Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Spill Prevention and Response, Contaminated Sites Program
610 University Avenue
Fairbanks, Alaska 99709

Arcadis U.S., Inc.
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Hawaii 96813
Phone: 808-522-0321
www.arcadis.com

Date: July 25, 2023
Our Ref: 30064229
Subject: First Quarter 2023 Groundwater Monitoring Report
Five Star Auto Care Center (Former), (Former Chevron Facility 381811)
501 30th Avenue Fairbanks, Alaska
ADEC File No.: 102.26.027
ADEC Hazard ID: 24230

Dear Ms. Reams,

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis), has prepared this report to document the first quarter 2023 groundwater monitoring activities of for the Five Star Auto Care Center (Former), (Former Chevron Facility 381811), located at 501 30th Avenue Fairbanks, Alaska (site). This work was conducted under the direction of a “Qualified Environmental Professional” (QEP) and “Qualified Sampler” (18 Alaska Administrative Code [AAC] 75.333).

If you have any questions, please do not hesitate to contact me.

Sincerely,

Arcadis U.S., Inc.

Nick Wood, P.E.
Project Manager
Email: Nick.Wood@arcadis.com
Direct Line: 808-522-0342

Copies
James Kiernan, CEMC *(electronic copy)*
Nathan A. Davis *(electronic copy)*

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date: July 25, 2023

QUARTERLY STATUS REPORT

First Quarter 2023

July 25, 2023

Work Conducted This Period [First Quarter 2023]:

1. Conducted quarterly groundwater monitoring activities on March 20 and 21, 2023.
2. Prepared the *First Quarter 2023 Groundwater Monitoring Report*.

Work Proposed Next Period [Second Quarter 2023]:

3. Conduct the second quarter 2023 groundwater monitoring activities.
4. Prepare the *Second Quarter* 2023 *Groundwater Monitoring Report.*

Site Description

The site is in interior Alaska. Fairbanks is situated in the south-central area of the state in the Tanana River Valley at an elevation of approximately 440 feet (ft) above sea level. Shallow streams and abandoned meander scars are found throughout the valley. Static groundwater depths historically range between 6.24 and 7.2 feet below top of casing (btoc). Groundwater flow has been primarily southwest. Presently, the site is a fenced dirt and gravel lot with one building, an attached former car wash bay, and the former station canopy. The Site is not actively in use but is operated by Hard Work LLC as an annexed office for the horticulture business located at the adjacent property (511 30th Avenue). The Site is bounded to the north by the Robert Mitchell Expressway, to the east by South Cushman Street, to the south by 30th Avenue, and to the west by a commercial and retail warehouse building and associated parking areas. As mentioned above, the commercial building to the west is currently occupied by a horticulture business (marijuana cultivation). Historically, USTs at the sites contained leaded and unleaded gasoline. Petroleum impacts were observed in soil and ground water during UST removal in 1990, and source of contamination is presumed to be USTs and associated dispensers and product piping. The site currently has a network of nine groundwater monitoring wells (**Table 1**) which are monitored quarterly. The surrounding properties are primarily commercial; the site is bordered by businesses to the north, south, east, and west. A site location map and site plan are shown as **Figure 1** and **Figure 2**, respectively.

Site Activities this Reporting Period

Current phase of project:	Assessment/Remediation
Frequency of monitoring and sampling:	Quarterly
Monitoring wells containing light non-aqueous phase liquid (LNAPL):	None
Cumulative LNAPL recovered to date: (gallons)	0.30

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date: July 25, 2023

Approximate depth to groundwater: (feet below top of casing)	8.26 (MW-2) to 11.85 (MW-8)
Approximate groundwater elevation: (feet relative to NAVD88)	433.49 (MW-3) to 433.86 (MW-8)
Groundwater flow direction	North-northwest
Groundwater gradient (feet per foot)	0.001
Current remediation techniques:	Interim Remediation Events (enhanced fluid recovery)
Summary of unusual activity:	Monitoring wells MW-4 and MW-5A could not be located due to large snow berms
Agency directive requirements:	None

Groundwater Gauging and Sampling Methods

On March 20 and 21, the first quarter 2023 groundwater monitoring and sampling activities were conducted. Groundwater monitoring wells scheduled to be gauged and/or sampled are summarized in **Table 1**. Monitoring wells were gauged with an oil/water interface probe in the order of lowest to highest historical petroleum hydrocarbon concentrations in groundwater to determine groundwater elevations and ascertain if LNAPL was present. Following gauging, groundwater was purged and sampled using low flow purge technology via bladder pump in accordance with the Field Sampling Guidance (ADEC 2022) and Arcadis *Standard Groundwater Sampling and Monitoring Wells (Arcadis 2022)*. Non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water. Water table drawdown was continuously monitored during purging with a water level meter and the flow rate of the pump was adjusted to limit drawdown to 0.1 meter. Water quality parameters were monitored during purging with a multi-parameter water quality meter equipped with a flow through cell and Turbidity meter. Parameters were recorded every 3 to 5 minutes until a minimum of three (minimum of four if using temperature as an indicator) of the parameters listed below stabilized. Water quality parameters were considered stable when three successive readings were within the following ADEC limits:

- ± 3% for temperature (minimum of ± 0.2 C°),
- ± 0.1 for pH,
- ± 3% for conductivity,
- ± 10 mv for redox potential,
- ± 10% for dissolved oxygen, and
- ± 10% for turbidity.

Following well stabilization, the flow rate was reduced to between 100 to 150 milliliters per minute and samples were collected into laboratory sample bottles. Groundwater samples were collected from the top foot of the water column in monitoring wells per the sampling schedule (**Table 1**) with the following exception: monitoring wells MW-4 and MW-5A which could not be located due to large snow berms. The groundwater potentiometric surface elevation and a rose diagram of historical groundwater flow directions are illustrated on **Figure 3**.

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
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Groundwater samples collected were analyzed by Pace Analytical National Center for Testing & Innovation (Pace) of Mt. Juliet, Tennessee for the following constituents:

- Full-Scan volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D, and
- Total petroleum hydrocarbons as gasoline range organics (GRO) by Alaska Method AK101.
- Total petroleum hydrocarbons as diesel range organics (DRO) by Alaska Method AK102.
- Total petroleum hydrocarbons as residual range organics (RRO) by Alaska Method AK103.
- Total Lead by USEPA 6010
- EDB and DBCP by USEPA 8011

A groundwater duplicate sample (BD-1) was collected from monitoring well MW-3 and submitted blind to Pace. Additionally, an equipment blank sample was collected, and trip blanks were included in sample coolers for quality assurance purposes. Field notes collected during groundwater monitoring activities including monitoring well purge rates and drawdown are presented in **Attachment A**.

Groundwater Sampling Results

Groundwater analytical results obtained during this event indicate constituents of potential concern (COPCs) exceed the ADEC Oil Pollution Prevention Requirements (18 AAC 75) identified in Table C - Groundwater Cleanup Levels (GCLs). Analytical data are summarized in **Table 2**. COPCs exceeding GCLs are summarized below and are illustrated on **Figure 4**. The laboratory report is included as **Attachment B.**

- DRO was detected at concentrations above the ADEC GCL of 1,500 micrograms per liter (µg/L) in MW-3 at a concentration of 4,460 µg/L and 3,980 µg/L in the blind duplicate.
- GRO was detected at concentrations above the ADEC GCL of 2,200 micrograms per liter (µg/L) in MW-3 at a concentration of 180,000 µg/L and 176,000 µg/L in the blind duplicate, in MW-2 at a concentration of 30,800 µg/L and in MW-9 at a concentration of 17,400 µg/L.
- Benzene was at concentrations detected above the ADEC GCL of 4.6 micrograms per liter (µg/L) in MW-2 at a concentration of 6,570 µg/L, in MW-3 at a concentration of 37,300 µg/L and 43,000 µg/L in the blind duplicate, in MW-7 at a concentration of 44.5 µg/L and in MW-9 at a concentration of 3,720 µg/L.
- Toluene was detected at concentrations above the ADEC GCL of 1,100 micrograms per liter (µg/L) in MW-2 at a concentration of 7,200 µg/L, in MW-3 at a concentration of 38,000 µg/L and 45,000 µg/L in the blind duplicate and in MW-9 at a concentration of 3,230 µg/L.
- Ethylbenzene was detected at concentrations above the ADEC GCL of 15 micrograms per liter (µg/L) in MW-2 at a concentration of 1,130 µg/L, in MW-3 at a concentration of 2,930 µg/L and 3,250 µg/L in the blind duplicate and in MW-9 at a concentration of 754 µg/L.
- Total Xylenes was detected at concentrations above the ADEC GCL of 190 micrograms per liter (µg/L) in MW-2 at a concentration of 4,090 µg/L, in MW-3 at a concentration of 13,300 µg/L and 15,300 µg/L in the blind duplicate and in MW-9 at a concentration of 2,850 µg/L.
- EDB was detected at concentrations above the ADEC GCL of 0.075 micrograms per liter (µg/L) in MW-3 at a concentration of 263 µg/L and 270 µg/L in the blind duplicate.
- Naphthalene was detected at concentrations above the ADEC GCL of 1.7 micrograms per liter (µg/L) in MW-8 at a concentration of 2.81 J µg/L.

- Lead was detected at concentrations above the ADEC GCL of 15 micrograms per liter (µg/L) in MW-3 at a concentration of 43.2 µg/L and 32.6 µg/L in the blind duplicate.
- All other analytes were not detected above ADEC GCLs.

The lowest RDL recorded for EDB using USEPA method 8011 and 8260D is represented within the report tables and figures. A historical summary from third quarter 2019 to 2022 is presented in **Attachment C**.

Laboratory Data Review

As required by the ADEC Guidelines for Data Reporting (ADEC 2022b), Arcadis completed a laboratory data review checklist for the laboratory report generated for this event. The data review checklist is included as **Attachment D**. Quality assurance and quality control parameters related to the precision, accuracy, representativeness, comparability, completeness, and sensitivity of the data presented in this report suggest that the data quality objectives have been met with the following exceptions:

- Accuracy:
    - Laboratory Control Sample and Laboratory Control Sample (LCS/LCSD) recovery exceedances were observed for compound 1,2-dichloropropane in sample locations MW-1, MW-10, MW-8, MW-7, EQB-1 and the Trip blank for USEPA Method 8260D. Associated compounds result in the associated sample location were qualified as estimated.
    - Laboratory Control Sample and Laboratory Control Sample (LCS/LCSD) recovery exceedances were observed for compound 1,2-dichloropropane in sample locations MW-3, BD-1, EQB-1 and the trip blank for USEPA Method 8260D. Associated compounds result in the associated sample location were qualified as estimated.
    - Laboratory Control Sample and Laboratory Control Sample (LCS/LCSD) recovery exceedances were observed for compound n-butylbenzene in sample locations MW-8 and MW-7 for USEPA Method 8260D. Associated compounds result in the associated sample location were qualified as estimated.
    - Continuing calibration for compounds carbon disulfide, chloromethane, 1,1-dichloroethane, 1,2-dichloropropane and di-isopropyl ether exhibited a low bias recovery for method USEPA 8260D. Result in sample locations MW-1 and MW-10 were qualified as estimated.
    - Continuing calibration for compound trichlorofluoromethane exhibited a high bias recovery for USEPA Method 8260D. Result in sample locations MW-1 and MW-10 were qualified as estimated.
    - Continuing calibration for compounds carbon disulfide, chloromethane, 1,1-dichloroethane, 1,2-dichloropropane, di-isopropyl ether, bromoform and 1,2-dibromo-3-chloropropane exhibited a low bias recovery for USEPA Method 8260D. Result in sample locations MW-8, MW-7, MW-2, EQB-1 and the Trip blank were qualified as estimated.
    - Continuing calibration for compounds bromoform and 1,2-dibromo-3-chloropropane exhibited a low bias recovery for USEPA Method 8260D. Result in sample location MW-9 were qualified as estimated.

    - Continuing calibration for compounds carbon disulfide, chloromethane, 1,1-dichloroethane, 1,2-dichloropropane and di-isopropyl ether exhibited a low bias recovery for USEPA Method 8260D. Result in sample locations MW-3, blind duplicate (BD-1), equipment blank (EQB-1) and Trip blank (TB) were qualified as estimated.

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date: July 25, 2023

- Precision:
    - The relative percent difference (RPD) for Laboratory Control Sample and Laboratory Control Sample (LCS/LCSD) exceedance were observed for compound RRO in sample locations MW-1, MW-10, MW-8, MW-2, MW-7 and EQB-1 for Alaska Method AK102/103. Associated compounds result in the associated sample location were qualified as estimated.
    - The relative percent difference (RPD) for Laboratory Control Sample and Laboratory Control Sample (LCS/LCSD) exceedance were observed for compound RRO in sample locations MW-9, MW-3, blind duplicate (BD-1) and equipment blank (EQB-1) was qualified as estimated.
- Comparability:
    - The laboratory results are presented in the same units as previous reports to allow comparison. The target compounds were not detected in trip blank, equipment blank, and method blank with below exceptions.
    - Compound DRO was detected below the reporting limit in the method blank and equipment blank for Alaska Method AK102/103. Based on blank evaluation, the results for compound at sample locations MW-1, MW-10, MW-2, MW-7 and MW-8 was qualified as non-detect.
    - Compound RRO was detected below the reporting limit in the method blank for Alaska Method AK102/103. Based on blank evaluation, the results for compound at sample locations MW-10, MW-8, MW-2, MW-7 and MW-1 was qualified as non-detect.
    - Compound DRO was detected below the reporting limit in the method blank and equipment blank for Alaska Method AK102/103. Based on blank evaluation, the results for compound at sample location MW-9 was qualified as non-detect.
    - Compound RRO was detected below the reporting limit in the method blank for Alaska Method AK102/103. Based on blank evaluation, the results for compound at sample locations MW-9 and MW-3 was qualified as non-detect.
- Sensitivity:
    - The concentration of DRO exceeded the ADEC groundwater cleanup levels (GCLs) in sample location MW-3.
    - The concentration of GRO exceeded the ADEC groundwater cleanup levels (GCLs) in sample locations MW-2, MW-3, and MW-9.
    - The concentration of toluene, ethylbenzene and total xylenes exceeded the ADEC groundwater cleanup levels (GCLs) in sample locations MW-2, MW-3, and MW-9.
    - The concentration of EDB exceeded the ADEC groundwater cleanup levels (GCLs) in sample location MW-3.
    - The concentration of naphthalene exceeded the ADEC groundwater cleanup levels (GCLs) in sample location MW-8.
    - The concentration of Lead exceeded the ADEC groundwater cleanup levels (GCLs) in sample locations MW-3.
    - The concentration of 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene exceeded the ADEC groundwater cleanup levels (GCLs) in sample locations MW-2, MW-3, and MW-9.
    - The laboratory reported detection limit for compounds DRO, EDB, EDC, naphthalene, acetone, bromobenzene, bromodichloromethane, bromoform, bromomethane, carbon tetrachloride, chlorobenzene, chlorodibromo-methane, chloroform, chloromethane, dibromomethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, hexachloro-1,3-butadiene, methylene chloride, 1,1,1,2-tetrachloroethane,

1,1,2,2-tetrachloroethane, tetrachloroethene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,1,2-trichloroethane, trichloroethene, 1,2,3-trichloropropane and vinyl chloride exceeded the ADEC GCLs; however, the laboratory method detection limit is below the ADEC GCLs therefore the sensitivity of the analyses was still adequate for the samples. The sensitivity of the analyses was adequate for the samples as the detection limits were less than the ADEC GCLs for compounds with above exceptions.

Investigation Derived Waste

Purge and decontamination water was collected and is currently stored in U.S. Department of Transportation-approved 55-gallon steel drums onsite. Each drum was labeled with the contents, generator, date generated, and generator contact information. Following waste characterization and ADEC approval, the investigation derived waste will be transported offsite for treatment and/or disposal.

Conclusion and Recommendations

The observed groundwater flow direction and hydraulic gradient during this event are generally consistent with historical data. Analytical results from the monitoring wells are generally consistent with historical data.

Arcadis recommends groundwater sampling continues in accordance with the current quarterly schedule. The second quarter sampling event will be conducted in summer of 2023.

References

ADEC. 2022a. Field Sampling Guidance. ADEC, Division of Spill Prevention and Response Contaminated Sites Program. August.

ADEC. 2022b. Technical Memorandum 22-001; Guidelines for Data Reporting. ADEC, Division of Spill Prevention and Response Contaminated Sites Program. August 15.

ADEC. 2023. 18-AAC-75 Oil and Other Hazardous Substances Pollution Control. ADEC. Amended February 5th.

Arcadis. 2022. Standard Groundwater Sampling for Monitoring Well. April

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date: July 25, 2023

Should you have any questions or concerns regarding this submittal please do not hesitate to contact us.

Sincerely,

Arcadis U.S., Inc.

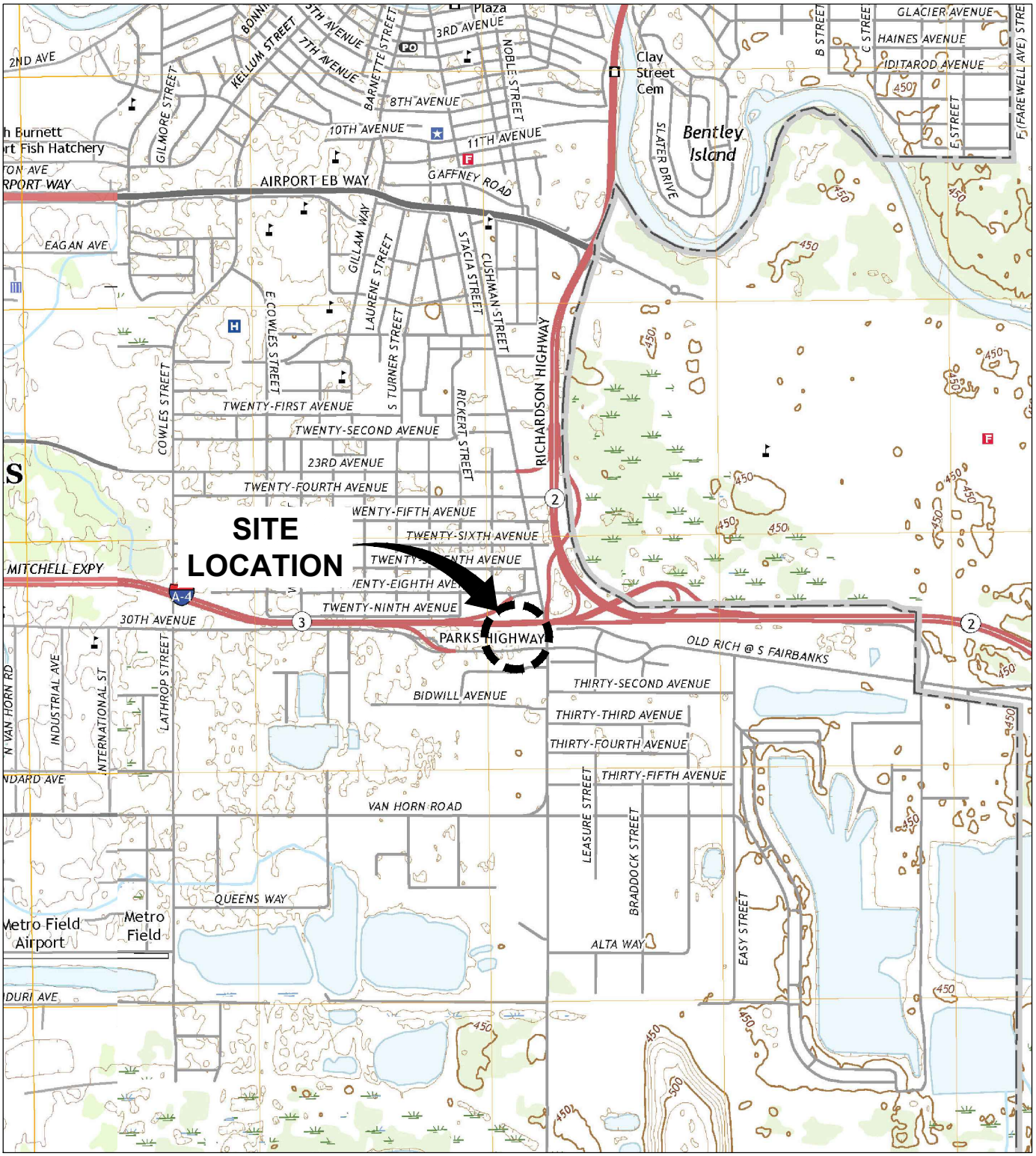
Gantt Jeffers
Staff Geologist

Nick Wood
Project Manager

Enclosures:

- Figure 1. Site Location Map
- Figure 2. Site Plan
- Figure 3. Groundwater Elevation Contour Map
- Figure 4. Groundwater Analytical Results Map
- Table 1. Groundwater Monitoring Schedule
- Table 2. Current Groundwater Gauging and Analytical Results
- Attachment A. Field Notes
- Attachment B. Laboratory Analytical Results
- Attachment C. Historical Groundwater Analytical Results- Third Quarter 2019 to 2022
- Attachment D. ADEC Data Review Checklist

Figures



SOURCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., FAIRBANKS D-2 SW, FAIRBANKS D-2 SE, ALASKA.

APPROXIMATE SCALE : 1 in. = 2,000 ft.

FIVE STAR AUTO CARE CENTER (FORMER)
(FORMER CHEVRON FACILITY 381811)
501 EAST, 30TH AVENUE
FAIRBANKS, ALASKA

SITE LOCATION MAP

ARCADIS

FIGURE 1

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AK_Fairbanks_D-2_SW_20130717_TM_geo.jpg
Arcadis Logo_2021.PNG

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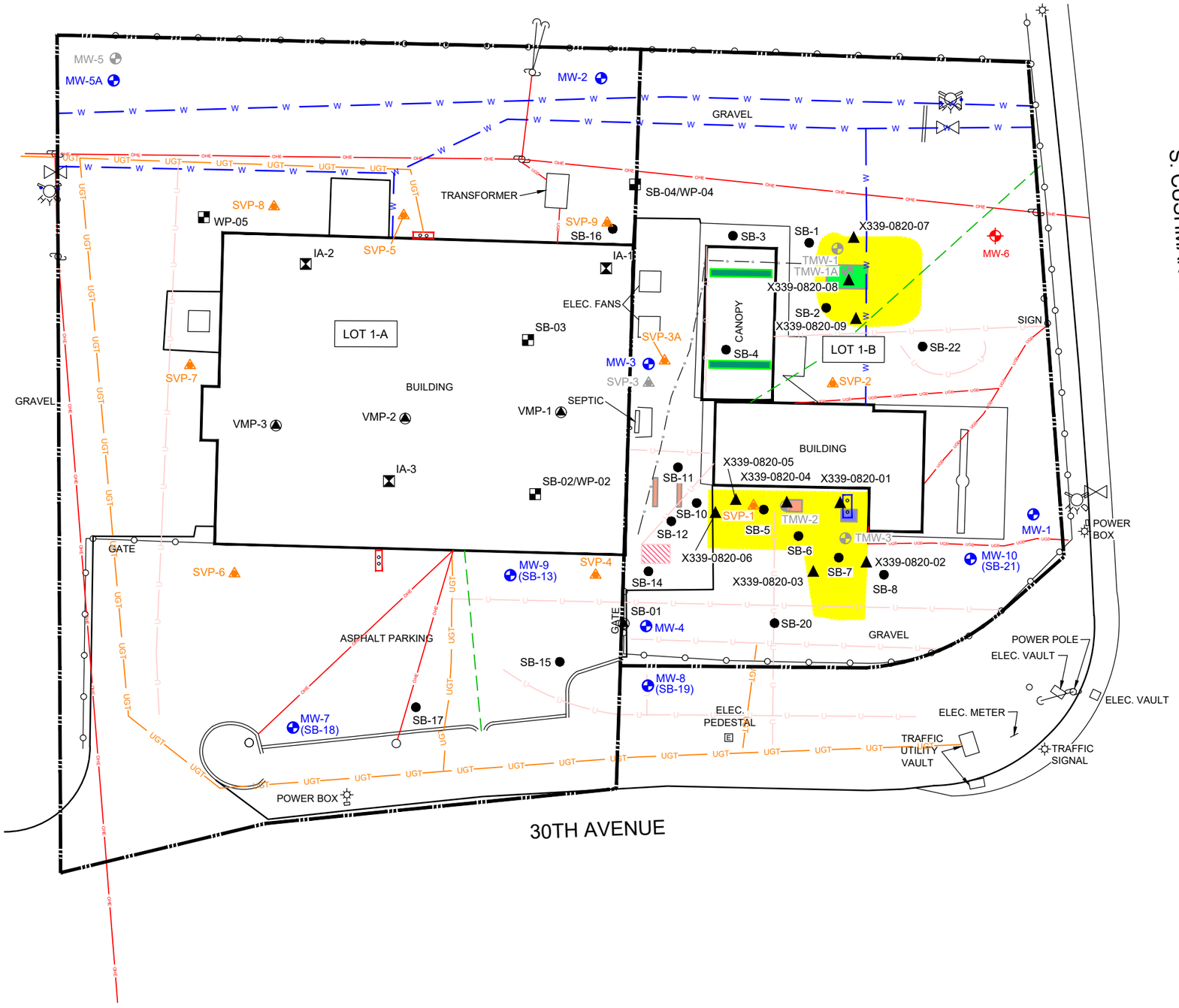

LEGEND:

- PROPERTY BOUNDARY
- MW-1 GROUNDWATER MONITORING WELL
- TMW-1A ABANDONED GROUNDWATER MONITORING WELL
- MW-6 PROPOSED WELL LOCATION
- SB-1 SOIL BORING
- SVP-2 SOIL VAPOR PROBE
- SVP-3 ABANDONED SOIL VAPOR PROBE
- VMP-1 SUB-SLAB VAPOR MONITORING POINT (RESCON 2016)
- IA-1 INDOOR AIR SAMPLE LOCATION (RESCON 2016)
- SP-02/WP-02 GROUNDWATER MONITORING LOCATIONS AND/OR SOIL BORING LOCATION (RESCON 2016)
- X339-0820-04 SOIL BORING (SHANNON AND WILSON, 1990)
- FENCE LINE
- OVERHEAD ELECTRIC LINE
- FUEL SERVICE LINE
- SEWER LINE
- SEWER / STORM DRAIN
- UNDERGROUND WATER LINE
- UNDERGROUND COMMUNICATION LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND UNKNOWN UTILITY
- POWER POLE
- FIRE HYDRANT AND WATER VALVE
- FORMER DIESEL TANK
- FORMER DIESEL DISPENSER ISLAND
- FORMER WASTE OIL TANK
- FORMER GASOLINE TANK
- FORMER GASOLINE DISPENSER ISLAND
- APPROXIMATE EXCAVATION EXTENT BACKFILLED WITH ORIGINAL MATERIAL (SHANNON & WILSON, 1990)
- VENT RISERS
- CURRENT HEATING OIL TANK
- SUSPECTED LOCATION OF HEATING OIL TANK
- RECTANGULAR METAL PICKED UP W / EM

N

0 40' 80'

APPROXIMATE SCALE 1 in. = 40 ft.

FIVE STAR AUTO CARE CENTER (FORMER)
(FORMER CHEVRON FACILITY 381811)
501 EAST, 30TH AVENUE
FAIRBANKS, ALASKA

SITE PLAN

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FIGURE 2

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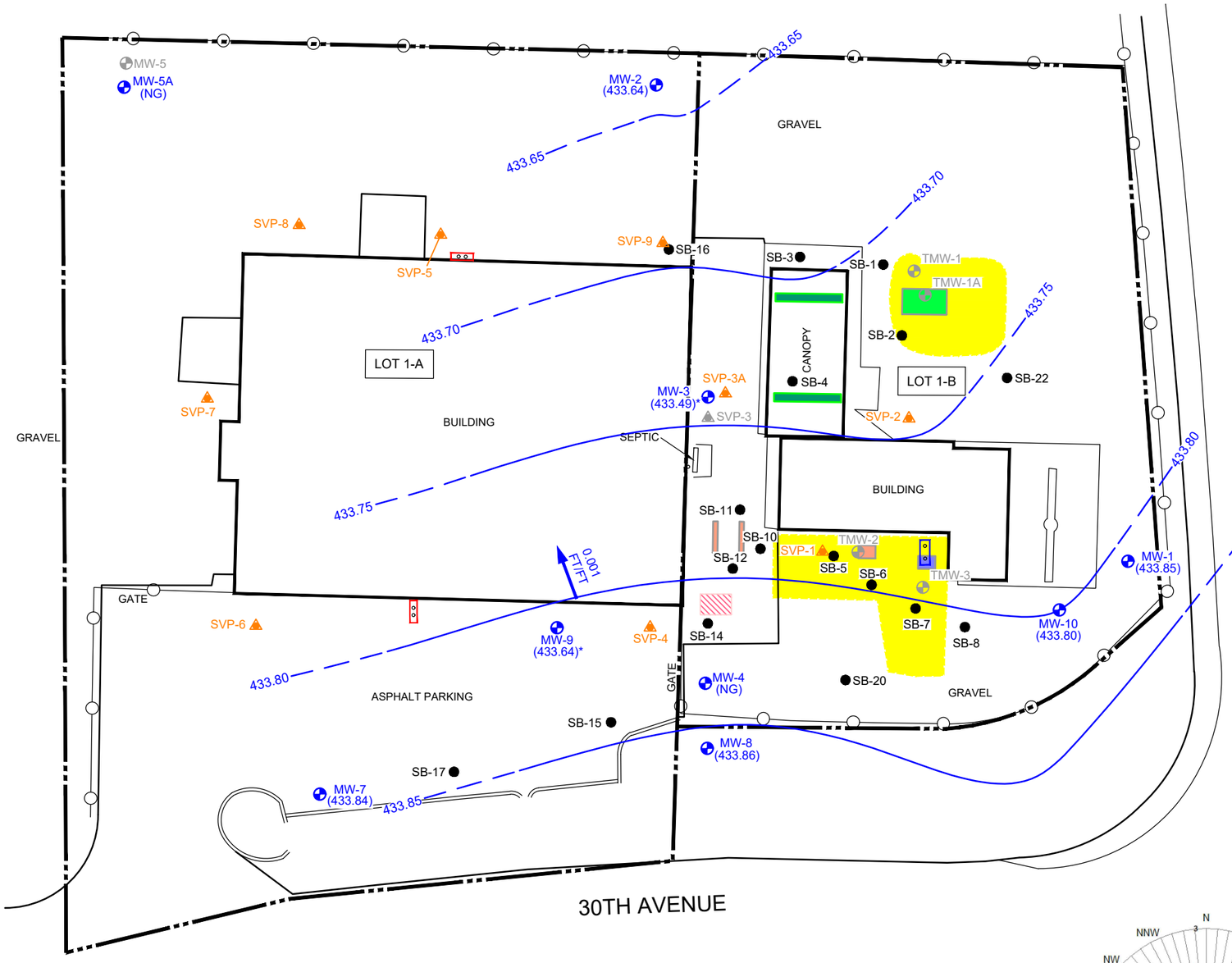
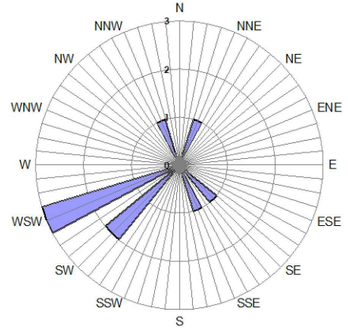


LEGEND:

- PROPERTY BOUNDARY
- MW-1 — GROUNDWATER MONITORING WELL
- TMW-1A — ABANDONED GROUNDWATER MONITORING WELL
- SB-1 — SOIL BORING
- SVP-2 — SOIL VAPOR PROBE
- SVP-3 — ABANDONED SOIL VAPOR PROBE
- FORMER DIESEL TANK
- FORMER DIESEL DISPENSER ISLAND
- FORMER WASTE OIL TANK
- FORMER GASOLINE TANK
- FORMER GASOLINE DISPENSER ISLAND
- APPROXIMATE EXCAVATION EXTENT BACKFILLED WITH ORIGINAL MATERIAL (SHANNON & WILSON, 1990)
- VENT RISERS
- CURRENT HEATING OIL TANK
- SUSPECTED LOCATION OF HEATING OIL TANK
- RECTANGULAR METAL PICKED UP W / EM
- (433.86) — GROUNDWATER ELEVATION (FEET)
- 433.85 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- 0.001 FT/FT — APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)
- (NG) — NOT GAUGED
- * — WELL NOT USED FOR CONTOURING



GROUNDWATER FLOW DIRECTION

0 40' 80'

APPROXIMATE SCALE 1 in. = 40 ft.

FIVE STAR AUTO CARE CENTER (FORMER)
(FORMER CHEVRON FACILITY 381811)
501 EAST, 30TH AVENUE
FAIRBANKS, ALASKA

GROUNDWATER ELEVATION MAP MARCH 20 AND 21, 2023

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FIGURE 3

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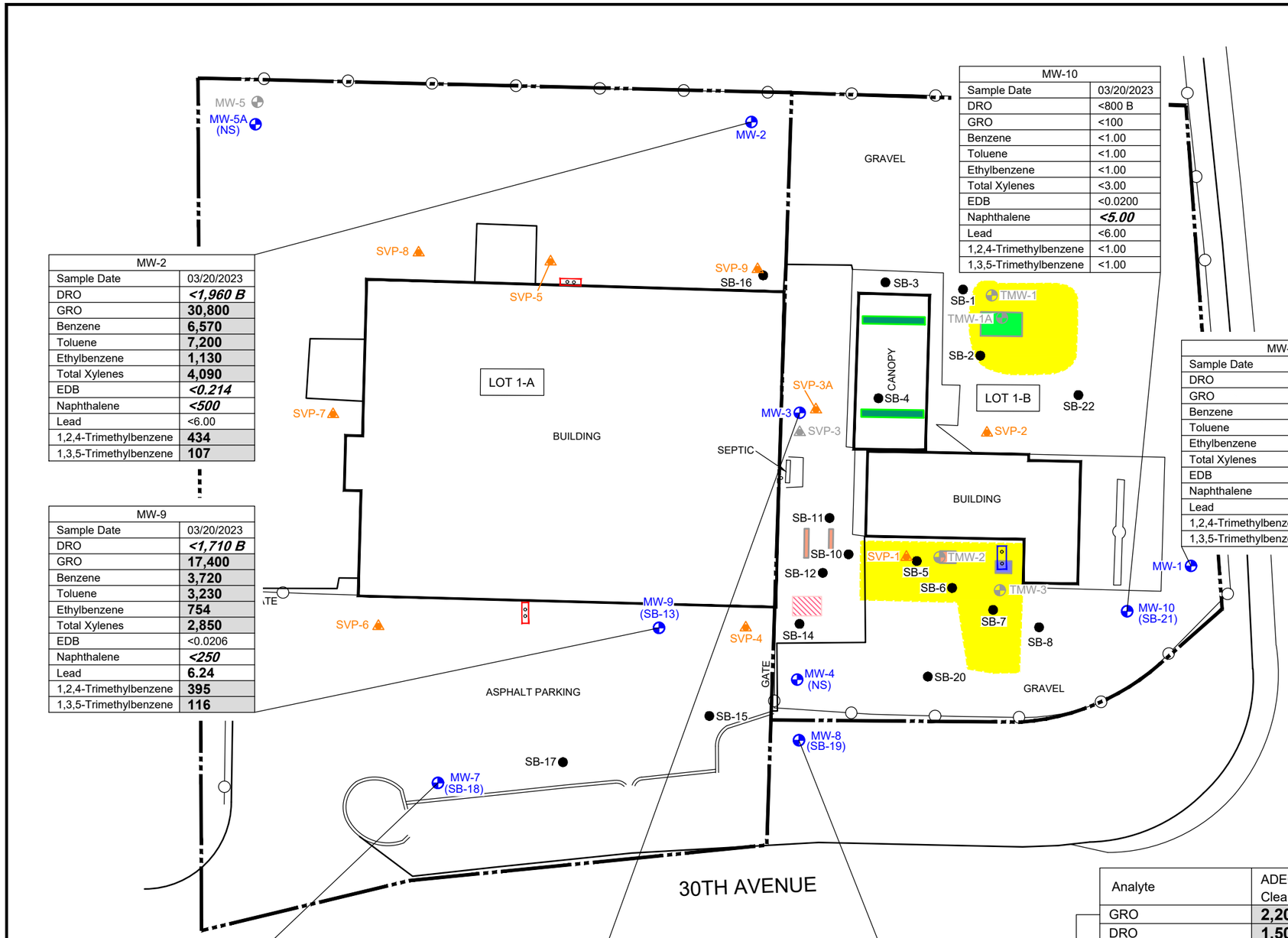


MW-2	
Sample Date	03/20/2023
DRO	***<1,960 B***
GRO	**30,800**
Benzene	**6,570**
Toluene	**7,200**
Ethylbenzene	**1,130**
Total Xylenes	**4,090**
EDB	***<0.214***
Naphthalene	***<500***
Lead	<6.00
1,2,4-Trimethylbenzene	**434**
1,3,5-Trimethylbenzene	**107**

MW-9	
Sample Date	03/20/2023
DRO	***<1,710 B***
GRO	**17,400**
Benzene	**3,720**
Toluene	**3,230**
Ethylbenzene	**754**
Total Xylenes	**2,850**
EDB	<0.0206
Naphthalene	***<250***
Lead	**6.24**
1,2,4-Trimethylbenzene	**395**
1,3,5-Trimethylbenzene	**116**

MW-10	
Sample Date	03/20/2023
DRO	<800 B
GRO	<100
Benzene	<1.00
Toluene	<1.00
Ethylbenzene	<1.00
Total Xylenes	<3.00
EDB	<0.0200
Naphthalene	***<5.00***
Lead	<6.00
1,2,4-Trimethylbenzene	<1.00
1,3,5-Trimethylbenzene	<1.00

MW-1	
Sample Date	03/20/2023
DRO	<800 B
GRO	<100
Benzene	<1.00
Toluene	<1.00
Ethylbenzene	<1.00
Total Xylenes	<3.00
EDB	<0.00500
Naphthalene	***<5.00***
Lead	**4.66 J**
1,2,4-Trimethylbenzene	<1.00
1,3,5-Trimethylbenzene	<1.00

MW-7	
Sample Date	03/20/2023
DRO	***<1,680 B***
GRO	**302**
Benzene	**44.5**
Toluene	<1.00
Ethylbenzene	**0.929 J**
Total Xylenes	**7.22**
EDB	<0.0210
Naphthalene	***<5.00***
Lead	**3.14 J**
1,2,4-Trimethylbenzene	**12.5**
1,3,5-Trimethylbenzene	**4.01**

MW-3	
Sample Date	03/20/2023
DRO	**4,460 [3,980]**
GRO	**180,000 [176,000]**
Benzene	**37,300 [43,000]**
Toluene	**38,000 [45,000]**
Ethylbenzene	**2,930 [3,250]**
Total Xylenes	**13,300 [15,300]**
EDB	**263 [270]**
Naphthalene	***<2,500 [<2,500]***
Lead	**43.2 [32.6]**
1,2,4-Trimethylbenzene	**1,160 [1,320]**
1,3,5-Trimethylbenzene	**258 J [301 J]**

MW-8	
Sample Date	03/20/2023
DRO	<888 B
GRO	**58.7 J**
Benzene	**3.00**
Toluene	<1.00
Ethylbenzene	**0.229 J**
Total Xylenes	**0.553 J**
EDB	<0.0214
Naphthalene	**2.81 J**
Lead	3.38 J
1,2,4-Trimethylbenzene	**0.910 J**
1,3,5-Trimethylbenzene	<1.00

CONCENTRATIONS IN µg/L

Analyte	ADEC Groundwater Cleanup Levels
GRO	**2,200**
DRO	**1,500**
Benzene	**4.6**
Toluene	**1,100**
Ethylbenzene	**15**
Total Xylenes	**190**
Naphthalene	**1.7**
EDB	**0.075**
Total Lead	**15**
1,2,4-Trimethylbenzene	**56**
1,3,5-Trimethylbenzene	**60**

0 40' 80'

APPROXIMATE SCALE 1 in. = 40 ft.

LEGEND:

- PROPERTY BOUNDARY
- MW-1 — GROUNDWATER MONITORING WELL
- TMW-1A — ABANDONED GROUNDWATER MONITORING WELL
- SB-1 — SOIL BORING
- SVP-2 — SOIL VAPOR PROBE
- SVP-3 — ABANDONED SOIL VAPOR PROBE
- FORMER DIESEL TANK
- FORMER DIESEL DISPENSER ISLAND
- FORMER WASTE OIL TANK
- FORMER GASOLINE TANK
- FORMER GASOLINE DISPENSER ISLAND
- APPROXIMATE EXCAVATION EXTENT BACKFILLED WITH ORIGINAL MATERIAL (SHANNON & WILSON, 1990)
- ° ° — VENT RISERS
- CURRENT HEATING OIL TANK
- SUSPECTED LOCATION OF HEATING OIL TANK
- RECTANGULAR METAL PICKED UP W / EM
- **BOLD** — VALUE EXCEEDS LABORATORY METHOD DETECTION LIMIT
- ***BOLD*** — CONSTITUENT CONSIDERED NON-DETECT, HOWEVER LABORATORY REPORTED DETECTION LIMIT (RDL) IS GREATER THAN THE ADEC GROUNDWATER CLEANUP LEVEL
- **BOLD** — VALUE EXCEEDS ADEC GROUNDWATER CLEANUP LEVEL
- GRO — TOTAL PETROLEUM HYDROCARBONS, GASOLINE RANGE
- DRO — TOTAL PETROLEUM HYDROCARBONS, DIESEL RANGE
- EDB — 1,2-DIBROMOETHANE
- <100 — NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
- J — THE ASSOCIATED NUMERCIAL VALUE IS AN ESTIMATED CONCENTRATON ONLY
- B — THE SAME ANALYTE IS FOUND IN THE ASSOCIATED BLANK
- [ ] — BLIND DUPLICATE SAMPLE RESULT
- (NS) — NOT SAMPLED
- ADEC — ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- µg/L — MICROGRAMS PER LITER

FIVE STAR AUTO CARE CENTER (FORMER)
(FORMER CHEVRON FACILITY 381811)
501 EAST, 30TH AVENUE
FAIRBANKS, ALASKA

GROUNDWATER ANALYTICAL MAP MARCH 20 AND 21, 2023

ARCADIS

FIGURE 4

C:\Users\shankarv4688\DC\ACCDocs\Arcadis\AUS-CHEVRON-381811-FAIRBANKS Alaska\Project Files\2023\01-In Progress\01-DWG\GWM-2023Q1-F04-GWA MAP.dwg LAYOUT: 4 SAVED: 6/16/2023 10:34 AM ACADVER: 24.1S (LMS TECH) PAGESETUP: --- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 6/16/2023 10:36 AM BY: SHANKARAPPA, VASANTH KUMAR
XREFS: GEN-X-BASEMAP
IMAGES: Arcadis Logo_2021.PNG

Tables

Table 1
Current Groundwater Gauging and Analytical Results
First Quarter 2023
Five Star Auto Care Center (Former)
(Former Chevron Facility 381811)
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Schedule	Gauge	Sample	Comment
MW-1	Quarterly	Y	Y	
MW-2	Quarterly	Y	Y	
MW-3	Quarterly	Y	Y	
MW-4	Quarterly	Y	Y	Could not locate due to large snow berms
MW-5A	Quarterly	Y	Y	Could not locate due to large snow berms
MW-7	Quarterly	Y	Y	
MW-8	Quarterly	Y	Y	
MW-9	Quarterly	Y	Y	
MW-10	Quarterly	Y	Y	
BD	Quarterly	N	Y	
TB	Quarterly	N	Y	VOCs Full Suite only
EQB	Quarterly	N	Y	
MS/MSD	Quarterly	N	Y	

Note:

Monitoring wells sampled for Volatile Organic Compounds (GC/MS) 8260D and 123-TCP/EDB Low level 524/8260D, EDB and DBCP 8011, Total Lead 6010 and Alaska AK102 Determination of DRO, Alaska AK101 Determination of GRO, and Alaska AK103 Determination of RRO

Table 2
Current Groundwater Gauging and Analytical Results
First Quarter 2023
Five Star Auto Care Center (Former)
(Former Chevron Facility 381811)
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	TOC (feet bTOC)	DTW (feet bTOC)	GW Elev. (feet)	DRO (µg/L)	GRO (µg/L)	RRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Naphthalene (µg/L)	Lead (µg/L)	Comments
ADEC Groundwater Cleanup Levels					1,500	2,200	1,100	4.6	1,100	15	190	140	0.075	1.7	1.7	15	
MW-1	03/20/23	442.88	9.03	433.85	<800 B	<100	<939 B J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.00500	<1.00	***<5.00***	**4.66 J**	
MW-2	03/20/23	441.90	8.26	433.64	***<1,960 B***	**30,800**	<888 B J	**6,570**	**7,200**	**1,130**	**4,090**	<100	***<0.214***	***<100***	***<500***	<6.00	
MW-3	03/21/23	442.68	9.19	433.49	**4,460 [3,980]**	**180,000 [176,000]**	<800 B J [<800 J]	**37,300 [43,000]**	**38,000 [45,000]**	**2,930 [3,250]**	**13,300 [15,300]**	***<500 [<500]***	**263 [270]**	***<500 [<500]***	***<2,500 [<2,500]***	**43.2 [32.6]**	Possible Sheen
MW-4	03/20/23	443.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to large snow berms
MW-5A	03/20/23	441.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to large snow berms
MW-7	03/20/23	442.36	8.52	433.84	***<1,680 B***	**302**	<800 B J	**44.5**	<1.00	**0.929 J**	**7.22**	<1.00	<0.0210	<1.00	***<5.00***	**3.14 J**	Well casing sunk
MW-8	03/20/23	445.71	11.85	433.86	<888 B	**58.7 J**	<888 B J	**3.00**	<1.00	**0.229 J**	**0.553 J**	<1.00	<0.0214	<1.00	**2.81 J**	**3.38 J**	
MW-9	03/21/23	442.65	9.01	433.64	***<1,710 B***	**17,400**	<888 B J	**3,720**	**3,230**	**754**	**2,850**	<50.0	<0.0206	***<50.0***	***<250***	**6.24**	
MW-10	03/20/23	442.97	9.17	433.80	<800 B	<100	<800 B J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.0200	<1.00	***<5.00***	<6.00	
TB	03/20/23	--	--	--	--	<100	--	<1.00	<1.00	<1.00	<3.00	<1.00	<0.00500	<1.00	***<5.00***	--	
TB	03/21/23	--	--	--	--	<100	--	<1.00	<1.00	<1.00	<3.00	<1.00	<0.00500	<1.00	***<5.00***	--	
EB	03/20/23	--	--	--	**489 J**	<100	<888 J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.00500	<1.00	***<5.00***	<6.00	
EB	03/21/23	--	--	--	**441 J**	<100	<800 J	<1.00	<1.00	<1.00	<3.00	<1.00	<0.00500	<1.00	***<5.00***	<6.00	

Notes
Acronyms and Abbreviations:
-- = Not Available or Not Analyzed
[ ] = Blind Duplicate Sample Result
<0.00100 = Not detected at or above the reported detection limit (RDL)
µg/L = Micrograms per liter
ADEC = Alaska Department of Environmental Conservation
Bold = Detected above laboratory method detection limit (MDL)
Bold and *Italicized* = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
Shaded = Value exceeds ADEC Groundwater Cleanup Level
DTW = Depth to groundwater
EB = Equipment Blank
feet = Relative to NAVD88
bTOC = Below top of casing
GW Elev = Groundwater elevation
ID = Identification
MW = Groundwater monitoring well
TB = Trip Blank
TOC = Top of casing
GRO = Total petroleum hydrocarbons, gasoline range organics
DRO = Total petroleum hydrocarbons, diesel range organics
RRO = Total petroleum hydrocarbons, residual range organics
MTBE = Methyl tert-butyl ether
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
J = The associated numerical value is an estimated concentration only
B = The same analyte is found in the associated blank

Analytical Methods:
1. GRO analyzed by Alaska Method AK101, DRO analyzed by Alaska Method AK102 and RRO analyzed by Alaska Method AK103
2. Lead analyzed by United States Environmental Protection Agency (USEPA) Method 6010D.
3. EDB is analyzed by United States Environmental Protection Agency (USEPA) Method 8260 and Method 8011 but method with the lowest RDL is considered
4. 1,2-Dibromo-3-chloropropane is analyzed by United States Environmental Protection Agency (USEPA) Method 8011
5. Tables 2 and 3 constituents of concern analyzed by USEPA Method 8260 except where noted above.

Reference:
18 AAC 75. Department of Environmental Conservation, State of Alaska, Oil and Other Hazardous Substances Pollution Control, Table C. Groundwater Cleanup Levels, as amended through February 5, 2023.

Attachment A

Field Notes

Daily Log

Project Number : 30064229

Prepared By: Evan Wujcik

Site ID: 381811

Site Name: Five Start Auto Care Center

City: Fairbanks

State: Alaska

Project Manager: Wood, Nicholas

Portfolio: COP 5.0

Subportfolio: West

Inside Chevron Operational Control? Yes ☐ No ☑

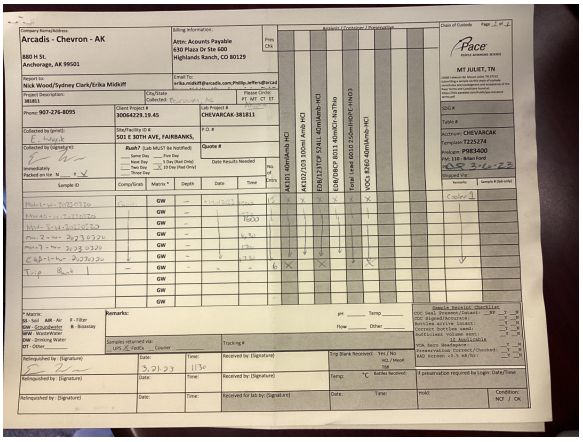
Staff on Site
Evan Wujcik , Gantt Jeffers

Weather(°F)	PPE	Equipment
Clear		Water Quality Meter (i.e. YSI), Water Level Meter (WLM), Bladder Pump, Photoionization Detector (PID)

Date	Time	Description of Activities
03/20/2023	10:00	Arrive onsite Begin to Locate wells
03/20/2023	12:00	Could not locate MW5A and MW4 due to large snow berms. After attempting to dig these wells out, they still could not be located.
03/20/2023	12:58	Return to site to sample. MW-7 well casing sunk. See photo.
03/20/2023	15:00	Sample MW1 DECON equipment See COC for analysis
03/20/2023	15:30	Sample MW10 DECON equipment See COC for analysis
03/20/2023	16:00	Sample MW8 DECON equipment See COC for analysis
03/20/2023	16:30	Sample MW2 DECON equipment See COC for analysis
03/20/2023	17:00	Sample MW7 DECON equipment See COC for analysis
03/20/2023	17:30	Collect EQB Load vehicle Mobilize offsite

Daily Log

COC Photos



Equipment and Calibration Information:

Supplier: Pine

Model: Horiba

Rental Number:

Calibrated: yes

Bump Checked:

Calibration Passed: yes

Water Quality Meter SN: 44191

Date	Time	Calibrated Fulid and Value	Lot #	Expiration Date	Initial Reading	Final Reading
03/20/2023	09:33:00					

Equipment and Calibration Information:

Supplier: Pine

Model: RAE

Rental Number:

Calibrated: yes

Bump Checked:

Calibration Passed: yes

PIDSN: Pgm7320

Date	Time	Calibrated Fulid and Value	Lot #	Expiration Date	Initial Reading	Final Reading
03/20/2023	09:33					

Daily Log

End of Day Questions	Yes	No	Comments	
Was waste generated?	☑	☐	Approximate volume of waste	8
			Container type	55 gallon drum with overpack
			Confirm container is not leaking	Yes ☑ No ☐

Waste Collected Photos

Have you performed work in accordance with the applicable QP/TGI?	☑	☐	
Change in plans (project delays)?	☐	☑	
Discovery of significant new site characteristics?	☐	☑	
Upcoming regulatory, community, or other stakeholder views change?	☐	☑	
Incident at the site?	☐	☑	
Is there a potential dispute?	☐	☐	
Identification of strategic opportunity?	☐	☑	
New application, renewal, or permit modifcation?	☐	☑	

Signature

Daily Log

Project Number : 30064229

Prepared By: Evan Wujcik

Site ID: 381811

Site Name: Five Start Auto Care Center

City: Fairbanks

State: Alaska

Project Manager: Wood, Nicholas

Portfolio: COP 5.0

Subportfolio: West

Inside Chevron Operational Control? Yes ☐ No ☑

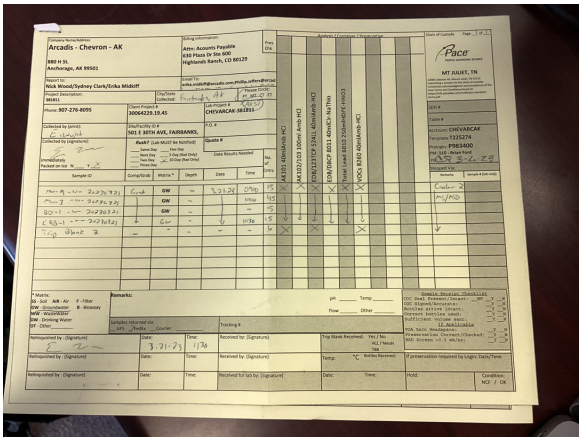
Staff on Site
Evan Wujcik , Gantt Jeffers

Weather(°F)	PPE	Equipment
Clear		Water Quality Meter (i.e. YSI), Water Level Meter (WLM), Bladder Pump, Photoionization Detector (PID)

Date	Time	Description of Activities
03/21/2023	08:00	Arrive onsite Locate wells
03/21/2023	08:01	Could not locate MW5A and MW4 due to large snow berms. After attempting to dig these wells out, they still could not be located.
03/21/2023	09:00	Sample MW9 DECON equipment See COC for analysis Sheen on purge water
03/21/2023	10:00	Sample MW3 BD and MS/MSD collected at this location DECON equipment See COC for analysis Sheen on purge water
03/21/2023	10:30	Collect EQB Load vehicle Mobilize offsite

Daily Log

COC Photos



Equipment and Calibration Information:

Supplier:	Pine	**Model:**	Horiba
Rental Number:		**Calibrated:**	yes
Bump Checked:		**Calibration Passed:**	yes

Water Quality Meter SN: 44191

Date	Time	Calibrated Fulid and Value	Lot #	Expiration Date	Initial Reading	Final Reading
03/21/2023	09:33:00					

Equipment and Calibration Information:

Supplier:	Pine	**Model:**	RAE
Rental Number:		**Calibrated:**	yes
Bump Checked:		**Calibration Passed:**	yes

PIDSN: Pgm7320

Date	Time	Calibrated Fulid and Value	Lot #	Expiration Date	Initial Reading	Final Reading
03/21/2023	09:33					

Daily Log

End of Day Questions	Yes	No	Comments	
Was waste generated?	☑	☐	Approximate volume of waste	6
			Container type	55 gallon drum with overpack
			Confirm container is not leaking	Yes ☑ No ☐

Waste Collected Photos

Have you performed work in accordance with the applicable QP/TGI?	☑	☐	
Change in plans (project delays)?	☐	☑	
Discovery of significant new site characteristics?	☐	☑	
Upcoming regulatory, community, or other stakeholder views change?	☐	☑	
Incident at the site?	☐	☑	
Is there a potential dispute?	☐	☐	
Identification of strategic opportunity?	☐	☑	
New application, renewal, or permit modifcation?	☐	☑	

Signature

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-1	**Date**	3/20/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	9.03	**Total Depth (ft-bmp)**	14	**Water Column (ft)**	4.97	**Gallons in Well**	0.81
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	15:00	**Well Volumes Purged**	0.78	**Sample ID**	MW-1-W-20230320	**Evacuation Equipment**	Bladder
Purge Start	14:40	**Gallons Purged**	0.63	**Duplicate ID**	--		
Purge End	14:58	**Total Purge Time (h:m)**	0:18				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
14:43	200	9.13	6.02	1.20	381	5.41	2.98	-43	--	--
14:46	200	9.16	5.91	1.20	259	3.08	2.89	-48	--	--
14:49	200	9.18	5.92	1.20	212	2.24	2.88	-52	--	--
14:52	200	9.19	5.93	1.19	172	1.76	2.89	-54	--	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-1-W-20230320 Sample Time: 15:00 Sample Depth (ft-bmp): 11

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-2	**Date**	3/20/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4 to 14	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	8.26	**Total Depth (ft-bmp)**	13.6	**Water Column (ft)**	5.34	**Gallons in Well**	0.87
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	16:30	**Well Volumes Purged**	0.73	**Sample ID**	MW-2-W-20230320	**Evacuation Equipment**	Bladder
Purge Start	16:10	**Gallons Purged**	0.63	**Duplicate ID**	--		
Purge End	16:25	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
16:13	200	8.27	6.17	0.884	22.9	1.86	3.09	-44	--	--
16:16	200	8.31	6.20	0.917	11.1	1.18	2.67	-50	--	--
16:19	200	8.31	6.23	0.937	10.9	1.03	2.47	-54	--	--
16:22	200	8.31	6.24	0.951	10.7	1.05	2.40	-56	--	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-2-W-20230320 Sample Time: 16:30 Sample Depth (ft-bmp): 9.5

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-3	**Date**	3/21/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	3.5 to 13.5	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	9.19	**Total Depth (ft-bmp)**	13.72	**Water Column (ft)**	4.53	**Gallons in Well**	0.74
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	10:00	**Well Volumes Purged**	0.86	**Sample ID**	MW-3-W-20230321	**Evacuation Equipment**	Bladder
Purge Start	09:20	**Gallons Purged**	0.63	**Duplicate ID**	BD, MS/MSD		
Purge End	09:40	**Total Purge Time (h:m)**	0:20				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
09:23	200	9.25	6.83	0.794	36.0	0.94	2.78	-41	--	--
09:26	200	9.27	6.84	0.754	29.8	0.85	2.80	-43	--	--
09:29	200	9.26	6.85	0.725	25.8	0.79	2.77	-43	--	--
09:32	200	9.27	6.81	0.717	24.4	0.78	2.76	-43	--	--

Comments: sheen

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-3-W-20230321 Sample Time: 10:00 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-7	**Date**	3/20/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	8.52	**Total Depth (ft-bmp)**	15	**Water Column (ft)**	6.48	**Gallons in Well**	1.05
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**		Grab	
Sample Time	17:00	**Well Volumes Purged**	0.60	**Sample ID**	MW-7-W-20230320	**Evacuation Equipment**	Bladder
Purge Start	16:40	**Gallons Purged**	0.63	**Duplicate ID**	--		
Purge End	16:55	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
16:43	200	8.94	6.31	1.16	126	1.90	2.74	-45	--	--
16:46	200	9.00	6.34	1.20	168	1.21	2.73	-49	--	--
16:49	200	9.04	6.34	1.22	135	1.02	2.70	-52	--	--
16:52	200	9.03	6.34	1.23	123	0.98	2.80	-53	--	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-7-W-20230320 Sample Time: 17:00 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-8	**Date**	3/20/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	11.85	**Total Depth (ft-bmp)**	15	**Water Column (ft)**	3.15	**Gallons in Well**	0.51
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	16:00	**Well Volumes Purged**	1.55	**Sample ID**	MW-8-W-20230320	**Evacuation Equipment**	Bladder
Purge Start	15:40	**Gallons Purged**	0.79	**Duplicate ID**	--		
Purge End	15:55	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:43	200	11.95	6.01	0.856	1000	3.03	3.27	-32	--	--
15:46	200	11.99	6.02	0.872	1000	1.53	3.13	-36	--	--
15:49	200	11.99	6.03	0.813	398	0.90	3.04	-40	--	--
15:52	200	11.99	6.04	0.810	220	0.71	3.00	-43	--	--
15:55	200	12.00	6.04	0.809	191	0.68	2.95	-44	--	--

Comments: None.

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-8-W-20230320 Sample Time: 16:00 Sample Depth (ft-bmp): 13

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-9	**Date**	3/21/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	4.5 to 14.5	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	9.01	**Total Depth (ft-bmp)**	14.1	**Water Column (ft)**	5.09	**Gallons in Well**	0.83
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	09:00	**Well Volumes Purged**	0.76	**Sample ID**	MW-9-W-20230321	**Evacuation Equipment**	Bladder
Purge Start	08:20	**Gallons Purged**	0.63	**Duplicate ID**	--		
Purge End	08:40	**Total Purge Time (h:m)**	0:20				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
08:23	200	9.12	6.93	0.804	0.0	2.11	2.71	-63	--	--
08:26	200	9.08	6.94	0.799	0.0	1.54	6.94	-70	--	--
08:29	200	9.12	6.97	0.805	621	1.11	2.37	-75	--	--
08:32	200	9.12	6.96	0.821	318	1.00	2.27	-79	--	--

Comments: Sheen

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-9-W-20230321 Sample Time: 09:00 Sample Depth (ft-bmp): 10

Analytes and Methods: See Chain-of-Custody.

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

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

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

Chevron Groundwater Sampling Form

ARCADIS

Project Number	30064229	**Well ID**	MW-10	**Date**	3/20/2023		
Site Location	Fairbanks, Alaska	**Site ID**	381811	**Weather (°F)**	Clear	**Sampled by**	Betty Walter
Measuring Point Description	Top of Casing	**Screen Depth Interval (ft-bmp)**	5 to 15	**Casing Diameter (in.)**	2	**Well Casing Material**	--
Static Water Level (ft-bmp)	9.17	**Total Depth (ft-bmp)**	15.3	**Water Column (ft)**	6.13	**Gallons in Well**	1
Water Quality Meter Make/Model	Horiba U-52	**Purge Method**	Low-Flow	**Sample Method**			Grab
Sample Time	15:30	**Well Volumes Purged**	0.63	**Sample ID**	MW-10-W-20230320	**Evacuation Equipment**	Bladder
Purge Start	15:10	**Gallons Purged**	0.63	**Duplicate ID**	--		
Purge End	15:25	**Total Purge Time (h:m)**	0:15				

Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
									Color	Odor
15:13	200	9.53	5.93	5.96	118	1.67	2.41	-34	--	--
15:16	200	9.50	5.92	1.04	117	1.06	2.25	-36	--	--
15:19	200	9.52	5.90	1.03	129	1.02	2.27	-38	--	--
15:22	200	9.56	5.89	1.03	113	0.93	2.32	-40	--	--

Comments: None.

Well Casing Volume Conversion

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

Sample Information

Sample ID: MW-10-W-20230320 Sample Time: 15:30 Sample Depth (ft-bmp): 11

Analytes and Methods: See Chain-of-Custody.

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

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

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

Groundwater Gauging Log

Project Number	30064229
Client:	Chevron
Site ID:	381811
Site Location:	Fairbanks, Alaska
Measuring Point:	Top of Casing
Date(s):	03/20/2023
Sampler(s):	Evan Wujcik
Gauging Equipment:	Water Level Meter

Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	LNAPL Removed (gal)	Comments
MW-1	03/20/2023	12:50	9.03	ND	14.00	0	--	--
MW-2	03/20/2023	13:10	8.26	ND	13.60	0.4	--	--
MW-3	03/20/2023	13:15	9.19	ND	13.72	226.6	--	Possible sheen
MW-7	03/20/2023	13:00	8.52	ND	15.00	10.5	--	--
MW-8	03/20/2023	13:04	11.85	ND	15.00	0	--	None.
MW-9	03/20/2023	13:23	9.01	ND	14.10	188.7	--	None.
MW-10	03/20/2023	12:51	9.17	ND	15.30	0	--	None.

ft-bmp = feet below measuring point ND = Not Detected PID = Photoionization Detector Reading

ppm = parts per million -- = Not Recorded

Attachment B

Laboratory Analytical Results

ANALYTICAL REPORT

March 31, 2023

Arcadis - Chevron - AK

Sample Delivery Group:	L1597378
Samples Received:	03/22/2023
Project Number:	30064229.19.45
Description:	381811
Site:	501 E 30TH AVE, FAIRBANKS, AK
Report To:	Nick Wood/Sydney Clark/Erika Midkiff 880 H St. Anchorage, AK 99501

Entire Report Reviewed By:

Brian Ford

Project Manager

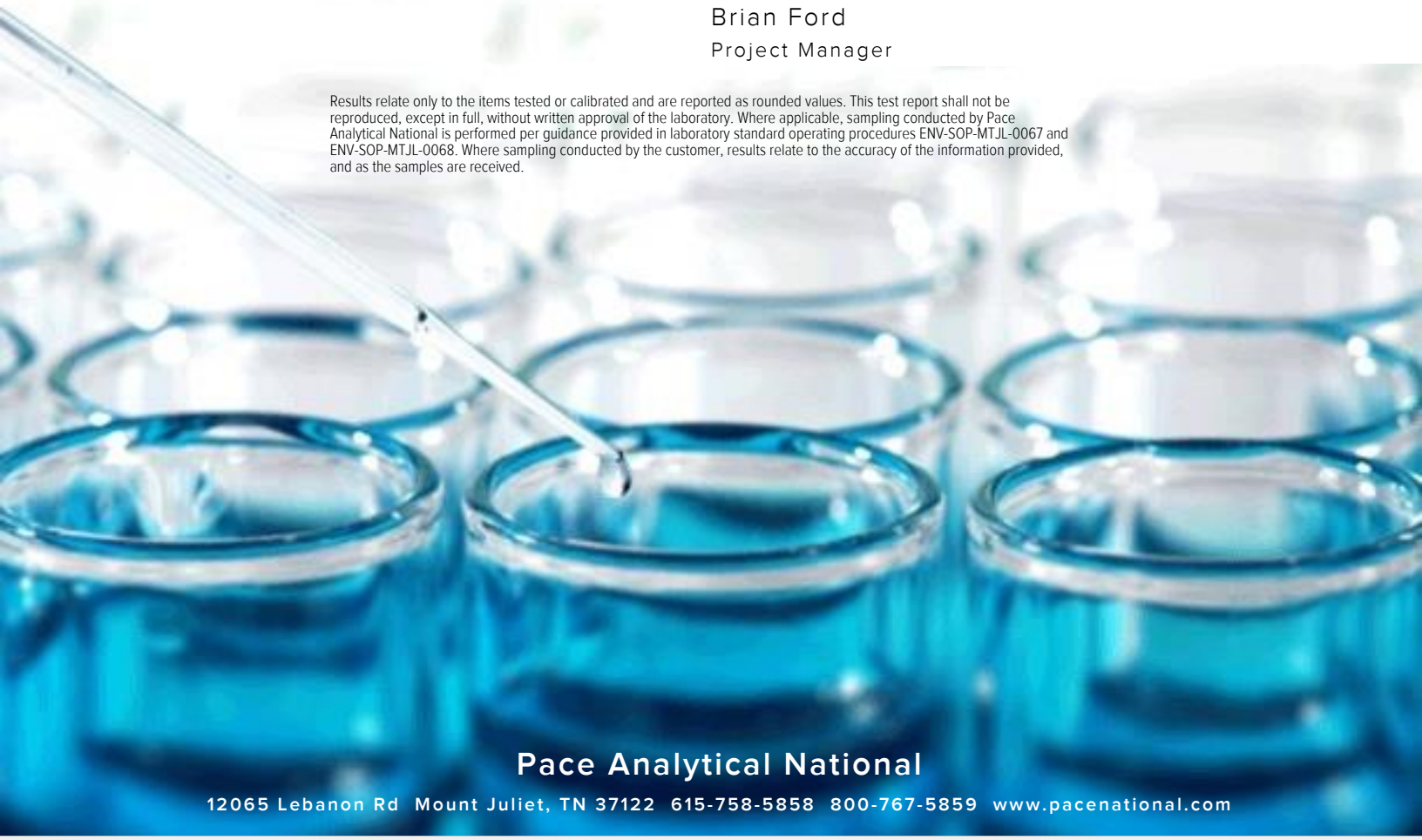


TABLE OF CONTENTS

MW-1-W-20230320 L1597378-01 GW

Collected by: E. Wujcik | Collected date/time: 03/20/23 15:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 22:58	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/25/23 02:09	03/25/23 02:09	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1	03/23/23 15:29	03/23/23 15:29	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 18:14	03/26/23 18:14	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.08	03/27/23 12:53	03/27/23 20:53	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 07:08	MWS	Mt. Juliet, TN

MW-10-W-20230320 L1597378-02 GW

Collected by: E. Wujcik | Collected date/time: 03/20/23 15:30 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:01	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/25/23 02:36	03/25/23 02:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	10	03/23/23 16:40	03/23/23 16:40	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 18:36	03/26/23 18:36	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1	03/27/23 12:53	03/27/23 21:05	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 07:29	MWS	Mt. Juliet, TN

MW-8-W-20230320 L1597378-03 GW

Collected by: E. Wujcik | Collected date/time: 03/20/23 16:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:03	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/25/23 03:02	03/25/23 03:02	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	50	03/23/23 17:04	03/23/23 17:04	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 18:58	03/26/23 18:58	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.07	03/27/23 12:53	03/27/23 21:17	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1.11	03/29/23 03:01	03/30/23 07:50	MWS	Mt. Juliet, TN

MW-2-W-20230320 L1597378-04 GW

Collected by: E. Wujcik | Collected date/time: 03/20/23 16:30 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:06	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2033069	25	03/31/23 00:53	03/31/23 00:53	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1000	03/23/23 17:28	03/23/23 17:28	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2032828	100	03/30/23 15:11	03/30/23 15:11	ACG	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.07	03/27/23 12:53	03/27/23 21:28	AMM	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	10.7	03/27/23 12:53	03/28/23 18:19	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1.11	03/29/23 03:01	03/30/23 08:11	MWS	Mt. Juliet, TN

MW-7-W-20230320 L1597378-05 GW

Collected by: E. Wujcik | Collected date/time: 03/20/23 17:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:14	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/25/23 03:29	03/25/23 03:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	10	03/23/23 17:51	03/23/23 17:51	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 19:19	03/26/23 19:19	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.05	03/27/23 12:53	03/27/23 21:40	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 08:33	MWS	Mt. Juliet, TN

EQB-1-W-20230320 L1597378-06 GW

Collected by: E. Wujcik
Collected date/time: 03/20/23 17:30
Received date/time: 03/22/23 09:15

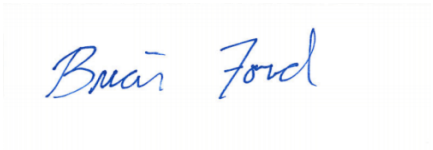
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:17	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/24/23 23:44	03/24/23 23:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1	03/23/23 15:53	03/23/23 15:53	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 15:42	03/26/23 15:42	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.04	03/27/23 12:53	03/27/23 21:52	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1.11	03/29/23 03:01	03/30/23 08:55	MWS	Mt. Juliet, TN

TRIP BLANK 1_20230320 L1597378-07 GW

Collected by: E. Wujcik
Collected date/time: 03/20/23 00:00
Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/24/23 22:51	03/24/23 22:51	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1	03/23/23 14:42	03/23/23 14:42	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 16:04	03/26/23 16:04	JCP	Mt. Juliet, TN

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



Brian Ford
Project Manager

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

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2030334	L1597378-01	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597378-02	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597378-03	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597378-05	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597378-06	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597378-07	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2032828	L1597378-04	1,2-Dibromo-3-Chloropropane and Bromoform

The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.

Batch	Lab Sample ID	Analytes
WG2030334	L1597378-01	Trichlorofluoromethane
WG2030334	L1597378-02	Trichlorofluoromethane

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2030334	(LCS) R3907249-1, L1597378-01, 02, 03, 05, 06, 07	1,2-Dichloropropane

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2030334	(LCS) R3907249-1, (LCSD) R3907249-2, L1597378-01, 02, 03, 05, 06, 07	Acetone and n-Butylbenzene

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2028781	(MSD) R3904849-4	1,2-Dibromoethane
WG2030334	(MS) R3907249-4, (MSD) R3907249-5	Benzene and Toluene

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

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2030334	(MS) R3907249-4, (MSD) R3907249-5	Acetone

EDB / DBCP by Method 8011

RPD between the primary and confirmatory analysis exceeded 40%

Batch	Lab Sample ID	Analytes
WG2030496	(MS) R3906632-2	1,2-Dibromo-3-Chloropropane

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2030496	(MS) R3906632-2	Ethylene Dibromide

Semi-Volatile Organic Compounds (GC) by Method AK102/103

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2031115	AK102 DRO C10-C25	L1597378-01, 02, 03, 04, 05, 06
WG2031115	AK103 RRO C25-C36	L1597378-01, 02, 03, 04, 05

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2031115	(LCSD) R3907348-5, L1597378-01, 02, 03, 04, 05, 06	AK103 RRO C25-C36

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	4.66	J	2.99	6.00	1	03/27/2023 22:58	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		28.7	100	1	03/25/2023 02:09	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*88.1*			*50.0-150*		*03/25/2023 02:09*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 18:14	WG2030334
1,2,3-Trichloropropane	U		0.00200	0.00500	1	03/23/2023 15:29	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 18:14	WG2030334
1,2-Dibromoethane	U		0.00410	0.00500	1	03/23/2023 15:29	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 18:14	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 18:14	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 18:14	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 18:14	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 18:14	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 18:14	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 18:14	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 18:14	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 18:14	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 18:14	WG2030334
Carbon disulfide	U	C3	0.0962	1.00	1	03/26/2023 18:14	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 18:14	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 18:14	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 18:14	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 18:14	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 18:14	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 18:14	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 18:14	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 18:14	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 18:14	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 18:14	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 18:14	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 18:14	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 18:14	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 18:14	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 18:14	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 18:14	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 18:14	WG2030334
cis-1,2-Dichloroethene	0.233	J	0.126	1.00	1	03/26/2023 18:14	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 18:14	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 18:14	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 18:14	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 18:14	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 18:14	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 18:14	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 18:14	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 18:14	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 18:14	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 18:14	WG2030334

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 18:14	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 18:14	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 18:14	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 18:14	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 18:14	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 18:14	WG2030334
Naphthalene	U		1.00	5.00	1	03/26/2023 18:14	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 18:14	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 18:14	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 18:14	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 18:14	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 18:14	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 18:14	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 18:14	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 18:14	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 18:14	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 18:14	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 18:14	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 18:14	WG2030334
Trichlorofluoromethane	98.3	C5	0.160	5.00	1	03/26/2023 18:14	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 18:14	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:14	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:14	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 18:14	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 18:14	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 18:14	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 18:14	WG2030334
(S) Toluene-d8	*97.0*			*80.0-120*		*03/26/2023 18:14*	WG2030334
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*03/26/2023 18:14*	WG2030334
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*03/26/2023 18:14*	WG2030334

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00579	0.0216	1.08	03/27/2023 20:53	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00808	0.0216	1.08	03/27/2023 20:53	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	618	B J	170	800	1	03/30/2023 07:08	WG2031115
AK103 RRO C25-C36	939	B J3	460	800	1	03/30/2023 07:08	WG2031115
(S) o-Terphenyl	*104*			*50.0-150*		*03/30/2023 07:08*	WG2031115
(S) n-Triacontane d62	*82.0*			*50.0-150*		*03/30/2023 07:08*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	U		2.99	6.00	1	03/27/2023 23:01	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	U		28.7	100	1	03/25/2023 02:36	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*88.3*			*50.0-150*		*03/25/2023 02:36*	WG2029645

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	11.3	50.0	1	03/26/2023 18:36	WG2030334
1,2,3-Trichloropropane	U		0.0200	0.0500	10	03/23/2023 16:40	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 18:36	WG2030334
1,2-Dibromoethane	U		0.0410	0.0500	10	03/23/2023 16:40	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 18:36	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 18:36	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 18:36	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 18:36	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 18:36	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 18:36	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 18:36	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 18:36	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 18:36	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 18:36	WG2030334
Carbon disulfide	3.02	C3	0.0962	1.00	1	03/26/2023 18:36	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 18:36	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 18:36	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 18:36	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 18:36	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 18:36	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 18:36	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 18:36	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 18:36	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 18:36	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 18:36	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 18:36	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 18:36	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 18:36	WG2030334
Dichlorodifluoromethane	0.440	J	0.374	5.00	1	03/26/2023 18:36	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 18:36	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 18:36	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 18:36	WG2030334
cis-1,2-Dichloroethene	U		0.126	1.00	1	03/26/2023 18:36	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 18:36	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 18:36	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 18:36	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 18:36	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 18:36	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 18:36	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 18:36	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 18:36	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 18:36	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 18:36	WG2030334

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 18:36	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 18:36	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 18:36	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 18:36	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 18:36	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 18:36	WG2030334
Naphthalene	U		1.00	5.00	1	03/26/2023 18:36	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 18:36	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 18:36	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 18:36	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 18:36	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 18:36	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 18:36	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 18:36	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 18:36	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 18:36	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 18:36	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 18:36	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 18:36	WG2030334
Trichlorofluoromethane	46.1	C5	0.160	5.00	1	03/26/2023 18:36	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 18:36	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:36	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:36	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 18:36	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 18:36	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 18:36	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 18:36	WG2030334
(S) Toluene-d8	*102*			*80.0-120*		*03/26/2023 18:36*	WG2030334
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*03/26/2023 18:36*	WG2030334
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*03/26/2023 18:36*	WG2030334

Sample Narrative:

L1597378-02 WG2028781: Non-target compounds too high to run at a lower dilution.

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00536	0.0200	1	03/27/2023 21:05	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00748	0.0200	1	03/27/2023 21:05	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	642	B J	170	800	1	03/30/2023 07:29	WG2031115
AK103 RRO C25-C36	652	B J J3	460	800	1	03/30/2023 07:29	WG2031115
(S) o-Terphenyl	*108*			*50.0-150*		*03/30/2023 07:29*	WG2031115
(S) n-Triacontane d62	*88.0*			*50.0-150*		*03/30/2023 07:29*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	3.38	J	2.99	6.00	1	03/27/2023 23:03	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	58.7	J	28.7	100	1	03/25/2023 03:02	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*83.3*			*50.0-150*		*03/25/2023 03:02*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 18:58	WG2030334
1,2,3-Trichloropropane	U		0.100	0.250	50	03/23/2023 17:04	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 18:58	WG2030334
1,2-Dibromoethane	U		0.205	0.250	50	03/23/2023 17:04	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 18:58	WG2030334
Benzene	3.00		0.0941	1.00	1	03/26/2023 18:58	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 18:58	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 18:58	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 18:58	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 18:58	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 18:58	WG2030334
n-Butylbenzene	0.735	J J4	0.157	1.00	1	03/26/2023 18:58	WG2030334
sec-Butylbenzene	1.88		0.125	1.00	1	03/26/2023 18:58	WG2030334
tert-Butylbenzene	0.281	J	0.127	1.00	1	03/26/2023 18:58	WG2030334
Carbon disulfide	0.591	C3 J	0.0962	1.00	1	03/26/2023 18:58	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 18:58	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 18:58	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 18:58	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 18:58	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 18:58	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 18:58	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 18:58	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 18:58	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 18:58	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 18:58	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 18:58	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 18:58	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 18:58	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 18:58	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 18:58	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 18:58	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 18:58	WG2030334
cis-1,2-Dichloroethene	0.588	J	0.126	1.00	1	03/26/2023 18:58	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 18:58	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 18:58	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 18:58	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 18:58	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 18:58	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 18:58	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 18:58	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 18:58	WG2030334
Ethylbenzene	0.229	J	0.137	1.00	1	03/26/2023 18:58	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 18:58	WG2030334

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	4.43		0.105	1.00	1	03/26/2023 18:58	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 18:58	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 18:58	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 18:58	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 18:58	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 18:58	WG2030334
Naphthalene	2.81	J	1.00	5.00	1	03/26/2023 18:58	WG2030334
n-Propylbenzene	4.81		0.0993	1.00	1	03/26/2023 18:58	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 18:58	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 18:58	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 18:58	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 18:58	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 18:58	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 18:58	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 18:58	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 18:58	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 18:58	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 18:58	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 18:58	WG2030334
Trichlorofluoromethane	0.292	J	0.160	5.00	1	03/26/2023 18:58	WG2030334
1,2,4-Trimethylbenzene	0.910	J	0.322	1.00	1	03/26/2023 18:58	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:58	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 18:58	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 18:58	WG2030334
Xylenes, Total	0.553	J	0.174	3.00	1	03/26/2023 18:58	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 18:58	WG2030334
m&p-Xylene	0.553	J	0.430	2.00	1	03/26/2023 18:58	WG2030334
(S) Toluene-d8	*95.3*			*80.0-120*		*03/26/2023 18:58*	WG2030334
(S) 4-Bromofluorobenzene	*97.8*			*77.0-126*		*03/26/2023 18:58*	WG2030334
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*03/26/2023 18:58*	WG2030334

Sample Narrative:

L1597378-03 WG2028781: Non-target compounds too high to run at a lower dilution.

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00574	0.0214	1.07	03/27/2023 21:17	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00800	0.0214	1.07	03/27/2023 21:17	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	880	B J	189	888	1.11	03/30/2023 07:50	WG2031115
AK103 RRO C25-C36	751	B J J3	511	888	1.11	03/30/2023 07:50	WG2031115
(S) o-Terphenyl	*108*			*50.0-150*		*03/30/2023 07:50*	WG2031115
(S) n-Triacontane d62	*85.6*			*50.0-150*		*03/30/2023 07:50*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	U		2.99	6.00	1	03/27/2023 23:06	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	30800		718	2500	25	03/31/2023 00:53	WG2033069
(S) a,a,a-Trifluorotoluene(FID)	*85.3*			*50.0-150*		*03/31/2023 00:53*	WG2033069

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1130	5000	100	03/30/2023 15:11	WG2032828
1,2,3-Trichloropropane	U		2.00	5.00	1000	03/23/2023 17:28	WG2028781
Acrolein	U		254	5000	100	03/30/2023 15:11	WG2032828
1,2-Dibromoethane	U		4.10	5.00	1000	03/23/2023 17:28	WG2028781
Acrylonitrile	U		67.1	1000	100	03/30/2023 15:11	WG2032828
Benzene	6570		9.41	100	100	03/30/2023 15:11	WG2032828
Bromobenzene	U		11.8	100	100	03/30/2023 15:11	WG2032828
Bromochloromethane	U		12.8	100	100	03/30/2023 15:11	WG2032828
Bromodichloromethane	U		13.6	100	100	03/30/2023 15:11	WG2032828
Bromoform	U	C3	12.9	100	100	03/30/2023 15:11	WG2032828
Bromomethane	U		60.5	500	100	03/30/2023 15:11	WG2032828
n-Butylbenzene	U		15.7	100	100	03/30/2023 15:11	WG2032828
sec-Butylbenzene	U		12.5	100	100	03/30/2023 15:11	WG2032828
tert-Butylbenzene	U		12.7	100	100	03/30/2023 15:11	WG2032828
Carbon disulfide	U		9.62	100	100	03/30/2023 15:11	WG2032828
Carbon tetrachloride	U		12.8	100	100	03/30/2023 15:11	WG2032828
Chlorobenzene	U		11.6	100	100	03/30/2023 15:11	WG2032828
Chlorodibromomethane	U		14.0	100	100	03/30/2023 15:11	WG2032828
Chloroethane	U		19.2	500	100	03/30/2023 15:11	WG2032828
Chloroform	U		11.1	500	100	03/30/2023 15:11	WG2032828
Chloromethane	U		96.0	250	100	03/30/2023 15:11	WG2032828
2-Chlorotoluene	U		10.6	100	100	03/30/2023 15:11	WG2032828
4-Chlorotoluene	U		11.4	100	100	03/30/2023 15:11	WG2032828
1,2-Dibromo-3-Chloropropane	U	C3	27.6	500	100	03/30/2023 15:11	WG2032828
Dibromomethane	U		12.2	100	100	03/30/2023 15:11	WG2032828
1,2-Dichlorobenzene	U		10.7	100	100	03/30/2023 15:11	WG2032828
1,3-Dichlorobenzene	U		11.0	100	100	03/30/2023 15:11	WG2032828
1,4-Dichlorobenzene	U		12.0	100	100	03/30/2023 15:11	WG2032828
Dichlorodifluoromethane	U		37.4	500	100	03/30/2023 15:11	WG2032828
1,1-Dichloroethane	U		10.0	100	100	03/30/2023 15:11	WG2032828
1,2-Dichloroethane	U		8.19	100	100	03/30/2023 15:11	WG2032828
1,1-Dichloroethene	U		18.8	100	100	03/30/2023 15:11	WG2032828
cis-1,2-Dichloroethene	U		12.6	100	100	03/30/2023 15:11	WG2032828
trans-1,2-Dichloroethene	U		14.9	100	100	03/30/2023 15:11	WG2032828
1,2-Dichloropropane	U		14.9	100	100	03/30/2023 15:11	WG2032828
1,1-Dichloropropene	U		14.2	100	100	03/30/2023 15:11	WG2032828
1,3-Dichloropropane	U		11.0	100	100	03/30/2023 15:11	WG2032828
cis-1,3-Dichloropropene	U		11.1	100	100	03/30/2023 15:11	WG2032828
trans-1,3-Dichloropropene	U		11.8	100	100	03/30/2023 15:11	WG2032828
2,2-Dichloropropane	U		16.1	100	100	03/30/2023 15:11	WG2032828
Di-isopropyl ether	U		10.5	100	100	03/30/2023 15:11	WG2032828
Ethylbenzene	1130		13.7	100	100	03/30/2023 15:11	WG2032828
Hexachloro-1,3-butadiene	U		33.7	100	100	03/30/2023 15:11	WG2032828

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	60.3	J	10.5	100	100	03/30/2023 15:11	WG2032828
p-Isopropyltoluene	U		12.0	100	100	03/30/2023 15:11	WG2032828
2-Butanone (MEK)	U		119	1000	100	03/30/2023 15:11	WG2032828
Methylene Chloride	U		43.0	500	100	03/30/2023 15:11	WG2032828
4-Methyl-2-pentanone (MIBK)	U		47.8	1000	100	03/30/2023 15:11	WG2032828
Methyl tert-butyl ether	U		10.1	100	100	03/30/2023 15:11	WG2032828
Naphthalene	U		100	500	100	03/30/2023 15:11	WG2032828
n-Propylbenzene	123		9.93	100	100	03/30/2023 15:11	WG2032828
Styrene	U		11.8	100	100	03/30/2023 15:11	WG2032828
1,1,1,2-Tetrachloroethane	U		14.7	100	100	03/30/2023 15:11	WG2032828
1,1,2,2-Tetrachloroethane	U		13.3	100	100	03/30/2023 15:11	WG2032828
1,1,2-Trichlorotrifluoroethane	U		18.0	100	100	03/30/2023 15:11	WG2032828
Tetrachloroethene	U		30.0	100	100	03/30/2023 15:11	WG2032828
Toluene	7200		27.8	100	100	03/30/2023 15:11	WG2032828
1,2,3-Trichlorobenzene	U		23.0	100	100	03/30/2023 15:11	WG2032828
1,2,4-Trichlorobenzene	U		48.1	100	100	03/30/2023 15:11	WG2032828
1,1,1-Trichloroethane	U		14.9	100	100	03/30/2023 15:11	WG2032828
1,1,2-Trichloroethane	U		15.8	100	100	03/30/2023 15:11	WG2032828
Trichloroethene	U		19.0	100	100	03/30/2023 15:11	WG2032828
Trichlorofluoromethane	U		16.0	500	100	03/30/2023 15:11	WG2032828
1,2,4-Trimethylbenzene	434		32.2	100	100	03/30/2023 15:11	WG2032828
1,2,3-Trimethylbenzene	108		10.4	100	100	03/30/2023 15:11	WG2032828
1,3,5-Trimethylbenzene	107		10.4	100	100	03/30/2023 15:11	WG2032828
Vinyl chloride	U		23.4	100	100	03/30/2023 15:11	WG2032828
Xylenes, Total	4090		17.4	300	100	03/30/2023 15:11	WG2032828
o-Xylene	1190		17.4	100	100	03/30/2023 15:11	WG2032828
m&p-Xylene	2900		43.0	200	100	03/30/2023 15:11	WG2032828
(S) Toluene-d8	*103*			*80.0-120*		*03/30/2023 15:11*	WG2032828
(S) 4-Bromofluorobenzene	*95.3*			*77.0-126*		*03/30/2023 15:11*	WG2032828
(S) 1,2-Dichloroethane-d4	*96.5*			*70.0-130*		*03/30/2023 15:11*	WG2032828

Sample Narrative:

L1597378-04 WG2028781: Non-target compounds too high to run at a lower dilution.

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	3.32		0.0574	0.214	10.7	03/28/2023 18:19	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00800	0.0214	1.07	03/27/2023 21:28	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1960	B	189	888	1.11	03/30/2023 08:11	WG2031115
AK103 RRO C25-C36	530	B J J3	511	888	1.11	03/30/2023 08:11	WG2031115
(S) o-Terphenyl	*112*			*50.0-150*		*03/30/2023 08:11*	WG2031115
(S) n-Triacontane d62	*90.5*			*50.0-150*		*03/30/2023 08:11*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	3.14	J	2.99	6.00	1	03/27/2023 23:14	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	302		28.7	100	1	03/25/2023 03:29	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*84.9*			*50.0-150*		*03/25/2023 03:29*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 19:19	WG2030334
1,2,3-Trichloropropane	U		0.0200	0.0500	10	03/23/2023 17:51	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 19:19	WG2030334
1,2-Dibromoethane	U		0.0410	0.0500	10	03/23/2023 17:51	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 19:19	WG2030334
Benzene	44.5		0.0941	1.00	1	03/26/2023 19:19	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 19:19	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 19:19	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 19:19	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 19:19	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 19:19	WG2030334
n-Butylbenzene	2.12	J4	0.157	1.00	1	03/26/2023 19:19	WG2030334
sec-Butylbenzene	9.49		0.125	1.00	1	03/26/2023 19:19	WG2030334
tert-Butylbenzene	1.66		0.127	1.00	1	03/26/2023 19:19	WG2030334
Carbon disulfide	0.152	C3 J	0.0962	1.00	1	03/26/2023 19:19	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 19:19	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 19:19	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 19:19	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 19:19	WG2030334
Chloroform	0.752	J	0.111	5.00	1	03/26/2023 19:19	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 19:19	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 19:19	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 19:19	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 19:19	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 19:19	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 19:19	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 19:19	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 19:19	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 19:19	WG2030334
1,1-Dichloroethane	0.152	C3 J	0.100	1.00	1	03/26/2023 19:19	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 19:19	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 19:19	WG2030334
cis-1,2-Dichloroethene	6.71		0.126	1.00	1	03/26/2023 19:19	WG2030334
trans-1,2-Dichloroethene	1.70		0.149	1.00	1	03/26/2023 19:19	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 19:19	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 19:19	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 19:19	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 19:19	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 19:19	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 19:19	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 19:19	WG2030334
Ethylbenzene	0.929	J	0.137	1.00	1	03/26/2023 19:19	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 19:19	WG2030334

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	28.6		0.105	1.00	1	03/26/2023 19:19	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 19:19	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 19:19	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 19:19	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 19:19	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 19:19	WG2030334
Naphthalene	U		1.00	5.00	1	03/26/2023 19:19	WG2030334
n-Propylbenzene	18.0		0.0993	1.00	1	03/26/2023 19:19	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 19:19	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 19:19	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 19:19	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 19:19	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 19:19	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 19:19	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 19:19	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 19:19	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 19:19	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 19:19	WG2030334
Trichloroethene	0.465	J	0.190	1.00	1	03/26/2023 19:19	WG2030334
Trichlorofluoromethane	U		0.160	5.00	1	03/26/2023 19:19	WG2030334
1,2,4-Trimethylbenzene	12.5		0.322	1.00	1	03/26/2023 19:19	WG2030334
1,2,3-Trimethylbenzene	2.40		0.104	1.00	1	03/26/2023 19:19	WG2030334
1,3,5-Trimethylbenzene	4.01		0.104	1.00	1	03/26/2023 19:19	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 19:19	WG2030334
Xylenes, Total	7.22		0.174	3.00	1	03/26/2023 19:19	WG2030334
o-Xylene	0.300	J	0.174	1.00	1	03/26/2023 19:19	WG2030334
m&p-Xylene	6.92		0.430	2.00	1	03/26/2023 19:19	WG2030334
(S) Toluene-d8	*94.3*			*80.0-120*		*03/26/2023 19:19*	WG2030334
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*03/26/2023 19:19*	WG2030334
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*03/26/2023 19:19*	WG2030334

Sample Narrative:

L1597378-05 WG2028781: Non-target compounds too high to run at a lower dilution.

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	U		0.00563	0.0210	1.05	03/27/2023 21:40	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00785	0.0210	1.05	03/27/2023 21:40	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1680	B	170	800	1	03/30/2023 08:33	WG2031115
AK103 RRO C25-C36	528	B J J3	460	800	1	03/30/2023 08:33	WG2031115
(S) o-Terphenyl	*103*			*50.0-150*		*03/30/2023 08:33*	WG2031115
(S) n-Triacontane d62	*83.8*			*50.0-150*		*03/30/2023 08:33*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	U		2.99	6.00	1	03/27/2023 23:17	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		28.7	100	1	03/24/2023 23:44	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*88.2*			*50.0-150*		*03/24/2023 23:44*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 15:42	WG2030334
1,2,3-Trichloropropane	U		0.00200	0.00500	1	03/23/2023 15:53	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 15:42	WG2030334
1,2-Dibromoethane	U		0.00410	0.00500	1	03/23/2023 15:53	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 15:42	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 15:42	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 15:42	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 15:42	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 15:42	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 15:42	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 15:42	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 15:42	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 15:42	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 15:42	WG2030334
Carbon disulfide	U	C3	0.0962	1.00	1	03/26/2023 15:42	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 15:42	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 15:42	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 15:42	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 15:42	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 15:42	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 15:42	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 15:42	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 15:42	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 15:42	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 15:42	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 15:42	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 15:42	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 15:42	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 15:42	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 15:42	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 15:42	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 15:42	WG2030334
cis-1,2-Dichloroethene	U		0.126	1.00	1	03/26/2023 15:42	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 15:42	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 15:42	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 15:42	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 15:42	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 15:42	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 15:42	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 15:42	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 15:42	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 15:42	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 15:42	WG2030334

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 15:42	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 15:42	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 15:42	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 15:42	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 15:42	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 15:42	WG2030334
Naphthalene	U		1.00	5.00	1	03/26/2023 15:42	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 15:42	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 15:42	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 15:42	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 15:42	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 15:42	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 15:42	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 15:42	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 15:42	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 15:42	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 15:42	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 15:42	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 15:42	WG2030334
Trichlorofluoromethane	U		0.160	5.00	1	03/26/2023 15:42	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 15:42	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 15:42	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 15:42	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 15:42	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 15:42	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 15:42	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 15:42	WG2030334
(S) Toluene-d8	*102*			*80.0-120*		*03/26/2023 15:42*	WG2030334
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*03/26/2023 15:42*	WG2030334
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*03/26/2023 15:42*	WG2030334

EDB / DBCP by Method 8011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ethylene Dibromide	U		0.00557	0.0208	1.04	03/27/2023 21:52	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00778	0.0208	1.04	03/27/2023 21:52	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
AK102 DRO C10-C25	489	B J	189	888	1.11	03/30/2023 08:55	WG2031115
AK103 RRO C25-C36	U	J3	511	888	1.11	03/30/2023 08:55	WG2031115
(S) o-Terphenyl	*91.6*			*50.0-150*		*03/30/2023 08:55*	WG2031115
(S) n-Triacontane d62	*73.0*			*50.0-150*		*03/30/2023 08:55*	WG2031115

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		28.7	100	1	03/24/2023 22:51	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*81.2*			*50.0-150*		*03/24/2023 22:51*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 16:04	WG2030334
1,2,3-Trichloropropane	U		0.00200	0.00500	1	03/23/2023 14:42	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 16:04	WG2030334
1,2-Dibromoethane	U		0.00410	0.00500	1	03/23/2023 14:42	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 16:04	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 16:04	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 16:04	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 16:04	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 16:04	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 16:04	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 16:04	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 16:04	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 16:04	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 16:04	WG2030334
Carbon disulfide	U	C3	0.0962	1.00	1	03/26/2023 16:04	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 16:04	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 16:04	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 16:04	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 16:04	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 16:04	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 16:04	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 16:04	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 16:04	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 16:04	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 16:04	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 16:04	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 16:04	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 16:04	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 16:04	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 16:04	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 16:04	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 16:04	WG2030334
cis-1,2-Dichloroethene	U		0.126	1.00	1	03/26/2023 16:04	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 16:04	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 16:04	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 16:04	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 16:04	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 16:04	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 16:04	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 16:04	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 16:04	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 16:04	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 16:04	WG2030334
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 16:04	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 16:04	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 16:04	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 16:04	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 16:04	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 16:04	WG2030334

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Naphthalene	U		1.00	5.00	1	03/26/2023 16:04	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 16:04	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 16:04	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 16:04	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 16:04	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 16:04	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 16:04	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 16:04	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 16:04	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 16:04	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 16:04	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 16:04	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 16:04	WG2030334
Trichlorofluoromethane	U		0.160	5.00	1	03/26/2023 16:04	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 16:04	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:04	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:04	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 16:04	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 16:04	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 16:04	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 16:04	WG2030334
(S) Toluene-d8	*103*			*80.0-120*		*03/26/2023 16:04*	WG2030334
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*03/26/2023 16:04*	WG2030334
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*03/26/2023 16:04*	WG2030334

Method Blank (MB)

(MB) R3906354-1 03/28/23 11:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Lead	U		2.99	6.00

Laboratory Control Sample (LCS)

(LCS) R3906354-2 03/28/23 11:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Lead	1000	960	96.0	80.0-120	

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/27/23 22:47 • (MS) R3906364-4 03/27/23 22:53 • (MSD) R3906364-5 03/27/23 22:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Lead	1000	43.2	984	977	94.1	93.4	1	75.0-125			0.731	20

Method Blank (MB)

(MB) R3907434-3 03/24/23 22:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHGAK C6 to C10	U		28.7	100
(S) a,a,a-Trifluorotoluene(FID)	*89.2*			*60.0-120*

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

(LCS) R3907434-1 03/24/23 20:24 • (LCSD) R3907434-2 03/24/23 20:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	3890	3770	77.8	75.4	60.0-120			3.13	20
(S) a,a,a-Trifluorotoluene(FID)				*98.9*	*87.4*	*60.0-120*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/25/23 04:49 • (MS) R3907434-4 03/25/23 05:42 • (MSD) R3907434-5 03/25/23 07:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000000	180000	3830000	3810000	73.0	72.6	1000	70.0-130			0.524	20
(S) a,a,a-Trifluorotoluene(FID)					*95.4*	*93.3*		*50.0-150*				

Method Blank (MB)

(MB) R3907605-3 03/30/23 23:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHGAK C6 to C10	97.2	J	28.7	100
(S) a,a,a-Trifluorotoluene(FID)	*84.7*			*60.0-120*

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

(LCS) R3907605-1 03/30/23 20:01 • (LCSD) R3907605-2 03/30/23 21:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	4130	4970	82.6	99.4	60.0-120			18.5	20
(S) a,a,a-Trifluorotoluene(FID)				*93.5*	*94.5*	*60.0-120*				

Method Blank (MB)

(MB) R3904849-2 03/23/23 14:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,2,3-Trichloropropane	U		0.00200	0.00500
1,2-Dibromoethane	U		0.00410	0.00500

Laboratory Control Sample (LCS)

(LCS) R3904849-1 03/23/23 13:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
1,2,3-Trichloropropane	0.0500	0.0480	96.0	70.0-130	
1,2-Dibromoethane	0.0500	0.0440	88.0	70.0-130	

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/23/23 21:01 • (MS) R3904849-3 03/23/23 21:49 • (MSD) R3904849-4 03/23/23 22:12

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
1,2,3-Trichloropropane	25.0	U	24.5	24.0	98.0	96.0	500	70.0-130			2.06	20
1,2-Dibromoethane	25.0	261	289	271	112	40.0	500	70.0-130	E	E V	6.43	20

Method Blank (MB)

(MB) R3907249-3 03/26/23 14:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromochloromethane	U		0.128	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

Method Blank (MB)

(MB) R3907249-3 03/26/23 14:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
o-Xylene	U		0.174	1.00
m&p-Xylenes	U		0.430	2.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	53.2	52.6	213	210	19.0-160	J4	J4	1.13	27
Acrolein	25.0	24.6	22.9	98.4	91.6	10.0-160			7.16	26

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acrylonitrile	25.0	20.2	18.7	80.8	74.8	55.0-149			7.71	20
Benzene	5.00	4.64	4.23	92.8	84.6	70.0-123			9.24	20
Bromobenzene	5.00	4.59	4.47	91.8	89.4	73.0-121			2.65	20
Bromochloromethane	5.00	4.39	5.03	87.8	101	76.0-122			13.6	20
Bromodichloromethane	5.00	4.80	4.55	96.0	91.0	75.0-120			5.35	20
Bromoform	5.00	5.69	4.99	114	99.8	68.0-132			13.1	20
Bromomethane	5.00	4.40	4.37	88.0	87.4	10.0-160			0.684	25
n-Butylbenzene	5.00	6.00	6.32	120	126	73.0-125		J4	5.19	20
sec-Butylbenzene	5.00	4.95	5.13	99.0	103	75.0-125			3.57	20
tert-Butylbenzene	5.00	5.07	4.99	101	99.8	76.0-124			1.59	20
Carbon disulfide	5.00	3.87	4.21	77.4	84.2	61.0-128			8.42	20
Carbon tetrachloride	5.00	5.54	5.43	111	109	68.0-126			2.01	20
Chlorobenzene	5.00	4.71	4.71	94.2	94.2	80.0-121			0.000	20
Chlorodibromomethane	5.00	5.03	4.87	101	97.4	77.0-125			3.23	20
Chloroethane	5.00	4.51	4.29	90.2	85.8	47.0-150			5.00	20
Chloroform	5.00	4.74	4.57	94.8	91.4	73.0-120			3.65	20
Chloromethane	5.00	3.37	3.61	67.4	72.2	41.0-142			6.88	20
2-Chlorotoluene	5.00	4.60	4.38	92.0	87.6	76.0-123			4.90	20
4-Chlorotoluene	5.00	4.44	4.27	88.8	85.4	75.0-122			3.90	20
1,2-Dibromo-3-Chloropropane	5.00	5.25	5.56	105	111	58.0-134			5.74	20
Dibromomethane	5.00	4.70	4.70	94.0	94.0	80.0-120			0.000	20
1,2-Dichlorobenzene	5.00	5.22	4.95	104	99.0	79.0-121			5.31	20
1,3-Dichlorobenzene	5.00	5.12	4.81	102	96.2	79.0-120			6.24	20
1,4-Dichlorobenzene	5.00	5.25	4.88	105	97.6	79.0-120			7.31	20
Dichlorodifluoromethane	5.00	5.52	5.30	110	106	51.0-149			4.07	20
1,1-Dichloroethane	5.00	3.78	3.67	75.6	73.4	70.0-126			2.95	20
1,2-Dichloroethane	5.00	4.79	4.42	95.8	88.4	70.0-128			8.03	20
1,1-Dichloroethene	5.00	4.21	4.50	84.2	90.0	71.0-124			6.66	20
cis-1,2-Dichloroethene	5.00	4.54	4.47	90.8	89.4	73.0-120			1.55	20
trans-1,2-Dichloroethene	5.00	4.61	4.15	92.2	83.0	73.0-120			10.5	20
1,2-Dichloropropane	5.00	3.79	3.85	75.8	77.0	77.0-125	J4		1.57	20
1,1-Dichloropropene	5.00	4.57	4.64	91.4	92.8	74.0-126			1.52	20
1,3-Dichloropropane	5.00	4.76	4.56	95.2	91.2	80.0-120			4.29	20
cis-1,3-Dichloropropene	5.00	4.65	4.20	93.0	84.0	80.0-123			10.2	20
trans-1,3-Dichloropropene	5.00	4.26	4.13	85.2	82.6	78.0-124			3.10	20
2,2-Dichloropropane	5.00	5.69	5.75	114	115	58.0-130			1.05	20
Di-isopropyl ether	5.00	3.92	3.63	78.4	72.6	58.0-138			7.68	20
Ethylbenzene	5.00	5.29	5.27	106	105	79.0-123			0.379	20
Hexachloro-1,3-butadiene	5.00	5.56	5.86	111	117	54.0-138			5.25	20
Isopropylbenzene	5.00	5.48	5.37	110	107	76.0-127			2.03	20

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	5.39	5.40	108	108	76.0-125			0.185	20
2-Butanone (MEK)	25.0	28.3	26.0	113	104	44.0-160			8.47	20
Methylene Chloride	5.00	4.77	4.24	95.4	84.8	67.0-120			11.8	20
4-Methyl-2-pentanone (MIBK)	25.0	27.1	25.9	108	104	68.0-142			4.53	20
Methyl tert-butyl ether	5.00	5.11	4.57	102	91.4	68.0-125			11.2	20
Naphthalene	5.00	4.91	5.56	98.2	111	54.0-135			12.4	20
n-Propylbenzene	5.00	4.58	4.51	91.6	90.2	77.0-124			1.54	20
Styrene	5.00	5.36	5.18	107	104	73.0-130			3.42	20
1,1,1,2-Tetrachloroethane	5.00	5.73	5.16	115	103	75.0-125			10.5	20
1,1,2,2-Tetrachloroethane	5.00	4.78	4.34	95.6	86.8	65.0-130			9.65	20
1,1,2-Trichlorotrifluoroethane	5.00	4.98	4.65	99.6	93.0	69.0-132			6.85	20
Tetrachloroethene	5.00	4.91	4.81	98.2	96.2	72.0-132			2.06	20
Toluene	5.00	4.57	4.40	91.4	88.0	79.0-120			3.79	20
1,2,3-Trichlorobenzene	5.00	5.00	5.67	100	113	50.0-138			12.6	20
1,2,4-Trichlorobenzene	5.00	5.29	5.42	106	108	57.0-137			2.43	20
1,1,1-Trichloroethane	5.00	4.98	4.79	99.6	95.8	73.0-124			3.89	20
1,1,2-Trichloroethane	5.00	5.35	4.58	107	91.6	80.0-120			15.5	20
Trichloroethene	5.00	4.80	4.65	96.0	93.0	78.0-124			3.17	20
Trichlorofluoromethane	5.00	6.32	6.36	126	127	59.0-147			0.631	20
1,2,4-Trimethylbenzene	5.00	5.30	5.04	106	101	76.0-121			5.03	20
1,2,3-Trimethylbenzene	5.00	5.16	4.91	103	98.2	77.0-120			4.97	20
1,3,5-Trimethylbenzene	5.00	4.84	4.89	96.8	97.8	76.0-122			1.03	20
Vinyl chloride	5.00	4.11	4.14	82.2	82.8	67.0-131			0.727	20
Xylenes, Total	15.0	15.3	14.6	102	97.3	79.0-123			4.68	20
o-Xylene	5.00	5.12	4.85	102	97.0	80.0-122			5.42	20
m&p-Xylenes	10.0	10.2	9.71	102	97.1	80.0-122			4.92	20
(S) Toluene-d8				*99.2*	*99.9*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*103*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*104*	*107*	*70.0-130*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	12500	U	21800	23300	174	186	500	10.0-160	J5	J5	6.65	35
Acrolein	12500	U	11000	12300	88.0	98.4	500	10.0-160			11.2	39
Acrylonitrile	12500	U	9150	9700	73.2	77.6	500	21.0-160			5.84	32
Benzene	2500	37300	42900	43900	224	264	500	17.0-158	V	V	2.30	27

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromobenzene	2500	U	2230	2260	89.2	90.4	500	30.0-149			1.34	28
Bromochloromethane	2500	U	2270	2450	90.8	98.0	500	38.0-142			7.63	26
Bromodichloromethane	2500	U	2250	2420	90.0	96.8	500	31.0-150			7.28	27
Bromoform	2500	U	2600	2760	104	110	500	29.0-150			5.97	29
Bromomethane	2500	U	1950	2280	78.0	91.2	500	10.0-160			15.6	38
n-Butylbenzene	2500	U	2870	3190	115	128	500	31.0-150			10.6	30
sec-Butylbenzene	2500	U	2550	2700	102	108	500	33.0-155			5.71	29
tert-Butylbenzene	2500	U	2510	2700	100	108	500	34.0-153			7.29	28
Carbon disulfide	2500	U	1860	2010	74.4	80.4	500	10.0-156			7.75	28
Carbon tetrachloride	2500	U	2780	2990	111	120	500	23.0-159			7.28	28
Chlorobenzene	2500	U	2350	2430	94.0	97.2	500	33.0-152			3.35	27
Chlorodibromomethane	2500	U	2490	2410	99.6	96.4	500	37.0-149			3.27	27
Chloroethane	2500	U	2290	2400	91.6	96.0	500	10.0-160			4.69	30
Chloroform	2500	U	2280	2530	91.2	101	500	29.0-154			10.4	28
Chloromethane	2500	U	1860	1980	74.4	79.2	500	10.0-160			6.25	29
2-Chlorotoluene	2500	U	2100	2320	84.0	92.8	500	32.0-153			9.95	28
4-Chlorotoluene	2500	U	2090	2310	83.6	92.4	500	32.0-150			10.0	28
1,2-Dibromo-3-Chloropropane	2500	U	2190	2680	87.6	107	500	22.0-151			20.1	34
Dibromomethane	2500	U	2270	2520	90.8	101	500	30.0-151			10.4	27
1,2-Dichlorobenzene	2500	U	2450	2380	98.0	95.2	500	34.0-149			2.90	28
1,3-Dichlorobenzene	2500	U	2400	2440	96.0	97.6	500	36.0-146			1.65	27
1,4-Dichlorobenzene	2500	U	2440	2520	97.6	101	500	35.0-142			3.23	27
Dichlorodifluoromethane	2500	U	3220	3180	129	127	500	10.0-160			1.25	29
1,1-Dichloroethane	2500	U	1890	1890	75.6	75.6	500	25.0-158			0.000	27
1,2-Dichloroethane	2500	U	2210	2410	88.4	96.4	500	29.0-151			8.66	27
1,1-Dichloroethene	2500	U	1920	2260	76.8	90.4	500	11.0-160			16.3	29
cis-1,2-Dichloroethene	2500	U	2210	2460	88.4	98.4	500	10.0-160			10.7	27
trans-1,2-Dichloroethene	2500	U	2110	2300	84.4	92.0	500	17.0-153			8.62	27
1,2-Dichloropropane	2500	U	1750	1840	70.0	73.6	500	30.0-156			5.01	27
1,1-Dichloropropene	2500	U	2360	2430	94.4	97.2	500	25.0-158			2.92	27
1,3-Dichloropropane	2500	U	2090	2230	83.6	89.2	500	38.0-147			6.48	27
cis-1,3-Dichloropropene	2500	U	2180	2200	87.2	88.0	500	34.0-149			0.913	28
trans-1,3-Dichloropropene	2500	U	1940	1990	77.6	79.6	500	32.0-149			2.54	28
2,2-Dichloropropane	2500	U	2860	2870	114	115	500	24.0-152			0.349	29
Di-isopropyl ether	2500	U	1790	1850	71.6	74.0	500	21.0-160			3.30	28
Ethylbenzene	2500	2930	5650	6110	109	127	500	30.0-155			7.82	27
Hexachloro-1,3-butadiene	2500	U	2410	2780	96.4	111	500	20.0-154			14.3	34
Isopropylbenzene	2500	122	2770	3050	106	117	500	28.0-157			9.62	27
p-Isopropyltoluene	2500	U	2530	2780	101	111	500	30.0-154			9.42	29
2-Butanone (MEK)	12500	U	12300	12200	98.4	97.6	500	10.0-160			0.816	32

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	2500	U	2200	2150	88.0	86.0	500	23.0-144			2.30	28
4-Methyl-2-pentanone (MIBK)	12500	U	12200	12800	97.6	102	500	29.0-160			4.80	29
Methyl tert-butyl ether	2500	U	2210	2500	88.4	100	500	28.0-150			12.3	29
Naphthalene	2500	U	2390	2940	95.6	118	500	12.0-156			20.6	35
n-Propylbenzene	2500	234	2440	2560	88.2	93.0	500	31.0-154			4.80	28
Styrene	2500	U	2710	3000	108	120	500	33.0-155			10.2	28
1,1,1,2-Tetrachloroethane	2500	U	2830	2960	113	118	500	36.0-151			4.49	29
1,1,2,2-Tetrachloroethane	2500	U	2220	2300	88.8	92.0	500	33.0-150			3.54	28
1,1,2-Trichlorotrifluoroethane	2500	U	2580	2800	103	112	500	23.0-160			8.18	30
Tetrachloroethene	2500	U	2590	2670	104	107	500	10.0-160			3.04	27
Toluene	2500	38000	42800	43700	192	228	500	26.0-154	V	V	2.08	28
1,2,3-Trichlorobenzene	2500	U	2230	2650	89.2	106	500	17.0-150			17.2	36
1,2,4-Trichlorobenzene	2500	U	2420	2740	96.8	110	500	24.0-150			12.4	33
1,1,1-Trichloroethane	2500	U	2550	2940	102	118	500	23.0-160			14.2	28
1,1,2-Trichloroethane	2500	U	2220	2330	88.8	93.2	500	35.0-147			4.84	27
Trichloroethene	2500	U	2180	2200	87.2	88.0	500	10.0-160			0.913	25
Trichlorofluoromethane	2500	U	3600	3620	144	145	500	17.0-160			0.554	31
1,2,4-Trimethylbenzene	2500	1160	3780	3780	105	105	500	26.0-154			0.000	27
1,2,3-Trimethylbenzene	2500	328	2840	2810	100	99.3	500	32.0-149			1.06	28
1,3,5-Trimethylbenzene	2500	258	2670	2810	96.5	102	500	28.0-153			5.11	27
Vinyl chloride	2500	U	2210	2140	88.4	85.6	500	10.0-160			3.22	27
Xylenes, Total	7500	13300	21600	21900	111	115	500	29.0-154			1.38	28
o-Xylene	2500	4530	7160	7340	105	112	500	45.0-144			2.48	26
m&p-Xylenes	5000	8730	14400	14600	113	117	500	43.0-146			1.38	26
(S) Toluene-d8					*99.0*	*96.4*		*80.0-120*				
(S) 4-Bromofluorobenzene					*102*	*103*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*105*	*106*		*70.0-130*				

Method Blank (MB)

(MB) R3907762-2 03/30/23 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromochloromethane	U		0.128	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

Method Blank (MB)

(MB) R3907762-2 03/30/23 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
o-Xylene	U		0.174	1.00
m&p-Xylenes	U		0.430	2.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	26.5	106	19.0-160	
Acrolein	25.0	23.9	95.6	10.0-160	

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	25.0	24.0	96.0	55.0-149	
Benzene	5.00	4.74	94.8	70.0-123	
Bromobenzene	5.00	4.23	84.6	73.0-121	
Bromochloromethane	5.00	4.68	93.6	76.0-122	
Bromodichloromethane	5.00	4.51	90.2	75.0-120	
Bromoform	5.00	3.66	73.2	68.0-132	
Bromomethane	5.00	4.49	89.8	10.0-160	
n-Butylbenzene	5.00	4.16	83.2	73.0-125	
sec-Butylbenzene	5.00	4.51	90.2	75.0-125	
tert-Butylbenzene	5.00	4.49	89.8	76.0-124	
Carbon disulfide	5.00	4.64	92.8	61.0-128	
Carbon tetrachloride	5.00	4.74	94.8	68.0-126	
Chlorobenzene	5.00	4.55	91.0	80.0-121	
Chlorodibromomethane	5.00	4.05	81.0	77.0-125	
Chloroethane	5.00	5.89	118	47.0-150	
Chloroform	5.00	4.85	97.0	73.0-120	
Chloromethane	5.00	5.76	115	41.0-142	
2-Chlorotoluene	5.00	4.64	92.8	76.0-123	
4-Chlorotoluene	5.00	4.52	90.4	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	3.93	78.6	58.0-134	
Dibromomethane	5.00	4.14	82.8	80.0-120	
1,2-Dichlorobenzene	5.00	4.41	88.2	79.0-121	
1,3-Dichlorobenzene	5.00	4.46	89.2	79.0-120	
1,4-Dichlorobenzene	5.00	4.55	91.0	79.0-120	
Dichlorodifluoromethane	5.00	7.10	142	51.0-149	
1,1-Dichloroethane	5.00	4.87	97.4	70.0-126	
1,2-Dichloroethane	5.00	4.53	90.6	70.0-128	
1,1-Dichloroethene	5.00	4.84	96.8	71.0-124	
cis-1,2-Dichloroethene	5.00	4.65	93.0	73.0-120	
trans-1,2-Dichloroethene	5.00	4.84	96.8	73.0-120	
1,2-Dichloropropane	5.00	4.58	91.6	77.0-125	
1,1-Dichloropropene	5.00	4.67	93.4	74.0-126	
1,3-Dichloropropane	5.00	4.26	85.2	80.0-120	
cis-1,3-Dichloropropene	5.00	4.19	83.8	80.0-123	
trans-1,3-Dichloropropene	5.00	4.05	81.0	78.0-124	
2,2-Dichloropropane	5.00	4.73	94.6	58.0-130	
Di-isopropyl ether	5.00	4.62	92.4	58.0-138	
Ethylbenzene	5.00	4.94	98.8	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.09	81.8	54.0-138	
Isopropylbenzene	5.00	4.65	93.0	76.0-127	

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.46	89.2	76.0-125	
2-Butanone (MEK)	25.0	24.8	99.2	44.0-160	
Methylene Chloride	5.00	5.22	104	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.4	89.6	68.0-142	
Methyl tert-butyl ether	5.00	4.24	84.8	68.0-125	
Naphthalene	5.00	4.00	80.0	54.0-135	
n-Propylbenzene	5.00	4.62	92.4	77.0-124	
Styrene	5.00	4.54	90.8	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.44	88.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.21	84.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	4.90	98.0	69.0-132	
Tetrachloroethene	5.00	4.79	95.8	72.0-132	
Toluene	5.00	4.73	94.6	79.0-120	
1,2,3-Trichlorobenzene	5.00	4.09	81.8	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.19	83.8	57.0-137	
1,1,1-Trichloroethane	5.00	4.95	99.0	73.0-124	
1,1,2-Trichloroethane	5.00	4.03	80.6	80.0-120	
Trichloroethene	5.00	4.65	93.0	78.0-124	
Trichlorofluoromethane	5.00	5.47	109	59.0-147	
1,2,4-Trimethylbenzene	5.00	4.41	88.2	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.40	88.0	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.53	90.6	76.0-122	
Vinyl chloride	5.00	5.72	114	67.0-131	
Xylenes, Total	15.0	14.0	93.3	79.0-123	
o-Xylene	5.00	4.56	91.2	80.0-122	
m&p-Xylenes	10.0	9.42	94.2	80.0-122	
(S) Toluene-d8			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*94.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*99.8*	*70.0-130*	

Method Blank (MB)

(MB) R3906632-1 03/27/23 19:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	U		0.00536	0.0200
1,2-Dibromo-3-Chloropropane	U		0.00748	0.0200

L1597379-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1597379-03 03/27/23 20:41 • (DUP) R3906632-3 03/27/23 20:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	U	U	1.02	0.000		20
1,2-Dibromo-3-Chloropropane	U	U	1.02	0.000		20

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

(LCS) R3906632-4 03/27/23 22:40 • (LCSD) R3906632-5 03/28/23 01:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylene Dibromide	0.250	0.214	0.224	85.6	89.6	60.0-140			4.57	20
1,2-Dibromo-3-Chloropropane	0.250	0.219	0.227	87.6	90.8	60.0-140			3.59	20

L1597389-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1597389-02 03/27/23 20:17 • (MS) R3906632-2 03/27/23 20:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.102	324	320	0.000	1.02	64.0-159	E V
1,2-Dibromo-3-Chloropropane	0.102	U	0.135	132	1.02	72.0-148	P

Method Blank (MB)

(MB) R3907348-1 03/29/23 23:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
AK102 DRO C10-C25	403	J	170	800
AK103 RRO C25-C36	553	J	460	800
(S) o-Terphenyl	*103*			*60.0-120*
(S) n-Triacontane d62	*91.5*			*60.0-120*

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

(LCS) R3907348-2 03/29/23 23:57 • (LCSD) R3907348-3 03/30/23 00:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	6710	6460	112	108	75.0-125			3.80	20
(S) o-Terphenyl				*106*	*104*	*60.0-120*				
(S) n-Triacontane d62				*87.0*	*83.5*	*60.0-120*				

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

(LCS) R3907348-4 03/30/23 00:39 • (LCSD) R3907348-5 03/30/23 01:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	6000	6460	5150	108	85.8	60.0-120		J3	22.6	20
(S) o-Terphenyl				*109*	*96.1*	*60.0-120*				
(S) n-Triacontane d62				*94.5*	*79.0*	*60.0-120*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/30/23 01:21 • (MS) R3907348-6 03/30/23 02:00 • (MSD) R3907348-7 03/30/23 02:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	4460	9430	11300	82.8	114	1	75.0-125			18.0	20
(S) o-Terphenyl					*99.3*	*104*		*50.0-150*				
(S) n-Triacontane d62					*85.0*	*92.5*		*50.0-150*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/30/23 01:21 • (MS) R3907348-8 03/30/23 06:26 • (MSD) R3907348-9 03/30/23 06:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	6000	588	5540	6340	82.5	95.9	1	60.0-120			13.5	20
(S) o-Terphenyl					*111*	*102*		*50.0-150*				
(S) n-Triacontane d62					*91.5*	*87.0*		*50.0-150*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
P	RPD between the primary and confirmatory analysis exceeded 40%.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:
Arcadis - Chevron - AK

880 H St.
Anchorage, AK 99501

Billing Information:
Attn: Acounts Payable
630 Plaza Dr Ste 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Nick Wood/Sydney Clark/Erika Midkiff

Email To:
erika.midkiff@arcadis.com;Phillip.Jeffers@arcad

Project Description:
381811

City/State Collected: Fairbanks, AK

Please Circle: PT MT CT ET

Phone: **907-276-8095**

Client Project #
30064229.19.45

Lab Project #
CHEVARCAK-381811
Alaska

Collected by (print):
E. Wyatt

Site/Facility ID #
501 E 30TH AVE, FAIRBANKS,

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	AK101 40mlAmb HCl	AK102/103 100ml Amb HCl	EDB/123TCP 524LL 40mlAmb-HCl	EDB/DBCP 8011 40mlClr-NaThio	Total Lead 6010 250mlHDPE-HNO3	VOCs 8260 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-1-W-20230320	Grab	GW	—	3/20/2023	1500	15	X	X	X	X	X	X	Cooler 1	-01
MW-10-W-20230320		GW	—		1530									-02
MW-8-W-20230320		GW	—		1600									-03
MW-2-W-20230320		GW	—		1630									-04
MW-7-W-20230320		GW	—		1700									-05
EQB-1-W-20230320		GW	—		1730									-06
Trip Blank 1	—	GW	—	—	—	6	X		X			X		-07
		GW												
		GW												
		GW												

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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

SDG # L597378
D079

Acctnum: **CHEVARCAK**
Template: **T225274**
Prelogin: **P983400**
PM: **110 - Brian Ford**
PB: DR 3-16-23
Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking # 6094 5470 8943

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: X Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No HCL / MeoH TBR	If preservation required by Login: Date/Time
E. Wyatt	3.21.23	1130		6 4 HCl 6 2 NaThio	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NSA 7 °C Bottles Received: 0.4+0=0.4 90	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Kayla J (9)	Date: 3/22/23 Time: 915	Hold: Condition: NCF / OK

ANALYTICAL REPORT

March 31, 2023

Arcadis - Chevron - AK

Sample Delivery Group:	L1597389
Samples Received:	03/22/2023
Project Number:	30064229.19.45
Description:	381811
Site:	501 E 30TH AVE, FAIRBANKS, AK
Report To:	Nick Wood/Sydney Clark/Erika Midkiff 880 H St. Anchorage, AK 99501

Entire Report Reviewed By:

Brian Ford

Project Manager

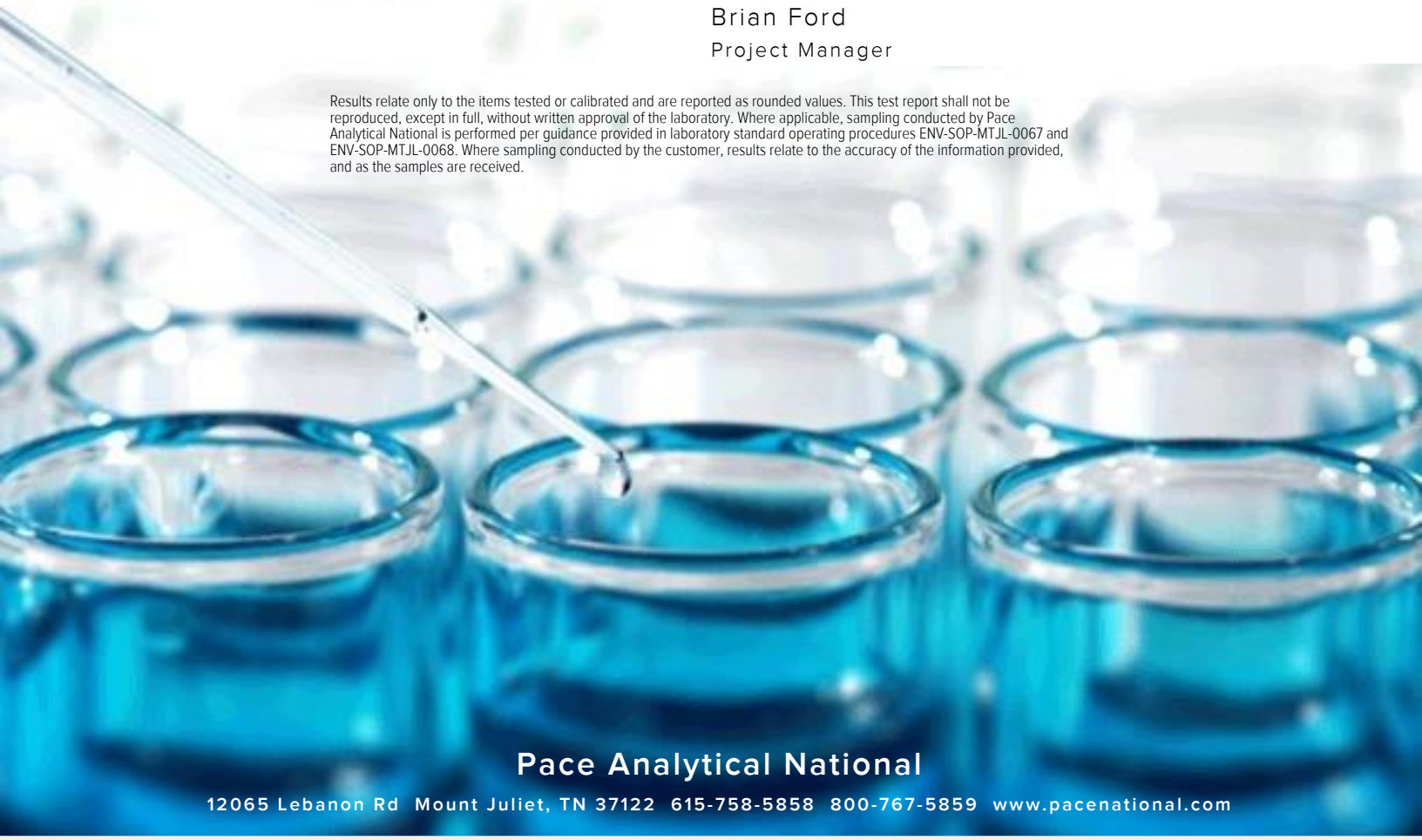


TABLE OF CONTENTS

MW-9-W-20230321 L1597389-01 GW

Collected by: E. Wujcik | Collected date/time: 03/21/23 09:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:23	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2033069	20	03/31/23 01:19	03/31/23 01:19	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	500	03/23/23 20:38	03/23/23 20:38	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2032828	50	03/30/23 15:31	03/30/23 15:31	ACG	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.03	03/27/23 12:53	03/27/23 23:28	JDJ	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1.11	03/29/23 03:01	03/30/23 09:16	MWS	Mt. Juliet, TN

MW-3-W-20230321 L1597389-02 GW

Collected by: E. Wujcik | Collected date/time: 03/21/23 10:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 22:47	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1000	03/25/23 04:49	03/25/23 04:49	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	500	03/23/23 21:01	03/23/23 21:01	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2029311	2500	03/24/23 15:51	03/24/23 15:51	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	500	03/26/23 21:08	03/26/23 21:08	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.05	03/27/23 12:53	03/27/23 20:17	JDJ	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1050	03/27/23 12:53	03/28/23 18:08	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 01:21	MWS	Mt. Juliet, TN

BD-1-W-20230321 L1597389-03 GW

Collected by: E. Wujcik | Collected date/time: 03/21/23 00:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:26	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	200	03/25/23 05:15	03/25/23 05:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	500	03/23/23 21:25	03/23/23 21:25	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2029311	2500	03/24/23 16:15	03/24/23 16:15	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	500	03/26/23 21:30	03/26/23 21:30	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1.04	03/27/23 12:53	03/27/23 23:40	JDJ	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2030496	1040	03/27/23 12:53	03/28/23 18:31	HMH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 09:36	MWS	Mt. Juliet, TN

EQB-1-W-20230321 L1597389-04 GW

Collected by: E. Wujcik | Collected date/time: 03/21/23 10:30 | Received date/time: 03/22/23 09:15

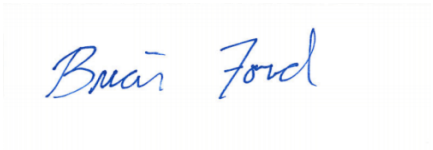
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010D	WG2029236	1	03/24/23 13:14	03/27/23 23:28	ABL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/25/23 00:10	03/25/23 00:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1	03/23/23 16:17	03/23/23 16:17	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 16:26	03/26/23 16:26	JCP	Mt. Juliet, TN
EDB / DBCP by Method 8011	WG2031055	1.02	03/28/23 09:16	03/28/23 15:37	LTB	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102/103	WG2031115	1	03/29/23 03:01	03/30/23 09:56	MWS	Mt. Juliet, TN

TRIP BLANK 2_20230321 L1597389-05 GW

Collected by: E. Wujcik | Collected date/time: 03/21/23 00:00 | Received date/time: 03/22/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG2029645	1	03/24/23 23:17	03/24/23 23:17	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2028781	1	03/23/23 15:05	03/23/23 15:05	BRA	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2030334	1	03/26/23 16:47	03/26/23 16:47	JCP	Mt. Juliet, TN

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



Brian Ford
Project Manager

Volatile Organic Compounds (GC) by Method AK101

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2033069	TPHGAK C6 to C10	L1597389-01

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

The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.

Batch	Lab Sample ID	Analytes
WG2030334	L1597389-02	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597389-03	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597389-04	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2030334	L1597389-05	1,1-Dichloroethane, 1,2-Dichloropropane, Carbon disulfide, Chloromethane and Di-isopropyl ether
WG2032828	L1597389-01	1,2-Dibromo-3-Chloropropane and Bromoform

The associated batch QC was below the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2030334	(LCS) R3907249-1, L1597389-02, 03, 04, 05	1,2-Dichloropropane

The associated batch QC was above the established quality control range for accuracy.

Batch	Lab Sample ID	Analytes
WG2030334	(LCS) R3907249-1, (LCSD) R3907249-2, L1597389-02, 03, 04, 05	Acetone and n-Butylbenzene

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2028781	(MSD) R3904849-4	1,2-Dibromoethane
WG2030334	(MS) R3907249-4, (MSD) R3907249-5, L1597389-02	Benzene and Toluene

The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Batch	Lab Sample ID	Analytes
WG2030334	(MS) R3907249-4, (MSD) R3907249-5, L1597389-02	Acetone

EDB / DBCP by Method 8011

RPD between the primary and confirmatory analysis exceeded 40%

Batch	Lab Sample ID	Analytes
WG2030496	(MS) R3906632-2	1,2-Dibromo-3-Chloropropane

The sample concentration is too high to evaluate accurate spike recoveries.

Batch	Lab Sample ID	Analytes
WG2030496	(MS) R3906632-2, L1597389-02	Ethylene Dibromide

Semi-Volatile Organic Compounds (GC) by Method AK102/103

The same analyte is found in the associated blank.

Batch	Analyte	Lab Sample ID
WG2031115	AK102 DRO C10-C25	L1597389-01, 03, 04
WG2031115	AK103 RRO C25-C36	L1597389-01, 02

The associated batch QC was outside the established quality control range for precision.

Batch	Lab Sample ID	Analytes
WG2031115	(LCSD) R3907348-5, L1597389-01, 03, 04	AK103 RRO C25-C36

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	6.24		2.99	6.00	1	03/27/2023 23:23	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	17400	B	574	2000	20	03/31/2023 01:19	WG2033069
(S) a,a,a-Trifluorotoluene(FID)	*86.1*			*50.0-150*		*03/31/2023 01:19*	WG2033069

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		565	2500	50	03/30/2023 15:31	WG2032828
1,2,3-Trichloropropane	U		1.00	2.50	500	03/23/2023 20:38	WG2028781
Acrolein	U		127	2500	50	03/30/2023 15:31	WG2032828
1,2-Dibromoethane	U		2.05	2.50	500	03/23/2023 20:38	WG2028781
Acrylonitrile	U		33.6	500	50	03/30/2023 15:31	WG2032828
Benzene	3720		4.71	50.0	50	03/30/2023 15:31	WG2032828
Bromobenzene	U		5.90	50.0	50	03/30/2023 15:31	WG2032828
Bromochloromethane	U		6.40	50.0	50	03/30/2023 15:31	WG2032828
Bromodichloromethane	U		6.80	50.0	50	03/30/2023 15:31	WG2032828
Bromoform	U	C3	6.45	50.0	50	03/30/2023 15:31	WG2032828
Bromomethane	U		30.3	250	50	03/30/2023 15:31	WG2032828
n-Butylbenzene	U		7.85	50.0	50	03/30/2023 15:31	WG2032828
sec-Butylbenzene	6.35	J	6.25	50.0	50	03/30/2023 15:31	WG2032828
tert-Butylbenzene	U		6.35	50.0	50	03/30/2023 15:31	WG2032828
Carbon disulfide	U		4.81	50.0	50	03/30/2023 15:31	WG2032828
Carbon tetrachloride	U		6.40	50.0	50	03/30/2023 15:31	WG2032828
Chlorobenzene	U		5.80	50.0	50	03/30/2023 15:31	WG2032828
Chlorodibromomethane	U		7.00	50.0	50	03/30/2023 15:31	WG2032828
Chloroethane	U		9.60	250	50	03/30/2023 15:31	WG2032828
Chloroform	U		5.55	250	50	03/30/2023 15:31	WG2032828
Chloromethane	U		48.0	125	50	03/30/2023 15:31	WG2032828
2-Chlorotoluene	U		5.30	50.0	50	03/30/2023 15:31	WG2032828
4-Chlorotoluene	U		5.70	50.0	50	03/30/2023 15:31	WG2032828
1,2-Dibromo-3-Chloropropane	U	C3	13.8	250	50	03/30/2023 15:31	WG2032828
Dibromomethane	U		6.10	50.0	50	03/30/2023 15:31	WG2032828
1,2-Dichlorobenzene	U		5.35	50.0	50	03/30/2023 15:31	WG2032828
1,3-Dichlorobenzene	U		5.50	50.0	50	03/30/2023 15:31	WG2032828
1,4-Dichlorobenzene	U		6.00	50.0	50	03/30/2023 15:31	WG2032828
Dichlorodifluoromethane	U		18.7	250	50	03/30/2023 15:31	WG2032828
1,1-Dichloroethane	U		5.00	50.0	50	03/30/2023 15:31	WG2032828
1,2-Dichloroethane	U		4.09	50.0	50	03/30/2023 15:31	WG2032828
1,1-Dichloroethene	U		9.40	50.0	50	03/30/2023 15:31	WG2032828
cis-1,2-Dichloroethene	23.6	J	6.30	50.0	50	03/30/2023 15:31	WG2032828
trans-1,2-Dichloroethene	U		7.45	50.0	50	03/30/2023 15:31	WG2032828
1,2-Dichloropropane	U		7.45	50.0	50	03/30/2023 15:31	WG2032828
1,1-Dichloropropene	U		7.10	50.0	50	03/30/2023 15:31	WG2032828
1,3-Dichloropropane	U		5.50	50.0	50	03/30/2023 15:31	WG2032828
cis-1,3-Dichloropropene	U		5.55	50.0	50	03/30/2023 15:31	WG2032828
trans-1,3-Dichloropropene	U		5.90	50.0	50	03/30/2023 15:31	WG2032828
2,2-Dichloropropane	U		8.05	50.0	50	03/30/2023 15:31	WG2032828
Di-isopropyl ether	U		5.25	50.0	50	03/30/2023 15:31	WG2032828
Ethylbenzene	754		6.85	50.0	50	03/30/2023 15:31	WG2032828
Hexachloro-1,3-butadiene	U		16.9	50.0	50	03/30/2023 15:31	WG2032828

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	50.5		5.25	50.0	50	03/30/2023 15:31	WG2032828
p-Isopropyltoluene	10.9	J	6.00	50.0	50	03/30/2023 15:31	WG2032828
2-Butanone (MEK)	U		59.5	500	50	03/30/2023 15:31	WG2032828
Methylene Chloride	U		21.5	250	50	03/30/2023 15:31	WG2032828
4-Methyl-2-pentanone (MIBK)	U		23.9	500	50	03/30/2023 15:31	WG2032828
Methyl tert-butyl ether	U		5.05	50.0	50	03/30/2023 15:31	WG2032828
Naphthalene	U		50.0	250	50	03/30/2023 15:31	WG2032828
n-Propylbenzene	102		4.97	50.0	50	03/30/2023 15:31	WG2032828
Styrene	U		5.90	50.0	50	03/30/2023 15:31	WG2032828
1,1,1,2-Tetrachloroethane	U		7.35	50.0	50	03/30/2023 15:31	WG2032828
1,1,2,2-Tetrachloroethane	U		6.65	50.0	50	03/30/2023 15:31	WG2032828
1,1,2-Trichlorotrifluoroethane	U		9.00	50.0	50	03/30/2023 15:31	WG2032828
Tetrachloroethene	U		15.0	50.0	50	03/30/2023 15:31	WG2032828
Toluene	3230		13.9	50.0	50	03/30/2023 15:31	WG2032828
1,2,3-Trichlorobenzene	U		11.5	50.0	50	03/30/2023 15:31	WG2032828
1,2,4-Trichlorobenzene	U		24.1	50.0	50	03/30/2023 15:31	WG2032828
1,1,1-Trichloroethane	U		7.45	50.0	50	03/30/2023 15:31	WG2032828
1,1,2-Trichloroethane	U		7.90	50.0	50	03/30/2023 15:31	WG2032828
Trichloroethene	U		9.50	50.0	50	03/30/2023 15:31	WG2032828
Trichlorofluoromethane	U		8.00	250	50	03/30/2023 15:31	WG2032828
1,2,4-Trimethylbenzene	395		16.1	50.0	50	03/30/2023 15:31	WG2032828
1,2,3-Trimethylbenzene	103		5.20	50.0	50	03/30/2023 15:31	WG2032828
1,3,5-Trimethylbenzene	116		5.20	50.0	50	03/30/2023 15:31	WG2032828
Vinyl chloride	U		11.7	50.0	50	03/30/2023 15:31	WG2032828
Xylenes, Total	2850		8.70	150	50	03/30/2023 15:31	WG2032828
o-Xylene	863		8.70	50.0	50	03/30/2023 15:31	WG2032828
m&p-Xylene	1990		21.5	100	50	03/30/2023 15:31	WG2032828
(S) Toluene-d8	*108*			*80.0-120*		*03/30/2023 15:31*	WG2032828
(S) 4-Bromofluorobenzene	*98.7*			*77.0-126*		*03/30/2023 15:31*	WG2032828
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*03/30/2023 15:31*	WG2032828

Sample Narrative:

L1597389-01 WG2028781: Non-target compounds too high to run at a lower dilution.

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	0.290		0.00552	0.0206	1.03	03/27/2023 23:28	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00770	0.0206	1.03	03/27/2023 23:28	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	1710	B	189	888	1.11	03/30/2023 09:16	WG2031115
AK103 RRO C25-C36	521	B J J3	511	888	1.11	03/30/2023 09:16	WG2031115
(S) o-Terphenyl	*102*			*50.0-150*		*03/30/2023 09:16*	WG2031115
(S) n-Triacontane d62	*83.8*			*50.0-150*		*03/30/2023 09:16*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	43.2		2.99	6.00	1	03/27/2023 22:47	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	180000		28700	100000	1000	03/25/2023 04:49	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*87.5*			*50.0-150*		*03/25/2023 04:49*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4 J5	5650	25000	500	03/26/2023 21:08	WG2030334
1,2,3-Trichloropropane	U		1.00	2.50	500	03/23/2023 21:01	WG2028781
Acrolein	U		1270	25000	500	03/26/2023 21:08	WG2030334
1,2-Dibromoethane	263		10.3	12.5	2500	03/24/2023 15:51	WG2029311
Acrylonitrile	U		336	5000	500	03/26/2023 21:08	WG2030334
Benzene	37300	V	47.1	500	500	03/26/2023 21:08	WG2030334
Bromobenzene	U		59.0	500	500	03/26/2023 21:08	WG2030334
Bromochloromethane	U		64.0	500	500	03/26/2023 21:08	WG2030334
Bromodichloromethane	U		68.0	500	500	03/26/2023 21:08	WG2030334
Bromoform	U		64.5	500	500	03/26/2023 21:08	WG2030334
Bromomethane	U		303	2500	500	03/26/2023 21:08	WG2030334
n-Butylbenzene	U	J4	78.5	500	500	03/26/2023 21:08	WG2030334
sec-Butylbenzene	U		62.5	500	500	03/26/2023 21:08	WG2030334
tert-Butylbenzene	U		63.5	500	500	03/26/2023 21:08	WG2030334
Carbon disulfide	U	C3	48.1	500	500	03/26/2023 21:08	WG2030334
Carbon tetrachloride	U		64.0	500	500	03/26/2023 21:08	WG2030334
Chlorobenzene	U		58.0	500	500	03/26/2023 21:08	WG2030334
Chlorodibromomethane	U		70.0	500	500	03/26/2023 21:08	WG2030334
Chloroethane	U		96.0	2500	500	03/26/2023 21:08	WG2030334
Chloroform	U		55.5	2500	500	03/26/2023 21:08	WG2030334
Chloromethane	U	C3	480	1250	500	03/26/2023 21:08	WG2030334
2-Chlorotoluene	U		53.0	500	500	03/26/2023 21:08	WG2030334
4-Chlorotoluene	U		57.0	500	500	03/26/2023 21:08	WG2030334
1,2-Dibromo-3-Chloropropane	U		138	2500	500	03/26/2023 21:08	WG2030334
Dibromomethane	U		61.0	500	500	03/26/2023 21:08	WG2030334
1,2-Dichlorobenzene	U		53.5	500	500	03/26/2023 21:08	WG2030334
1,3-Dichlorobenzene	U		55.0	500	500	03/26/2023 21:08	WG2030334
1,4-Dichlorobenzene	U		60.0	500	500	03/26/2023 21:08	WG2030334
Dichlorodifluoromethane	U		187	2500	500	03/26/2023 21:08	WG2030334
1,1-Dichloroethane	U	C3	50.0	500	500	03/26/2023 21:08	WG2030334
1,2-Dichloroethane	U		40.9	500	500	03/26/2023 21:08	WG2030334
1,1-Dichloroethene	U		94.0	500	500	03/26/2023 21:08	WG2030334
cis-1,2-Dichloroethene	U		63.0	500	500	03/26/2023 21:08	WG2030334
trans-1,2-Dichloroethene	U		74.5	500	500	03/26/2023 21:08	WG2030334
1,2-Dichloropropane	U	C3 J4	74.5	500	500	03/26/2023 21:08	WG2030334
1,1-Dichloropropene	U		71.0	500	500	03/26/2023 21:08	WG2030334
1,3-Dichloropropane	U		55.0	500	500	03/26/2023 21:08	WG2030334
cis-1,3-Dichloropropene	U		55.5	500	500	03/26/2023 21:08	WG2030334
trans-1,3-Dichloropropene	U		59.0	500	500	03/26/2023 21:08	WG2030334
2,2-Dichloropropane	U		80.5	500	500	03/26/2023 21:08	WG2030334
Di-isopropyl ether	U	C3	52.5	500	500	03/26/2023 21:08	WG2030334
Ethylbenzene	2930		68.5	500	500	03/26/2023 21:08	WG2030334
Hexachloro-1,3-butadiene	U		169	500	500	03/26/2023 21:08	WG2030334

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	122	J	52.5	500	500	03/26/2023 21:08	WG2030334
p-Isopropyltoluene	U		60.0	500	500	03/26/2023 21:08	WG2030334
2-Butanone (MEK)	U		595	5000	500	03/26/2023 21:08	WG2030334
Methylene Chloride	U		215	2500	500	03/26/2023 21:08	WG2030334
4-Methyl-2-pentanone (MIBK)	U		239	5000	500	03/26/2023 21:08	WG2030334
Methyl tert-butyl ether	U		50.5	500	500	03/26/2023 21:08	WG2030334
Naphthalene	U		500	2500	500	03/26/2023 21:08	WG2030334
n-Propylbenzene	234	J	49.7	500	500	03/26/2023 21:08	WG2030334
Styrene	U		59.0	500	500	03/26/2023 21:08	WG2030334
1,1,1,2-Tetrachloroethane	U		73.5	500	500	03/26/2023 21:08	WG2030334
1,1,2,2-Tetrachloroethane	U		66.5	500	500	03/26/2023 21:08	WG2030334
1,1,2-Trichlorotrifluoroethane	U		90.0	500	500	03/26/2023 21:08	WG2030334
Tetrachloroethene	U		150	500	500	03/26/2023 21:08	WG2030334
Toluene	38000	V	139	500	500	03/26/2023 21:08	WG2030334
1,2,3-Trichlorobenzene	U		115	500	500	03/26/2023 21:08	WG2030334
1,2,4-Trichlorobenzene	U		241	500	500	03/26/2023 21:08	WG2030334
1,1,1-Trichloroethane	U		74.5	500	500	03/26/2023 21:08	WG2030334
1,1,2-Trichloroethane	U		79.0	500	500	03/26/2023 21:08	WG2030334
Trichloroethene	U		95.0	500	500	03/26/2023 21:08	WG2030334
Trichlorofluoromethane	U		80.0	2500	500	03/26/2023 21:08	WG2030334
1,2,4-Trimethylbenzene	1160		161	500	500	03/26/2023 21:08	WG2030334
1,2,3-Trimethylbenzene	328	J	52.0	500	500	03/26/2023 21:08	WG2030334
1,3,5-Trimethylbenzene	258	J	52.0	500	500	03/26/2023 21:08	WG2030334
Vinyl chloride	U		117	500	500	03/26/2023 21:08	WG2030334
Xylenes, Total	13300		87.0	1500	500	03/26/2023 21:08	WG2030334
o-Xylene	4530		87.0	500	500	03/26/2023 21:08	WG2030334
m&p-Xylene	8730		215	1000	500	03/26/2023 21:08	WG2030334
(S) Toluene-d8	*97.5*			*80.0-120*		*03/26/2023 21:08*	WG2030334
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*03/26/2023 21:08*	WG2030334
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*03/26/2023 21:08*	WG2030334

EDB / DBCP by Method 8011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ethylene Dibromide	225	V	5.63	21.0	1050	03/28/2023 18:08	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00785	0.0210	1.05	03/27/2023 20:17	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	4460		170	800	1	03/30/2023 01:21	WG2031115
AK103 RRO C25-C36	588	B J	460	800	1	03/30/2023 01:21	WG2031115
(S) o-Terphenyl	*94.0*			*50.0-150*		*03/30/2023 01:21*	WG2031115
(S) n-Triacontane d62	*76.5*			*50.0-150*		*03/30/2023 01:21*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Lead	32.6		2.99	6.00	1	03/27/2023 23:26	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	176000		5740	20000	200	03/25/2023 05:15	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*87.1*			*50.0-150*		*03/25/2023 05:15*	WG2029645

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	5650	25000	500	03/26/2023 21:30	WG2030334
1,2,3-Trichloropropane	U		1.00	2.50	500	03/23/2023 21:25	WG2028781
Acrolein	U		1270	25000	500	03/26/2023 21:30	WG2030334
1,2-Dibromoethane	270		10.3	12.5	2500	03/24/2023 16:15	WG2029311
Acrylonitrile	U		336	5000	500	03/26/2023 21:30	WG2030334
Benzene	43000		47.1	500	500	03/26/2023 21:30	WG2030334
Bromobenzene	U		59.0	500	500	03/26/2023 21:30	WG2030334
Bromochloromethane	U		64.0	500	500	03/26/2023 21:30	WG2030334
Bromodichloromethane	U		68.0	500	500	03/26/2023 21:30	WG2030334
Bromoform	U		64.5	500	500	03/26/2023 21:30	WG2030334
Bromomethane	U		303	2500	500	03/26/2023 21:30	WG2030334
n-Butylbenzene	U	J4	78.5	500	500	03/26/2023 21:30	WG2030334
sec-Butylbenzene	U		62.5	500	500	03/26/2023 21:30	WG2030334
tert-Butylbenzene	U		63.5	500	500	03/26/2023 21:30	WG2030334
Carbon disulfide	U	C3	48.1	500	500	03/26/2023 21:30	WG2030334
Carbon tetrachloride	U		64.0	500	500	03/26/2023 21:30	WG2030334
Chlorobenzene	U		58.0	500	500	03/26/2023 21:30	WG2030334
Chlorodibromomethane	U		70.0	500	500	03/26/2023 21:30	WG2030334
Chloroethane	U		96.0	2500	500	03/26/2023 21:30	WG2030334
Chloroform	U		55.5	2500	500	03/26/2023 21:30	WG2030334
Chloromethane	U	C3	480	1250	500	03/26/2023 21:30	WG2030334
2-Chlorotoluene	U		53.0	500	500	03/26/2023 21:30	WG2030334
4-Chlorotoluene	U		57.0	500	500	03/26/2023 21:30	WG2030334
1,2-Dibromo-3-Chloropropane	U		138	2500	500	03/26/2023 21:30	WG2030334
Dibromomethane	U		61.0	500	500	03/26/2023 21:30	WG2030334
1,2-Dichlorobenzene	U		53.5	500	500	03/26/2023 21:30	WG2030334
1,3-Dichlorobenzene	U		55.0	500	500	03/26/2023 21:30	WG2030334
1,4-Dichlorobenzene	U		60.0	500	500	03/26/2023 21:30	WG2030334
Dichlorodifluoromethane	U		187	2500	500	03/26/2023 21:30	WG2030334
1,1-Dichloroethane	U	C3	50.0	500	500	03/26/2023 21:30	WG2030334
1,2-Dichloroethane	U		40.9	500	500	03/26/2023 21:30	WG2030334
1,1-Dichloroethene	U		94.0	500	500	03/26/2023 21:30	WG2030334
cis-1,2-Dichloroethene	U		63.0	500	500	03/26/2023 21:30	WG2030334
trans-1,2-Dichloroethene	U		74.5	500	500	03/26/2023 21:30	WG2030334
1,2-Dichloropropane	U	C3 J4	74.5	500	500	03/26/2023 21:30	WG2030334
1,1-Dichloropropene	U		71.0	500	500	03/26/2023 21:30	WG2030334
1,3-Dichloropropane	U		55.0	500	500	03/26/2023 21:30	WG2030334
cis-1,3-Dichloropropene	U		55.5	500	500	03/26/2023 21:30	WG2030334
trans-1,3-Dichloropropene	U		59.0	500	500	03/26/2023 21:30	WG2030334
2,2-Dichloropropane	U		80.5	500	500	03/26/2023 21:30	WG2030334
Di-isopropyl ether	U	C3	52.5	500	500	03/26/2023 21:30	WG2030334
Ethylbenzene	3250		68.5	500	500	03/26/2023 21:30	WG2030334
Hexachloro-1,3-butadiene	U		169	500	500	03/26/2023 21:30	WG2030334

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Isopropylbenzene	146	J	52.5	500	500	03/26/2023 21:30	WG2030334
p-Isopropyltoluene	U		60.0	500	500	03/26/2023 21:30	WG2030334
2-Butanone (MEK)	U		595	5000	500	03/26/2023 21:30	WG2030334
Methylene Chloride	U		215	2500	500	03/26/2023 21:30	WG2030334
4-Methyl-2-pentanone (MIBK)	U		239	5000	500	03/26/2023 21:30	WG2030334
Methyl tert-butyl ether	U		50.5	500	500	03/26/2023 21:30	WG2030334
Naphthalene	U		500	2500	500	03/26/2023 21:30	WG2030334
n-Propylbenzene	254	J	49.7	500	500	03/26/2023 21:30	WG2030334
Styrene	U		59.0	500	500	03/26/2023 21:30	WG2030334
1,1,1,2-Tetrachloroethane	U		73.5	500	500	03/26/2023 21:30	WG2030334
1,1,2,2-Tetrachloroethane	U		66.5	500	500	03/26/2023 21:30	WG2030334
1,1,2-Trichlorotrifluoroethane	U		90.0	500	500	03/26/2023 21:30	WG2030334
Tetrachloroethene	U		150	500	500	03/26/2023 21:30	WG2030334
Toluene	45000		139	500	500	03/26/2023 21:30	WG2030334
1,2,3-Trichlorobenzene	U		115	500	500	03/26/2023 21:30	WG2030334
1,2,4-Trichlorobenzene	U		241	500	500	03/26/2023 21:30	WG2030334
1,1,1-Trichloroethane	U		74.5	500	500	03/26/2023 21:30	WG2030334
1,1,2-Trichloroethane	U		79.0	500	500	03/26/2023 21:30	WG2030334
Trichloroethene	U		95.0	500	500	03/26/2023 21:30	WG2030334
Trichlorofluoromethane	U		80.0	2500	500	03/26/2023 21:30	WG2030334
1,2,4-Trimethylbenzene	1320		161	500	500	03/26/2023 21:30	WG2030334
1,2,3-Trimethylbenzene	340	J	52.0	500	500	03/26/2023 21:30	WG2030334
1,3,5-Trimethylbenzene	301	J	52.0	500	500	03/26/2023 21:30	WG2030334
Vinyl chloride	U		117	500	500	03/26/2023 21:30	WG2030334
Xylenes, Total	15300		87.0	1500	500	03/26/2023 21:30	WG2030334
o-Xylene	4960		87.0	500	500	03/26/2023 21:30	WG2030334
m&p-Xylene	10300		215	1000	500	03/26/2023 21:30	WG2030334
(S) Toluene-d8	*99.9*			*80.0-120*		*03/26/2023 21:30*	WG2030334
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*03/26/2023 21:30*	WG2030334
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*03/26/2023 21:30*	WG2030334

EDB / DBCP by Method 8011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ethylene Dibromide	232		5.57	20.8	1040	03/28/2023 18:31	WG2030496
1,2-Dibromo-3-Chloropropane	U		0.00778	0.0208	1.04	03/27/2023 23:40	WG2030496

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
AK102 DRO C10-C25	3980	B	170	800	1	03/30/2023 09:36	WG2031115
AK103 RRO C25-C36	U	J3	460	800	1	03/30/2023 09:36	WG2031115
(S) o-Terphenyl	*97.1*			*50.0-150*		*03/30/2023 09:36*	WG2031115
(S) n-Triacontane d62	*84.5*			*50.0-150*		*03/30/2023 09:36*	WG2031115

Metals (ICP) by Method 6010D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Lead	U		2.99	6.00	1	03/27/2023 23:28	WG2029236

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		28.7	100	1	03/25/2023 00:10	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*85.9*			*50.0-150*		*03/25/2023 00:10*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 16:26	WG2030334
1,2,3-Trichloropropane	U		0.00200	0.00500	1	03/23/2023 16:17	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 16:26	WG2030334
1,2-Dibromoethane	U		0.00410	0.00500	1	03/23/2023 16:17	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 16:26	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 16:26	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 16:26	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 16:26	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 16:26	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 16:26	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 16:26	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 16:26	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 16:26	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 16:26	WG2030334
Carbon disulfide	U	C3	0.0962	1.00	1	03/26/2023 16:26	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 16:26	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 16:26	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 16:26	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 16:26	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 16:26	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 16:26	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 16:26	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 16:26	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 16:26	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 16:26	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 16:26	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 16:26	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 16:26	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 16:26	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 16:26	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 16:26	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 16:26	WG2030334
cis-1,2-Dichloroethene	U		0.126	1.00	1	03/26/2023 16:26	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 16:26	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 16:26	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 16:26	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 16:26	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 16:26	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 16:26	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 16:26	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 16:26	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 16:26	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 16:26	WG2030334

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 16:26	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 16:26	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 16:26	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 16:26	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 16:26	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 16:26	WG2030334
Naphthalene	U		1.00	5.00	1	03/26/2023 16:26	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 16:26	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 16:26	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 16:26	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 16:26	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 16:26	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 16:26	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 16:26	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 16:26	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 16:26	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 16:26	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 16:26	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 16:26	WG2030334
Trichlorofluoromethane	U		0.160	5.00	1	03/26/2023 16:26	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 16:26	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:26	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:26	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 16:26	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 16:26	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 16:26	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 16:26	WG2030334
(S) Toluene-d8	*98.4*			*80.0-120*		*03/26/2023 16:26*	WG2030334
(S) 4-Bromofluorobenzene	*99.9*			*77.0-126*		*03/26/2023 16:26*	WG2030334
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*03/26/2023 16:26*	WG2030334

EDB / DBCP by Method 8011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ethylene Dibromide	U		0.00547	0.0204	1.02	03/28/2023 15:37	WG2031055
1,2-Dibromo-3-Chloropropane	U		0.00763	0.0204	1.02	03/28/2023 15:37	WG2031055

Semi-Volatile Organic Compounds (GC) by Method AK102/103

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
AK102 DRO C10-C25	441	B J	170	800	1	03/30/2023 09:56	WG2031115
AK103 RRO C25-C36	U	J3	460	800	1	03/30/2023 09:56	WG2031115
(S) o-Terphenyl	*98.4*			*50.0-150*		*03/30/2023 09:56*	WG2031115
(S) n-Triacontane d62	*86.8*			*50.0-150*		*03/30/2023 09:56*	WG2031115

Volatile Organic Compounds (GC) by Method AK101

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TPHGAK C6 to C10	U		28.7	100	1	03/24/2023 23:17	WG2029645
(S) a,a,a-Trifluorotoluene(FID)	*84.7*			*50.0-150*		*03/24/2023 23:17*	WG2029645

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.3	50.0	1	03/26/2023 16:47	WG2030334
1,2,3-Trichloropropane	U		0.00200	0.00500	1	03/23/2023 15:05	WG2028781
Acrolein	U		2.54	50.0	1	03/26/2023 16:47	WG2030334
1,2-Dibromoethane	U		0.00410	0.00500	1	03/23/2023 15:05	WG2028781
Acrylonitrile	U		0.671	10.0	1	03/26/2023 16:47	WG2030334
Benzene	U		0.0941	1.00	1	03/26/2023 16:47	WG2030334
Bromobenzene	U		0.118	1.00	1	03/26/2023 16:47	WG2030334
Bromochloromethane	U		0.128	1.00	1	03/26/2023 16:47	WG2030334
Bromodichloromethane	U		0.136	1.00	1	03/26/2023 16:47	WG2030334
Bromoform	U		0.129	1.00	1	03/26/2023 16:47	WG2030334
Bromomethane	U		0.605	5.00	1	03/26/2023 16:47	WG2030334
n-Butylbenzene	U	J4	0.157	1.00	1	03/26/2023 16:47	WG2030334
sec-Butylbenzene	U		0.125	1.00	1	03/26/2023 16:47	WG2030334
tert-Butylbenzene	U		0.127	1.00	1	03/26/2023 16:47	WG2030334
Carbon disulfide	U	C3	0.0962	1.00	1	03/26/2023 16:47	WG2030334
Carbon tetrachloride	U		0.128	1.00	1	03/26/2023 16:47	WG2030334
Chlorobenzene	U		0.116	1.00	1	03/26/2023 16:47	WG2030334
Chlorodibromomethane	U		0.140	1.00	1	03/26/2023 16:47	WG2030334
Chloroethane	U		0.192	5.00	1	03/26/2023 16:47	WG2030334
Chloroform	U		0.111	5.00	1	03/26/2023 16:47	WG2030334
Chloromethane	U	C3	0.960	2.50	1	03/26/2023 16:47	WG2030334
2-Chlorotoluene	U		0.106	1.00	1	03/26/2023 16:47	WG2030334
4-Chlorotoluene	U		0.114	1.00	1	03/26/2023 16:47	WG2030334
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	03/26/2023 16:47	WG2030334
Dibromomethane	U		0.122	1.00	1	03/26/2023 16:47	WG2030334
1,2-Dichlorobenzene	U		0.107	1.00	1	03/26/2023 16:47	WG2030334
1,3-Dichlorobenzene	U		0.110	1.00	1	03/26/2023 16:47	WG2030334
1,4-Dichlorobenzene	U		0.120	1.00	1	03/26/2023 16:47	WG2030334
Dichlorodifluoromethane	U		0.374	5.00	1	03/26/2023 16:47	WG2030334
1,1-Dichloroethane	U	C3	0.100	1.00	1	03/26/2023 16:47	WG2030334
1,2-Dichloroethane	U		0.0819	1.00	1	03/26/2023 16:47	WG2030334
1,1-Dichloroethene	U		0.188	1.00	1	03/26/2023 16:47	WG2030334
cis-1,2-Dichloroethene	U		0.126	1.00	1	03/26/2023 16:47	WG2030334
trans-1,2-Dichloroethene	U		0.149	1.00	1	03/26/2023 16:47	WG2030334
1,2-Dichloropropane	U	C3 J4	0.149	1.00	1	03/26/2023 16:47	WG2030334
1,1-Dichloropropene	U		0.142	1.00	1	03/26/2023 16:47	WG2030334
1,3-Dichloropropane	U		0.110	1.00	1	03/26/2023 16:47	WG2030334
cis-1,3-Dichloropropene	U		0.111	1.00	1	03/26/2023 16:47	WG2030334
trans-1,3-Dichloropropene	U		0.118	1.00	1	03/26/2023 16:47	WG2030334
2,2-Dichloropropane	U		0.161	1.00	1	03/26/2023 16:47	WG2030334
Di-isopropyl ether	U	C3	0.105	1.00	1	03/26/2023 16:47	WG2030334
Ethylbenzene	U		0.137	1.00	1	03/26/2023 16:47	WG2030334
Hexachloro-1,3-butadiene	U		0.337	1.00	1	03/26/2023 16:47	WG2030334
Isopropylbenzene	U		0.105	1.00	1	03/26/2023 16:47	WG2030334
p-Isopropyltoluene	U		0.120	1.00	1	03/26/2023 16:47	WG2030334
2-Butanone (MEK)	U		1.19	10.0	1	03/26/2023 16:47	WG2030334
Methylene Chloride	U		0.430	5.00	1	03/26/2023 16:47	WG2030334
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	03/26/2023 16:47	WG2030334
Methyl tert-butyl ether	U		0.101	1.00	1	03/26/2023 16:47	WG2030334

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Naphthalene	U		1.00	5.00	1	03/26/2023 16:47	WG2030334
n-Propylbenzene	U		0.0993	1.00	1	03/26/2023 16:47	WG2030334
Styrene	U		0.118	1.00	1	03/26/2023 16:47	WG2030334
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	03/26/2023 16:47	WG2030334
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	03/26/2023 16:47	WG2030334
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	03/26/2023 16:47	WG2030334
Tetrachloroethene	U		0.300	1.00	1	03/26/2023 16:47	WG2030334
Toluene	U		0.278	1.00	1	03/26/2023 16:47	WG2030334
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/26/2023 16:47	WG2030334
1,2,4-Trichlorobenzene	U		0.481	1.00	1	03/26/2023 16:47	WG2030334
1,1,1-Trichloroethane	U		0.149	1.00	1	03/26/2023 16:47	WG2030334
1,1,2-Trichloroethane	U		0.158	1.00	1	03/26/2023 16:47	WG2030334
Trichloroethene	U		0.190	1.00	1	03/26/2023 16:47	WG2030334
Trichlorofluoromethane	U		0.160	5.00	1	03/26/2023 16:47	WG2030334
1,2,4-Trimethylbenzene	U		0.322	1.00	1	03/26/2023 16:47	WG2030334
1,2,3-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:47	WG2030334
1,3,5-Trimethylbenzene	U		0.104	1.00	1	03/26/2023 16:47	WG2030334
Vinyl chloride	U		0.234	1.00	1	03/26/2023 16:47	WG2030334
Xylenes, Total	U		0.174	3.00	1	03/26/2023 16:47	WG2030334
o-Xylene	U		0.174	1.00	1	03/26/2023 16:47	WG2030334
m&p-Xylene	U		0.430	2.00	1	03/26/2023 16:47	WG2030334
(S) Toluene-d8	*99.9*			*80.0-120*		*03/26/2023 16:47*	WG2030334
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*03/26/2023 16:47*	WG2030334
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*03/26/2023 16:47*	WG2030334

Method Blank (MB)

(MB) R3906354-1 03/28/23 11:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Lead	U		2.99	6.00

Laboratory Control Sample (LCS)

(LCS) R3906354-2 03/28/23 11:43

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Lead	1000	960	96.0	80.0-120	

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/27/23 22:47 • (MS) R3906364-4 03/27/23 22:53 • (MSD) R3906364-5 03/27/23 22:55

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Lead	1000	43.2	984	977	94.1	93.4	1	75.0-125			0.731	20

Method Blank (MB)

(MB) R3907434-3 03/24/23 22:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHGAK C6 to C10	U		28.7	100
(S) a,a,a-Trifluorotoluene(FID)	*89.2*			*60.0-120*

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

(LCS) R3907434-1 03/24/23 20:24 • (LCSD) R3907434-2 03/24/23 20:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	3890	3770	77.8	75.4	60.0-120			3.13	20
(S) a,a,a-Trifluorotoluene(FID)				*98.9*	*87.4*	*60.0-120*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/25/23 04:49 • (MS) R3907434-4 03/25/23 05:42 • (MSD) R3907434-5 03/25/23 07:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000000	180000	3830000	3810000	73.0	72.6	1000	70.0-130			0.524	20
(S) a,a,a-Trifluorotoluene(FID)					*95.4*	*93.3*		*50.0-150*				

Method Blank (MB)

(MB) R3907605-3 03/30/23 23:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TPHGAK C6 to C10	97.2	J	28.7	100
(S) a,a,a-Trifluorotoluene(FID)	*84.7*			*60.0-120*

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

(LCS) R3907605-1 03/30/23 20:01 • (LCSD) R3907605-2 03/30/23 21:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPHGAK C6 to C10	5000	4130	4970	82.6	99.4	60.0-120			18.5	20
(S) a,a,a-Trifluorotoluene(FID)				*93.5*	*94.5*	*60.0-120*				

Method Blank (MB)

(MB) R3904849-2 03/23/23 14:18

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,2,3-Trichloropropane	U		0.00200	0.00500
1,2-Dibromoethane	U		0.00410	0.00500

Laboratory Control Sample (LCS)

(LCS) R3904849-1 03/23/23 13:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2,3-Trichloropropane	0.0500	0.0480	96.0	70.0-130	
1,2-Dibromoethane	0.0500	0.0440	88.0	70.0-130	

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/23/23 21:01 • (MS) R3904849-3 03/23/23 21:49 • (MSD) R3904849-4 03/23/23 22:12

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichloropropane	25.0	U	24.5	24.0	98.0	96.0	500	70.0-130			2.06	20
1,2-Dibromoethane	25.0	261	289	271	112	40.0	500	70.0-130	E	E V	6.43	20

Method Blank (MB)

(MB) R3905629-2 03/24/23 09:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,2-Dibromoethane	U		0.00410	0.00500

Laboratory Control Sample (LCS)

(LCS) R3905629-1 03/24/23 08:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2-Dibromoethane	0.0500	0.0420	84.0	70.0-130	

Method Blank (MB)

(MB) R3907249-3 03/26/23 14:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromochloromethane	U		0.128	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

Method Blank (MB)

(MB) R3907249-3 03/26/23 14:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
o-Xylene	U		0.174	1.00
m&p-Xylenes	U		0.430	2.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	53.2	52.6	213	210	19.0-160	J4	J4	1.13	27
Acrolein	25.0	24.6	22.9	98.4	91.6	10.0-160			7.16	26

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acrylonitrile	25.0	20.2	18.7	80.8	74.8	55.0-149			7.71	20
Benzene	5.00	4.64	4.23	92.8	84.6	70.0-123			9.24	20
Bromobenzene	5.00	4.59	4.47	91.8	89.4	73.0-121			2.65	20
Bromochloromethane	5.00	4.39	5.03	87.8	101	76.0-122			13.6	20
Bromodichloromethane	5.00	4.80	4.55	96.0	91.0	75.0-120			5.35	20
Bromoform	5.00	5.69	4.99	114	99.8	68.0-132			13.1	20
Bromomethane	5.00	4.40	4.37	88.0	87.4	10.0-160			0.684	25
n-Butylbenzene	5.00	6.00	6.32	120	126	73.0-125		J4	5.19	20
sec-Butylbenzene	5.00	4.95	5.13	99.0	103	75.0-125			3.57	20
tert-Butylbenzene	5.00	5.07	4.99	101	99.8	76.0-124			1.59	20
Carbon disulfide	5.00	3.87	4.21	77.4	84.2	61.0-128			8.42	20
Carbon tetrachloride	5.00	5.54	5.43	111	109	68.0-126			2.01	20
Chlorobenzene	5.00	4.71	4.71	94.2	94.2	80.0-121			0.000	20
Chlorodibromomethane	5.00	5.03	4.87	101	97.4	77.0-125			3.23	20
Chloroethane	5.00	4.51	4.29	90.2	85.8	47.0-150			5.00	20
Chloroform	5.00	4.74	4.57	94.8	91.4	73.0-120			3.65	20
Chloromethane	5.00	3.37	3.61	67.4	72.2	41.0-142			6.88	20
2-Chlorotoluene	5.00	4.60	4.38	92.0	87.6	76.0-123			4.90	20
4-Chlorotoluene	5.00	4.44	4.27	88.8	85.4	75.0-122			3.90	20
1,2-Dibromo-3-Chloropropane	5.00	5.25	5.56	105	111	58.0-134			5.74	20
Dibromomethane	5.00	4.70	4.70	94.0	94.0	80.0-120			0.000	20
1,2-Dichlorobenzene	5.00	5.22	4.95	104	99.0	79.0-121			5.31	20
1,3-Dichlorobenzene	5.00	5.12	4.81	102	96.2	79.0-120			6.24	20
1,4-Dichlorobenzene	5.00	5.25	4.88	105	97.6	79.0-120			7.31	20
Dichlorodifluoromethane	5.00	5.52	5.30	110	106	51.0-149			4.07	20
1,1-Dichloroethane	5.00	3.78	3.67	75.6	73.4	70.0-126			2.95	20
1,2-Dichloroethane	5.00	4.79	4.42	95.8	88.4	70.0-128			8.03	20
1,1-Dichloroethene	5.00	4.21	4.50	84.2	90.0	71.0-124			6.66	20
cis-1,2-Dichloroethene	5.00	4.54	4.47	90.8	89.4	73.0-120			1.55	20
trans-1,2-Dichloroethene	5.00	4.61	4.15	92.2	83.0	73.0-120			10.5	20
1,2-Dichloropropane	5.00	3.79	3.85	75.8	77.0	77.0-125	J4		1.57	20
1,1-Dichloropropene	5.00	4.57	4.64	91.4	92.8	74.0-126			1.52	20
1,3-Dichloropropane	5.00	4.76	4.56	95.2	91.2	80.0-120			4.29	20
cis-1,3-Dichloropropene	5.00	4.65	4.20	93.0	84.0	80.0-123			10.2	20
trans-1,3-Dichloropropene	5.00	4.26	4.13	85.2	82.6	78.0-124			3.10	20
2,2-Dichloropropane	5.00	5.69	5.75	114	115	58.0-130			1.05	20
Di-isopropyl ether	5.00	3.92	3.63	78.4	72.6	58.0-138			7.68	20
Ethylbenzene	5.00	5.29	5.27	106	105	79.0-123			0.379	20
Hexachloro-1,3-butadiene	5.00	5.56	5.86	111	117	54.0-138			5.25	20
Isopropylbenzene	5.00	5.48	5.37	110	107	76.0-127			2.03	20

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

(LCS) R3907249-1 03/26/23 12:40 • (LCSD) R3907249-2 03/26/23 13:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	5.39	5.40	108	108	76.0-125			0.185	20
2-Butanone (MEK)	25.0	28.3	26.0	113	104	44.0-160			8.47	20
Methylene Chloride	5.00	4.77	4.24	95.4	84.8	67.0-120			11.8	20
4-Methyl-2-pentanone (MIBK)	25.0	27.1	25.9	108	104	68.0-142			4.53	20
Methyl tert-butyl ether	5.00	5.11	4.57	102	91.4	68.0-125			11.2	20
Naphthalene	5.00	4.91	5.56	98.2	111	54.0-135			12.4	20
n-Propylbenzene	5.00	4.58	4.51	91.6	90.2	77.0-124			1.54	20
Styrene	5.00	5.36	5.18	107	104	73.0-130			3.42	20
1,1,1,2-Tetrachloroethane	5.00	5.73	5.16	115	103	75.0-125			10.5	20
1,1,2,2-Tetrachloroethane	5.00	4.78	4.34	95.6	86.8	65.0-130			9.65	20
1,1,2-Trichlorotrifluoroethane	5.00	4.98	4.65	99.6	93.0	69.0-132			6.85	20
Tetrachloroethene	5.00	4.91	4.81	98.2	96.2	72.0-132			2.06	20
Toluene	5.00	4.57	4.40	91.4	88.0	79.0-120			3.79	20
1,2,3-Trichlorobenzene	5.00	5.00	5.67	100	113	50.0-138			12.6	20
1,2,4-Trichlorobenzene	5.00	5.29	5.42	106	108	57.0-137			2.43	20
1,1,1-Trichloroethane	5.00	4.98	4.79	99.6	95.8	73.0-124			3.89	20
1,1,2-Trichloroethane	5.00	5.35	4.58	107	91.6	80.0-120			15.5	20
Trichloroethene	5.00	4.80	4.65	96.0	93.0	78.0-124			3.17	20
Trichlorofluoromethane	5.00	6.32	6.36	126	127	59.0-147			0.631	20
1,2,4-Trimethylbenzene	5.00	5.30	5.04	106	101	76.0-121			5.03	20
1,2,3-Trimethylbenzene	5.00	5.16	4.91	103	98.2	77.0-120			4.97	20
1,3,5-Trimethylbenzene	5.00	4.84	4.89	96.8	97.8	76.0-122			1.03	20
Vinyl chloride	5.00	4.11	4.14	82.2	82.8	67.0-131			0.727	20
Xylenes, Total	15.0	15.3	14.6	102	97.3	79.0-123			4.68	20
o-Xylene	5.00	5.12	4.85	102	97.0	80.0-122			5.42	20
m&p-Xylenes	10.0	10.2	9.71	102	97.1	80.0-122			4.92	20
(S) Toluene-d8				*99.2*	*99.9*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*103*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*104*	*107*	*70.0-130*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	12500	U	21800	23300	174	186	500	10.0-160	J5	J5	6.65	35
Acrolein	12500	U	11000	12300	88.0	98.4	500	10.0-160			11.2	39
Acrylonitrile	12500	U	9150	9700	73.2	77.6	500	21.0-160			5.84	32
Benzene	2500	37300	42900	43900	224	264	500	17.0-158	V	V	2.30	27

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromobenzene	2500	U	2230	2260	89.2	90.4	500	30.0-149			1.34	28
Bromochloromethane	2500	U	2270	2450	90.8	98.0	500	38.0-142			7.63	26
Bromodichloromethane	2500	U	2250	2420	90.0	96.8	500	31.0-150			7.28	27
Bromoform	2500	U	2600	2760	104	110	500	29.0-150			5.97	29
Bromomethane	2500	U	1950	2280	78.0	91.2	500	10.0-160			15.6	38
n-Butylbenzene	2500	U	2870	3190	115	128	500	31.0-150			10.6	30
sec-Butylbenzene	2500	U	2550	2700	102	108	500	33.0-155			5.71	29
tert-Butylbenzene	2500	U	2510	2700	100	108	500	34.0-153			7.29	28
Carbon disulfide	2500	U	1860	2010	74.4	80.4	500	10.0-156			7.75	28
Carbon tetrachloride	2500	U	2780	2990	111	120	500	23.0-159			7.28	28
Chlorobenzene	2500	U	2350	2430	94.0	97.2	500	33.0-152			3.35	27
Chlorodibromomethane	2500	U	2490	2410	99.6	96.4	500	37.0-149			3.27	27
Chloroethane	2500	U	2290	2400	91.6	96.0	500	10.0-160			4.69	30
Chloroform	2500	U	2280	2530	91.2	101	500	29.0-154			10.4	28
Chloromethane	2500	U	1860	1980	74.4	79.2	500	10.0-160			6.25	29
2-Chlorotoluene	2500	U	2100	2320	84.0	92.8	500	32.0-153			9.95	28
4-Chlorotoluene	2500	U	2090	2310	83.6	92.4	500	32.0-150			10.0	28
1,2-Dibromo-3-Chloropropane	2500	U	2190	2680	87.6	107	500	22.0-151			20.1	34
Dibromomethane	2500	U	2270	2520	90.8	101	500	30.0-151			10.4	27
1,2-Dichlorobenzene	2500	U	2450	2380	98.0	95.2	500	34.0-149			2.90	28
1,3-Dichlorobenzene	2500	U	2400	2440	96.0	97.6	500	36.0-146			1.65	27
1,4-Dichlorobenzene	2500	U	2440	2520	97.6	101	500	35.0-142			3.23	27
Dichlorodifluoromethane	2500	U	3220	3180	129	127	500	10.0-160			1.25	29
1,1-Dichloroethane	2500	U	1890	1890	75.6	75.6	500	25.0-158			0.000	27
1,2-Dichloroethane	2500	U	2210	2410	88.4	96.4	500	29.0-151			8.66	27
1,1-Dichloroethene	2500	U	1920	2260	76.8	90.4	500	11.0-160			16.3	29
cis-1,2-Dichloroethene	2500	U	2210	2460	88.4	98.4	500	10.0-160			10.7	27
trans-1,2-Dichloroethene	2500	U	2110	2300	84.4	92.0	500	17.0-153			8.62	27
1,2-Dichloropropane	2500	U	1750	1840	70.0	73.6	500	30.0-156			5.01	27
1,1-Dichloropropene	2500	U	2360	2430	94.4	97.2	500	25.0-158			2.92	27
1,3-Dichloropropane	2500	U	2090	2230	83.6	89.2	500	38.0-147			6.48	27
cis-1,3-Dichloropropene	2500	U	2180	2200	87.2	88.0	500	34.0-149			0.913	28
trans-1,3-Dichloropropene	2500	U	1940	1990	77.6	79.6	500	32.0-149			2.54	28
2,2-Dichloropropane	2500	U	2860	2870	114	115	500	24.0-152			0.349	29
Di-isopropyl ether	2500	U	1790	1850	71.6	74.0	500	21.0-160			3.30	28
Ethylbenzene	2500	2930	5650	6110	109	127	500	30.0-155			7.82	27
Hexachloro-1,3-butadiene	2500	U	2410	2780	96.4	111	500	20.0-154			14.3	34
Isopropylbenzene	2500	122	2770	3050	106	117	500	28.0-157			9.62	27
p-Isopropyltoluene	2500	U	2530	2780	101	111	500	30.0-154			9.42	29
2-Butanone (MEK)	12500	U	12300	12200	98.4	97.6	500	10.0-160			0.816	32

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/26/23 21:08 • (MS) R3907249-4 03/26/23 22:35 • (MSD) R3907249-5 03/26/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methylene Chloride	2500	U	2200	2150	88.0	86.0	500	23.0-144			2.30	28
4-Methyl-2-pentanone (MIBK)	12500	U	12200	12800	97.6	102	500	29.0-160			4.80	29
Methyl tert-butyl ether	2500	U	2210	2500	88.4	100	500	28.0-150			12.3	29
Naphthalene	2500	U	2390	2940	95.6	118	500	12.0-156			20.6	35
n-Propylbenzene	2500	234	2440	2560	88.2	93.0	500	31.0-154			4.80	28
Styrene	2500	U	2710	3000	108	120	500	33.0-155			10.2	28
1,1,1,2-Tetrachloroethane	2500	U	2830	2960	113	118	500	36.0-151			4.49	29
1,1,2,2-Tetrachloroethane	2500	U	2220	2300	88.8	92.0	500	33.0-150			3.54	28
1,1,2-Trichlorotrifluoroethane	2500	U	2580	2800	103	112	500	23.0-160			8.18	30
Tetrachloroethene	2500	U	2590	2670	104	107	500	10.0-160			3.04	27
Toluene	2500	38000	42800	43700	192	228	500	26.0-154	V	V	2.08	28
1,2,3-Trichlorobenzene	2500	U	2230	2650	89.2	106	500	17.0-150			17.2	36
1,2,4-Trichlorobenzene	2500	U	2420	2740	96.8	110	500	24.0-150			12.4	33
1,1,1-Trichloroethane	2500	U	2550	2940	102	118	500	23.0-160			14.2	28
1,1,2-Trichloroethane	2500	U	2220	2330	88.8	93.2	500	35.0-147			4.84	27
Trichloroethene	2500	U	2180	2200	87.2	88.0	500	10.0-160			0.913	25
Trichlorofluoromethane	2500	U	3600	3620	144	145	500	17.0-160			0.554	31
1,2,4-Trimethylbenzene	2500	1160	3780	3780	105	105	500	26.0-154			0.000	27
1,2,3-Trimethylbenzene	2500	328	2840	2810	100	99.3	500	32.0-149			1.06	28
1,3,5-Trimethylbenzene	2500	258	2670	2810	96.5	102	500	28.0-153			5.11	27
Vinyl chloride	2500	U	2210	2140	88.4	85.6	500	10.0-160			3.22	27
Xylenes, Total	7500	13300	21600	21900	111	115	500	29.0-154			1.38	28
o-Xylene	2500	4530	7160	7340	105	112	500	45.0-144			2.48	26
m&p-Xylenes	5000	8730	14400	14600	113	117	500	43.0-146			1.38	26
(S) Toluene-d8					*99.0*	*96.4*		*80.0-120*				
(S) 4-Bromofluorobenzene					*102*	*103*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*105*	*106*		*70.0-130*				

Method Blank (MB)

(MB) R3907762-2 03/30/23 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromochloromethane	U		0.128	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00

Method Blank (MB)

(MB) R3907762-2 03/30/23 09:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.337	1.00
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,2,3-Trimethylbenzene	U		0.104	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
o-Xylene	U		0.174	1.00
m&p-Xylenes	U		0.430	2.00
(S) Toluene-d8	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	26.5	106	19.0-160	
Acrolein	25.0	23.9	95.6	10.0-160	

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	25.0	24.0	96.0	55.0-149	
Benzene	5.00	4.74	94.8	70.0-123	
Bromobenzene	5.00	4.23	84.6	73.0-121	
Bromochloromethane	5.00	4.68	93.6	76.0-122	
Bromodichloromethane	5.00	4.51	90.2	75.0-120	
Bromoform	5.00	3.66	73.2	68.0-132	
Bromomethane	5.00	4.49	89.8	10.0-160	
n-Butylbenzene	5.00	4.16	83.2	73.0-125	
sec-Butylbenzene	5.00	4.51	90.2	75.0-125	
tert-Butylbenzene	5.00	4.49	89.8	76.0-124	
Carbon disulfide	5.00	4.64	92.8	61.0-128	
Carbon tetrachloride	5.00	4.74	94.8	68.0-126	
Chlorobenzene	5.00	4.55	91.0	80.0-121	
Chlorodibromomethane	5.00	4.05	81.0	77.0-125	
Chloroethane	5.00	5.89	118	47.0-150	
Chloroform	5.00	4.85	97.0	73.0-120	
Chloromethane	5.00	5.76	115	41.0-142	
2-Chlorotoluene	5.00	4.64	92.8	76.0-123	
4-Chlorotoluene	5.00	4.52	90.4	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	3.93	78.6	58.0-134	
Dibromomethane	5.00	4.14	82.8	80.0-120	
1,2-Dichlorobenzene	5.00	4.41	88.2	79.0-121	
1,3-Dichlorobenzene	5.00	4.46	89.2	79.0-120	
1,4-Dichlorobenzene	5.00	4.55	91.0	79.0-120	
Dichlorodifluoromethane	5.00	7.10	142	51.0-149	
1,1-Dichloroethane	5.00	4.87	97.4	70.0-126	
1,2-Dichloroethane	5.00	4.53	90.6	70.0-128	
1,1-Dichloroethene	5.00	4.84	96.8	71.0-124	
cis-1,2-Dichloroethene	5.00	4.65	93.0	73.0-120	
trans-1,2-Dichloroethene	5.00	4.84	96.8	73.0-120	
1,2-Dichloropropane	5.00	4.58	91.6	77.0-125	
1,1-Dichloropropene	5.00	4.67	93.4	74.0-126	
1,3-Dichloropropane	5.00	4.26	85.2	80.0-120	
cis-1,3-Dichloropropene	5.00	4.19	83.8	80.0-123	
trans-1,3-Dichloropropene	5.00	4.05	81.0	78.0-124	
2,2-Dichloropropane	5.00	4.73	94.6	58.0-130	
Di-isopropyl ether	5.00	4.62	92.4	58.0-138	
Ethylbenzene	5.00	4.94	98.8	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.09	81.8	54.0-138	
Isopropylbenzene	5.00	4.65	93.0	76.0-127	

Laboratory Control Sample (LCS)

(LCS) R3907762-1 03/30/23 08:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.46	89.2	76.0-125	
2-Butanone (MEK)	25.0	24.8	99.2	44.0-160	
Methylene Chloride	5.00	5.22	104	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	22.4	89.6	68.0-142	
Methyl tert-butyl ether	5.00	4.24	84.8	68.0-125	
Naphthalene	5.00	4.00	80.0	54.0-135	
n-Propylbenzene	5.00	4.62	92.4	77.0-124	
Styrene	5.00	4.54	90.8	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	4.44	88.8	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	4.21	84.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	5.00	4.90	98.0	69.0-132	
Tetrachloroethene	5.00	4.79	95.8	72.0-132	
Toluene	5.00	4.73	94.6	79.0-120	
1,2,3-Trichlorobenzene	5.00	4.09	81.8	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.19	83.8	57.0-137	
1,1,1-Trichloroethane	5.00	4.95	99.0	73.0-124	
1,1,2-Trichloroethane	5.00	4.03	80.6	80.0-120	
Trichloroethene	5.00	4.65	93.0	78.0-124	
Trichlorofluoromethane	5.00	5.47	109	59.0-147	
1,2,4-Trimethylbenzene	5.00	4.41	88.2	76.0-121	
1,2,3-Trimethylbenzene	5.00	4.40	88.0	77.0-120	
1,3,5-Trimethylbenzene	5.00	4.53	90.6	76.0-122	
Vinyl chloride	5.00	5.72	114	67.0-131	
Xylenes, Total	15.0	14.0	93.3	79.0-123	
o-Xylene	5.00	4.56	91.2	80.0-122	
m&p-Xylenes	10.0	9.42	94.2	80.0-122	
(S) Toluene-d8			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*94.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*99.8*	*70.0-130*	

Method Blank (MB)

(MB) R3906632-1 03/27/23 19:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	U		0.00536	0.0200
1,2-Dibromo-3-Chloropropane	U		0.00748	0.0200

L1597379-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1597379-03 03/27/23 20:41 • (DUP) R3906632-3 03/27/23 20:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	U	U	1.02	0.000		20
1,2-Dibromo-3-Chloropropane	U	U	1.02	0.000		20

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

(LCS) R3906632-4 03/27/23 22:40 • (LCSD) R3906632-5 03/28/23 01:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylene Dibromide	0.250	0.214	0.224	85.6	89.6	60.0-140			4.57	20
1,2-Dibromo-3-Chloropropane	0.250	0.219	0.227	87.6	90.8	60.0-140			3.59	20

L1597389-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1597389-02 03/27/23 20:17 • (MS) R3906632-2 03/27/23 20:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.102	324	320	0.000	1.02	64.0-159	E V
1,2-Dibromo-3-Chloropropane	0.102	U	0.135	132	1.02	72.0-148	P

Method Blank (MB)

(MB) R3906418-1 03/28/23 14:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylene Dibromide	U		0.00536	0.0200
1,2-Dibromo-3-Chloropropane	U		0.00748	0.0200

L1597389-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1597389-04 03/28/23 15:37 • (DUP) R3906418-3 03/28/23 15:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethylene Dibromide	U	U	1	0.000		20
1,2-Dibromo-3-Chloropropane	U	U	1	0.000		20

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

(LCS) R3906418-4 03/28/23 17:36 • (LCSD) R3906418-5 03/28/23 20:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylene Dibromide	0.250	0.193	0.194	77.2	77.6	60.0-140			0.517	20
1,2-Dibromo-3-Chloropropane	0.250	0.202	0.206	80.8	82.4	60.0-140			1.96	20

L1597411-10 Original Sample (OS) • Matrix Spike (MS)

(OS) L1597411-10 03/28/23 15:13 • (MS) R3906418-2 03/28/23 15:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ethylene Dibromide	0.0984	U	0.0998	101	1	64.0-159	
1,2-Dibromo-3-Chloropropane	0.0984	U	0.0885	89.9	1	72.0-148	

Method Blank (MB)

(MB) R3907348-1 03/29/23 23:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
AK102 DRO C10-C25	403	J	170	800
AK103 RRO C25-C36	553	J	460	800
(S) o-Terphenyl	*103*			*60.0-120*
(S) n-Triacontane d62	*91.5*			*60.0-120*

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

(LCS) R3907348-2 03/29/23 23:57 • (LCSD) R3907348-3 03/30/23 00:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	6710	6460	112	108	75.0-125			3.80	20
(S) o-Terphenyl				*106*	*104*	*60.0-120*				
(S) n-Triacontane d62				*87.0*	*83.5*	*60.0-120*				

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

(LCS) R3907348-4 03/30/23 00:39 • (LCSD) R3907348-5 03/30/23 01:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	6000	6460	5150	108	85.8	60.0-120		J3	22.6	20
(S) o-Terphenyl				*109*	*96.1*	*60.0-120*				
(S) n-Triacontane d62				*94.5*	*79.0*	*60.0-120*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/30/23 01:21 • (MS) R3907348-6 03/30/23 02:00 • (MSD) R3907348-7 03/30/23 02:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	6000	4460	9430	11300	82.8	114	1	75.0-125			18.0	20
(S) o-Terphenyl					*99.3*	*104*		*50.0-150*				
(S) n-Triacontane d62					*85.0*	*92.5*		*50.0-150*				

L1597389-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1597389-02 03/30/23 01:21 • (MS) R3907348-8 03/30/23 06:26 • (MSD) R3907348-9 03/30/23 06:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
AK103 RRO C25-C36	6000	588	5540	6340	82.5	95.9	1	60.0-120			13.5	20
(S) o-Terphenyl					*111*	*102*		*50.0-150*				
(S) n-Triacontane d62					*91.5*	*87.0*		*50.0-150*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
P	RPD between the primary and confirmatory analysis exceeded 40%.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

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

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

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

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

Company Name/Address:
Arcadis - Chevron - AK

880 H St.
Anchorage, AK 99501

Billing Information:
Attn: Acounts Payable
630 Plaza Dr Ste 600
Highlands Ranch, CO 80129

Pres Chk

Report to:
Nick Wood/Sydney Clark/Erika Midkiff

Email To:
erika.midkiff@arcadis.com;Phillip.Jeffers@arcad

Project Description:
381811

City/State Collected: Fairbanks, AK

Please Circle: PT MT CT ET (AKST)

Phone: **907-276-8095**

Client Project #
30064229.19.45

Lab Project #
CHEVARCAK-381811

Collected by (print):
E Wyatt

Site/Facility ID #
501 E 30TH AVE, FAIRBANKS,

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day X 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	AK101 40mlAmb HCl	AK102/103 100ml Amb HCl	EDB/123TCP 524LL 40mlAmb-HCl	EDB/DBCP 8011 40mlClr-NaThio	Total Lead 6010 250mlHDPE-HNO3	VOCs 8260 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-9-W-20230321	Grab	GW	-	3.21.23	0900	15	X	X	X	X	X	X	Cooler-2	-01
MW-3-W-20230321	"	GW	-	"	1000	45	"	"	"	"	"	"	MS/MSD	-02
BD-1-W-20230321	"	GW	-	"	-	15	"	"	"	"	"			-03
EQB-1-W-20230321	"	GW	-	"	1030	15	"	"	"	"	"			-04
Trip Blank 2	-	-	-	-	-	6	X		X			X		-05

Chain of Custody Page 1 of 1

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN

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

SDG # L1577589
D080

Acctnum: **CHEVARCAK**
Template: **T225274**
Prelogin: **P983400**
PM: **110 - Brian Ford**
PB: **CR 3-6-23**

Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS X FedEx __ Courier _____

Tracking # 6094 5471 0792

Sample Receipt Checklist
COC Seal Present/Intact: __NP X Y __N
COC Signed/Accurate: X Y __N
Bottles arrive intact: X Y __N
Correct bottles used: X Y __N
Sufficient volume sent: X Y __N
If Applicable
VOA Zero Headspace: X Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: X Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No HCL / MeoH TBR	If preservation required by Login: Date/Time
E Wyatt	3.21.23	1130		6 4 HCl 6 2 NaThio	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: NSA 7 °C 1.9+0=1.9 Bottles Received: 90	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Kayci J	Date: 3/22/23 Time: 915	Hold: / Condition: NCF / OK

Attachment C

Historical Groundwater Analytical Results – Third Quarter 2019 through 2022

Table 1. Historic Groundwater Gauging and Analytical Results
Third Quarter 2019 to Current
Five Star Auto, Chevron Station 381811
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft)	Datum	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft)	GRO (µg/L)	DRO (µg/L)	RRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Comments
ADEC Groundwater Cleanup Level								**2,200**	**1,500**	**1,100**	**4.6**	**1,100**	**15**	**190**	**1.7**	**140**	**0.075**	**280**	**15**	
MW-1	8/28/2019	4-14	443.05	NAVD88	6.76	0.00	436.29	<100 [<100]	**570 [530]**	**1,400 [1,300]**	<0.50 BJ [<0.51 BJ]	**0.58 J** [<0.39]	<0.50 [<0.50]	<0.75 [<0.75]	<0.027 J [<0.027 J]	<0.44 [<0.44]	--	<0.024 J [<0.024 J]	<2.7 [<2.7]	Gauged on 9/4/2019
MW-1	11/6/2019	4-14	443.05	NAVD88	8.41	0.00	434.64	<100	**620**	**680**	<0.50 B	<2.0 B	<0.50	<0.75	<0.50 B	<0.44	--	<0.024	**17 J**	
MW-1	6/18/2020	4-14	443.05	NAVD88	7.44	0.00	435.61	<100	**496 J**	**962**	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	--	<1.00	**8.88**	
MW-1	7/28/2020	4-14	443.05	NAVD88	6.40	0.00	436.65	**11.4 J**	**441 J**	**1,100**	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
MW-1	3/25/2021	4-14	443.05	NAVD88	--	--	--	--	--	--	--	--	--	--	--	--		--	--	unable to be located due to large snow banks from plowing
MW-1	6/14/2021	4-14	443.05	NAVD88	8.08	0.00	434.97	<100 B	**498 J**	<850 B	**0.233 J**	**1.51**	**1.23**	**9.85**	**1.34 J**	<1.00	<0.00500	<1.00	<100 B	
MW-1	8/17/2021	4-14	443.05	NAVD88	7.76	0.00	435.29	<100 B J	<800 B J	<800 J	<1.00	**0.525 J**	<1.00 B	**6.19 UB**	***<5.00***	<1.00	<0.00500 J	<1.00	**3.69 J**	
MW-1	10/13/2021	4-14	443.05	NAVD 88	8.28	0.00	434.77	<100 B	**831 J**	<888	<1.00 J	<1.00 J	<1.00 J	<3.00 J	<5.00 J	<1.00 J	<0.00500 J	<1.00 J	**5.21 J**	
MW-1	3/14/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate due to ice/snow
MW-1	6/18/2022	4-14	443.05	NAVD 88	6.95	--	436.10	<100 B	**390 J**	**772 J**	**0.234 J**	**4.30**	**2.04**	**10.1**	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
MW-1	8/2/2022	4-14	443.05	NAVD 88	7.20	--	435.85	**29.8 J**	**346 J**	**410 J**	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500 / <0.0204 [a]	<1.00	**7.23**	
MW-1	10/7/2022	4-14	443.32	NAVD 88	7.79	0.00	435.53	<100	**300 J**	**529 J**	**0.205 J**	**0.622 J**	**0.212 J**	<3.00 B	***<5.00***	<1.00	<0.00500	<1.00	**3.88 J**	
MW-2	8/28/2019	4-14	442.15	NAVD88	5.97	0.00	436.18	**63,000 J**	**1,300**	**530**	**13,000 J**	**13,000**	**1,600**	**6,000**	**41 J**	<4.4	--	**40 J**	<2.7	Gauged on 9/4/2019
MW-2	11/6/2019	4-14	442.15	NAVD88	7.62	0.00	434.53	**69,000**	**480 J**	<250 BJ	**14,000 J**	**12,000 D**	**1,100 D**	**3,900 D**	**30 J**	<0.44	--	<250 BJ	<2.7	
MW-2	6/18/2020	4-14	442.15	NAVD88	6.63	0.00	435.52	**29,000 [29,400]**	**1,180 [1,150]**	**524 J [700 J]**	**8,130 J [8,340 J]**	**5,970 J [6,770 J]**	**1,040 J [969 J]**	<30.0 [<30.0]	**54.2 [51.3]**	<10.0 [<10.0]	--	<10.0 [<10.0]	<6.00 [<6.00]	
MW-2	7/28/2020	4-14	442.15	NAVD88	5.55	0.00	436.60	**47,900 J [48,500 J]**	**1,740 [1,530]**	**466 J** [<840]	**16,200 [17,200]**	**17,000 [17,600]**	**1,630 [1,790]**	**6,170 [6,490]**	***<2,500 [<2,500]***	***<500 [<500]***	***<50.0* [50.0]**	**67.1 J *[<500]***	<6.00 **[5.64 J]**	
MW-2	3/25/2021	4-14	442.15	NAVD88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	unable to be located due to large snow banks from plowing
MW-2	6/14/2021	4-14	442.15	NAVD88	7.28	0.00	434.87	**77,300**	**2,170**	<800 B	**17,000**	**16,100**	**1,700**	**6,140**	***<2,500 J***	***<500***	***<25.0***	***<500***	<6.00	
MW-2	8/17/2021	4-14	442.15	NAVD88	6.95	0.00	435.20	**67,300**	**2,000**	<800 J	**12,800**	**12,700**	**1,420**	**5,220**	***<2,500***	***<500***	***<25.0***	***<500***	<6.00	
MW-2	10/13/2021	4-14	442.15	NAVD 88	7.45	0.00	434.70	**90,400**	**2,140**	<840	**18,400**	**18,200**	**1,530**	**5,780**	***<2,500 J***	***<500***	***<25.0***	***<500***	<6.00	
MW-2	3/14/2022	4-14	--	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate due to ice/snow
MW-2	6/18/2022	4-14	--	NAVD 88	6.03	--	--	**35,000**	**1,400**	**996**	**6,940**	**7,690**	**1,300**	**4,460**	***<2,500***	***<500***	***<25.0***	***<500***	**4.43 J**	Well PVC cut down due to jack frosting
MW-2	8/2/2022	4-14	442.15	NAVD 88	6.24	--	435.91	**16,500**	**827 J**	**465 J**	**2,970**	**4,110**	**638**	**2,300**	***<500***	<100	***<5.00* / 1.81 [a]**	<100	**4.41 J**	
MW-2	10/7/2022	4-14	442.26	NAVD 88	6.92	0.00	435.34	**67,700 [64,500]**	**2,000 [1,650]**	<888 [<888]	**13,500 [14,000]**	**13,600 [14,300]**	**1,430 [1,580]**	**5,430 [6,000]**	***<2,500 [<2,500]***	***<500 [<500]***	***<5.00* [3.50]**	***<500 [<500]***	<6.00 [<6.00]	
MW-3	8/28/2019	3.5-13.5	442.66	NAVD88	6.42	0.00	436.24	**190,000 J**	**4,100**	**1,200**	**47,000 J**	**49,000**	**3,500**	**15,000**	**130 J**	<0.44	--	**460 J**	**33.0**	Gauged on 9/4/2019
MW-3	11/6/2019	3.5-13.5	442.66	NAVD88	8.06	0.00	434.60	**210,000**	**1,500**	**470**	**32,000 J**	**49,000 D**	**3,600 D**	**14,600 D**	***<250 BJ***	<0.44	--	<250 BJ	**47.0**	
MW-3	6/18/2020	3.5-13.5	442.66	NAVD88	7.23	0.00	435.43	**52,300**	**4,520**	**473 J**	**15,200 J**	**16,200 J**	**1,460 J**	<150	**125 J**	<50.0	--	<50.0	**30.7**	
MW-3	7/28/2020	3.5-13.5	442.66	NAVD88	6.17	0.00	436.49	**69,800 J**	**2,750**	<800	**16,900**	**23,100**	**2,300**	**11,100**	***<5,000***	***<1,000***	***<125***	**96.5 J**	**33.3**	
MW-3	3/25/2021	3.5-13.5	442.66	NAVD88	9.80	0.00	432.86	**200,000 J [203,000]**	**3,730 [3,700]**	<840 B [<888 B]	**28,400 J [48,200 J]**	**25,200 J [43,300 J]**	**1,570 [2,670]**	**6,850 [11,000]**	***<5,000 [<5,000]***	***<1,000 [<1,000]***	**470 J [400] / 298 [300] [a]**	**168 J [288 J]**	**36.5 [35.7]**	
MW-3	6/14/2021	3.5-13.5	442.66	NAVD88	7.77	0.00	434.89	**110,000 [118,000]**	**6,690 [6,070]**	<800 B [<888 B]	**17,300 [16,100]**	**27,300 [28,400]**	**2,520 [2,690]**	**13,900 [15,300]**	***<5,000 J [<2,500 J]***	***<1,000 [<500]***	**80.0 [80.0]**	***<1,000 [<500]***	**88.7 [89.8]**	
MW-3	8/17/2021	3.5-13.5	442.66	NAVD88	7.44	0.00	435.22	**120,000 [115,000]**	**5,040 [4,260]**	<800 J [<800 J]	**16,500 [17,100]**	**24,500 [25,100]**	**2,550 [2,620]**	**14,400 [14,700]**	***<5,000 [<2,500]***	***<1,000 [<500]***	**95.0 [90.0]**	***<1,000 [<500]***	**66.1 [64.9]**	
MW-3	10/13/2021	3.5-13.5	442.66	NAVD 88	7.96	0.00	434.70	**166,000 [163,000]**	**5,740 [6,950]**	<840 [<800]	**25,000 [24,100]**	**35,000 [32,000]**	**3,200 [2,920]**	**17,200 [16,100]**	***<5,000 J [<2,500 J]***	***<1,000 [<500]***	**125 [115]**	***<1,000 [<500]***	**64.0 [61.4]**	
MW-3	3/14/2022	3.5-13.5	442.66	NAVD 88	10.68	**0.06**	431.98	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-3	6/18/2022	3.5-13.5	--	NAVD 88	6.69	--	--	**92,300 J**	**12,600**	**669 J**	**19,400**	**21,400**	**1,970**	**13,400**	***<5,000***	***<1,000***	**60.0 D**	***<1,000***	**62.1**	Well PVC cut down due to jack frosting
MW-3	8/2/2022	3.5-13.5	442.66	NAVD 88	6.91	--	435.75	**97,500 J**	**8,660**	<800	**20,200**	**27,500**	**2,320**	**16,400**	***<2,500***	***<500***	**97.0 D / 179 [a]**	***<500***	**85.5**	
MW-3	10/7/2022	3.5-13.5	442.66	NAVD 88	7.65	0.00	435.01	**144,000**	**5,290**	<840	**27,600**	**30,900**	**2,400**	**13,700**	***<5,000***	***<1,000***	**172**	***<1,000***	**50.8**	
MW-4	9/4/2019	4-14.5	443.00	NAVD88	7.64	**1.21**	436.33	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	11/6/2019	4-14.5	443.00	NAVD88	9.69	**1.68**	434.65	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	6/18/2020	4-14.5	443.00	NAVD88	7.70	**0.23**	435.48	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	7/28/2020	4-14.5	443.00	NAVD88	6.60	**0.15**	436.52	--	--	--	--	--	--	--	--	--	--	--	--	Unable to be located due to large snow banks from plowing
MW-4	3/25/2021	4-14.5	443.00	NAVD88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	6/14/2021	4-14.5	443.00	NAVD88	8.25	**0.07**	434.75	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	8/17/2021	4-14.5	443.00	NAVD88	7.90	**0.07**	435.11	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	10/13/2021	4-14.5	443.00	NAVD 88	8.45	**0.05**	434.55	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	3/14/2022	4-14.5	--	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not accessible due to large snowlice beam covering the well
MW-4	6/18/2022	4-14.5	--	NAVD 88	6.9	--	--	**104,000 [103,000]**	**6,180 [5,830]**	<800 **[511 J]**	**2,500 D [2,690]**	**28,900 D [30,100]**	**4,060 D [4,200]**	**21,200 D [20,700]**	**233 D J [<2,500]**	<1.00 ***[<500]***	***<12.5 [<12.5]***	<1.00 ***[<500]***	**129[123]**	Well PVC cut down due to jack frosting
MW-4	8/2/2022	4-14.5	443.00	NAVD 88	7.10	--	435.90	**101,000 J [92,700]**	**9,040 [8,820]**	<840 [<840]	**2,520 [2,630 D]**	**30,500 [22,200 D]**	**4,320 [4,410 D]**	**22,300 [23,400 D]**	**309 J [234 DJ]**	***<200*** [<1.00 J]	**5.00 D J [5.00 D J] /6.29 [6.40] [a]**	<200 [<1.00 J]	**104 [97.9]**	
MW-4	10/7/2022	4-14.5	443.06	NAVD 88	8.52	0.60	435.02	--	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-5	8/28/2019	2.1-12.1	441.92	NAVD88	5.79	0.00	436.13	**2,200 J**	**530**	**380**	**1,600 J**	**7.1 J**	**4.50**	**20.3**	**0.47 J**	<0.44	--	**22 J**	<2.7	
MW-5	11/6/2019	2.1-12.1	441.92	NAVD88	7.42	0.00	434.50	**170 J [300]**	**240 [230]**	<260 B [<280 B]	**50 J [110 J]**	<0.39 [<2.0]	<0.50 [<2.5]	<0.75 [<3.8]	<0.50B ***[<5.0 BJ]***	<0.44 [<0.44]	--	**1.0** [<5.0 BJ]	<2.7 [<2.7]	
MW-5	6/18/2020	2.1-12.1	441.92	NAVD88	6.43	0.00	435.49	**1,760**	**278 J**	**623 J**	**1,580 J**	**0.462 J**	**1.06**	**5.81**	***<5.00***	<1.00	--	**20.8 J**	<6.00	Unable to be located due to large snow banks from plowing
MW-5	7/28/2020	2.1-12.1	441.92	NAVD88	5.35	0.00	436.57	**2,710**	**453 J**	<800	**2,750**	<25.0	***<25.0***	<75.0	***<125***	<25.0	***<12.5***	**33.9**	**12.2**	
MW-5	3/25/2021	2.1-12.1	441.92	NAVD88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Flooded
MW-5	6/14/2021	2.1-12.1	441.92	NAVD88	6.85	0.00	435.07	**1,460**	**423 J**	<800 B	**678**	**7.75 J**	***<25.0***	<75.0	***<125 J***	<25.0	***<1.00***	**8.60 J**	**3.39 J**	
MW-5	8/17/2021	2.1-12.1	441.92	NAVD88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Flooded
MW-5	10/13/2021	2.1-12.1	441.92	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5	3/14/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5	6/18/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5	8/2/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5A	10/7/2022	--	442.16	NAVD 88	6.69	0.00	435.47	**796**	**415 J**	**571 J**	**644**	<1.00	**0.316 J**	<3.00 B	***<5.00***	<1.00	***<1.25***	**5.97**	<6.00	
MW-7	10/7/2022	--	442.68	NAVD 88	7.30	0.00	435.38	**192**	**1,020**	<888	**24.5**	**0.860 J**	**1.48**	**15.9**	**1.78 J**	<1.00	<0.0500	<1.00	<6.00	
MW-8	10/7/2022	--	446.07	NAVD 88	10.68	0.00	435.39	**357**	**261 J**	<840	**20.5**	**1.51**	**7.56**	**69.9**	**19.1**	<1.00	***<0.250***	**0.105 J**	**7.31**	
MW-9	10/7/2022	--	443.05	NAVD 88	7.60	0.00	435.45	**64,700**	**3,450**	**485 J**	**7,740**	**13,900**	**2,880**	**11,500**	**207**	<20.0	***<2.50***	**28.0**	**15.3**	
MW-10	10/7/2022	--	443.38	NAVD 88	7.89	0.00	435.49	<100	<800	<800	**0.667 J**	**0.961 J**	**0.286 J**	<3.00 B	***<5.00***	<1.00	<0.0500	<1.00	**4.00 J**	
TMW-1	8/26/2019	5-15	442.80	NAVD88	9.75	0.00	433.05	**21,000 [20,000]**	**4,400 [4,700]**	**640 [690]**	**1,900 J [320 J]**	**1,900 J [260 J]**	**1,400 J [200 J]**	**6,200 J [560 J]**	**220 [230]**	<0.44 [<0.44]	--	**14 J [--]**	<2.7 [<2.7]	
TMW-2	8/26/2019	4-14.3	443.00	NAVD88	9.15	0.00	433.85	<100	**4,500**	**11,000**	<0.50 B J	<0.39	<0.50	<0.75	<0.026	<0.44	--	<0.024 J	<2.7	
QA (EQB)	6/18/2020	--	--	--	--	--	--	<100	<800	<800	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	--	<1.00	<6.00	
QA (EQB)	7/28/2020	--	--	--	--	--	--	<100	<800	<840	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
QA (EQB)	3/25/2021	--	--	--	--	--	--	**26.7 J**	<800	<800	<1.00	<1.00	**0.655 J**	**4.84**	***<5.00***	<1.00	<0.00500 / <0.0200 [a]	<1.00	<6.00	
QA (EQB)	6/14/2021	--	--	--	--	--	--	**19.6 J**	<800	<800	<1.00	<1.00	**0.139 J**	**1.54 J**	***<5.00 J***	<1.00	<0.00500	<1.00	<6.00	
QA (EQB)	8/17/2021	--	--	--	--	--	--	<100	**358 J**	<800 J	<1.00	<1.00	**0.528 J**	**3.17**	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
QA (EQB)	10/13/2021	--	--	--	--	--	--	<100	<888	<888	<1.00	<1.00	<1.00	<3.00	***<5.00 J***	<1.00	<0.00500	<1.00	<6.00	
QA (EQB)	6/18/2022	--	--	--	--	--	--	<100	<800	<800	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
QA (EQB)	8/2/2022	--	--	--	--	--	--	<100 J	<840	<840	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500 / <0.0200 [a]	<1.00	<6.00	

Table 1. Historic Groundwater Gauging and Analytical Results
Third Quarter 2019 to Current
Five Star Auto, Chevron Station 381811
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	Screen Interval (ft bTOC)	TOC (ft)	Datum	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft)	GRO (µg/L)	DRO (µg/L)	RRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Naphthalene (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Total Lead (µg/L)	Comments
ADEC Groundwater Cleanup Level								**2,200**	**1,500**	**1,100**	**4.6**	**1,100**	**15**	**190**	**1.7**	**140**	**0.075**	**280**	**15**	
QA (EQB)	10/7/2022	--	--	--	--	--	--	<100	<840	<840	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	<6.00	
QA (TB)	6/18/2020	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	--	<1.00	--	
QA (TB)	7/28/2020	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	--	
QA (TB)	3/25/2021	--	--	--	--	--	--	**20.2 J**	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	--	<1.00	--	
QA (TB)	6/14/2021	--	--	--	--	--	--	**22.1 J**	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00 J***	<1.00	<0.00500	<1.00	--	
QA (TB)	8/17/2021	--	--	--	--	--	--	**58.6 J**	--	--	<1.00	<1.00	**1.61**	**9.16**	***<5.00***	<1.00	<0.00500	<1.00	--	
QA (TB)	10/13/2021	--	--	--	--	--	--	**45.8 J**	--	--	<1.00	**0.286 J**	**1.41**	**8.03**	***<5.00 J***	<1.00	<0.00500	<1.00	--	
QA (TB)	6/18/2022	--	--	--	--	--	--	<100	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	--	**0.599 J**	--	
QA (TB)	8/2/2022	--	--	--	--	--	--	<100 J	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500 / <0.0200 [a]	<1.00	--	
QA (TB)	10/7/2022	--	--	--	--	--	--	--	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	--	
QA (TB)	10/7/2022	--	--	--	--	--	--	--	--	--	<1.00	<1.00	<1.00	<3.00	***<5.00***	<1.00	<0.00500	<1.00	--	
QA (TB)	10/7/2022	--	--	--	--	--	--	--	--	--	<1.00	<1.00	<1.00	**0.446 J**	**<5.00 J**	<1.00	<0.00500	<1.00	--	

Notes:
ID = Identification
MW = Groundwater monitoring well
TMW = Temporary Groundwater monitoring well
TOC = Top of casing
DTW = Depth to groundwater
ft bTOC = Feet below top of casing
ft = Feet relative to NAVD88
[ ] = Duplicate Sample Results
GW Elev = Groundwater elevation
µg/L= Micrograms per Liter
ADEC = Alaska Department of Environmental Conservation
<1.00 = Not detected at or above the Reported Detection Limit (RDL)
Bold = Value exceeds laboratory Method Detection Limit (MDL); LNAPL thickness and/or volume recovered is greater than 0.00 ft
Bold and Shaded= Value exceeds ADEC Groundwater Cleanup Level
Bold and *Italicized* : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
J = The associated numerical value is an estimated concentration only
D = Represents the result from the diluted run
B = Compound considered non-detect at the listed value due to associated blank contamination.

GRO = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to United States Environmental Protection Agency (USEPA) Method AK101
DRO = Total petroleum hydrocarbons, diesel range by LUFT GC/MS according to USEPA Method AK102/103
RRO = Total petroleum hydrocarbons, residual range by LUFT GC/MS according to USEPA Method AK102/103
Samples analyzed by EPA Method 8260D:
Benzene, Toluene, Ethylbenzene and Total Xylenes (collectively BTEX)
MTBE = Methyl tert-butyl ether
EDC = 1,2-Dichloroethane
Naphthalene
Lead by USEPA Method 6010D
-- = Not sampled/not measured/not available
LNAPL = Light non-aqueous phase liquid
QA (EQB) = Quality Assurance (Equipment Blank)
QA (TB) = Quality Assurance (Trip Blank)
LUFT = Leaking Underground Fuel Tank
GC/MS = Gas chromatography/Mass Spectrome
If LNAPL is present, GW Elevation is corrected according to the following formula (TOC elevation - DTW) + (0.8 x LNAPL thickness)
[a] = Ethylene Dibromide by EDB / DBCP by Method 8011

ARCADIS

Table 2. Historical Groundwater Analytical Results - Additional VOCs

Third Quarter 2019 to Current

Five Star Auto, Chevon Station 381811
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	Acetone (µg/L)	Acrolein (µg/L)	Acrylonitrile (µg/L)	Bromobenzene (µg/L)	Bromochloromethane (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	n-Butylbenzene (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	Carbon disulfide (µg/L)	Carbon Tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chlorodibromo-methane (Dibromochloro-methane) (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)
ADEC Groundwater Cleanup Levels		14,000	--	--	62	--	1.3	33	7.5	1,000	2,000	690	810	4.6	78	8.7	--	2.2	190
MW-1	8/28/2019	<50.0 [<50.0]	--	--	<2.00 [<2.00]	<2.00 [<2.00]	<0.500 J [<0.500 J]	<0.500 J [<0.500 J]	<0.500 [<0.500]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<2.00 [<2.00]	<0.500 [<0.500]	<5.00 [<5.00]	<0.500 J [<0.500 J]	<20.0 [<20.0]
MW-1	11/6/2019	<50.0	--	--	<2.00	<2.00	<0.500	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	<0.500	<20.0
MW-1	6/18/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	0.228 J	<1.00	<5.00	<5.00	<2.50
MW-1	7/28/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50 J
MW-1	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	6/14/2021	<50.0 J	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	0.259 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-1	8/17/2021	334	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50 J
MW-1	10/13/2021	<50.0	<50.0 J	<10.0 J	<1.00 J	<1.00 J	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00 J	<1.00 J	<1.00	<1.00 J	<1.00	<5.00 J	<5.00 J	<2.50 J
MW-1	6/18/2022	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00 J	0.470 J	0.293 J	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-1	8/2/2022	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-1	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-2	8/28/2019	<500	--	--	<20.0	<20.0	<0.500 J	<0.500 J	<0.500	19.0 J	<30.0	<30.0	<30.0	<30.0	<20.0	<0.500	<50.0	<0.500 J	<200
MW-2	11/6/2019	<50.0	--	--	<2.00	<2.00	<0.500	<0.500	<0.500	2.30 J	1.50 J	0.590 J	<3.00	<3.00	<2.00	<0.500	<5.00	<0.500	<20.0
MW-2	6/18/2020	<500 [<500]	<500 [<500]	<100 [<100]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	<50.0 [<50.0]	<25.0 [<25.0]
MW-2	7/28/2020	<25,000 [<25,000]	<25,000 [<25,000]	<5,000 [<5,000]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<2,500 [<2,500]	<1,250 J [<1,250 J]
MW-2	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/14/2021	<25,000 J	<25,000	<5,000	<500 J	<500	<500	<500	<2,500	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<1,250 J
MW-2	8/17/2021	<25,000	<25,000	<5,000	<500	<500	<500	<500 J	<2,500 J	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<1,250 J
MW-2	10/13/2021	<25,000	<25,000 J	<5,000	<500	<500	<500	<500	<2,500 J	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<1,250
MW-2	6/18/2022	<25,000	<25,000 J	<5,000	<500	<500	<500	<500 J	<2,500 J	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<1,250
MW-2	8/2/2022	<5,000 J	<5,000 J	<1,000	<100	<100	<100	<100	<500	<100	<100	<100	<100	<100	<100	<100	<500	<500	<250
MW-2	10/7/2022	<25,000 [<25,000]	<25,000 [<25,000]	<5,000 [<5,000]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<2,500 [<2,500]	<1,250 [<1,250]
MW-3	8/28/2019	<50.0	--	--	<2.00	<2.00	<0.500 J	<0.500 J	<0.500 J	72.0	9.20	2.00 J	<3.00	<3.00	<2.00	<0.500 J	6.20	2.80 J	<20.0
MW-3	11/6/2019	<50.0	--	--	<2.00	<2.00	<0.500 J	<0.500 J	<0.500 J	17.0	8.70	2.50 J	<3.00	<3.00	<2.00	<0.500 J	3.80 J	<0.500 J	<20.0
MW-3	6/18/2020	<2,500	<2,500	<500	<50.0	<50.0	<50.0	<50.0	<250	16.9 J	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<250	<125
MW-3	7/28/2020	<50,000	<50,000	<10,000	<1,000	<1,000	<1,000	<1,000	<5,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<5,000	<2,500 J
MW-3	3/25/2021	<50,000 [<50,000]	<50,000 J [<50,000 J]	<10,000 J [<10,000 J]	<1,000 J [<1,000 J]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<5,000 [<5,000]	<1,000 [<1,000]	<1,000 [842 J]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<5,000 [<5,000]	<5,000 [<5,000]	<2,500 [<2,500]
MW-3	6/14/2021	<50,000 J [<25,000 J]	<50,000 [<25,000]	<10,000 [<5,000]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<5,000 [<2,500]	<2,500 [<1,250]
MW-3	8/17/2021	<50,000 [<25,000]	<50,000 [<25,000]	<10,000 [<5,000]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 J [<500 J]	<5,000 J [<2,500 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<5,000 [<2,500]	<2,500 J [<1,250 J]
MW-3	10/13/2021	<50,000 [<25,000]	<50,000 J [<25,000 J]	<10,000 [<5,000]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 J [<2,500 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<5,000 [<2,500]	<2,500 [<1,250]
MW-3	6/18/2022	<50,000	<50,000 J	<10,000	<1,000	<1,000	<1,000	<1,000 J	<5,000 J	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<5,000	<2,500
MW-3	8/2/2022	<25,000 J	<25,000 J	<5,000	<500	<500	<500	<500	<2,500	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<1,250
MW-3	10/7/2022	<50,000	<50,000	<10,000	<1,000	<1,000	<1,000	<1,000	<5,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<5,000	<2,500
MW-4	8/28/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	11/6/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/18/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/28/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/18/2022	<50.0 [<25,000]	<50.0 J [<25,000 J]	<10.0 [<5,000]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 J [<500 J]	<5.00 J [<2,500 J]	30.7 J [<500]	25.5 J [<500]	7.51 J [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<5.00 [<2,500]	<5.00 [169 J]	<2.50 [<1,250]
MW-4	8/2/2022	<10,000 [<50.0 J]	<10,000 J [<50.0 J]	<2,000 [<10.0 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<1,000 [<5.00 J]	<200 [30.1 J]	28.0 J [23.1 J]	<200 [6.80 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<1,000 [<5.00 J]	<1,000 [<5.00 J]	<500 [<2.50 J]
MW-4	10/7/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	8/28/2019	<50.0	--	--	<2.00	<2.00	<0.500 J	<0.500 J	<0.500	1.00 J	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	1.10 J	<20.0
MW-5	11/6/2019	<50.0 [<50.0]	--	--	<2.00 [<2.00]	<2.00 [<2.00]	<0.500 [<0.500]	<0.500 [<0.500]	<0.500 [<0.500]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<3.00 [<3.00]	<2.00 [<2.00]	<0.500 [<0.500]	<5.00 [<5.00]	2.9 [2.7]	<20.0 [<20.0]
MW-5	6/18/2020	<50.0 J	<50.0	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	2.42 J	<2.50
MW-5	7/28/2020	<1,250	<1,250	<250	<25.0	<25.0	<25.0	<25.0	<125	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<125	<125	<62.5 J
MW-5	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/14/2021	<1,250 J	<1,250	<250	<25.0	<25.0	<25.0	<25.0	<125	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<125	<125	<62.5
MW-5	8/17/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	10/13/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/18/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	8/2/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5A	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	0.206 J	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-7	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	1.86	5.24	0.794 J	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-7	9/4/2022	<50.0 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	2.82	10.9	1.77	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-8	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	1.95	3.73	0.612 J	0.196 J	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-8	9/4/2022	<50.0 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	1.89	4.15	0.841 J	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
MW-9	10/7/2022	<1,000	<1,000	<200	<20.0	<20.0	<20.0	<20.0	<100	21.6	15.3 J	3.87 J	<20.0	<20.0	<20.0	<20.0	<100	<100	<50.0
MW-9	9/4/2022	<500 J [<500 J]	<500 J [<500 J]	<100 [<100]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	12.6 [11.7]	11.8 [12]	2.92 J [3.63 J]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	<50.0 [<50.0]	<25.0 [<25.0]
MW-10	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	0.898 J	<1.00	<1.00	<1.00	<5.00	0.206 J	<2.50
MW-10	9/5/2022	<50.0 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	1.19	<1.00	<1.00	<1.00	<5.00	1.93 J	<2.50
TMW-1	8/26/2019	<500 J [2,100 J]	--	--	<2.00 [<2.00]	<2.00 [<2.00]	<50.0 J [<2.00]	<50.0 J [<3.00]	<50.0 J [<6.00]	140 [110 J]	22.0 J [21.0 J]	13.0 [14.0]	<3.00 [<3.00]	<3.00 [<3.00]	<2.00 [<2.00]	<50.0 J [<2.00 J]	<5.00 [<5.00]	<50.0 J [<5.00]	<20.0 [<20.0]
TMW-2	8/26/2019	<50.0	--	--	<2.00	<2.00	<0.500 J	<0.500 J	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	<0.500 BJ	<20.0
TMW-3	8/26/2019	19.0 J	--	--	<2.00	<2.00	<0.500 J	<0.500 J	<0.500 J	<30.0	<30.0	<3.00	<3.00	<3.00	<2.00	<0.500 J	<5.00	2.50 J	<20.0
QA (EQB)	8/28/2019	<50.0	--	--	<2.00	<2.00	<0.500	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	0.0200 J	<20.0
QA (EQB)	11/6/2019	<50.0	--	--	<2.00	<2.00	<0.500	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	<0.500	<20.0
QA (EQB)	6/18/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	7/28/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	3/25/2021	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<2.50
QA (EQB)	6/14/2021	<50.0 J	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	8/17/2021	54.2	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00 J	<1.00	<1.00	<1.00	0.294 J	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50 J
QA (EQB)	10/13/2021	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	6/18/2022	16.9 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	8/2/2022	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (EQB)	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	11/6/2019	<50.0	--	--	<2.00	<2.00	<0.500	<0.500	<0.500	<3.00	<3.00	<3.00	<3.00	<3.00	<2.00	<0.500	<5.00	<0.500	<20.0
QA (TB)	6/18/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	7/28/2020	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	3/25/2021	<50.0	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	6/14/2021	<50.0 J	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	8/17/2021	28.9 J	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00 J	<1.00	<1.00	<1.00	0.112 J	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50 J
QA (TB)	10/13/2021	25.7 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	6/18/2022	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	8/2/2022	<50.0	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50
QA (TB)	10/7/2022	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00 J	<5.00	<2.50

Notes
ID = Identification
MW = Groundwater monitoring well
TMW = Temporary Groundwater monitoring well
[] = Duplicate Sample Results
µg/L= Micrograms per Liter
ADEC = Alaska Department of Environmental Conservation
<1.00 = Not detected at or above the Reported Detection Limit (RDL)
Bold = Value exceeds laboratory Method Detection Limit (MDL)
Bold Shaded= Value exceeds ADEC Groundwater Cleanup Level
Bold and *Italicized* : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
-- = Not sampled/not measured/not available
J = The associated numerical value is an estimated concentration only
B = Compound considered non-detect at the listed value due to associated blank contamination.
D = Sample results derived from dilution
VOCs = Volatile Organic Compounds analzyed by USEPA Method 8260D:
[a] = Ethylene Dibromide by EDB / DBCP by Method 8011

Table 2. Historical Groundwater Analytical Results - Additional VOCs
Third Quarter 2019 to Current
Five Star Auto, Chevron Station 381811
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	2-Chlorotoluene (o-Chlorotoluene) (µg/L)	4-Chlorotoluene (p-Chlorotoluene) (µg/L)	1,2-Dibromoethane (µg/L)	Dibromomethane (Methylene bromide) (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Dichlorodifluoromethane (Freon 12) (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) (µg/L)	trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene) (µg/L)	1,2-Dichloropropane (µg/L)	1,1-Dichloropropene (µg/L)	1,3-Dichloropropane (µg/L)	cis-1,3-Dichloropropene (µg/L)	trans-1,3-Dichloropropene (µg/L)	2,2-Dichloropropane (µg/L)	Di-isopropyl ether (µg/L)	Hexachloro-1,3-butadiene (Hexachlorobutadiene) (µg/L)	2-Hexanone (µg/L)	
ADEC Groundwater Cleanup Levels		--	--	**0.075**	**8.3**	--	**360**	**360**	**4.8**	**200**	**28**	**280**	**36**	**360**	**8.2**	--	--	--	**4.7**	**4.7**	--	--	**1.4**	**38**	
MW-1	8/28/2019	<3.00 [<3.00]	<2.00 [<2.00]	***<0.500 J [<0.500 J]***	<0.500 [<0.500]	<10.0 [<10.0]	<2.00 [<2.00]	<2.00 [<2.00]	<0.500 [<0.500]	<10.0 [<10.0]	<2.00 [<2.00]	<0.500 [<0.500]	<3.00 [<3.00]	<3.00 [<3.00]	<1.00 [<1.00]	<3.00 [<3.00]	<2.00 [<2.00]	<0.500 [<0.500]	<0.500 [<0.500]	<3.00 [<3.00]	--	<0.500 [<0.500]	--	
MW-1	11/6/2019	<3.00	<2.00	***<0.50***	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	<0.500	--	
MW-1	6/18/2020	<1.00	<1.00	<1.00	<0.0250	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-1	7/28/2020	<1.00	<1.00	<1.00	<0.00500	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-1	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	6/14/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	
MW-1	8/17/2021	<1.00	<1.00	<0.00500 J	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-1	10/13/2021	<1.00	<1.00	<0.00500 J	<1.00 J	<5.00 J	<1.00 J	<1.00	<1.00	<5.00	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00 J	<1.00	
MW-1	6/18/2022	<1.00	<1.00	<0.00500 / <0.0200[a]	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-1	8/2/2022	<1.00	<1.00	<0.00500 / <0.0204[a]	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-1	10/7/2022	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-2	8/28/2019	<30.0	<20.0	**6.80 J**	<0.500	<100	<20.0	<20.0	<0.500	<100	<20.0	<0.500	<30.0	<30.0	***<10.0***	<30.0	<20.0	<0.500	<0.500	<30.0	--	<0.500	--	
MW-2	11/6/2019	<3.00	<2.00	**1.1 J**	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	<0.500	--	
MW-2	6/18/2020	<10.0 [<10.0]	<10.0 [<10.0]	***<50.0 [<50.0]***	***<10.0 [<10.0]***	<50.0 [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	<50.0 [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	***<10.0 [<10.0]***	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	--	
MW-2	7/28/2020	<500 [<500]	<500 [<500]	***<50.0 [<50.0]***	***<500 [<500]***	<2,500 [<2,500]	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<2,500 [<2,500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	<500 [<500]	<500 [<500]	***<500 [<500]***	***<500 [<500]***	<500 [<500]	<500 [<500]	***<500 [<500]***	--	
MW-2	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	6/14/2021	<500 J	<500	***<25.0***	***<500***	<2,500 J	***<500***	***<500***	***<500***	***<2,500 J***	***<500***	***<500 J***	***<500***	***<500***	***<500***	<500	<500	***<500***	***<500***	***<500***	<500	***<500 J***	--	
MW-2	8/17/2021	<500	<500	***<25.0***	***<500***	<2,500 J	***<500***	***<500***	***<500***	***<2,500***	***<500***	***<500***	***<500***	***<500***	***<500***	<500	<500	***<500***	***<500***	***<500***	<500	***<500***	--	
MW-2	10/13/2021	<500	<500	***<25.0***	***<500***	<2,500 J	***<500***	***<500***	***<500***	***<2,500***	***<500***	***<500***	***<500***	***<500***	***<500***	<500	<500	***<500***	***<500***	***<500***	<500	***<500***	--	
MW-2	6/18/2022	<500	<500	**4.41**	***<500***	<2,500 J	***<500***	***<500***	***<500***	***<2,500***	***<500***	***<500***	***<500***	***<500***	***<500***	<500	<500	***<500***	***<500***	***<500***	<500	***<500***	--	
MW-2	8/2/2022	<100	<100	***<5.00 / 1.81[a]***	***<100***	<500	<100	<100	***<100***	***<500 [<2,500]***	***<100***	<100	***<100***	<100	***<100***	<100	<100	***<100***	***<100***	<100	<100	***<100***	--	
MW-2	10/7/2022	<500 [<500]	<500 [<500]	***<5.00 [3.5]***	***<500 [<500]***	<2,500 [<2,500]	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<2,500 [<2,500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	***<500 [<500]***	<500 [<500]	<500 [<500]	***<500 [<500]***	***<500 [<500]***	<500 [<500]	<500 [<500]	***<500 [<500]***	--	
MW-3	8/28/2019	<3.00	<2.00	**380 J**	<0.500 J	<10.0	<2.00	<2.00	<0.500 J	<10.0	**0.430 J**	**0.0330 J**	<3.00	<3.00	<1.00	<3.00	<1.000	<0.500 J	<0.500 J	<3.00	--	<0.500 J	--	
MW-3	11/6/2019	<3.00	<2.00	**280 J**	<0.500 J	<10.0	<2.00	<2.00	<0.500 J	<10.0	<2.00	<0.500 J	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500 J	<0.500 J	<3.00	--	<0.500 J	--	
MW-3	6/18/2020	<50.0	<50.0	**60.0**	***<50.0***	<250	<50.0	<50.0	***<50.0***	***<250***	***<50.0***	<50.0	***<50.0***	<50.0	***<50.0***	<50.0	<50.0	***<50.0***	***<50.0***	<50.0	<50.0	***<50.0***	--	
MW-3	7/28/2020	<1,000	<1,000	**<125**	***<1,000***	<5,000	***<1,000***	***<1,000***	***<1,000***	***<5,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	--	
MW-3	3/25/2021	<1,000 [<1,000]	<1,000 [<1,000]	**298 [300]**	***<1,000 [<1,000]***	<5,000 [<5,000]	***<1,000 [<1,000]***	***<1,000 [<1,000]***	***<1,000 [<1,000]***	***<5,000 [<5,000]***	***<1,000 [<1,000]***	***<1,000 [<1,000]***	***<1,000 [<1,000]***	***<1,000 [<1,000]***	***<1,000 [<1,000]***	<1,000 [<1,000]	<1,000 [<1,000]	***<1,000 [<1,000]***	***<1,000 [<1,000]***	<1,000 [<1,000]	<1,000 J [<1,000 J]	***<1,000 [<1,000]***	--	
MW-3	6/14/2021	<1,000 [<500]	<1,000 [<500]	**80.0 [80.0]**	***<1,000 [<500]***	<5,000 J [<2,500 J]	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<5,000 J [<2,500 J]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 J [<500 J]***	--	
MW-3	8/17/2021	<1,000 [<500]	<1,000 [<500]	**95.0 [90.0]**	***<1,000 [<500]***	<5,000 J [<2,500 J]	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<5,000 [<2,500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 [<500]***	--	
MW-3	10/13/2021	<1,000 [<500]	<1,000 [<500]	**125 [115]**	***<1,000 [<500]***	<5,000 J [<2,500 J]	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<5,000 [<2,500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 [<500]***	***<1,000 [<500]***	<1,000 [<500]	<1,000 [<500]	***<1,000 [<500]***	--	
MW-3	6/18/2022	<1,000	<1,000	**60.0 D / 70.2 [a]**	***<1,000***	<5,000 J	***<1,000***	***<1,000***	***<1,000***	***<5,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	--	
MW-3	8/2/2022	<500	<500	**97.0 D / 175[a]**	***<500***	<2,500	***<500***	***<500***	***<500***	***<2,500***	***<500***	***<500***	***<500***	***<500***	***<500***	<500	<500	***<500***	***<500***	<500	<500	***<500***	--	
MW-3	10/7/2022	<1,000	<1,000	**172**	***<1,000***	<5,000	***<1,000***	***<1,000***	***<1,000***	***<5,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	***<1,000***	<1,000	<1,000	***<1,000***	--	
MW-4	8/28/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/6/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/18/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	7/28/2020	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/18/2022	<1.00 [<500]	<1.00 [<500]	***<12.5 [<12.5] / 4.66 [a] [4.82] [a]***	<1.00 ***[<500]***	<5.00 J [<2,500 J]	<1.00 ***[<500]***	<1.00 ***[<500]***	<1.00 ***[<500]***	<5.00 ***[<2,500]***	<1.00 ***[<500]***	<1.00 ***[<500]***	<1.00 ***[<500]***	<1.00 ***[<500]***	<1.00 ***[<500]***	<1.00 [<500]	<1.00 [<500]	***<1.00 [<500]***	***<1.00 [<500]***	<1.00 [<500]	<1.00 [<500]	<1.00 ***[<500]***	--	
MW-4	8/2/2022	<200 [<1.00 J]	<200 [<1.00 J]	**5.00 DJ [5.00 DJ] / 6.29 [a] [6.40] [a]**	***<200*** [<1.00 J]	<1,000 [<5.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	***<200*** [<1.00 J]	***<1,000*** [<5.00 J]	***<200*** [<1.00 J]	***<200*** [<1.00 J]	***<200*** [<1.00 J]	***<200*** [<1.00 J]	***<200*** [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	***<200*** [<1.00 J]	***<200*** [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	***<200*** [<1.00 J]	--	
MW-4	10/7/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	8/28/2019	<3.00	<2.00	**0.0310 J**	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	**0.0290 J**	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	<0.500	--	
MW-5	11/6/2019	<3.00 [<3.00]	<2.00 [<2.00]	***<0.50 [<0.140 J]***	<0.500 [<0.500]	<10.0 [<10.0]	<2.00 [<2.00]	<2.00 [<2.00]	<0.500 [<0.500]	<10.0 [<10.0]	<2.00 [<2.00]	**0.0360 J** [<0.500]	<3.00 [<3.00]	<3.00 [<3.00]	<1.00 [<1.00]	<3.00 [<3.00]	<2.00 [<2.00]	<0.500 [<0.500]	<0.500 [<0.500]	<3.00 [<3.00]	--	<0.500 [<0.500]	--	
MW-5	6/18/2020	<1.00	<1.00	***<50.0***	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	**2.25**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-5	7/28/2020	<25.0	<25.0	***<12.5***	***<25.0***	<125	<25.0	<25.0	***<25.0***	<125	<25.0	<25.0	**5.78 J**	<25.0	***<25.0***	<25.0	<25.0	***<25.0***	***<25.0***	<25.0	<25.0	***<25.0***	--	
MW-5	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	6/14/2021	<25.0	<25.0	***<1.00***	***<25.0***	<125 J	<25.0	<25.0	***<25.0***	<125 J	<25.0	<25.0	<25.0	<25.0	***<25.0***	<25.0	<25.0	***<25.0***	***<25.0***	<25.0	<25.0	***<25.0 J***	--	
MW-5	8/17/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/13/2021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	6/18/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	8/2/2022	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-SA	10/7/2022	<1.00	<1.00	***<1.25***	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**1.69**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-7	10/7/2022	<1.00	<1.00	<0.0500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	**0.174 J**	<1.00	**4.81**	**1.37**	**0.406 J**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-7	9/4/2022	<1.00	<1.00	<0.0200	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	**0.226 J**	<1.00	**9.25**	**2.71**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-8	10/7/2022	<1.00	<1.00	***<0.250***	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**0.943 J**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-8	9/4/2022	<1.00	<1.00	<0.0206	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**1.12**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-9	10/7/2022	<20.0	<20.0	***<2.50***	***<20.0***	<100	<20.0	<20.0	***<20.0***	<100	<20.0	<20.0	**85.4**	**3.42 J**	***<20.0***	<20.0	<20.0	***<20.0***	***<20.0***	<20.0	<20.0	***<20.0***	--	
MW-9	9/4/2022	<10.0 [<10.0]	<10.0 [<10.0]	**0.757 [0.817]**	***<10.0 [<10.0]***	<50.0 [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	<50.0 [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	**68.9 [68.5]**	**3.55 J [3.16 J]**	***<10.0 [<10.0]***	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	***<10.0 [<10.0]***	<10.0 [<10.0]	<10.0 [<10.0]	***<10.0 [<10.0]***	--	
MW-10	10/7/2022	<1.00	<1.00	<0.0500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-10	9/5/2022	<1.00	<1.00	<0.0206	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
TMW-1	8/26/2019	<3.00 [<3.00]	<2.00 [<2.00]	***<1.40 J [<0.400 J]***	***<50.0 J*** [<2.00]	<100 [<10.0 J]	<2.00 [<2.00]	<2.00 [<2.00]	***<50.0 J*** [<4.00]	<10.0 [<10.0]	<2.00 [<2.00]	<50.0 J [<4.00]	<3.00 [<3.00]	<3.00 [<3.00]	<1.00 [<1.00]	<3.00 [<3.00]	<2.00 J [<2.00 J]	***<50.0 J*** [<1.00 J]	***<50.0 J*** [<1.00 J]	<3.00 [<3.00]	--	***<2.60 J [<6.00 J]***	--	
TMW-2	8/26/2019	<3.00	<2.00	***<0.500 J***	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00 J	<0.500	<0.500	<3.00	--	<0.500	--	
TMW-3	8/26/2019	<3.00	<2.00	***<0.500 J***	<0.500 J	<100	<2.00	<2.00	<0.500 J	<10.0	<2.00	<0.500 J	<3.00	<3.00	<1.00	<3.00	<2.00 J	<0.500 J	<0.500 J	<3.00	--	<0.500 J	--	
QA (EQB)	8/28/2019	<3.00	<2.00	***<0.500***	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	<0.500	--	
QA (EQB)	11/6/2019	<3.00	<2.00	***<0.50***	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	<0.500	--	
QA (EQB)	6/18/2020	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	7/28/2020	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	3/25/2021	<1.00	<1.00	<0.0200	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	
QA (EQB)	6/14/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	
QA (EQB)	8/17/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	10/13/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	6/18/2022	<1.00	<1.00	<0.0202	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	8/2/2022	<1.00	<1.00	<0.00500 / **0.0202**	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	10/7/2022	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	11/6/2019	<3.00	<2.00	***<0.50***	<0.500	<10.0	<2.00	<2.00	<0.500	<10.0	<2.00	<0.500	<3.00	<3.00	<1.00	<3.00	<2.00	<0.500	<0.500	<3.00	--	**0.0340 J**	--	
QA (TB)	6/18/2020	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	7/28/2020	--	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	3/25/2021	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	
QA (TB)	6/14/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	
QA (TB)	8/17/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/13/2021	<1.00	<1.00	<0.00500	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	6/18/2022	<1.00	<1.00	--	<1.00	<5.00 J	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	8/2/2022	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/7/2022	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/7/2022	<1.00	<1.00	<0.00500	<1.00	<5.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	

Notes
ID = Identification
MW = Groundwater monitoring well
TMW = Temporary Groundwater monitoring well
[] = Duplicate Sample Results
µg/L= Micrograms per Liter
ADEC = Alaska Department of Environmental Conservation
<1.00 = Not detected at or above the Reported Detection Limit (RDL)
Bold = Value exceeds laboratory Method Detection Limit (MDL)
Bold Shaded= Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized: Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
-- = Not sampled/not measured/not available
J = The associated numerical value is an estimated concentration only
B = Compound considered non-detect at the listed value due to associated blank contamination.
D = Sample results derived from dilution
VOCs = Volatile Organic Compounds analyzed by USEPA Method 8260D:
a = Ethylene Dibromide by EDB / DBCP by Method 8011

Table 2. Historical Groundwater Analytical Results - Additional VOCs
Third Quarter 2019 to Current
Five Star Auto, Chevon Station 381811
501 East 30th Avenue
Fairbanks, Alaska

Well ID	Sample Date	Isopropylbenzene (Cumene) (µg/L)	p-Isopropyltoluene (µg/L)	2-Butanone (Methyl ethyl ketone) (µg/L)	Methylene chloride (µg/L)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (µg/L)	n-Propylbenzene (Propylbenzene) (µg/L)	Styrene (µg/L)	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	1,1,2-Trichlorotrifluoroet hane (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)
ADEC Groundwater Cleanup L Levels		450	--	5,600	110	6,300	660	1,200	5.7	0.76	10,000	41
MW-1	8/28/2019	<2.00 [<2.00]	<3.00 [<3.00]	<20.0 [<20.0]	<5.00 [<5.00]	<15.0 [<15.0]	<3.00 [<3.00]	<5.00 [<5.00]	<0.500 J [<0.500 J]	<0.500 [<0.500]	--	<0.500 [<0.500]
MW-1	11/6/2019	<2.00	<3.00	<20.0	<5.00	<15.0	<3.00	<5.00	<0.500	<0.500	--	<0.500
MW-1	6/18/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	7/28/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	3/25/2021	--	--	--	--	--	--	--	--	--	--	--
MW-1	6/14/2021	<1.00B	<1.00	<10.0	<5.00	<10.0	1.06	0.122 J	<1.00	<1.00	<1.00	<1.00
MW-1	8/17/2021	<1.00	<1.00	<10.0 J	<5.00	<10.0	0.269 J	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	10/13/2021	<1.00 J	<1.00	<10.0 J	<5.00 J	<10.0 J	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00
MW-1	6/18/2022	0.340 J	0.167 J	<10.0	<5.00	<10.0	1.00 J	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	8/2/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	0.159 J	<1.00	<1.00	<1.00	<1.00	<1.00
MW-2	8/28/2019	71.0	5.60 J	<200	<50.0	<150	140	<50.0	<0.500 J	<0.500	--	<0.500
MW-2	11/6/2019	39.0	1.70 J	<20.0	4.30 J	<15.0	75.0	<5.00	<0.500	<0.500	--	<0.500 B
MW-2	6/18/2020	69.3 [65.8]	<10.0 B [<10.0 B]	<100 [<100]	<50.0 [<50.0]	<100 [<100]	134 [129]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]
MW-2	7/28/2020	66.5 J [71.6 J]	<500 [<500]	<5,000 [<5,000]	<2,500 [<2,500]	<5,000 [<5,000]	135 J [132 J]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]
MW-2	3/25/2021	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/14/2021	<79.0 B J	<500	<5,000	<2,500	<5,000	110 J	<500	<500	<500	<500	<500
MW-2	8/17/2021	70.2 J	<500	<5,000	<2,500	<5,000	108 J	<500	<500	<500	<500	<500
MW-2	10/13/2021	62.0 J	<500	<5,000	<2,500	<5,000	130 J	<500	<500	<500	<500	<500
MW-2	6/18/2022	68.6 J	<500	<5,000	<2,500	<5,000	129 J	<500	<500	<500	<500	<500
MW-2	8/2/2022	29.5 J	<100	<1,000	<500	<1,000	56.4 J	<100	<100	<100	<100	<100
MW-2	10/7/2022	67.9 J [76.1 J]	<500 [<500]	<5,000 [<5,000]	<2,500 [<2,500]	<5,000 [<5,000]	124 J [138 J]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]
MW-3	8/28/2019	<1,000	4.30	48.0	8.30	3.30 J	<1,500	5.30	<0.500 J	<0.500 J	--	0.0340 J
MW-3	11/6/2019	140	4.50	<20.0	3.50 J	<15.0	270 D	6.10	<0.500 J	<0.500 J	--	<0.500 BJ
MW-3	6/18/2020	117	<50.0	<500	<250	<500	225	<50.0	<50.0	<50.0	<50.0	<50.0
MW-3	7/28/2020	126 J	<1,000	<10,000	<5,000	<10,000	264 J	<1,000	<1,000	<1,000	<1,000	<1,000
MW-3	3/25/2021	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<5,000 J [<5,000 J]	<1,000 [<10,000]	169 J [251 J]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 J [<1,000 J]	<1,000 [<1,000]
MW-3	6/14/2021	182 J [152 J]	<1,000 [<500]	<10,000 [<5,000]	<5,000 [<2,500]	<10,000 [<5,000]	250 J [264 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]
MW-3	8/17/2021	148 J [155 J]	<1,000 [<500]	<10,000 [<5,000]	<5,000 [<2,500]	<10,000 [<5,000]	293 J [305 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]
MW-3	10/13/2021	176 J [151 J]	<1,000 [<500]	<10,000 [<5,000]	<5,000 [<2,500]	<10,000 [<5,000]	380 J [362 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]
MW-3	6/18/2022	138 J	<1,000	<10,000	<5,000	<10,000	284 J	<1,000	<1,000	<1,000	<1,000	<1,000
MW-3	8/2/2022	160 J	<500	<5,000	<2,500	<5,000	315 J	<500	<500	<500	<500	<500
MW-3	10/7/2022	133 J	<1,000	<10,000	<5,000	<10,000	220 J	<1,000	<1,000	<1,000	<1,000	<1,000
MW-4	8/28/2019	--	--	--	--	--	--	--	--	--	--	--
MW-4	11/6/2019	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/18/2020	--	--	--	--	--	--	--	--	--	--	--
MW-4	7/28/2020	--	--	--	--	--	--	--	--	--	--	--
MW-4	3/25/2021	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/18/2022	282 D [251 J]	12.0 J [<500]	<10.0 [<5,000]	<5.00 [<2,500]	<10.0 [<5,000]	594 D [515]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]
MW-4	8/2/2022	260 [255 D]	<200 [11.6 J]	<2,000 [<10.0 J]	<1,000 [<5.00 J]	<2,000 [<10.0 J]	482 [467 D]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]
MW-4	10/7/2022	--	--	--	--	--	--	--	--	--	--	--
MW-5	8/28/2019	6.00	1.10 J	<20.0	<5.00	<15.0	3.80	<5.00	<0.500 J	<0.500	--	<0.500
MW-5	11/6/2019	<2.00 [<2.00]	<3.00 [<3.00]	<20.0 [<20.0]	<5.00 [<5.00]	<15.0 [<15.0]	<3.00 [<3.00]	<5.00 [<5.00]	<0.500 [<0.500]	<0.500 [<0.500]	--	<0.500 [<0.500]
MW-5	6/18/2020	3.15	<1.00	<10.0	<5.00	<10.0	1.34	<1.00	<1.00	<1.00	<1.00	<1.00
MW-5	7/28/2020	5.05 J	<25.0	<250	<125	<250	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
MW-5	3/25/2021	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/14/2021	<25.0	<25.0	<250	<125	<250	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
MW-5	8/17/2021	--	--	--	--	--	--	--	--	--	--	--
MW-5	10/13/2021	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/18/2022	--	--	--	--	--	--	--	--	--	--	--
MW-5	8/2/2022	--	--	--	--	--	--	--	--	--	--	--
MW-5A	10/7/2022	2.58	<1.00	<10.0	<5.00	<10.0	0.549 J	<1.00	<1.00	<1.00	<1.00	<1.00
MW-7	10/7/2022	12.7	1.78	<10.0	<5.00	<10.0	10.4	<1.00	<1.00	<1.00	<1.00	<1.00
MW-7	9/4/2022	27.7	3.00	<10.0 J	<5.00	<10.0	30.0	<1.00	<1.00	<1.00	<1.00	<1.00
MW-8	10/7/2022	12.5	<1.00	<10.0	<5.00	<10.0	19.5	<1.00	<1.00	<1.00	<1.00	<1.00
MW-8	9/4/2022	14.5	1.25	<10.0 J	<5.00	<10.0	29.4	<1.00	<1.00	<1.00	<1.00	<1.00
MW-9	10/7/2022	166	<20.0	<200	<100	<200	341	<20.0	<20.0	<20.0	<20.0	<20.0
MW-9	9/4/2022	164 [143]	24.1 [23.3]	<100 J [<100 J]	<50.0 [<50.0]	<100 [<100]	335 [384]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]
MW-10	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-10	9/5/2022	<1.00	<1.00	<10.0 J	<5.00	<10.0	0.179 J	<1.00	<1.00	<1.00	<1.00	<1.00
TMW-1	8/26/2019	94.0 [99.0]	19.0 [18.0]	<20.0 [<20.0]	<50.0 [<5.00 J]	<15.0 J [<15.0 J]	240 [160 J]	<5.00 [<5.00]	<50.0 J [<2.00]	<4.90 J [<3.00]	--	<50.0 J [<3.00 J]
TMW-2	8/26/2019	<2.00	<3.00	<20.0	<5.00	<15.0 J	<3.00	<5.00	<0.500 J	<0.500	--	1.50
TMW-3	8/26/2019	16.0	<3.00	<20.0	<50.0	<15.0 J	12.0 J	<5.00	<0.500 J	<0.500 J	--	1.30 J
QA (EQB)	8/28/2019	<2.00	<3.00	<20.0	<5.00	<15.0	<3.00	<5.00	<0.500	<0.500	--	<0.500
QA (EQB)	11/6/2019	<2.00	<3.00	<20.0	<5.00	<15.0	<3.00	<5.00	<0.500	<0.500	--	0.0360 J
QA (EQB)	6/18/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	7/28/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	3/25/2021	<1.00	<1.00	<10.0	<5.00 J	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00
QA (EQB)	6/14/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	8/17/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	10/13/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	6/18/2022	<1.00	<1.00	4.53 J	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	8/2/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (EQB)	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	11/6/2019	<2.00	<3.00	<20.0	<5.00	<15.0	<3.00	<5.00	<0.500	<0.500	--	<0.500
QA (TB)	6/18/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	7/28/2020	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	3/25/2021	<1.00	<1.00	<10.0	<5.00 J	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00
QA (TB)	6/14/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	8/17/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	10/13/2021	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	6/18/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	8/2/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
QA (TB)	10/7/2022	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00

Well ID	Sample Date	1,2,3-Trichlorobenzene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,3-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Vinyl Chloride (µg/L)	Comments
ADEC Groundwater Cleanup L Levels		7	4	8,000	0.41	2.8	5,200	0.0075	--	56	60	0.19	
MW-1	8/28/2019	<5.00 [<5.00]	<2.00 [<2.00]	<3.00 [<3.00]	<0.500 [<0.500]	<0.500 J [<0.500 J]	0.750 J [0.800 J]	<2.00 [<2.00]	--	<3.00 [<3.00]	<3.00 [<3.00]	<0.500 [<0.500]	
MW-1	11/6/2019	<5.00	<2.00	<3.00	<0.500	<0.500	<3.00	<2.00	--	<3.00	<3.00	<0.500	
MW-1	6/18/2020	<1.00	<1.00	<1.00	<1.00	<1.00	6.32	<0.0250	<1.00	<1.00	<1.00	<1.00	
MW-1	7/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	0.732 J	<0.00500	<1.00	<1.00	<1.00	<1.00 J	
MW-1	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	
MW-1	6/14/2021	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	2.91 J	<0.00500	3.17	8.93	2.02	<1.00	
MW-1	8/17/2021	<1.00	<1.00	<1.00	<1.00	<1.00	7.07	<0.00500 J	0.431 J	1.53	0.376 J	<1.00	
MW-1	10/13/2021	<1.00 J	<1.00	<1.00 J	<1.00 J	<1.00 J	0.514 J	<0.00500 J	<1.00 J	<1.00	<1.00	<1.00 J	
MW-1	6/18/2022	<1.00	<1.00	<1.00	<1.00	<1.00	2.56 J	<0.00500	1.16	4.15	1.03	<1.00	
MW-1	8/2/2022	<1.00 J	<1.00	<1.00	<1.00	<1.00	7.46	<0.00500	<1.00	<1.00	<1.00	<1.00	
MW-1	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	13.1	<0.00500	0.330 J	0.961 J	0.260 J	<1.00	
MW-2	8/28/2019	<11.0	<20.0	<30.0	1.00	0.190 J	<30.0	<20.0	--	490	120	0.150 J	
MW-2	11/6/2019	<5.00	<2.00	<3.00	0.670 J	<0.500	<150	<2.00	--	290 D	64.0	<0.500	
MW-2	6/18/2020	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	40.0 J [<50.0]	150 J [162 J]	598 [560]	118 [112]	<10.0 [<10.0]	
MW-2	7/28/2020	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<50.0 [<50.0]	214 J [224 J]	540 [546]	139 J [131 J]	<500 [<500]	
MW-2	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	
MW-2	6/14/2021	<500 J	<500 J	<500	<500	<500	<2,500	<25.0	173 J	461 J	153 J	<500	
MW-2	8/17/2021	<500	<500	<500	<500	<500	<2,500	<25.0	184 J	527	162 J	<500	
MW-2	10/13/2021	<500 J	<500	<500	<500	<500	<2,500 J	<25.0	157 J	459 J	114 J	<500	
MW-2	6/18/2022	<500	<500	<500	<500	<500	<2,500	<25.0	108 J	457 J	135 J	<500	Well PVC cut down due to jack frosting
MW-2	8/2/2022	<100 J	<100	<100	<100	<100	<500	<5.00	56.4 J	211	53.5 J	<100	
MW-2	10/7/2022	<500 J [<500 J]	<500 J [<500 J]	<500 [<500]	<500 [<500]	<500 [<500]	<2,500 [<2,500]	<5.00 [<2.50]	134 J [157 J]	559 [574]	166 J [161 J]	<500 [<500]	
MW-3	8/28/2019	<5.00	<2.00	<3.00	<0.500 J	<0.500 J	0.630 J	<2.00	--	840 J	<280	<0.500 J	
MW-3	11/6/2019	<5.00	<2.00	<3.00	<0.500 J	<0.500 J	0.810 J	<2.00	--	1,100 D	260 D	<0.500 J	
MW-3	6/18/2020	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<50.0	500 J	1,620	334	<50.0	
MW-3	7/28/2020	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<125	533 J	1,580	369 J	<1,000	
MW-3	3/25/2021	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<1,000 [<1,000]	<5,000 [<5,000]	<50.0 J [50.0]	183 J [273 J]	601 J [956 J]	170 J [270 J]	<1,000 [<1,000]	
MW-3	6/14/2021	<1,000 J [<500 J]	<1,000 J [<500 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<25.0 [<25.0]	523 J [596]	1,660 [1,850]	465 J [403 J]	<1,000 [<500]	
MW-3	8/17/2021	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 [<2,500]	<25.0 [<25.0]	656 J [690]	1,870 [1,940]	398 J [489 J]	<1,000 [<500]	
MW-3	10/13/2021	<1,000 J [<500 J]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<1,000 [<500]	<5,000 J [<2,500 J]	10.0 J [<25.0]	770 J [711]	2,220 [2,060]	493 J [476 J]	<1,000 [<500]	
MW-3	6/18/2022	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<25.0	557 J	2,000	641 J	<1,000	Well PVC cut down due to jack frosting
MW-3	8/2/2022	<500 J	<500	<500	<500	<500	<2,500	<5.00	632	2,290	535	<500	
MW-3	10/7/2022	<1,000 J	<1,000 J	<1,000	<1,000	<1,000	<5,000	<5.00	509 J	1,740	427 J	<1,000	
MW-4	8/28/2019	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	11/6/2019	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	6/18/2020	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	7/28/2020	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	Not Sampled - LNAPL present
MW-4	6/18/2022	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<1.00 [<500]	<5.00 [<2,500]	<12.5 [<12.5]	676 D [602]	2,510 D [2,230]	654 D [562]	<1.00 [<500]	Well PVC cut down due to jack frosting
MW-4	8/2/2022	<200 J [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<200 [<1.00 J]	<1,000 [<5.00 J]	<5.00 [<5.00]	602 [581 D]	2,250 [2,250 D]	507 [484 D]	<200 [<1.00 J]	
MW-4	10/7/2022	--	--	--	--	--	--	--	--	--	--	--	
MW-5	8/28/2019	<5.00	<2.00	<3.00	<0.500	0.290 J	56.0	<2.00	--	6.40	1.10 J	<0.500	
MW-5	11/6/2019	<5.00 [<5.00]	<2.00 [<2.00]	<3.00 [<3.00]	<0.500 [<0.500]	0.120 J [0.110 J]	140 D [150 D]	<2.00 [<2.00]	--	<3.00 [<3.00]	<3.00 [<3.00]	<0.500 [<0.500]	
MW-5	6/18/2020	<1.00	<1.00	<1.00	<1.00	0.344 J	85.0	<50.0	<1.00	1.05	0.221 J	<1.00	
MW-5	7/28/2020	<25.0	<25.0	<25.0	<25.0	<25.0	67.9 J	<12.5	<25.0	<25.0	<25.0	<25.0	
MW-5	3/25/2021	--	--	--	--	--	--	--	--	--	--	--	
MW-5	6/14/2021	<25.0 J	17.1 J	<25.0	<25.0	<25.0	89.3 J	<1.00	<25.0	<25.0	<25.0	<25.0	
MW-5	8/17/2021	--	--	--	--	--	--	--	--	--	--	--	Flooded
MW-5	10/13/2021	--	--	--	--	--	--	--	--	--	--	--	Destroyed by plow
MW-5	6/18/2022	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5	8/2/2022	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed by Snow Plow
MW-5A	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	0.192 J	105	<1.25	<1.00	<1.00	<1.00	<1.00	
MW-7	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	0.251 J	<5.00	<0.0500	9.42	18.6	4.68	<1.00	
MW-7	9/4/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.0500	26.9	54.4	13.4	<1.00	
MW-8	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.250	11.0	52.7	6.67	<1.00	
MW-8	9/4/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	0.226 J	<0.250	19.2	77.0	15.1	<1.00	
MW-9	10/7/2022	<20.0 J	<20.0 J	<20.0	<20.0	6.60 J	<100	<2.50	411	1,530	352	<20.0	
MW-9	9/4/2022	<10.0 J [<10.0 J]	<10.0 J [<10.0 J]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 [<50.0]	<2.50 [<2.50]	369 [379]	1,450 [1,530]	317 [349]	<10.0 [<10.0]	
MW-10	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	9.61	<0.0500	0.109 J	<1.00	0.109 J	<1.00	
MW-10	9/5/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	34.7 J	<0.0500	0.172 J	0.562 J	0.122 J	<1.00	
TMW-1	8/26/2019	<5.00 J [<5.00 J]	<20.0 [<2.00 J]	<3.00 [<3.00]	<1.70 J [<1.00 J]	<50.0 J [<3.00]	3.00 [2.60 J]	<2.00 [<2.00]	--	1,000 J [180 J]	300 J [140 J]	<1.30 J [<0.220]	
TMW-2	8/26/2019	<5.00 J	<2.00	<3.00	<0.500	<0.500 J	44.0	<2.00	--	<3.00	<3.00	<0.500	
TMW-3	8/26/2019	<5.00 J	<20.0	<3.00	<0.500 J	<0.500 J	32.0	<2.00	--	180	44.0	<0.500 J	
QA (EQB)	8/28/2019	<5.00	<2.00	<3.00	<0.500	<0.500	<3.00	<2.00	--	<3.00	<3.00	<0.500	
QA (EQB)	11/6/2019	<5.00	<2.00	<3.00	<0.500	<0.500	<3.00	<2.00	--	<3.00	<3.00	<0.500	
QA (EQB)	6/18/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	7/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	3/25/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00 J	<1.00	<1.00	<1.00	
QA (EQB)	6/14/2021	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	8/17/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	10/13/2021	<1.00 J	<1.00	<1.00	<1.00	<1.00	<5.00 J	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	6/18/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	8/2/2022	<1.00 J	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (EQB)	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	11/6/2019	<5.00	<2.00	<3.00	<0.500	<0.500	<3.00	<2.00	--	<3.00	<3.00	<0.500	
QA (TB)	6/18/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	7/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	3/25/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00 J	<1.00	<1.00	<1.00	
QA (TB)	6/14/2021	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	8/17/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/13/2021	<1.00 J	<1.00	<1.00	<1.00	<1.00	<5.00 J	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	6/18/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	--	<1.00	<1.00	<1.00	<1.00	
QA (TB)	8/2/2022	<1.00 J	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/7/2022	<1.00 J	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	
QA (TB)	10/7/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00	<1.00	<1.00	

Notes
ID = Identification
MW = Groundwater monitoring well
TMW = Temporary Groundwater monitoring well
[] = Duplicate Sample Results
µg/L= Micrograms per Liter
ADEC = Alaska Department of Environmental Conservation
<1.00 = Not detected at or above the Reported Detection Limit (RDL)
Bold = Value exceeds laboratory Method Detection Limit (MDL)
Bold Shaded= Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
-- = Not sampled/not measured/not available
J = The associated numerical value is an estimated concentration only
B = Compound considered non-detect at the listed value due to associated blank contamination.
D = Sample results derived from dilution
VOCs = Volatile Organic Compounds analzyed by USEPA Method 8260D:
a = Ethylene Dibromide by EDB / DBCP by Method 8011

Attachment D

ADEC Data Review Checklist

Laboratory Data Review Checklist

Completed By:

Bhagyashree A Fulzele

Title:

Project Chemist

Date:

April 06, 2023

Consultant Firm:

ARCADIS U.S., Inc

Laboratory Name:

Pace Analytical

Laboratory Report Number:

L1597378

Laboratory Report Date:

03/31/2023

CS Site Name:

First Quarter 2023 Groundwater Monitoring Report

ADEC File Number:

102.26.027

Hazard Identification Number:

24230

Note: Any N/A or No box checked must have an explanation in the comments box.

1. Laboratory

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   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-LAP approved?

   Yes☐ No☐ N/A☒ Comments:

Not applicable.

2. Chain of Custody (CoC)

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

   Yes☒ No☐ N/A☐ Comments:

Yes.

   b. Were the correct analyses requested?

   Yes☒ No☐ N/A☐ Comments:

Yes.

3. Laboratory Sample Receipt Documentation

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   b. Is the sample preservation acceptable – acidified waters, methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   c. Is the sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials); canister vacuum/pressure checked and no open valves etc?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   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, canister not holding a vacuum, etc.?

   Yes☒ No☐ N/A☐ Comments:

Yes, no discrepancies.

e. Is the data quality or usability affected?

Comments:

Data quality or usability was not affected.

4. Case Narrative

a. Is the case narrative present and understandable?

Yes☒ No☐ N/A☐ Comments:

Yes.

b. Are there discrepancies, errors, or QC failures identified by the lab?

Yes☒ No☐ N/A☐ Comments:

Yes.

c. Were all corrective actions documented?

Yes☒ No☐ N/A☐ Comments:

Yes.

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

Comments:

Data quality/usability was not affected.

5. Samples Results

a. Are the correct analyses performed/reported as requested on COC?

Yes☒ No☐ N/A☐ Comments:

Yes.

b. Are all applicable holding times met?

Yes☒ No☐ N/A☐ Comments:

Yes.

c. Are all soils reported on a dry weight basis?

Yes☐ No☒ N/A☐ Comments:

No soil samples were submitted for analysis.

d. Are the reported limit of quantitation (LOQs) or limits of detection (LOD), or reporting limits (RL) less than the Cleanup Level for the project?

Yes☒ No☐ N/A☐ Comments:

Yes.

e. Is the data quality or usability affected?

Data quality/usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

Yes.

ii. Are all method blank results less than limit of quantitation LOQ (or RL)?

Yes☐ No☒ N/A☐ Comments:

iii. If above LOQ or RL, what samples are affected?

Comments:

Sample Locations	Compounds	Sample Result	Qualification
MW-1-W-20230320 MW-10-W-20230320 MW-8-W-20230320	AK102 DRO C10-C25	Detected sample results <RL and <BAL	"UB" at the RL
MW-2-W-20230320 MW-7-W-20230320		Detected sample results >RL and <BAL	"UB" at detected sample concentration
MW-10-W-20230320 MW-8-W-20230320 MW-2-W-20230320 MW-7-W-20230320	AK103 RRO C25-C36	Detected sample results <RL and <BAL	"UB" at the RL
MW-1-W-20230320		Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
RL Reporting limit

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

Yes☒ No☐ N/A☐ Comments:

Yes.

v. Data quality or usability affected?

Comments:

The method blank contamination is considered minor and would result in the non-detect of the associated data. The reported data should still consider as usable.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are 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:

Yes.

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

Yes☒ No☐ N/A☐ Comments:

Yes.

iii. Accuracy – Are 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:

Sample locations associated with LCS/LCSD analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery	LCSD Recovery
MW-1-W-20230320 MW-10-W-20230320	Acetone	>UL	>UL
MW-8-W-20230320 MW-7-W-20230320	n-Butylbenzene	AC	>UL
EQB-1-W-20230320 TRIP BLANK 1_20230320	1,2-Dichloropropane	<LL but >10%	AC

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of an LCS/LCSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

iv. Precision –Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the 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:

Sample locations associated with LCS/LCSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
MW-1-W-20230320 MW-10-W-20230320 MW-8-W-20230320 MW-2-W-20230320 MW-7-W-20230320 EQB-1-W-20230320	AK103 RRO C25-C36

The criteria used to evaluate the RPD between the LCS/LCSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

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

Comments:

%Recovery:
Method SW846 8260D: Compound 1,2-Dichloropropane result in sample IDs MW-1-W-20230320, MW-10-W-20230320, MW-8-W-20230320, MW-7-W-20230320, EQB-1-W-20230320 and TRIP BLANK 1_20230320 were qualified as estimated (UJ). Compound n-butylbenzene result in sample IDs MW-8-W-20230320 and MW-7-W-20230320 were qualified as estimated (J).

RPD:
Method AK102/103: Compound AK103 RRO C25-C36 result in sample IDs MW-1-W-20230320, MW-10-W-20230320, MW-8-W-20230320, MW-2-W-20230320, MW-7-W-20230320, and EQB-1-W-20230320 were qualified as estimated (UJ).

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

Yes☒ No☐ N/A☐ Comments:

Yes.

vii. Is the data quality or usability affected? (Use comment box to explain.)

Comments:

The LCS/LCSD recoveries and RPD exceedances are considered minor and would result in the estimation of associated data. The reported data should still consider as usable.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Note: Leave blank if not required for project

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes☐ No☒ N/A☐ Comments:

The MS/MSD analysis was not performed on any of the samples from this SDG.

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

Yes☐ No☒ N/A☐ Comments:

The MS/MSD analysis was not performed on any of the samples from this SDG.

iii. Accuracy – Are 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:

Not applicable.

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes☐ No☐ N/A☒ Comments:

Not applicable.

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

Comments:

None of the samples were affected.

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

Yes☐ No☐ N/A☒ Comments:

Not applicable.

vii. Is the data quality or usability affected? (Use comment box to explain.)

Comments:

Data quality or usability was not affected.

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:

Yes.

ii. Accuracy – Are 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 60-120% R for QC samples ; all other analyses see the laboratory report pages)

Yes☒ No☐ N/A☐ Comments:

Yes.

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:

Not applicable.

iv. Is the data quality or usability affected?

Comments:

Data quality or usability was not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes☒ No☐ N/A☐ Comments:

Trip blank sample was collected as TRIP BLANK 1_20230320.

ii. Are all results less than LOQ or RL?

Yes☒ No☐ N/A☐ Comments:

Yes.

iii. If above LOQ or RL, what samples are affected?

Comments:

None of the samples were affected.

iv. Is data quality or usability affected?

Comments:

Data quality or usability was not affected.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis and 10 project samples?

Yes☐ No☒ N/A☐ Comments:

No.

ii. Was the duplicate submitted blind to lab?

Yes☐ No☒ N/A☐ Comments:

No.

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:

Not applicable.

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

Comments:

Data quality or usability was not affected.

g. Decontamination or Equipment Blank

i. Were decontamination or equipment blanks collected?

Yes☒ No☐ N/A☐ Comments:

Equipment blank sample was collected as EQB-1-W-20230320.

ii. Are all results less than LOQ or RL?

Yes☐ No☒ N/A☐ Comments:

No.

iii. If above LOQ or RL, specify what samples are affected?

Comments:

Sample Locations	Compound	Sample Result	Qualification
MW-1-W-20230320 MW-10-W-20230320 MW-8-W-20230320	AK102 DRO C10-C25	Detected sample results <RL and <BAL	"UB" at the RL
MW-2-W-20230320 MW-7-W-20230320		Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
RL Reporting limit

iv. Are data quality or usability affected?

Comments:

The equipment blank contamination is considered minor and would result in the non-detect of the associated data. The reported data should still consider as usable.

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

a. Are they defined and appropriate?

Yes☒ No☐ N/A☐ Comments:

Yes.

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compounds	Recovery
MW-1-W-20230320 MW-10-W-20230320	CCV %D	Carbon disulfide	Low
		Chloromethane	Low
		1,1-Dichloroethane	Low
		1,2-Dichloropropane	Low
		Di-isopropyl ether	Low
		Trichlorofluoromethane	High
MW-8-W-20230320 MW-7-W-20230320 EQB-1-W-20230320 TRIP BLANK 1_20230320		Carbon disulfide	Low
		Chloromethane	Low
		1,1-Dichloroethane	Low
		1,2-Dichloropropane	Low
		Di-isopropyl ether	Low

Sample Locations	Initial/Continuing	Compounds	Recovery
MW-2-W-20230320		Bromoform	Low
		1,2-Dibromo-3-Chloropropane	Low

Results associated with calibrations outside of the recovery limits are qualified as estimated (UJ/J).

Laboratory Data Review Checklist

Completed By:

Bhagyashree A Fulzele

Title:

Project Chemist

Date:

April 06, 2023

Consultant Firm:

ARCADIS U.S., Inc

Laboratory Name:

Pace Analytical

Laboratory Report Number:

L1597389

Laboratory Report Date:

03/31/2023

CS Site Name:

First Quarter 2023 Groundwater Monitoring Report

ADEC File Number:

102.26.027

Hazard Identification Number:

24230

Note: Any N/A or No box checked must have an explanation in the comments box.

1. Laboratory

   a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   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-LAP approved?

   Yes☐ No☐ N/A☒ Comments:

Not applicable.

2. Chain of Custody (CoC)

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

   Yes☒ No☐ N/A☐ Comments:

Yes.

   b. Were the correct analyses requested?

   Yes☒ No☐ N/A☐ Comments:

Yes.

3. Laboratory Sample Receipt Documentation

   a. Is the sample/cooler temperature documented and within range at receipt (0° to 6° C)?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   b. Is the sample preservation acceptable – acidified waters, methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   c. Is the sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials); canister vacuum/pressure checked and no open valves etc?

   Yes☒ No☐ N/A☐ Comments:

Yes.

   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, canister not holding a vacuum, etc.?

   Yes☒ No☐ N/A☐ Comments:

Yes, no discrepancies.

e. Is the data quality or usability affected?

Comments:

Data quality or usability was not affected.

4. Case Narrative

a. Is the case narrative present and understandable?

Yes☒ No☐ N/A☐ Comments:

Yes.

b. Are there discrepancies, errors, or QC failures identified by the lab?

Yes☒ No☐ N/A☐ Comments:

Yes.

c. Were all corrective actions documented?

Yes☒ No☐ N/A☐ Comments:

Yes.

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

Comments:

Data quality/usability was not affected.

5. Samples Results

a. Are the correct analyses performed/reported as requested on COC?

Yes☒ No☐ N/A☐ Comments:

Yes.

b. Are all applicable holding times met?

Yes☒ No☐ N/A☐ Comments:

Yes.

c. Are all soils reported on a dry weight basis?

Yes☐ No☒ N/A☐ Comments:

No soil samples were submitted for analysis.

d. Are the reported limit of quantitation (LOQs) or limits of detection (LOD), or reporting limits (RL) less than the Cleanup Level for the project?

Yes☒ No☐ N/A☐ Comments:

Yes.

e. Is the data quality or usability affected?

Data quality/usability was not affected.

6. QC Samples

a. Method Blank

i. Was one method blank reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

Yes.

ii. Are all method blank results less than limit of quantitation LOQ (or RL)?

Yes☐ No☒ N/A☐ Comments:

iii. If above LOQ or RL, what samples are affected?

Comments:

Sample Locations	Compounds	Sample Result	Qualification
MW-9-W-20230321	AK102 DRO C10-C25	Detected sample results >RL and <BAL	"UB" at detected sample concentration
MW-9-W-20230321 MW-3-W-20230321	AK103 RRO C25-C36	Detected sample results <RL and <BAL	"UB" at the RL

Note:
RL Reporting limit

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

Yes☒ No☐ N/A☐ Comments:

Yes.

v. Data quality or usability affected?

Comments:

The method blank contamination is considered minor and would result in the non-detect of the associated data. The reported data should still consider as usable.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – Are 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:

Yes.

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

Yes☒ No☐ N/A☐ Comments:

Yes.

iii. Accuracy – Are 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:

Sample locations associated with LCS/LCSD analysis exhibiting recoveries outside of the control limits presented in the following table.

Sample Locations	Compound	LCS Recovery	LCSD Recovery
MW-3-W-20230321 BD-1-W-20230321 EQB-1-W-20230321 TRIP BLANK 2_20230321	Acetone	>UL	>UL
	n-Butylbenzene	AC	>UL
	1,2-Dichloropropane	<LL but >10%	AC

The criteria used to evaluate the LCS/LCSD recoveries are presented in the following table. In the case of an LCS/LCSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J

iv. Precision –Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? Was the 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:

Sample locations associated with LCS/LCSD recoveries exhibiting an RPD greater than of the control limit presented in the following table.

Sample Locations	Compound
MW-9-W-20230321 MW-3-W-20230321BD-1-W-20230321 EQB-1-W-20230321	AK103 RRO C25-C36

The criteria used to evaluate the RPD between the LCS/LCSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> UL	Non-detect	UJ
	Detect	J

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

Comments:

%Recovery:
Method SW846 8260D: Compound 1,2-Dichloropropane result in sample IDs MW-3-W-20230321, BD-1-W-20230321, EQB-1-W-20230321 and TRIP BLANK 2_20230321 were qualified as estimated (UJ).

RPD:
Method AK102/103: Compound AK103 RRO C25-C36 result in sample IDs MW-9-W-20230321, MW-3-W-20230321, BD-1-W-20230321 and EQB-1-W-20230321 was qualified as estimated (UJ).

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

Yes☒ No☐ N/A☐ Comments:

Yes.

vii. Is the data quality or usability affected? (Use comment box to explain.)

Comments:

The LCS/LCSD recoveries and RPD exceedances are considered minor and would result in the estimation of associated data. The reported data should still consider as usable.

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Note: Leave blank if not required for project

i. Organics – Are one MS/MSD reported per matrix, analysis and 20 samples?

Yes☒ No☐ N/A☐ Comments:

The MS/MSD analysis was performed on sample ID MW-3-W-20230321.

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

Yes☒ No☐ N/A☐ Comments:

The MS/MSD analysis was performed on sample ID MW-3-W-20230321.

iii. Accuracy – Are 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:

Sample locations associated with the MS/MSD exhibiting recoveries outside of the control limits are presented in the following table.

Sample Locations	Compound	MS Recovery	MSD Recovery
MW-3-W-20230321	Acetone	>UL	>UL

Note:
AC Acceptable

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No Action
	Detect	J
< the lower control limit (LL) but > 10%	Non-detect	UJ
	Detect	J
< 10%	Non-detect	R
	Detect	J
Parent sample concentration > four times the MS/MSD spiking solution concentration.	Detect	No Action
	Non-detect	

iv. Precision – Are all relative percent differences (RPD) reported and less than method or laboratory limits and project specified objectives, if applicable? RPD reported from MS/MSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes☒ No☐ N/A☐ Comments:

Yes.

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

Comments:

None of the samples were affected.

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

Yes☒ No☐ N/A☐ Comments:

Yes.

vii. Is the data quality or usability affected? (Use comment box to explain.)

Comments:

MS/MSD recovery and RPD exceedance are considered minor and would result in the estimation of the associated data. The reported data should still consider as usable.

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:

Yes.

ii. Accuracy – Are 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 60-120% R for QC samples ; all other analyses see the laboratory report pages)

Yes☒ No☐ N/A☐ Comments:

Yes.

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:

Not applicable.

iv. Is the data quality or usability affected?

Comments:

Data quality or usability was not affected.

e. Trip Blanks

i. Is one trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes☒ No☐ N/A☐ Comments:

Trip blank sample was collected as TRIP BLANK 2_20230321.

ii. Are all results less than LOQ or RL?

Yes☒ No☐ N/A☐ Comments:

Yes.

iii. If above LOQ or RL, what samples are affected?

Comments:

None of the samples were affected.

iv. Is data quality or usability affected?

Comments:

Data quality or usability was not affected.

f. Field Duplicate

i. Are one field duplicate submitted per matrix, analysis and 10 project samples?

Yes☒ No☐ N/A☐ Comments:

Yes.

ii. Was the duplicate submitted blind to lab?

Yes☒ No☐ N/A☐ Comments:

Yes.

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:

Results for duplicate samples are summarized in the following table.

Sample ID / Duplicate ID	Method	Compounds / Analytes	Sample Result	Duplicate Result	RPD
MW-3-W-20230321 / BD-1-W-20230321	6010D	Lead	43.2	32.6	28%
	AK101	TPHGAK C6 to C10	180000	176000	AC
	8260D	1,2-Dibromoethane	263	270	3%
		Benzene	37300	43000	14%
		Ethylbenzene	2930	3250	10%
		Isopropylbenzene	122	146	AC
		n-Propylbenzene	234	254	AC
		Toluene	38000	45000	17%
		1,2,4-Trimethylbenzene	1160	1320	AC
		1,2,3-Trimethylbenzene	328	340	AC
		1,3,5-Trimethylbenzene	258	301	AC
		Xylenes, Total	13300	15300	14%
		o-Xylene	4530	4960	9%
		m&p-Xylene	8730	10300	17%
	8011	Ethylene Dibromide	225	232	3%
	AK102/103	AK102 DRO C10-C25	4460	3890	AC

Notes:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

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

Data quality or usability was not affected.

g. Decontamination or Equipment Blank

i. Were decontamination or equipment blanks collected?

Yes☒ No☐ N/A☐ Comments:

Equipment blank sample was collected as EQB-1-W-20230321.

ii. Are all results less than LOQ or RL?

Yes☐ No☒ N/A☐ Comments:

No.

iii. If above LOQ or RL, specify what samples are affected?

Comments:

Sample Locations	Compound	Sample Result	Qualification
MW-9-W-20230321	AK102 DRO C10-C25	Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
RL Reporting limit

iv. Are data quality or usability affected?

Comments:

The equipment blank contamination is considered minor and would result in the non-detect of the associated data. The reported data should still consider as usable.

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

a. Are they defined and appropriate?

Yes☒ No☐ N/A☐ Comments:

Yes.

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compounds	Recovery
MW-9-W-20230321	CCV %D	Bromoform	Low
		1,2-Dibromo-3-Chloropropane	Low
MW-3-W-20230321 BD-1-W-20230321 EQB-1-W-20230321 TRIP BLANK 2_20230321		Carbon disulfide	Low
		Chloromethane	Low
		1,1-Dichloroethane	Low
		1,2-Dichloropropane	Low
		Di-isopropyl ether	Low

Results associated with calibrations outside of the recovery limits are qualified as estimated (UJ).