ADEC, 2021).

Laboratory Duplicate Samples

No laboratory duplicates were analyzed in association with these samples.

Overall Assessment

This data was considered of good quality acceptable for use with the noted qualifications and limitations.

Precision, Accuracy/Bias, Comparability, Sensitivity, Representativeness, and Completeness Summary

- Precision: Precision goals were met, except as noted in the Field Duplicates section.
- Accuracy/Bias: Accuracy goals were met, except as noted in the Holding Times and LCS/LCSD Recovery sections.
- Comparability: Comparability goals were met. The same laboratory and methods were used.
- Sensitivity: Sensitivity goals were met, except as noted in the Reporting Limits section.
- Representativeness: Representativeness goals were met. The samples were collected from usual locations.
- Completeness: The data were 100% usable with respect to analysis. No data were rejected.

References

Alaska Department of Environmental conservation (ADEC). 2022. ADEC Technical Memorandum *Guidelines for Data Reporting.* August 15.

--------. 2021. 18 AAC 75, *Oil and Other Hazardous Substances Pollution Control.* November 18.

SLR International Corporation (SLR). 2018. *Work Plan Addendum for Groundwater Monitoring at the ML&P Transformer Shop.* July 9.

U.S. Environmental Protection Agency (USEPA). 2020. *National Functional Guidelines for Superfund Organic Methods Data Review.* November.

Laboratory Data Review Checklist

Completed By:

Jennifer McLean

Title:

Senior Chemist

Date:

September 15, 2022

Consultant Firm:

SLR International Corporation

Laboratory Name:

SGS North America, Inc.

Laboratory Report Number:

1224326

Laboratory Report Date:

September 15, 2022

CS Site Name:

ML&P Transformer Shop, 1130 E. 1st

ADEC File Number:

2100.26.302

Hazard Identification Number:

23842

1224326

Laboratory Report Date:

September 15, 2022

CS Site Name:

ML&P Transformer Shop, 1130 E. 1st

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:

   All analyses were conducted at SGS North America, Inc., Anchorage. SGS is ADEC CS approved, certificate number 17-021.

   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 conducted at SGS North America, Inc., Anchorage.

2. Chain of Custody (CoC)

   a. CoC information completed, signed, and dated (including released/received by)?

   Yes☐ No☒ N/A☐ Comments:

   The date and time samples were relinquished to the laboratory was not noted on the COC but the date and time of receipt at the laboratory were recorded. As samples were in the custody of the sampler until they were hand delivered to laboratory personnel, data integrity was not compromised.

   b. Correct analyses requested?

   Yes☒ No☐ N/A☐ Comments:

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:

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:

No discrepancies were noted.

e. Data quality or usability affected?

Comments:

No impact.

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:

c. Were all corrective actions documented?

Yes☐ No☐ N/A☒ Comments:

Samples were re-extracted for AK102 past hold time. Refer to 6b.

d. What is the effect on data quality/usability according to the case narrative?

Comments:

No impact.

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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:

Samples were re-extracted for AK102 past hold time. Refer to 6b.

c. All soils reported on a dry weight basis?

Yes☐ No☐ N/A☒ Comments:

Only water samples were analyzed.

d. Are the reported LOQs less than the Cleanup Level or the minimum required detection level for the project?

Yes☐ No☒ N/A☐ Comments:

LODs for VOC analytes not meeting ADEC cleanup levels were:

1 - 1,2,3-trichloropropane for all samples and

2 - for MW-9 and MW-99 (due to necessary dilution due to high target analyte concentration)

- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,2,4-Trichlorobenzene
- 1,2-Dibromoethane
- 2-Hexanone
- Bromodichloromethane
- Bromomethane
- Carbon tetrachloride
- Hexachlorobutadiene
- trans-1,3-Dichloropropene
- Trichloroethene
- Vinyl chloride

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e. Data quality or usability affected?

For the noted compounds, it is not possible to state with certainty the absence of target analyte below the laboratory LOD, but above the ADEC cleanup level. The data for the impacted analytes are limited in usability for that purpose. Overall, data usability was considered minimally impacted, and all data were usable without qualification.

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:

iii. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples were affected.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

No samples were affected.

v. Data quality or usability affected?

Comments:

No impact.

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:

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ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes☐ No☐ N/A☒ Comments:

No metals or inorganics were analyzed.

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:

For DRO by Method AK102, the LCS and LCSD recovered at 72% and 67%, below the lower control limit of 75%. Samples were re-extracted on August 18, 2022, seven days past the method allowed two-week hold time with confirming results. The initial extraction and analysis were reported.

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:

All samples in this work order were affected.

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☒ No☐ N/A☐ Comments:

DRO results for all samples were qualified, "Q-" and should be considered estimated values with a potential low bias.

vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

Since a slightly low bias was indicated by the LCS/LCSD and all affected data were either well above or well below the applicable cleanup level of 1.5 mg/L, data usability was not impacted.

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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:

No MS/MSDs were analyzed.

ii. Metals/Inorganics – one MS and one MSD reported per matrix, analysis and 20 samples?

Yes☐ No☐ N/A☒ Comments:

No metals or inorganics were analyzed.

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable?

Yes☐ No☐ N/A☒ Comments:

No MS/MSDs were analyzed.

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.

Yes☐ No☐ N/A☒ Comments:

No MS/MSDs were analyzed.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

NA

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes☐ No☐ N/A☒ Comments:

No MS/MSDs were analyzed.

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vii. Data quality or usability affected? (Use comment box to explain.)

Comments:

No impact.

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:

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 for field samples and 60-120 %R for QC samples; 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:

All surrogates met criteria.

iv. Data quality or usability affected?

Comments:

No impact.

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:

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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 data was affected.

v. Data quality or usability affected?

Comments:

No impact.

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 duplicate of MW-9 was MW-99.

iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water, 50% soil)

$$\text{RPD (\%)} = \text{Absolute value of: } \frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

Yes☐ No☒ N/A☐ Comments:

RPDs for the parent sample/duplicate pair for GRO, m,p-xylene, and total xylenes were greater than the 30% limit.

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iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Comments:

Regarding associated samples, all samples included in this work order were chronologically associated with the primary/duplicate pair; however, all associated/impacted samples had results of undetectable for the affected analytes. Undetectable results were considered not impacted by field precision error, as precision measures quantity, not presence or absence of an analyte. No data for any associated samples were affected.

For all impacted analytes in the primary/duplicate samples, laboratory precision was established by an LCS/LCSD with RPDs within acceptable limits, thus the impact to data was considered minimal. Both the primary sample and duplicate results for m,p-xylene and total xylenes were below the applicable ADEC cleanup level; therefore, data usability was not impacted. The GRO result for primary sample MW-9 exceeded the ADEC cleanup level while the duplicate result was below. The higher of the values should be used for reporting purposes. GRO data is considered an exceedance of ADEC criteria and is usable.

g. Decontamination or Equipment Blank (If not applicable, a comment stating why must be entered below)?

Yes☐ No☐ N/A☒ Comments:

No decontamination or equipment blanks were required or used.

i. All results less than LOQ and project specified objectives?

Yes☐ No☐ N/A☒ Comments:

No decontamination or equipment blanks were required or used.

ii. If above LOQ or project specified objectives, what samples are affected?

Comments:

NA

iii. Data quality or usability affected?

Comments:

No impact.

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7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

   a. Defined and appropriate?

      Yes☒ No☐ N/A☐ Comments:

Laboratory Report of Analysis

To: SLR Alaska-Anchorage
2700 Gambell Street, Suite 200
Anchorage, AK 99503
907-222-1112

Report Number: **1224326**

Client Project: **ML&P Transformer Shop**

Dear Bret Berglund,

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 Justin 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.

_____

Justin Nelson Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **SLR Alaska-Anchorage**
SGS Project: **1224326**
Project Name/Site: **ML&P Transformer Shop**
Project Contact: **Bret Berglund**

Refer to sample receipt form for information on sample condition. Corrected Report: In hold data reported.

MW-5 (1224326001) PS

AK102 - LCS/LCSD recoveries for DRO do not meet QC criteria. The sample was reextracted outside of hold time and the sample results confirmed. The in hold data is reported.

MW-6 (1224326002) PS

AK102 - LCS/LCSD recoveries for DRO do not meet QC criteria. The sample was reextracted outside of hold time and the sample results confirmed. The in hold data is reported.

MW-7 (1224326003) PS

AK102 - LCS/LCSD recoveries for DRO do not meet QC criteria. The sample was reextracted outside of hold time and the sample results confirmed. The in hold data is reported.

MW-9 (1224326006) PS

AK102 - LCS/LCSD recoveries for DRO do not meet QC criteria. The sample was reextracted outside of hold time and the sample results confirmed. The in hold data is reported.

MW-99 (1224326007) PS

AK102- LCS/LCSD recoveries for DRO do not meet QC criteria. The sample was reextracted outside of hold time and the sample results confirmed. The in hold data is reported.

LCS for HBN 1840915 [XXX/46761 (1677917) LCS

AK102/103- LCS/LCSD DRO concentration did not meet QC criteria biased low.

LCSD for HBN 1840915 [XXX/4676 (1677918) LCSD

AK102/103- LCS/LCSD DRO concentration did not meet QC criteria biased low.

*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 & 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.

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

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW-5	1224326001	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
MW-6	1224326002	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
MW-7	1224326003	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
Trip Blank #1	1224326004	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
Trip Blank #2	1224326005	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
MW-9	1224326006	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)
MW-99	1224326007	07/28/2022	07/28/2022	Water (Surface, Eff., Ground)

Method	Method Description
AK102	DRO/RRO Low Volume Water
AK103	DRO/RRO Low Volume Water
AK101	Gasoline Range Organics (W)
SW8260D	Volatile Organic Compounds (W) FULL

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
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Detectable Results Summary

Client Sample ID: **MW-5**
Lab Sample ID: 1224326001

Parameter	Result	Units
Semivolatile Organic Fuels		
Diesel Range Organics	0.532J	mg/L
Residual Range Organics	0.541	mg/L

Client Sample ID: **MW-6**
Lab Sample ID: 1224326002

Parameter	Result	Units
Semivolatile Organic Fuels		
Diesel Range Organics	0.396J	mg/L
Residual Range Organics	0.632	mg/L

Client Sample ID: **MW-7**
Lab Sample ID: 1224326003

Parameter	Result	Units
Semivolatile Organic Fuels		
Diesel Range Organics	0.319J	mg/L
Residual Range Organics	0.525	mg/L

Client Sample ID: **MW-9**
Lab Sample ID: 1224326006

Parameter	Result	Units
Semivolatile Organic Fuels		
Diesel Range Organics	3.87	mg/L
Residual Range Organics	3.95	mg/L
Volatile Fuels		
Gasoline Range Organics	3.50	mg/L
Volatile GC/MS		
1,2,4-Trimethylbenzene	41.2	ug/L
1,2-Dichloroethane	6.20	ug/L
1,3,5-Trimethylbenzene	19.6	ug/L
2-Butanone (MEK)	97.9J	ug/L
Benzene	597	ug/L
Ethylbenzene	14.6	ug/L
Naphthalene	17.3	ug/L
o-Xylene	4.96J	ug/L
P & M -Xylene	120	ug/L
Toluene	4.33J	ug/L
Xylenes (total)	125	ug/L

Client Sample ID: **MW-99**
Lab Sample ID: 1224326007

Parameter	Result	Units
Semivolatile Organic Fuels		
Diesel Range Organics	3.56	mg/L
Residual Range Organics	3.44	mg/L
Volatile Fuels		
Gasoline Range Organics	1.64	mg/L
Volatile GC/MS		
1,2,4-Trimethylbenzene	30.8	ug/L
1,2-Dichloroethane	6.06	ug/L
1,3,5-Trimethylbenzene	17.0	ug/L
2-Butanone (MEK)	114	ug/L
Benzene	476	ug/L
Ethylbenzene	11.4	ug/L
Naphthalene	10.4	ug/L
o-Xylene	3.98J	ug/L
P & M -Xylene	86.0	ug/L
Toluene	2.91J	ug/L
Xylenes (total)	90.0	ug/L

Results of **MW-5**

Client Sample ID: **MW-5**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326001
Lab Project ID: 1224326

Collection Date: 07/28/22 09:25
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.532	J	0.625	0.208	mg/L	1		08/11/22 20:15
Surrogates								
5a Androstane (surr)	69.4		50-150		%	1		08/11/22 20:15

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Analyst: MAP
Analytical Date/Time: 08/11/22 20:15
Container ID: 1224326001-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 240 mL
Prep Extract Vol: 1 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	0.541		0.521	0.208	mg/L	1		08/11/22 20:15
Surrogates								
n-Triacontane-d62 (surr)	81.7		50-150		%	1		08/11/22 20:15

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Analyst: MAP
Analytical Date/Time: 08/11/22 20:15
Container ID: 1224326001-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 240 mL
Prep Extract Vol: 1 mL

Results of **MW-5**

Client Sample ID: **MW-5**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326001
Lab Project ID: 1224326

Collection Date: 07/28/22 09:25
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0450	mg/L	1		07/30/22 01:24
Surrogates								
4-Bromofluorobenzene (surr)	87		50-150		%	1		07/30/22 01:24

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/30/22 01:24
Container ID: 1224326001-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 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-5**

Client Sample ID: **MW-5**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326001
Lab Project ID: 1224326

Collection Date: 07/28/22 09:25
Received Date: 07/28/22 15:01
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		08/05/22 18:39
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:39
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/22 18:39
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:39
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/22 18:39
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		08/05/22 18:39
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:39
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:39
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:39
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:39
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:39
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/22 18:39
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:39
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
Bromomethane	3.00	U	6.00	3.00	ug/L	1		08/05/22 18:39
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:39
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:39
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:39

Results of **MW-5**

Client Sample ID: **MW-5**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326001
Lab Project ID: 1224326

Collection Date: 07/28/22 09:25
Received Date: 07/28/22 15:01
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		08/05/22 18:39
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/22 18:39
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/22 18:39
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:39
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:39
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:39
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/22 18:39
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:39
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:39
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/22 18:39
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/22 18:39
Surrogates								
1,2-Dichloroethane-D4 (surr)	102		81-118		%	1		08/05/22 18:39
4-Bromofluorobenzene (surr)	95.4		85-114		%	1		08/05/22 18:39
Toluene-d8 (surr)	100		89-112		%	1		08/05/22 18:39

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J flagging is activated

Results of **MW-5**

Client Sample ID: **MW-5**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326001
Lab Project ID: 1224326

Collection Date: 07/28/22 09:25
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 18:39
Container ID: 1224326001-D

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-6**

Client Sample ID: **MW-6**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326002
Lab Project ID: 1224326

Collection Date: 07/28/22 10:26
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.396	J	0.577	0.192	mg/L	1		08/11/22 20:24
Surrogates								
5a Androstane (surr)	59		50-150		%	1		08/11/22 20:24

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Analyst: MAP
Analytical Date/Time: 08/11/22 20:24
Container ID: 1224326002-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	0.632		0.481	0.192	mg/L	1		08/11/22 20:24
Surrogates								
n-Triacontane-d62 (surr)	74		50-150		%	1		08/11/22 20:24

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Analyst: MAP
Analytical Date/Time: 08/11/22 20:24
Container ID: 1224326002-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of **MW-6**

Client Sample ID: **MW-6**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326002
Lab Project ID: 1224326

Collection Date: 07/28/22 10:26
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0450	mg/L	1		07/30/22 01:42
Surrogates								
4-Bromofluorobenzene (surr)	87.5		50-150		%	1		07/30/22 01:42

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/30/22 01:42
Container ID: 1224326002-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-6**

Client Sample ID: **MW-6**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326002
Lab Project ID: 1224326

Collection Date: 07/28/22 10:26
Received Date: 07/28/22 15:01
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		08/05/22 18:54
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:54
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/22 18:54
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:54
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/22 18:54
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		08/05/22 18:54
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:54
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:54
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:54
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:54
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:54
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/22 18:54
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:54
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
Bromomethane	3.00	U	6.00	3.00	ug/L	1		08/05/22 18:54
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/22 18:54
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 18:54
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 18:54

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J flagging is activated

Results of **MW-6**

Client Sample ID: **MW-6**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326002
Lab Project ID: 1224326

Collection Date: 07/28/22 10:26
Received Date: 07/28/22 15:01
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		08/05/22 18:54
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/22 18:54
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/22 18:54
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:54
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:54
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:54
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/22 18:54
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 18:54
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/22 18:54
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/22 18:54
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/22 18:54
Surrogates								
1,2-Dichloroethane-D4 (surr)	103		81-118		%	1		08/05/22 18:54
4-Bromofluorobenzene (surr)	95.2		85-114		%	1		08/05/22 18:54
Toluene-d8 (surr)	100		89-112		%	1		08/05/22 18:54

Print Date: 09/15/2022 11:33:46AM

J flagging is activated

Results of **MW-6**

Client Sample ID: **MW-6**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326002
Lab Project ID: 1224326

Collection Date: 07/28/22 10:26
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 18:54
Container ID: 1224326002-D

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-7**

Client Sample ID: **MW-7**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326003
Lab Project ID: 1224326

Collection Date: 07/28/22 11:20
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	0.319	J	0.600	0.200	mg/L	1		08/11/22 20:35
Surrogates								
5a Androstane (surr)	69.7		50-150		%	1		08/11/22 20:35

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Analyst: MAP
Analytical Date/Time: 08/11/22 20:35
Container ID: 1224326003-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	0.525		0.500	0.200	mg/L	1		08/11/22 20:35
Surrogates								
n-Triacontane-d62 (surr)	70.9		50-150		%	1		08/11/22 20:35

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Analyst: MAP
Analytical Date/Time: 08/11/22 20:35
Container ID: 1224326003-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

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J flagging is activated

Results of **MW-7**

Client Sample ID: **MW-7**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326003
Lab Project ID: 1224326

Collection Date: 07/28/22 11:20
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0450	mg/L	1		07/30/22 02:01
Surrogates								
4-Bromofluorobenzene (surr)	96.2		50-150		%	1		07/30/22 02:01

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/30/22 02:01
Container ID: 1224326003-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-7**

Client Sample ID: **MW-7**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326003
Lab Project ID: 1224326

Collection Date: 07/28/22 11:20
Received Date: 07/28/22 15:01
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		08/05/22 19:09
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 19:09
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/22 19:09
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/22 19:09
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/22 19:09
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		08/05/22 19:09
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/22 19:09
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 19:09
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 19:09
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/22 19:09
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 19:09
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/22 19:09
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 19:09
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
Bromomethane	3.00	U	6.00	3.00	ug/L	1		08/05/22 19:09
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/22 19:09
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 19:09
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 19:09

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Results of **MW-7**

Client Sample ID: **MW-7**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326003
Lab Project ID: 1224326

Collection Date: 07/28/22 11:20
Received Date: 07/28/22 15:01
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		08/05/22 19:09
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/22 19:09
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/22 19:09
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/22 19:09
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/22 19:09
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/22 19:09
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/22 19:09
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 19:09
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/22 19:09
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/22 19:09
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/22 19:09
Surrogates								
1,2-Dichloroethane-D4 (surr)	105		81-118		%	1		08/05/22 19:09
4-Bromofluorobenzene (surr)	94.5		85-114		%	1		08/05/22 19:09
Toluene-d8 (surr)	101		89-112		%	1		08/05/22 19:09

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J flagging is activated

Results of **MW-7**

Client Sample ID: **MW-7**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326003
Lab Project ID: 1224326

Collection Date: 07/28/22 11:20
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 19:09
Container ID: 1224326003-D

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **Trip Blank #1**

Client Sample ID: **Trip Blank #1**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326004
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	0.0500	U	0.100	0.0450	mg/L	1		07/29/22 19:51
Surrogates								
4-Bromofluorobenzene (surr)	93.3		50-150		%	1		07/29/22 19:51

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/29/22 19:51
Container ID: 1224326004-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Print Date: 09/15/2022 11:33:46AM

J flagging is activated

Results of **Trip Blank #2**

Client Sample ID: **Trip Blank #2**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326005
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
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		08/05/22 15:55
1,1,1-Trichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,1,2,2-Tetrachloroethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 15:55
1,1,2-Trichloroethane	0.200	U	0.400	0.120	ug/L	1		08/05/22 15:55
1,1-Dichloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,1-Dichloroethene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,1-Dichloropropene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2,3-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2,3-Trichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2,4-Trichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2,4-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2-Dibromo-3-chloropropane	5.00	U	10.0	3.10	ug/L	1		08/05/22 15:55
1,2-Dibromoethane	0.0375	U	0.0750	0.0180	ug/L	1		08/05/22 15:55
1,2-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,2-Dichloroethane	0.250	U	0.500	0.200	ug/L	1		08/05/22 15:55
1,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,3,5-Trimethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,3-Dichlorobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
1,3-Dichloropropane	0.250	U	0.500	0.150	ug/L	1		08/05/22 15:55
1,4-Dichlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 15:55
2,2-Dichloropropane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
2-Butanone (MEK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 15:55
2-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
2-Hexanone	5.00	U	10.0	3.10	ug/L	1		08/05/22 15:55
4-Chlorotoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
4-Isopropyltoluene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
4-Methyl-2-pentanone (MIBK)	5.00	U	10.0	3.10	ug/L	1		08/05/22 15:55
Benzene	0.200	U	0.400	0.120	ug/L	1		08/05/22 15:55
Bromobenzene	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
Bromochloromethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
Bromodichloromethane	0.250	U	0.500	0.150	ug/L	1		08/05/22 15:55
Bromoform	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
Bromomethane	3.00	U	6.00	3.00	ug/L	1		08/05/22 15:55
Carbon disulfide	5.00	U	10.0	3.10	ug/L	1		08/05/22 15:55
Carbon tetrachloride	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55
Chlorobenzene	0.250	U	0.500	0.150	ug/L	1		08/05/22 15:55
Chloroethane	0.500	U	1.00	0.310	ug/L	1		08/05/22 15:55

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Results of **Trip Blank #2**

Client Sample ID: **Trip Blank #2**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326005
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
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		08/05/22 15:55
Chloromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
cis-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
cis-1,3-Dichloropropene	0.250 U		0.500	0.150	ug/L	1		08/05/22 15:55
Dibromochloromethane	0.250 U		0.500	0.150	ug/L	1		08/05/22 15:55
Dibromomethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Dichlorodifluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Ethylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Freon-113	5.00 U		10.0	3.10	ug/L	1		08/05/22 15:55
Hexachlorobutadiene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Isopropylbenzene (Cumene)	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Methylene chloride	5.00 U		10.0	3.10	ug/L	1		08/05/22 15:55
Methyl-t-butyl ether	5.00 U		10.0	3.10	ug/L	1		08/05/22 15:55
Naphthalene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
n-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
n-Propylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
o-Xylene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
P & M -Xylene	1.00 U		2.00	0.620	ug/L	1		08/05/22 15:55
sec-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Styrene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
tert-Butylbenzene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Tetrachloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Toluene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
trans-1,2-Dichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
trans-1,3-Dichloropropene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Trichloroethene	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Trichlorofluoromethane	0.500 U		1.00	0.310	ug/L	1		08/05/22 15:55
Vinyl acetate	5.00 U		10.0	3.10	ug/L	1		08/05/22 15:55
Vinyl chloride	0.0750 U		0.150	0.0500	ug/L	1		08/05/22 15:55
Xylenes (total)	1.50 U		3.00	1.00	ug/L	1		08/05/22 15:55
Surrogates								
1,2-Dichloroethane-D4 (surr)	106		81-118		%	1		08/05/22 15:55
4-Bromofluorobenzene (surr)	96.6		85-114		%	1		08/05/22 15:55
Toluene-d8 (surr)	102		89-112		%	1		08/05/22 15:55

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Results of **Trip Blank #2**

Client Sample ID: **Trip Blank #2**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326005
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 15:55
Container ID: 1224326005-A

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 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-9**

Client Sample ID: **MW-9**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326006
Lab Project ID: 1224326

Collection Date: 07/28/22 11:45
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	3.87		0.577	0.192	mg/L	1		08/11/22 20:45
Surrogates								
5a Androstane (surr)	69.6		50-150		%	1		08/11/22 20:45

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Analyst: MAP
Analytical Date/Time: 08/11/22 20:45
Container ID: 1224326006-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	3.95		0.481	0.192	mg/L	1		08/11/22 20:45
Surrogates								
n-Triacontane-d62 (surr)	71.7		50-150		%	1		08/11/22 20:45

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Analyst: MAP
Analytical Date/Time: 08/11/22 20:45
Container ID: 1224326006-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Results of **MW-9**

Client Sample ID: **MW-9**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326006
Lab Project ID: 1224326

Collection Date: 07/28/22 11:45
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	3.50		0.100	0.0450	mg/L	1		07/30/22 02:19
Surrogates								
4-Bromofluorobenzene (surr)	96.2		50-150		%	1		07/30/22 02:19

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/30/22 02:19
Container ID: 1224326006-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-9**

Client Sample ID: **MW-9**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326006
Lab Project ID: 1224326

Collection Date: 07/28/22 11:45
Received Date: 07/28/22 15:01
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	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
1,1,1-Trichloroethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,1,2,2-Tetrachloroethane	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
1,1,2-Trichloroethane	2.00	U	4.00	1.20	ug/L	10		08/05/22 21:08
1,1-Dichloroethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,1-Dichloroethene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,1-Dichloropropene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,2,3-Trichlorobenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,2,3-Trichloropropane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,2,4-Trichlorobenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,2,4-Trimethylbenzene	41.2		10.0	3.10	ug/L	10		08/05/22 21:08
1,2-Dibromo-3-chloropropane	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
1,2-Dibromoethane	0.375	U	0.750	0.180	ug/L	10		08/05/22 21:08
1,2-Dichlorobenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,2-Dichloroethane	6.20		5.00	2.00	ug/L	10		08/05/22 21:08
1,2-Dichloropropane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,3,5-Trimethylbenzene	19.6		10.0	3.10	ug/L	10		08/05/22 21:08
1,3-Dichlorobenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
1,3-Dichloropropane	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
1,4-Dichlorobenzene	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
2,2-Dichloropropane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
2-Butanone (MEK)	97.9	J	100	31.0	ug/L	10		08/05/22 21:08
2-Chlorotoluene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
2-Hexanone	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
4-Chlorotoluene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
4-Isopropyltoluene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
4-Methyl-2-pentanone (MIBK)	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Benzene	597		4.00	1.20	ug/L	10		08/05/22 21:08
Bromobenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Bromochloromethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Bromodichloromethane	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
Bromoform	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Bromomethane	30.0	U	60.0	30.0	ug/L	10		08/05/22 21:08
Carbon disulfide	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Carbon tetrachloride	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Chlorobenzene	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
Chloroethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08

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J flagging is activated

Results of **MW-9**

Client Sample ID: **MW-9**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326006
Lab Project ID: 1224326

Collection Date: 07/28/22 11:45
Received Date: 07/28/22 15:01
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	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Chloromethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
cis-1,2-Dichloroethene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
cis-1,3-Dichloropropene	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
Dibromochloromethane	2.50	U	5.00	1.50	ug/L	10		08/05/22 21:08
Dibromomethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Dichlorodifluoromethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Ethylbenzene	14.6		10.0	3.10	ug/L	10		08/05/22 21:08
Freon-113	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Hexachlorobutadiene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Isopropylbenzene (Cumene)	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Methylene chloride	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Methyl-t-butyl ether	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Naphthalene	17.3		10.0	3.10	ug/L	10		08/05/22 21:08
n-Butylbenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
n-Propylbenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
o-Xylene	4.96	J	10.0	3.10	ug/L	10		08/05/22 21:08
P & M -Xylene	120		20.0	6.20	ug/L	10		08/05/22 21:08
sec-Butylbenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Styrene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
tert-Butylbenzene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Tetrachloroethene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Toluene	4.33	J	10.0	3.10	ug/L	10		08/05/22 21:08
trans-1,2-Dichloroethene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
trans-1,3-Dichloropropene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Trichloroethene	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Trichlorofluoromethane	5.00	U	10.0	3.10	ug/L	10		08/05/22 21:08
Vinyl acetate	50.0	U	100	31.0	ug/L	10		08/05/22 21:08
Vinyl chloride	0.750	U	1.50	0.500	ug/L	10		08/05/22 21:08
Xylenes (total)	125		30.0	10.0	ug/L	10		08/05/22 21:08
Surrogates								
1,2-Dichloroethane-D4 (surr)	104		81-118		%	10		08/05/22 21:08
4-Bromofluorobenzene (surr)	93.6		85-114		%	10		08/05/22 21:08
Toluene-d8 (surr)	100		89-112		%	10		08/05/22 21:08

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Results of **MW-9**

Client Sample ID: **MW-9**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326006
Lab Project ID: 1224326

Collection Date: 07/28/22 11:45
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 21:08
Container ID: 1224326006-D

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **MW-99**

Client Sample ID: **MW-99**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326007
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Semivolatile Organic Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Diesel Range Organics	3.56		0.577	0.192	mg/L	1		08/11/22 20:55
Surrogates								
5a Androstane (surr)	66.2		50-150		%	1		08/11/22 20:55

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Analyst: MAP
Analytical Date/Time: 08/11/22 20:55
Container ID: 1224326007-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Residual Range Organics	3.44		0.481	0.192	mg/L	1		08/11/22 20:55
Surrogates								
n-Triacontane-d62 (surr)	67.3		50-150		%	1		08/11/22 20:55

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Analyst: MAP
Analytical Date/Time: 08/11/22 20:55
Container ID: 1224326007-G

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 08/08/22 15:58
Prep Initial Wt./Vol.: 260 mL
Prep Extract Vol: 1 mL

Print Date: 09/15/2022 11:33:46AM

J flagging is activated

Results of **MW-99**

Client Sample ID: **MW-99**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326007
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile Fuels**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Gasoline Range Organics	1.64		0.100	0.0450	mg/L	1		07/30/22 02:56
Surrogates								
4-Bromofluorobenzene (surr)	94.5		50-150		%	1		07/30/22 02:56

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Analyst: PHK
Analytical Date/Time: 07/30/22 02:56
Container ID: 1224326007-A

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 07/29/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Results of **MW-99**

Client Sample ID: **MW-99**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326007
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
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	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
1,1,1-Trichloroethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,1,2,2-Tetrachloroethane	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
1,1,2-Trichloroethane	1.00	U	2.00	0.600	ug/L	5		08/05/22 21:23
1,1-Dichloroethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,1-Dichloroethene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,1-Dichloropropene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,2,3-Trichlorobenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,2,3-Trichloropropane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,2,4-Trichlorobenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,2,4-Trimethylbenzene	30.8		5.00	1.55	ug/L	5		08/05/22 21:23
1,2-Dibromo-3-chloropropane	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
1,2-Dibromoethane	0.188	U	0.375	0.0900	ug/L	5		08/05/22 21:23
1,2-Dichlorobenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,2-Dichloroethane	6.06		2.50	1.00	ug/L	5		08/05/22 21:23
1,2-Dichloropropane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,3,5-Trimethylbenzene	17.0		5.00	1.55	ug/L	5		08/05/22 21:23
1,3-Dichlorobenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
1,3-Dichloropropane	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
1,4-Dichlorobenzene	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
2,2-Dichloropropane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
2-Butanone (MEK)	114		50.0	15.5	ug/L	5		08/05/22 21:23
2-Chlorotoluene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
2-Hexanone	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
4-Chlorotoluene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
4-Isopropyltoluene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
4-Methyl-2-pentanone (MIBK)	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Benzene	476		2.00	0.600	ug/L	5		08/05/22 21:23
Bromobenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Bromochloromethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Bromodichloromethane	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
Bromoform	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Bromomethane	15.0	U	30.0	15.0	ug/L	5		08/05/22 21:23
Carbon disulfide	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Carbon tetrachloride	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Chlorobenzene	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
Chloroethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23

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J flagging is activated

Results of **MW-99**

Client Sample ID: **MW-99**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326007
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
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	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Chloromethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
cis-1,2-Dichloroethene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
cis-1,3-Dichloropropene	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
Dibromochloromethane	1.25	U	2.50	0.750	ug/L	5		08/05/22 21:23
Dibromomethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Dichlorodifluoromethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Ethylbenzene	11.4		5.00	1.55	ug/L	5		08/05/22 21:23
Freon-113	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Hexachlorobutadiene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Isopropylbenzene (Cumene)	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Methylene chloride	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Methyl-t-butyl ether	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Naphthalene	10.4		5.00	1.55	ug/L	5		08/05/22 21:23
n-Butylbenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
n-Propylbenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
o-Xylene	3.98	J	5.00	1.55	ug/L	5		08/05/22 21:23
P & M -Xylene	86.0		10.0	3.10	ug/L	5		08/05/22 21:23
sec-Butylbenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Styrene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
tert-Butylbenzene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Tetrachloroethene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Toluene	2.91	J	5.00	1.55	ug/L	5		08/05/22 21:23
trans-1,2-Dichloroethene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
trans-1,3-Dichloropropene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Trichloroethene	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Trichlorofluoromethane	2.50	U	5.00	1.55	ug/L	5		08/05/22 21:23
Vinyl acetate	25.0	U	50.0	15.5	ug/L	5		08/05/22 21:23
Vinyl chloride	0.375	U	0.750	0.250	ug/L	5		08/05/22 21:23
Xylenes (total)	90.0		15.0	5.00	ug/L	5		08/05/22 21:23
Surrogates								
1,2-Dichloroethane-D4 (surr)	118		81-118		%	5		08/05/22 21:23
4-Bromofluorobenzene (surr)	94.4		85-114		%	5		08/05/22 21:23
Toluene-d8 (surr)	101		89-112		%	5		08/05/22 21:23

Print Date: 09/15/2022 11:33:46AM

J flagging is activated

Results of **MW-99**

Client Sample ID: **MW-99**
Client Project ID: **ML&P Transformer Shop**
Lab Sample ID: 1224326007
Lab Project ID: 1224326

Collection Date: 07/28/22 09:00
Received Date: 07/28/22 15:01
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Analyst: S.S
Analytical Date/Time: 08/05/22 21:23
Container ID: 1224326007-D

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 08/05/22 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Method Blank

Blank ID: MB for HBN 1840620 [VXX/38939]
Blank Lab ID: 1676782

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326004, 1224326006, 1224326007

Results by **AK101**

Parameter	Results	LOQ/CL	DL	Units
Gasoline Range Organics	0.0500U	0.100	0.0450	mg/L
Surrogates				
4-Bromofluorobenzene (surr)	90	50-150		%

Batch Information

Analytical Batch: VFC16195
Analytical Method: AK101
Instrument: Agilent 7890A PID/FID
Analyst: PHK
Analytical Date/Time: 7/29/2022 12:31:00PM

Prep Batch: VXX38939
Prep Method: SW5030B
Prep Date/Time: 7/29/2022 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 1224326 [VXX38939]
Blank Spike Lab ID: 1676785
Date Analyzed: 07/29/2022 13:26

Spike Duplicate ID: LCSD for HBN 1224326 [VXX38939]
Spike Duplicate Lab ID: 1676786
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326004, 1224326006, 1224326007

Results by **AK101**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Gasoline Range Organics	1.00	0.991	99	1.00	0.991	99	(60-120)	0.03	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		98	0.0500		95	(50-150)	2.70	

Batch Information

Analytical Batch: **VFC16195**
Analytical Method: **AK101**
Instrument: **Agilent 7890A PID/FID**
Analyst: **PHK**

Prep Batch: **VXX38939**
Prep Method: **SW5030B**
Prep Date/Time: **07/29/2022 06:00**
Spike Init Wt./Vol.: 0.0500 mg/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 0.0500 mg/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1841121 [VXX/38972]
Blank Lab ID: 1678483

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

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 1841121 [VXX/38972]
Blank Lab ID: 1678483

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

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)	95.7	85-114		%
Toluene-d8 (surr)	102	89-112		%

Method Blank

Blank ID: MB for HBN 1841121 [VXX/38972]
Blank Lab ID: 1678483

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	Units

Batch Information

Analytical Batch: VMS21846
Analytical Method: SW8260D
Instrument: Agilent 7890-75MS
Analyst: S.S
Analytical Date/Time: 8/5/2022 1:39:00PM

Prep Batch: VXX38972
Prep Method: SW5030B
Prep Date/Time: 8/5/2022 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 1224326 [VXX38972]
Blank Spike Lab ID: 1678484
Date Analyzed: 08/05/2022 13:54

Spike Duplicate ID: LCSD for HBN 1224326 [VXX38972]
Spike Duplicate Lab ID: 1678485
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

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	30.8	103	30	30.0	100	(78-124)	2.60	(< 20)
1,1,1-Trichloroethane	30	29.0	97	30	29.2	97	(74-131)	0.55	(< 20)
1,1,2,2-Tetrachloroethane	30	28.3	94	30	27.7	92	(71-121)	2.00	(< 20)
1,1,2-Trichloroethane	30	29.6	99	30	29.2	97	(80-119)	1.60	(< 20)
1,1-Dichloroethane	30	28.6	95	30	28.4	95	(77-125)	0.59	(< 20)
1,1-Dichloroethene	30	29.4	98	30	29.4	98	(71-131)	0.14	(< 20)
1,1-Dichloropropene	30	29.7	99	30	29.6	99	(79-125)	0.36	(< 20)
1,2,3-Trichlorobenzene	30	32.5	108	30	33.3	111	(69-129)	2.30	(< 20)
1,2,3-Trichloropropane	30	27.7	93	30	27.9	93	(73-122)	0.63	(< 20)
1,2,4-Trichlorobenzene	30	32.1	107	30	33.2	111	(69-130)	3.40	(< 20)
1,2,4-Trimethylbenzene	30	28.8	96	30	29.1	97	(79-124)	0.70	(< 20)
1,2-Dibromo-3-chloropropane	30	26.6	89	30	26.2	88	(62-128)	1.20	(< 20)
1,2-Dibromoethane	30	29.8	99	30	30.0	100	(77-121)	0.56	(< 20)
1,2-Dichlorobenzene	30	29.2	97	30	29.7	99	(80-119)	1.90	(< 20)
1,2-Dichloroethane	30	27.8	93	30	28.0	93	(73-128)	0.75	(< 20)
1,2-Dichloropropane	30	29.4	98	30	29.3	98	(78-122)	0.12	(< 20)
1,3,5-Trimethylbenzene	30	29.3	98	30	29.5	98	(75-124)	0.83	(< 20)
1,3-Dichlorobenzene	30	29.6	99	30	30.2	101	(80-119)	2.10	(< 20)
1,3-Dichloropropane	30	29.3	98	30	30.4	101	(80-119)	3.90	(< 20)
1,4-Dichlorobenzene	30	29.4	98	30	30.1	100	(79-118)	2.20	(< 20)
2,2-Dichloropropane	30	29.5	99	30	29.5	98	(60-139)	0.14	(< 20)
2-Butanone (MEK)	90	80.9	90	90	80.0	89	(56-143)	1.00	(< 20)
2-Chlorotoluene	30	28.6	95	30	28.1	94	(79-122)	1.90	(< 20)
2-Hexanone	90	78.9	88	90	79.1	88	(57-139)	0.24	(< 20)
4-Chlorotoluene	30	29.1	97	30	28.6	95	(78-122)	1.90	(< 20)
4-Isopropyltoluene	30	30.4	101	30	30.7	102	(77-127)	1.10	(< 20)
4-Methyl-2-pentanone (MIBK)	90	82.9	92	90	83.1	92	(67-130)	0.28	(< 20)
Benzene	30	30.2	101	30	29.5	98	(79-120)	2.30	(< 20)
Bromobenzene	30	28.9	96	30	29.6	99	(80-120)	2.30	(< 20)
Bromochloromethane	30	29.9	100	30	30.0	100	(78-123)	0.48	(< 20)
Bromodichloromethane	30	28.9	96	30	29.1	97	(79-125)	0.66	(< 20)
Bromoform	30	30.3	101	30	29.9	100	(66-130)	1.20	(< 20)
Bromomethane	30	29.0	97	30	30.8	103	(53-141)	6.00	(< 20)
Carbon disulfide	45	43.3	96	45	43.1	96	(64-133)	0.36	(< 20)

Blank Spike Summary

Blank Spike ID: LCS for HBN 1224326 [VXX38972]
Blank Spike Lab ID: 1678484
Date Analyzed: 08/05/2022 13:54

Spike Duplicate ID: LCSD for HBN 1224326 [VXX38972]
Spike Duplicate Lab ID: 1678485
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

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	29.2	97	30	29.4	98	(72-136)	0.75	(< 20)
Chlorobenzene	30	30.6	102	30	29.9	100	(82-118)	2.30	(< 20)
Chloroethane	30	27.7	92	30	27.1	91	(60-138)	1.90	(< 20)
Chloroform	30	27.5	92	30	27.4	91	(79-124)	0.45	(< 20)
Chloromethane	30	26.6	89	30	26.8	89	(50-139)	0.55	(< 20)
cis-1,2-Dichloroethene	30	29.4	98	30	29.4	98	(78-123)	0.12	(< 20)
cis-1,3-Dichloropropene	30	29.6	99	30	31.0	103	(75-124)	4.70	(< 20)
Dibromochloromethane	30	30.0	100	30	30.3	101	(74-126)	0.88	(< 20)
Dibromomethane	30	29.2	97	30	29.7	99	(79-123)	1.70	(< 20)
Dichlorodifluoromethane	30	26.8	89	30	26.6	89	(32-152)	0.79	(< 20)
Ethylbenzene	30	30.4	101	30	30.0	100	(79-121)	1.40	(< 20)
Freon-113	45	44.9	100	45	44.7	99	(70-136)	0.38	(< 20)
Hexachlorobutadiene	30	32.0	107	30	33.1	110	(66-134)	3.20	(< 20)
Isopropylbenzene (Cumene)	30	30.9	103	30	30.6	102	(72-131)	1.10	(< 20)
Methylene chloride	30	29.3	98	30	30.2	101	(74-124)	3.10	(< 20)
Methyl-t-butyl ether	45	44.0	98	45	43.7	97	(71-124)	0.80	(< 20)
Naphthalene	30	29.0	97	30	32.0	107	(61-128)	9.90	(< 20)
n-Butylbenzene	30	30.0	100	30	30.3	101	(75-128)	1.00	(< 20)
n-Propylbenzene	30	29.3	98	30	28.9	96	(76-126)	1.20	(< 20)
o-Xylene	30	30.9	103	30	30.3	101	(78-122)	2.10	(< 20)
P & M -Xylene	60	61.4	102	60	61.1	102	(80-121)	0.52	(< 20)
sec-Butylbenzene	30	30.1	100	30	30.1	100	(77-126)	0.04	(< 20)
Styrene	30	31.3	104	30	31.0	103	(78-123)	1.10	(< 20)
tert-Butylbenzene	30	29.4	98	30	29.8	99	(78-124)	1.20	(< 20)
Tetrachloroethene	30	30.8	103	30	30.5	102	(74-129)	0.82	(< 20)
Toluene	30	29.4	98	30	29.1	97	(80-121)	0.79	(< 20)
trans-1,2-Dichloroethene	30	29.5	98	30	29.5	98	(75-124)	0.13	(< 20)
trans-1,3-Dichloropropene	30	29.9	100	30	30.0	100	(73-127)	0.41	(< 20)
Trichloroethene	30	29.7	99	30	29.7	99	(79-123)	0.10	(< 20)
Trichlorofluoromethane	30	29.5	98	30	29.3	98	(65-141)	0.53	(< 20)
Vinyl acetate	30	29.0	97	30	29.5	98	(54-146)	1.50	(< 20)
Vinyl chloride	30	28.5	95	30	28.4	95	(58-137)	0.34	(< 20)
Xylenes (total)	90	92.3	103	90	91.4	102	(79-121)	1.00	(< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1224326 [VXX38972]
Blank Spike Lab ID: 1678484
Date Analyzed: 08/05/2022 13:54

Spike Duplicate ID: LCSD for HBN 1224326 [VXX38972]
Spike Duplicate Lab ID: 1678485
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326005, 1224326006, 1224326007

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		97	30		98	(81-118)	1.40	
4-Bromofluorobenzene (surr)	30		97	30		95	(85-114)	2.00	
Toluene-d8 (surr)	30		100	30		100	(89-112)	0.56	

Batch Information

Analytical Batch: **VMS21846**
Analytical Method: **SW8260D**
Instrument: **Agilent 7890-75MS**
Analyst: **S.S**

Prep Batch: **VXX38972**
Prep Method: **SW5030B**
Prep Date/Time: **08/05/2022 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 1840915 [XXX/46761]
Blank Lab ID: 1677916

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326006, 1224326007

Results by **AK102**

Parameter	Results	LOQ/CL	DL	Units
Diesel Range Organics	0.300U	0.600	0.200	mg/L
Surrogates				
5a Androstane (surr)	67	60-120		%

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK102
Instrument: Agilent 7890B R
Analyst: MAP
Analytical Date/Time: 8/11/2022 6:30:00PM

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 8/8/2022 3:58:05PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1224326 [XXX46761]
Blank Spike Lab ID: 1677917
Date Analyzed: 08/11/2022 18:40

Spike Duplicate ID: LCSD for HBN 1224326 [XXX46761]
Spike Duplicate Lab ID: 1677918
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326006, 1224326007

Results by **AK102**

	Blank Spike (mg/L)				Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Diesel Range Organics	20	14.3	72	*	20	13.5	67	* (75-125)	6.20	(< 20)
Surrogates										
5a Androstane (surr)	0.4		71		0.4		70	(60-120)	2.10	

Batch Information

Analytical Batch: **XFC16313**
Analytical Method: **AK102**
Instrument: **Agilent 7890B R**
Analyst: **MAP**

Prep Batch: **XXX46761**
Prep Method: **SW3520C**
Prep Date/Time: **08/08/2022 15:58**
Spike Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL
Dupe Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL

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Method Blank

Blank ID: MB for HBN 1840915 [XXX/46761]
Blank Lab ID: 1677916

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1224326001, 1224326002, 1224326003, 1224326006, 1224326007

Results by **AK103**

Parameter	Results	LOQ/CL	DL	Units
Residual Range Organics	0.250U	0.500	0.200	mg/L
Surrogates				
n-Triacontane-d62 (surr)	71.1	60-120		%

Batch Information

Analytical Batch: XFC16313
Analytical Method: AK103
Instrument: Agilent 7890B R
Analyst: MAP
Analytical Date/Time: 8/11/2022 6:30:00PM

Prep Batch: XXX46761
Prep Method: SW3520C
Prep Date/Time: 8/8/2022 3:58:05PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1224326 [XXX46761]
Blank Spike Lab ID: 1677917
Date Analyzed: 08/11/2022 18:40

Spike Duplicate ID: LCSD for HBN 1224326 [XXX46761]
Spike Duplicate Lab ID: 1677918
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224326001, 1224326002, 1224326003, 1224326006, 1224326007

Results by **AK103**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Residual Range Organics	20	14.4	72	20	14.5	73	(60-120)	0.73	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	0.4		73	0.4		73	(60-120)	0.54	

Batch Information

Analytical Batch: **XFC16313**
Analytical Method: **AK103**
Instrument: **Agilent 7890B R**
Analyst: **MAP**

Prep Batch: **XXX46761**
Prep Method: **SW3520C**
Prep Date/Time: **08/08/2022 15:58**
Spike Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL
Dupe Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL

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CHAIN OF CUSTODY RECORD

1224326

PH#3586166CP2

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Section 1

CLIENT: SLR

CONTACT: Bret Berglund — PHONE #: 907 222 1112

PROJECT NAME: ML&P Transformer Shop — PROJECT/ PWSID/ PERMIT#:

REPORTS TO: Bret Berglund — E-MAIL: — Profile #:

INVOICE TO: SLR — QUOTE #: — P.O. #:

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Comp Grab MI (Multi-incremental)	Analysis* GRO 101 (HCL)	VOC 8260 (HCL)	DRO RRO 102 103 (HCL)	REMARKS/LOC ID
	~~MW-125-22~~ ET									
1 AH	MW-5	7/28/22	0925	W	8	G	X	X	X	
2 AH	MW-6	7/28/22	1026	W	8	G	X	X	X	
3 AH	MW-7	7/28/22	1120	W	8	G	X	X	X	
4 AC	Trip Blank #1	7/28/22		W	3	—	X			
5 AC	Trip Blank #2	7/28/22		W	3	—		X		
	~~MW-~~ ET									
6 AH	MW-9	7/28/22	1145	W	8	G	X	X	X	
7 AH	MW-99	7/28/22	0900	W	8	G	X	X	X	

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 5

Relinquished By:	Date	Time	Received By:
(1)			
(2)			
(3)			
(4)	7/28/22	15:01	Received For Laboratory By:

Section 4

DOD Project? Yes / No

Cooler ID:

Data Deliverable Requirements: Level 2

Requested Turnaround Time and/or Special Instructions: Standard TAT

Temp Blank °C: 5.0 or Ambient [ ] DSG

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: Hand Delivery [ ] Commerical Delivery [ ]

e-Sample Receipt Form

SGS Workorder #:	1224326	1224326

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	Container Id	Preservative	Container Condition
1224326001-A	HCL to pH < 2	OK			
1224326001-B	HCL to pH < 2	OK			
1224326001-C	HCL to pH < 2	OK			
1224326001-D	HCL to pH < 2	OK			
1224326001-E	HCL to pH < 2	OK			
1224326001-F	HCL to pH < 2	OK			
1224326001-G	HCL to pH < 2	OK			
1224326001-H	HCL to pH < 2	OK			
1224326002-A	HCL to pH < 2	OK			
1224326002-B	HCL to pH < 2	OK			
1224326002-C	HCL to pH < 2	OK			
1224326002-D	HCL to pH < 2	OK			
1224326002-E	HCL to pH < 2	OK			
1224326002-F	HCL to pH < 2	OK			
1224326002-G	HCL to pH < 2	OK			
1224326002-H	HCL to pH < 2	OK			
1224326003-A	HCL to pH < 2	OK			
1224326003-B	HCL to pH < 2	OK			
1224326003-C	HCL to pH < 2	OK			
1224326003-D	HCL to pH < 2	OK			
1224326003-E	HCL to pH < 2	OK			
1224326003-F	HCL to pH < 2	OK			
1224326003-G	HCL to pH < 2	OK			
1224326003-H	HCL to pH < 2	OK			
1224326004-A	HCL to pH < 2	OK			
1224326004-B	HCL to pH < 2	OK			
1224326004-C	HCL to pH < 2	OK			
1224326005-A	HCL to pH < 2	OK			
1224326005-B	HCL to pH < 2	OK			
1224326005-C	HCL to pH < 2	OK			
1224326006-A	HCL to pH < 2	OK			
1224326006-B	HCL to pH < 2	OK			
1224326006-C	HCL to pH < 2	OK			
1224326006-D	HCL to pH < 2	OK			
1224326006-E	HCL to pH < 2	OK			
1224326006-F	HCL to pH < 2	OK			
1224326006-G	HCL to pH < 2	OK			
1224326006-H	HCL to pH < 2	OK			
1224326007-A	HCL to pH < 2	OK			
1224326007-B	HCL to pH < 2	OK			
1224326007-C	HCL to pH < 2	OK			
1224326007-D	HCL to pH < 2	OK			
1224326007-E	HCL to pH < 2	OK			
1224326007-F	HCL to pH < 2	OK			
1224326007-G	HCL to pH < 2	OK			
1224326007-H	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.