

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Spill Prevention and Response, Contaminated Sites Program
P.O Box 1535
Haines, Alaska 99827

Date: May 31, 2024
Our Ref: 30063666
Subject: First Half 2024 Groundwater Monitoring Report
Chevron #1356 (Midtown Chevron #91356)
1465 West Northern Lights Boulevard, Anchorage, Alaska
ADEC File No.: 2100.26.065
ADEC Hazard ID: 23313

Arcadis U.S., Inc.
213 Court Street
Middletown
Connecticut 06457
Phone: 860 503 1427
Fax: 860 346 2853
www.arcadis.com

Dear Ms. Reams,

On behalf of Chevron Environmental Management Company, Arcadis U.S., Inc. (Arcadis), has prepared this report to document the first half 2024 groundwater monitoring activities for Chevron #1356 (Midtown Chevron), located at 1465 West Northern Lights Boulevard, Anchorage, Alaska (site). This work was conducted under the direction of a "Qualified Environmental Professional" by a "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.



Jill Settle
Certified Project Manager
Email: jill.settle@arcadis.com
Direct Line: 860.503.1427

Copies

James Kiernan, Chevron Environmental Management Company (*electronic copy*)

Mark Engelke, Cook Inlet Marketing Group, Inc. (*electronic copy*)

Jeff Brown, Carr-Gottstein Foods Company

FIRST HALF 2024 GROUNDWATER MONITORING REPORT

Work Conducted This Period [First Half 2024]:

1. Conducted quarterly groundwater monitoring activities on April 5, 2024.
2. Prepared the *First Half 2024 Groundwater Monitoring Report*.
3. Prepare and submit a *Vapor Intrusion Investigation Work Plan*.

Work Proposed Next Period [Second Half 2024]:

1. Conduct the second half 2024 groundwater monitoring activities.
2. Prepare the *Second Half 2024 Groundwater Monitoring Report*.
3. Conduct the vapor intrusion investigation, if approved by Alaska Department of Environmental Conservation (ADEC).

Site Description

The site is in south central Alaska, to the southeast of the northern Knik Arm of Cook Inlet. Anchorage area bedrock consists of Mesozoic metamorphic and igneous rocks overlain by densely consolidated sediments of the Kenai group. A series of marine transgressive sequences combined with glaciofluvial sediments are overlain by the most recent glacial sediments (Cederstrom 1964). Subsurface site sediments as identified during past site assessment activities consist primarily of sand with gravel to approximately 10 feet below ground surface (bgs) underlain by poorly graded sand to the total explored depth of approximately 23 feet bgs. As documented in the site's historical boring logs, clay was found at depths of 22 feet bgs (SECOR International, Inc. [SECOR] 2001). Historic groundwater depths have ranged between approximately 11 and 17 feet below top of casing, and historical groundwater flow is to the west-southwest. Site facilities consist of three underground storage tanks (USTs), four fuel dispenser islands, product piping, and a station building. In May 1998, the five original USTs, the dispenser islands, and associated piping were removed as part of station raze and rebuild activities. Samples collected during the removal activities indicated soils near the former dispenser islands, gasoline USTs, and associated piping were impacted with gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethylbenzene, and xylenes (collectively BTEX) above ADEC Soil Cleanup Levels (SCLs). While it was noted that no visible cracks or holes were observed in the USTs removed in 1998, the release mechanism is assumed to be a release from the original UST system (SECOR 1998). Currently, there are five onsite groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, and MW-9) and two offsite groundwater monitoring wells (MW-6 and MW-7).

On November 9, 2022, ADEC approved a *Groundwater Sampling Analyte Reduction Request – Groundwater Sampling Work Plan Addendum*, which included the monitoring and sampling of site-related monitoring wells semi-annually. 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 Figures 1 and 2, respectively.

Site Activities this Reporting Period

Current phase of project:	Monitoring
Frequency of monitoring and sampling:	Semi-annual
Monitoring wells containing light non-aqueous phase liquid (LNAPL):	None
Cumulative LNAPL recovered to date: (gallons)	0.00
Approximate depth to groundwater: (feet below top of casing)	12.35 (MW-7) to 15.77 (MW-1)
Approximate groundwater elevation: (feet relative to NAVD88)	79.33 (MW-7) to 80.40 (MW-9)
Groundwater flow direction	Southwest
Groundwater gradient (feet per foot)	0.003
Current remediation techniques:	None
Summary of unusual activity:	Could not locate MW-2 and MW-3 under snow/ice berms.
Agency directive requirements:	None

Groundwater Gauging and Sampling Methods

On April 5, 2024, the first half, 2024 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 ADEC Field Sampling Guidance (ADEC 2022a) and Arcadis *Standard Groundwater Sampling and Monitoring Wells* (Arcadis 2022a). Non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water. Groundwater table drawdown was continuously monitored during purging with an oil/water interface probe and the flow rate of the pump was adjusted to limit drawdown to 0.5 feet. Groundwater quality parameters were monitored during purging with a Horiba U-52 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:

- $\pm 3\%$ for temperature (minimum of $\pm 0.2^\circ\text{C}$),
- ± 0.1 for pH,
- $\pm 3\%$ for conductivity,
- ± 10 mV for redox potential,
- $\pm 10\%$ for dissolved oxygen, and
- $\pm 10\%$ for turbidity.

Following well stabilization, the flow rate was reduced to approximately 200 milliliters per minute and groundwater samples were collected into laboratory sample bottles. Groundwater samples were collected from the top foot of the groundwater column in monitoring wells per the sampling schedule (Table 1) with the following exception: MW-2 and MW-3 could not be located under snow/ice berms. The groundwater potentiometric surface elevation and a rose diagram of historical groundwater flow directions are illustrated on Figure 3.

In the letter dated November 9, 2022, ADEC approved a reduction of analytes for the site. Groundwater samples collected were analyzed by Pace Analytical National Center for Testing & Innovation (Pace) of Mt. Juliet, Tennessee for the following constituents:

- Select volatile organic compounds by United States Environmental Protection Agency (USEPA) 8260D including: benzene, toluene, ethylbenzene and total xylenes (BTEX), naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride

A groundwater duplicate sample (BD-1) was collected from monitoring well MW-4 and submitted blind to Pace. Additionally, an equipment blank (EQB-1) sample was collected and a trip blank (Trip Blank) was 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). Current analytical data are summarized in Table 2. COPCs exceeding GCLs during the April 2024 event is summarized below and are illustrated on Figure 4. The laboratory report is included as Attachment B. Current and historical data from 2023 are summarized in Table 3.

- Chloroform was detected at concentrations above the ADEC GCL (2.2 micrograms per liter ($\mu\text{g}/\text{L}$)) in four of the six groundwater samples collected during this event. Detected concentrations ranged from 8.79 $\mu\text{g}/\text{L}$ (BD-1 collected from MW-4) to 14.4 $\mu\text{g}/\text{L}$ (MW-9). The maximum concentration was observed at location MW-9 (14.4 $\mu\text{g}/\text{L}$).
- Vinyl Chloride was detected at a concentration above the ADEC GCL (0.19 $\mu\text{g}/\text{L}$) in the groundwater sample at MW-6 at a concentration of 0.516 $\mu\text{g}/\text{L}$ (The associated numerical value is an estimated concentration only).

Historical analytical results (pre-2023) are presented in Attachment C. Historical analytical data from spring [spring, fall] of 2023 to current are summarized in Table 4 and Table 5.

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:
 - Continuing calibration recovery was less than the control limit for naphthalene in sample locations MW-1, MW-4, MW-6, MW-7, MW-9, BD-1, EQB-1, and Trip Blank for USEPA Method 8260D. Laboratory analytical results in the associated sample locations were qualified as estimated.
 - The percent recoveries reported were within method or laboratory detection limits and project specified objectives.
- Precision:
 - Based on the laboratory control sample and laboratory control sample duplicate relative percent differences, the data meets precision objectives.
- Comparability:
 - Comparability is not applicable to these laboratory results.
- Sensitivity:
 - The concentration of chloroform exceeded the ADEC GCL in sample locations MW-1, MW-4, MW-9, and BD-1.
 - The concentration of vinyl chloride exceeded the ADEC GCL in sample location MW-6.
 - The laboratory reported detection limit for naphthalene, vinyl chloride and chloroform exceeded the ADEC GCLs. The laboratory method detection limit is above the ADEC GCLs for naphthalene and chloroform. The requested laboratory method detection limit for vinyl chloride could not be achieved.
 - The sensitivity of the analyses was adequate for the samples.
- Representativeness:
 - The data appears to be representative of site conditions and are generally consistent with expected groundwater concentrations.
- Completeness:
 - The results appear to be valid and usable, and thus, the laboratory results have 100 percent completeness.

Investigation Derived Waste

Purge water and decontamination water collected during groundwater sampling was temporarily collected into 5-gallon buckets and treated onsite via a Granular Activated Carbon (GAC) bucket. The treatment of purge water and decontamination water was completed per the Arcadis *Summary of Procedures for Investigation Derived Waste Treatment Utilizing Granular Activated Carbon* (Arcadis 2022b). Approximately 3.15 gallons of groundwater were treated during this event.

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.

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date May 31, 2024

Arcadis recommends groundwater sampling continues in accordance with the current semi-annual schedule. The second semi-annual sampling event will be conducted in fall of 2024.

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 October 18
- Arcadis. 2022a. Standard Groundwater Sampling for Monitoring Well. April
- Arcadis. 2022b. Summary of Procedures for Investigation Derived Waste Treatment Utilizing Granular Activated Carbon. September.
- Cederstrom, D.J., F. Trainer and R. Waller. 1964. Geology and Ground-Water Resources of the Anchorage Area, Alaska. United States Geological Survey.
- SECOR International, Inc. (SECOR) 1998. Underground Storage Tanks Removal and Site Assessment Report. August 6, 1998.
- SECOR. 2001. Assessment for Offsite Monitoring Well Installation. November 20.

Ms. Rebekah Reams
Alaska Department of Environmental Conservation
Date May 31, 2024

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

Sincerely,

Arcadis U.S., Inc.



Nate Polen
Associate Project Manager

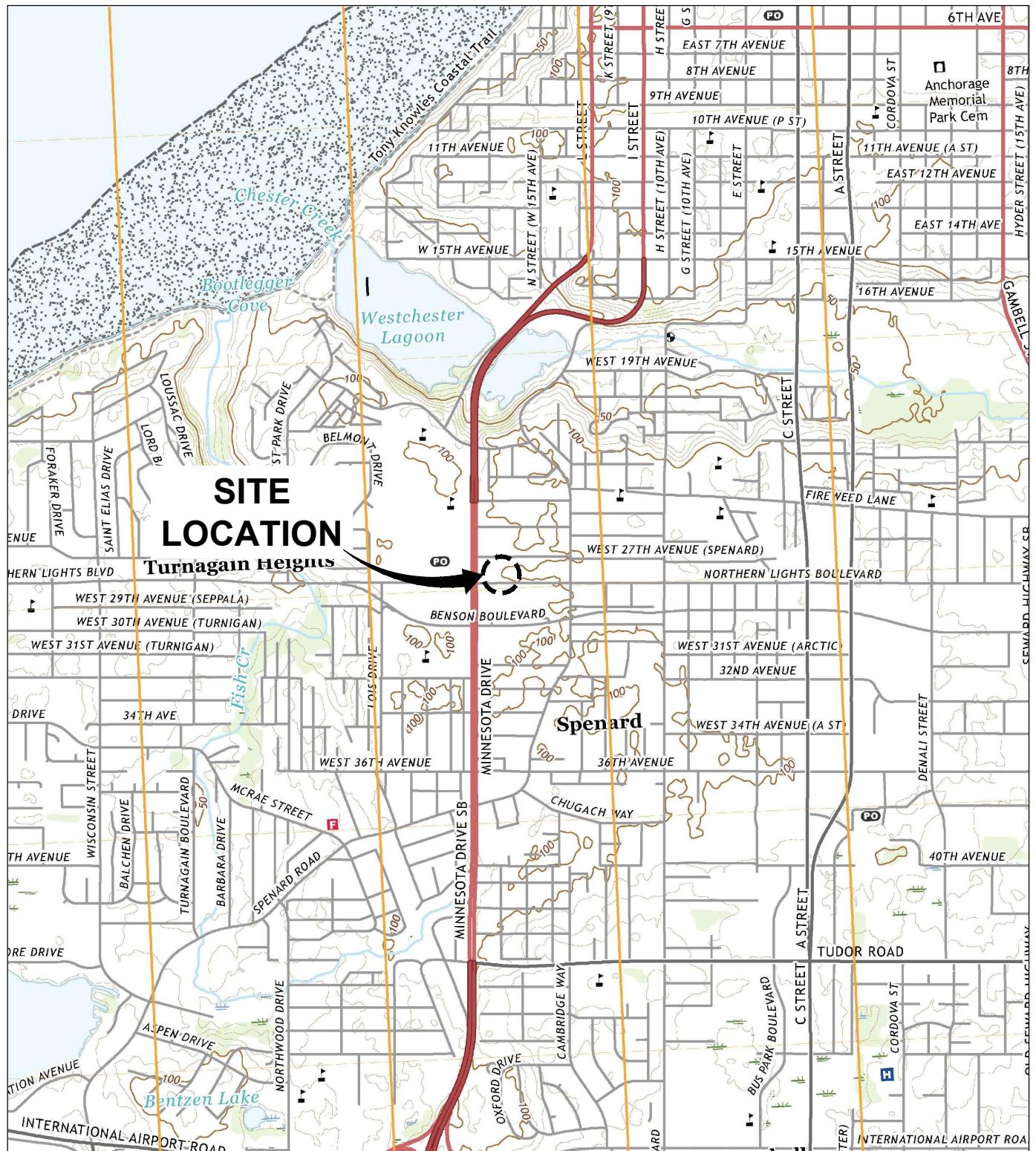


Jill M. Settle
Certified Project Manager

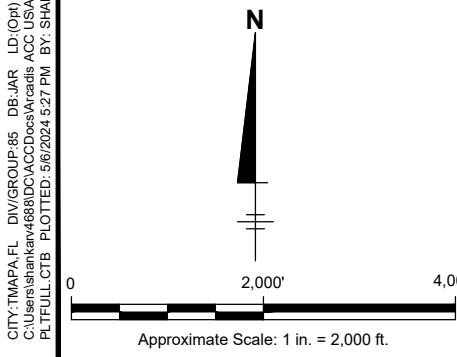
Enclosures:

- 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 Primary Analytical Results
- Table 3. Historical Groundwater Gauging and Primary Analytical Results
- Attachment A. Field Notes
- Attachment B. Laboratory Analytical Results
- Attachment C. Historical Groundwater Analytical Results Third Quarter 1999 through 2022
- Attachment D. ADEC Data Review Checklist

Figures



SOURCE: USGS 7.5 ANCHORAGE A-8 NW QUADRANGLE, ALASKA.

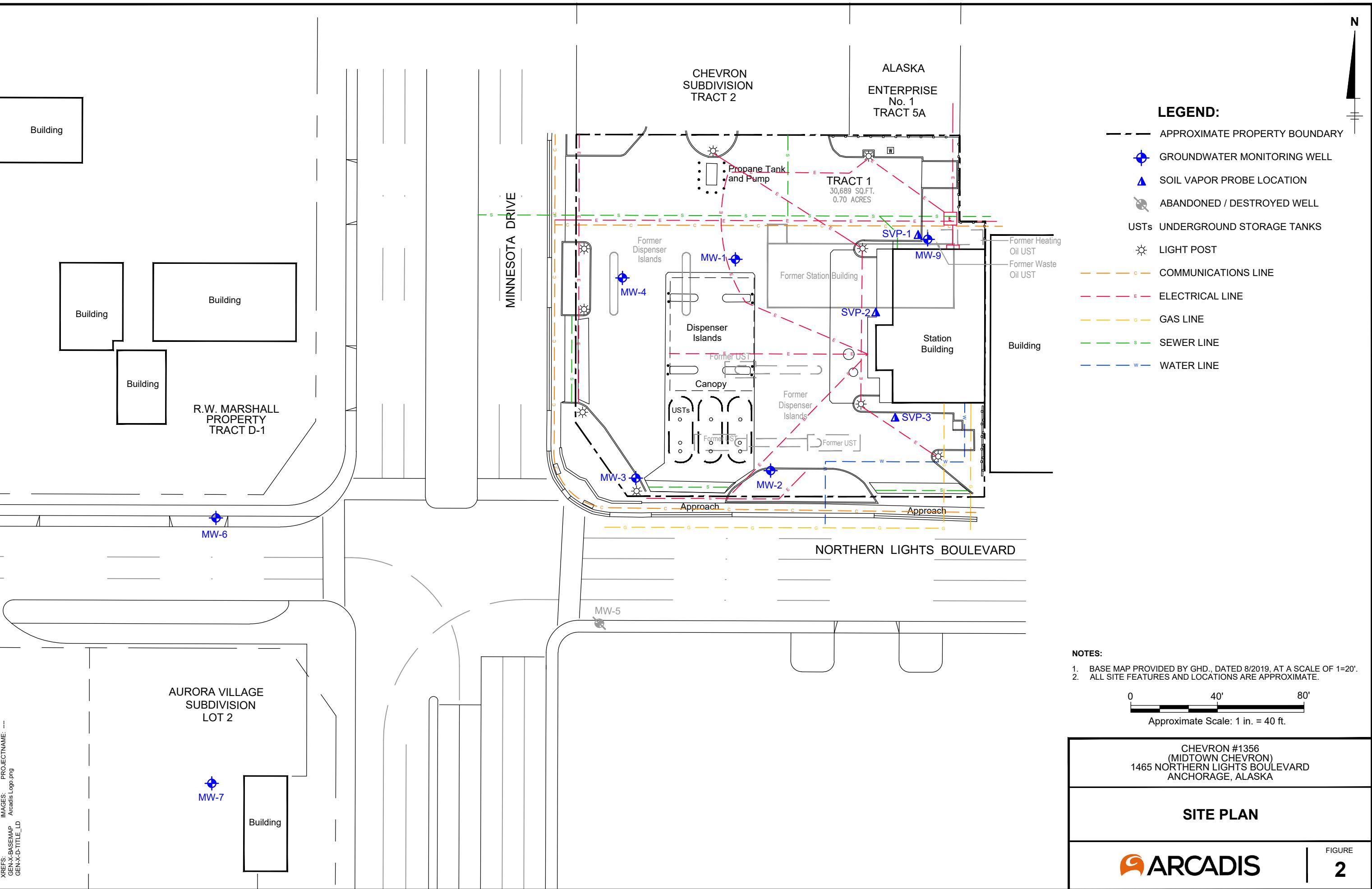


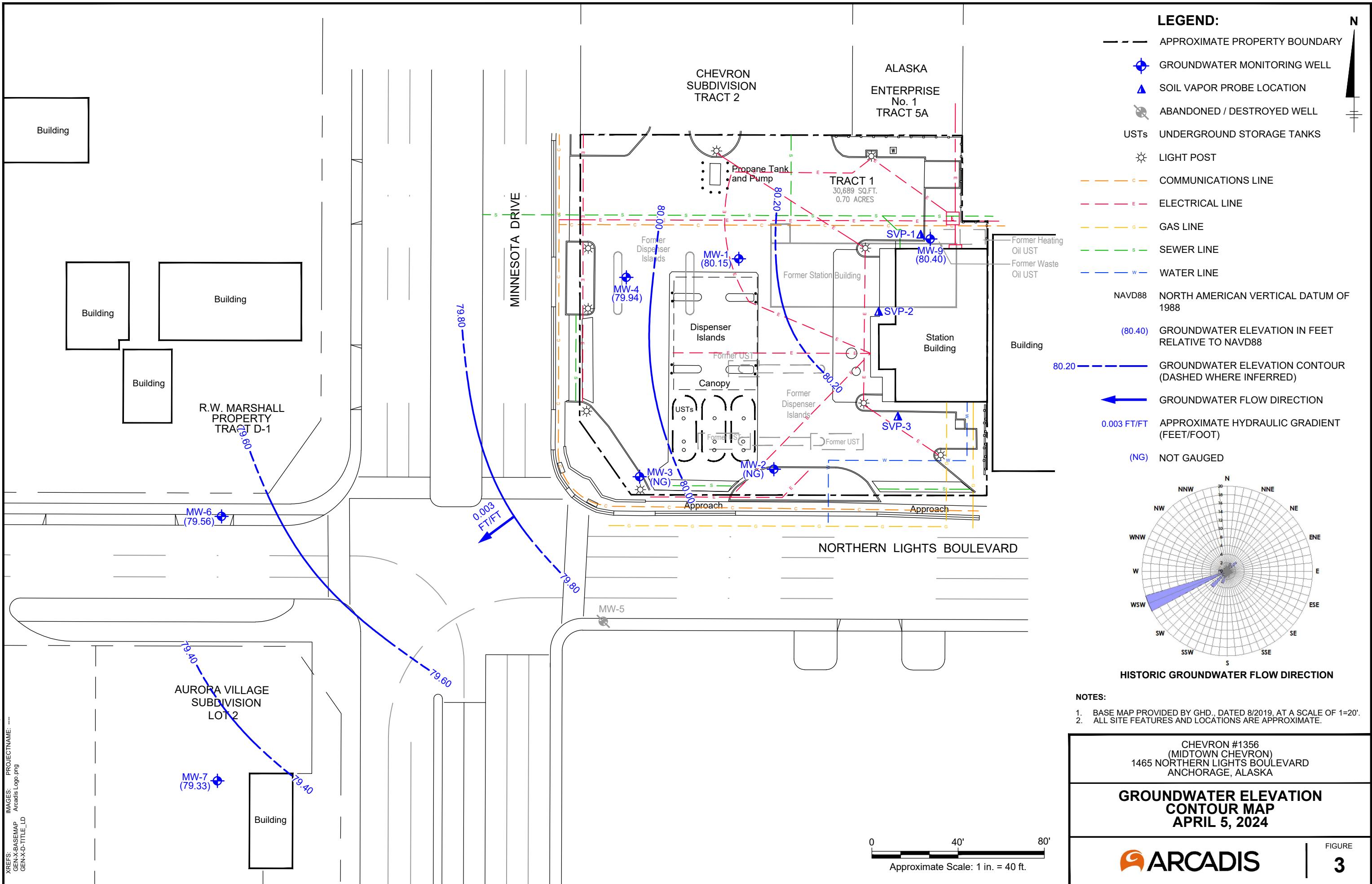
CHEVRON #1356
 (MIDTOWN CHEVRON)
 1465 NORTHERN LIGHTS BOULEVARD
 ANCHORAGE, ALASKA

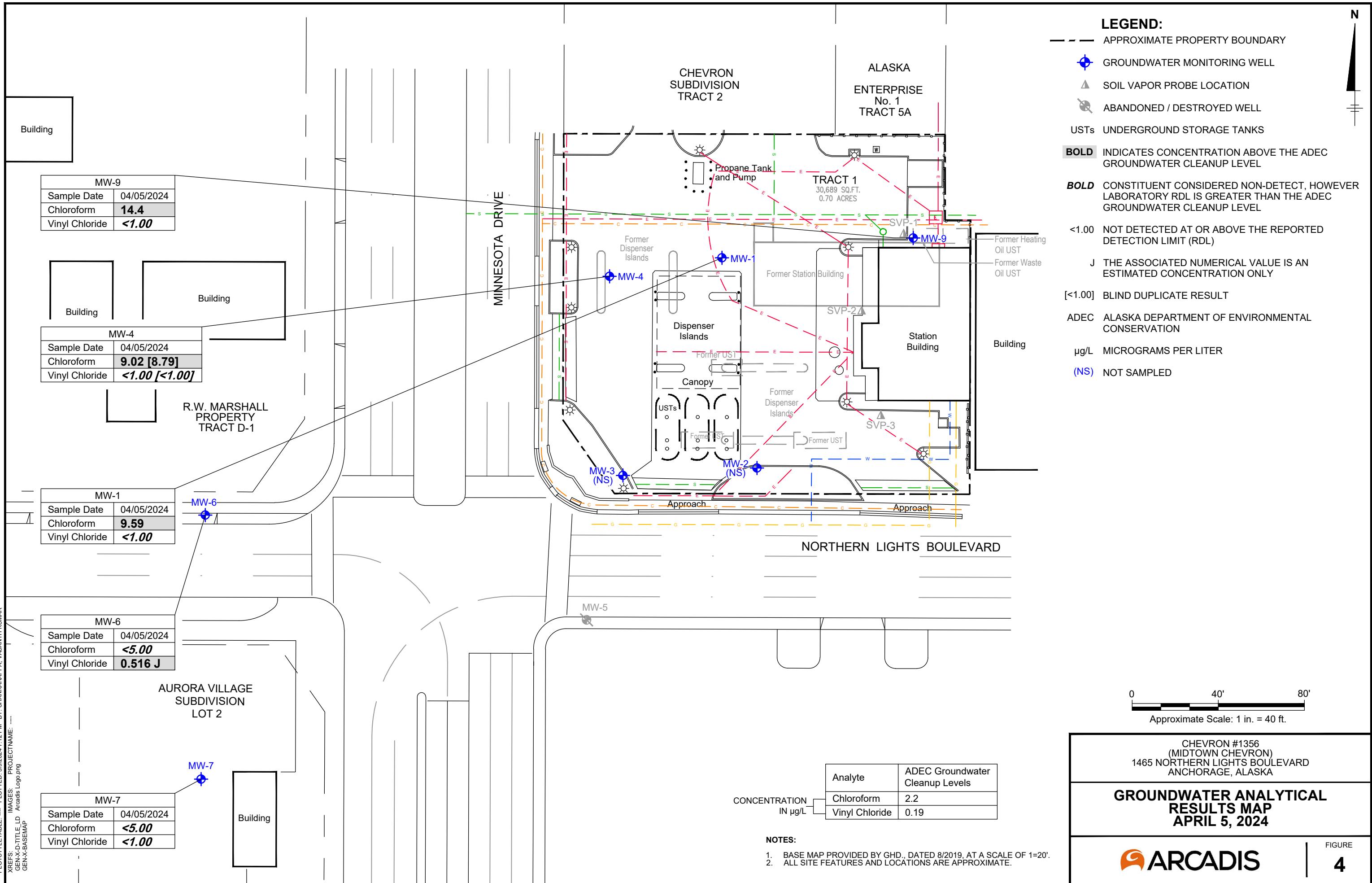
SITE LOCATION MAP

ARCADIS

FIGURE
1







Tables

Table 1
Groundwater Monitoring Schedule
First Half 2024
Chevron #1356 (Midtown Chevron)
1465 West Northern Lights Boulevard,
Anchorage, Alaska



Well ID	Sample Schedule	Gauge	Sample	Comment
MW-1	Semi Annual	Y	Y	
MW-2	Semi Annual	Y	Y	Could not locate due to snow berms
MW-3	Semi Annual	Y	Y	Could not locate due to snow berms
MW-4	Semi Annual	Y	Y	
MW-6	Semi Annual	Y	Y	
MW-7	Semi Annual	Y	Y	
MW-9	Semi Annual	Y	Y	
BD	Semi Annual	N	Y	

Note:

Wells sampled for the following volatile organic compounds by United States Environmental Protection Agency Method 8260D: benzene, toluene, ethylbenzene, total xylenes, naphthalene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trichloroethene and vinyl chloride.

Table 3
Historical Groundwater Gauging and Primary Analytical Results

First Half 2023 through First Half 2024

Chevron #1356 (Midtown Chevron)

1465 West Northern Lights Boulevard,

Anchorage, Alaska

Well ID	Sample Date	TOC (ft bTOC)	DTW (feet bTOC)	GW Elev. (feet)	Benzene	Toluene	Ethylbenzene	Total Xylenes	Naphthalene	1,2,4-Trimethyl- benzene	1,3,5-Trimethyl- benzene	Chloroform	cis-1,2-Dichloroethene (cis-1,2- Dichloroethylene)	Tetrachloroethene (Tetrachloroethylene)	Trichloroethene (Trichloroethylene)	Vinyl Chloride	Comments
ADEC Groundwater Cleanup Levels					4.6	1,100	15	190	1.7	56	60	2.2	36	41	2.8	0.19	
MW-1	04/13/23	95.92	16.26	79.66	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	8.04	<1.00	0.916 J	<1.00	<1.00	
MW-1	09/14/23	95.92	14.94	80.98	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	9.04	<1.00	1.04	<1.00	<1.00	
MW-1	04/05/24	95.92	15.77	80.15	<1.00	0.696 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	9.59	<1.00	1.02	<1.00	<1.00	
MW-2	04/13/23	94.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to snow berms
MW-2	09/14/23	94.64	13.85	80.79	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<5.00 B	<1.00	38.8	0.830 J	<1.00	
MW-2	04/05/24	94.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to snow berms
MW-3	04/13/23	93.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to snow berms
MW-3	09/14/23	93.59	12.89	80.70	1.75	0.442 J	14.7	8.15	1.50 J	19.0	0.544 J	<5.00	3.54	1.96	3.61	<1.00	
MW-3	04/05/24	93.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Could not locate due to snow berms
MW-4	04/13/23	94.74	15.09	79.65	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	8.59	<1.00	0.471 J	<1.00	<1.00	
MW-4	09/14/23	94.74	14.04	80.70	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	9.44	<1.00	0.706 J	<1.00	<1.00	
Duplicate (MW-4)	09/14/23	94.74	14.04	80.70	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	8.54	<1.00	0.631 J	<1.00	<1.00	
MW-4	04/05/24	94.74	14.80	79.94	<1.00	0.762 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	9.02	<1.00	0.676 J	<1.00	<1.00	
Duplicate (MW-4)	04/05/24	--	--	--	<1.00	0.698 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	8.79	<1.00	0.555 J	<1.00	<1.00	
MW-6	04/13/23	92.88	13.58	79.30	0.163 J	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<5.00 B	1.05	5.44	<1.00	0.350 J	
MW-6	09/14/23	92.88	12.35	80.53	0.145 J	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<5.00	0.825 J	5.47	<1.00	<1.00	
MW-6	04/05/24	92.88	13.32	79.56	0.421 J	0.836 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	<5.00	1.57	8.55	<1.00	0.516 J	
MW-7	04/13/23	91.68	12.58	79.10	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	
MW-7	09/14/23	91.68	11.30	80.38	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	
MW-7	04/05/24	91.68	12.35	79.33	<1.00	0.590 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	
MW-9	04/13/23	96.14	16.04	80.10	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	11.7	<1.00	<1.00	<1.00	<1.00	
Duplicate (MW-9)	04/13/23	96.14	16.04	80.10	<1.00	<1.00	<1.00	<3.00	<5.00 J	<1.00	<1.00	11.8	<1.00	<1.00	<1.00	<1.00	
MW-9	09/14/23	96.14	14.75	81.39	<1.00	<1.00	<1.00	<3.00	<5.00	<1.00	<1.00	11.5	<1.00	0.303 J	<1.00	<1.00	
MW-9	04/05/24	96.14	15.74	80.40	<1.00	0.765 J	<1.00	<3.00	<5.00 J	<1.00	<1.00	14.4	<1.00	<1.00	<1.00	<1.00	

Table 3 Notes
First Half 2023 through First Half 2024
Chevron #1356 (Midtown Chevron)
1465 West Northern Lights Boulevard,
Anchorage, Alaska

Notes:

1. Select VOCs analyzed by USEPA Method 8260D.

2. All concentration are reported in micrograms per liter.

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

Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level

feet = Relative to NAVD88 for TOC and GW Elevation

Acronyms and Abbreviations:

-- = Not Available or Not Analyzed

[] = Blind Duplicate Sample Result

<1.00 = Not detected at or above the reported detection limit (RDL)

µg/L = Micrograms per liter

ADEC = Alaska Department of Environmental Conservation

B = The same analyte is found in the associated blank

bTOC = Below top of casing

D = The diluted result were reported and qualified as being reported at a dilution

DRO = Total petroleum hydrocarbons, diesel range organics

DTW = Depth to groundwater

EDC = 1,2-Dichloroethane

GRO = Total petroleum hydrocarbons, gasoline range organics

GW Elev. = Groundwater elevation

ID = Identification

J = The associated numerical value is an estimated concentration only

MW = Groundwater monitoring well

NAVD 88= North American Vertical Datum of 1988

RDL = reporting detection limit

TOC = Top of casing

USEPA = U.S. Environmental Protection Agency

VOCs = volatile organic compounds

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 October 18, 2023.

Attachment A

Field Notes

Project Number : 30063666

Site ID: 91356

City: Anchorage

Project Manager: Jill Settle

Portfolio: COP 3.0

Inside Chevron Operational Control? Yes No

Prepared By: Evan Wujcik

Site Name: Midtown Chevron

State: Alaska

Subportfolio: West

Staff on Site

Evan Wujcik

Weather(°F)	PPE	Equipment
SNOW, T:30.65 °F, rH:89%, Clouds: 100%, Wind:10.36mph S-SW		Water Quality Meter (i.e. YSI), Water Level Meter (WLM), Bladder Pump, Photoionization Detector (PID)

Date	Time	Description of Activities
04/05/2024	6:00	Arrive on site Locate Wells Could not locate MW2 or MW3 under ice berms.
04/05/2024	7:00	Sample MW6 Decon equipment See COC for analysis
04/05/2024	7:45	Sample MW1 Decon equipment See COC for analysis
04/05/2024	8:30	Sample MW4 BD samples collected from this location Decon equipment See COC for analysis
04/05/2024	9:15	Sample MW9 MS/MSD samples collected at this location Decon equipment See COC for analysis
04/05/2024	10:00	Sample MW7 Decon equipment See COC for analysis
04/05/2024	10:30	Could not locate MW-2 or MW-3 due to ice/snow berms. Load vehicle Mobilize offsite

Signature





Groundwater Gauging Log

Project Number	30063666							
Client:	Chevron							
Site ID:	91356							
Site Location:	Anchorage, Alaska							
Measuring Point:	Top of Casing							
Date(s):	04/05/2024							
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	04/05/2024	06:25	15.77	ND	22.20	0	--	--
MW-4	04/05/2024	06:47	14.80	ND	24.20	0	--	--
MW-6	04/05/2024	06:08	13.32	ND	19.70	0	--	--
MW-7	04/05/2024	06:35	12.35	ND	24.20	0	--	--
MW-9	04/05/2024	06:19	15.74	ND	26.60	0	--	--

ft-bmp = feet below measuring point

ND = Not Detected

PID = Photoionization Detector Reading

ppm = parts per million

-- = Not Recorded

Project Number	30063666	Well ID	MW-7	Date		4/5/2024			
Site Location	Anchorage, Alaska	Site ID	91356	Weather (°F)	Clear	Sampled by	Evan Wujcik		
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	PVC		
Static Water Level (ft-bmp)	12.35	Total Depth (ft-bmp)	24.2	Water Column (ft)	11.85	Gallons in Well	1.93		
Water Quality Meter Make/Model	Horiba U-52	Purge Method	Low-Flow	Collection Type		Grab			
Sample Time	10:00	Well Volumes Purged	0.33	Sample ID	MW-7-W-20240405	Purge Equipment	Bladder		
Purge Start	09:30	Gallons Purged	0.63	Duplicate ID	--	Sample Equipment	Bladder		
Purge End	09:50	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)	Color
09:33	200	12.35	7.27	0.627	22.2	0.00	5.34	165	--
09:36	200	12.36	7.22	0.604	18.5	0.00	5.81	161	--
09:39	200	12.37	7.26	0.599	13.2	0.00	6.04	158	--
09:42	200	12.37	7.29	0.598	8.1	0.00	6.15	154	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID:	MW-7-W-20240405	Sample Time:	10:00	Sample Depth (ft-bmp) (e.g. pump intake):	13
Analytes and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	12.37

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

Project Number	30063666	Well ID	MW-6	Date		4/5/2024			
Site Location	Anchorage, Alaska	Site ID	91356	Weather (°F)	Clear	Sampled by	Evan Wujcik		
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	PVC		
Static Water Level (ft-bmp)	13.32	Total Depth (ft-bmp)	19.7	Water Column (ft)	6.38	Gallons in Well	1.04		
Water Quality Meter Make/Model	Horiba U-52	Purge Method	Low-Flow	Collection Type		Grab			
Sample Time	07:00	Well Volumes Purged	0.61	Sample ID	MW-6-W-20240405	Purge Equipment	Bladder		
Purge Start	06:30	Gallons Purged	0.63	Duplicate ID	--	Sample Equipment	Bladder		
Purge End	06:50	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)	Color
06:33	200	13.34	7.18	1.05	27.8	0.00	4.61	163	--
06:36	200	13.35	7.15	1.05	19.0	0.00	4.65	163	--
06:39	200	13.35	7.17	1.06	14.4	0.00	4.78	162	--
06:42	200	13.36	7.18	1.05	11.7	0.00	4.91	161	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID:	MW-6-W-20240405	Sample Time:	07:00	Sample Depth (ft-bmp) (e.g. pump intake):	13.5
Analytics and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	13.36

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

Project Number	30063666	Well ID	MW-1	Date		4/5/2024			
Site Location	Anchorage, Alaska	Site ID	91356	Weather (°F)	Clear	Sampled by	Evan Wujcik		
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	PVC		
Static Water Level (ft-bmp)	15.77	Total Depth (ft-bmp)	22.2	Water Column (ft)	6.43	Gallons in Well	1.04		
Water Quality Meter Make/Model	Horiba U-52	Purge Method	Low-Flow	Collection Type		Grab			
Sample Time	07:45	Well Volumes Purged	0.61	Sample ID	MW-1-W-20240405	Purge Equipment	Bladder		
Purge Start	07:20	Gallons Purged	0.63	Duplicate ID	--	Sample Equipment	Bladder		
Purge End	07:40	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)	Color
07:23	200	15.78	7.50	0.226	878	4.87	6.99	137	--
07:26	200	15.79	7.41	0.227	870	4.53	7.23	142	--
07:29	200	15.8	7.34	0.228	785	4.47	7.38	146	--
07:32	200	15.8	7.30	0.228	708	4.44	7.47	149	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID:	MW-1-W-20240405	Sample Time:	07:45	Sample Depth (ft-bmp) (e.g. pump intake):	16
Analytics and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	15.8

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

Project Number	30063666	Well ID	MW-4	Date		4/5/2024			
Site Location	Anchorage, Alaska	Site ID	91356	Weather (°F)	Clear	Sampled by	Evan Wujcik		
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	PVC		
Static Water Level (ft-bmp)	14.8	Total Depth (ft-bmp)	24.2	Water Column (ft)	9.4	Gallons in Well	1.53		
Water Quality Meter Make/Model	Horiba U-52	Purge Method	Low-Flow	Collection Type		Grab			
Sample Time	08:30	Well Volumes Purged	0.41	Sample ID	MW-4-W-20240405	Purge Equipment	Bladder		
Purge Start	08:00	Gallons Purged	0.63	Duplicate ID	BD	Sample Equipment	Bladder		
Purge End	07:47	Total Purge Time (h:m)	0:13						
Time	Rate (ml/min)	Depth to Water (ft)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Color
08:03	200	14.82	7.07	0.342	1000	4.18	7.06	167	--
08:06	200	14.83	7.12	0.352	1000	3.99	7.31	165	--
08:09	200	14.84	7.17	0.364	980	3.91	7.53	163	--
08:12	200	14.85	7.20	0.365	759	3.98	7.56	163	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID:	MW-4-W-20240405	Sample Time:	08:30	Sample Depth (ft-bmp) (e.g. pump intake):	15.5
Analytics and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	14.85

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

Project Number	30063666	Well ID	MW-9	Date		4/5/2024			
Site Location	Anchorage, Alaska	Site ID	91356	Weather (°F)	Clear	Sampled by	Evan Wujcik		
Measuring Point Description	Top of Casing	Screen Depth Interval (ft-bmp)	-- to --	Casing Diameter (in.)	2	Well Casing Material	PVC		
Static Water Level (ft-bmp)	15.74	Total Depth (ft-bmp)	26.6	Water Column (ft)	10.86	Gallons in Well	1.76		
Water Quality Meter Make/Model	Horiba U-52	Purge Method	Low-Flow	Collection Type		Grab			
Sample Time	09:15	Well Volumes Purged	0.36	Sample ID	MW-9-W-20240405	Purge Equipment	Bladder		
Purge Start	08:50	Gallons Purged	0.63	Duplicate ID	MS/MSD	Sample Equipment	Bladder		
Purge End	09:10	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)	Color
08:53	200	15.75	8.20	0.168	143	8.21	7.61	100	--
08:56	200	15.76	8.01	0.164	125	6.82	8.11	108	--
08:59	200	15.77	7.98	0.162	108	6.37	8.41	113	--
09:02	200	15.78	7.93	0.161	93.9	6.22	8.63	118	--

Comments: None

Well Casing Volume Conversion

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

Sample Information

Sample ID:	MW-9-W-20240405	Sample Time:	09:15	Sample Depth (ft-bmp) (e.g. pump intake):	16
Analytics and Methods:	See Chain-of-Custody.			Depth to Water at Time of Sampling	15.78

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

Attachment B

Laboratory Analytical Results



ANALYTICAL REPORT

April 16, 2024

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Arcadis - Chevron - AK

Sample Delivery Group: L1723207
Samples Received: 04/06/2024
Project Number: 30063666.19.45
Description: 91356
Site: 1465 W NORTHERN LIGHTS BLVD
Report To: Jill Settle
880 H St.
Anchorage, AK 99501

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

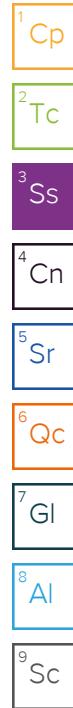
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

Cp: Cover Page	1	¹ Cp
Tc: Table of Contents	2	² Tc
Ss: Sample Summary	3	³ Ss
Cn: Case Narrative	4	⁴ Cn
Sr: Sample Results	5	⁵ Sr
MW-1-W-20240405 L1723207-01	5	⁶ Qc
MW-4-W-20240405 L1723207-02	6	⁷ Gl
MW-6-W-20240405 L1723207-03	7	⁸ Al
MW-7-W-20240405 L1723207-04	8	⁹ Sc
MW-9-W-20240405 L1723207-05	9	
BD-1-W-20240405 L1723207-06	10	
EQB-1-W-20240405 L1723207-07	11	
TRIP BLANK-20240405 L1723207-08	12	
Qc: Quality Control Summary	13	
Volatile Organic Compounds (GC/MS) by Method 8260D	13	
Gl: Glossary of Terms	17	
Al: Accreditations & Locations	18	
Sc: Sample Chain of Custody	19	

SAMPLE SUMMARY

				Collected by E. Wujcik	Collected date/time 04/05/24 07:45	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 17:13	04/11/24 17:13	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 08:30	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 17:38	04/11/24 17:38	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 07:00	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 18:02	04/11/24 18:02	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 10:00	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 18:26	04/11/24 18:26	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 09:15	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2267285	1	04/15/24 22:47	04/15/24 22:47	DYW	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 00:00	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 19:15	04/11/24 19:15	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 10:30	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 16:49	04/11/24 16:49	JAH	Mt. Juliet, TN
				Collected by E. Wujcik	Collected date/time 04/05/24 00:00	Received date/time 04/06/24 09:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2265010	1	04/11/24 16:00	04/11/24 16:00	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2267285	1	04/15/24 22:06	04/15/24 22:06	DYW	Mt. Juliet, TN



CASE NARRATIVE

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
WG2265010	L1723207-01	Naphthalene
WG2265010	L1723207-02	Naphthalene
WG2265010	L1723207-03	Naphthalene
WG2265010	L1723207-04	Naphthalene
WG2265010	L1723207-06	Naphthalene
WG2265010	L1723207-07	Naphthalene
WG2265010	L1723207-08	Naphthalene
WG2267285	L1723207-05	Naphthalene

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	04/11/2024 17:13	WG2265010
Chloroform	9.59		0.111	5.00	1	04/11/2024 17:13	WG2265010
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 17:13	WG2265010
Ethylbenzene	U		0.137	1.00	1	04/11/2024 17:13	WG2265010
Naphthalene	U	C3	1.00	5.00	1	04/11/2024 17:13	WG2265010
Tetrachloroethene	1.02		0.300	1.00	1	04/11/2024 17:13	WG2265010
Toluene	0.696	J	0.278	1.00	1	04/11/2024 17:13	WG2265010
Trichloroethene	U		0.190	1.00	1	04/11/2024 17:13	WG2265010
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 17:13	WG2265010
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 17:13	WG2265010
Vinyl chloride	U		0.234	1.00	1	04/11/2024 17:13	WG2265010
Xylenes, Total	U		0.174	3.00	1	04/11/2024 17:13	WG2265010
o-Xylene	U		0.174	1.00	1	04/11/2024 17:13	WG2265010
m&p-Xylene	U		0.430	2.00	1	04/11/2024 17:13	WG2265010
(S) Toluene-d8	116			80.0-120		04/11/2024 17:13	WG2265010
(S) 4-Bromofluorobenzene	115			77.0-126		04/11/2024 17:13	WG2265010
(S) 1,2-Dichloroethane-d4	107			70.0-130		04/11/2024 17:13	WG2265010

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

MW-4-W-20240405

Collected date/time: 04/05/24 08:30

SAMPLE RESULTS - 02

L1723207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	U		0.0941	1.00	1	04/11/2024 17:38	WG2265010	¹ Cp
Chloroform	9.02		0.111	5.00	1	04/11/2024 17:38	WG2265010	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 17:38	WG2265010	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/11/2024 17:38	WG2265010	⁴ Cn
Naphthalene	U	C3	1.00	5.00	1	04/11/2024 17:38	WG2265010	⁵ Sr
Tetrachloroethene	0.676	J	0.300	1.00	1	04/11/2024 17:38	WG2265010	⁶ Qc
Toluene	0.762	J	0.278	1.00	1	04/11/2024 17:38	WG2265010	⁷ GI
Trichloroethene	U		0.190	1.00	1	04/11/2024 17:38	WG2265010	⁸ AI
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 17:38	WG2265010	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 17:38	WG2265010	
Vinyl chloride	U		0.234	1.00	1	04/11/2024 17:38	WG2265010	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 17:38	WG2265010	
o-Xylene	U		0.174	1.00	1	04/11/2024 17:38	WG2265010	
m&p-Xylene	U		0.430	2.00	1	04/11/2024 17:38	WG2265010	
(S) Toluene-d8	116			80.0-120		04/11/2024 17:38	WG2265010	
(S) 4-Bromofluorobenzene	115			77.0-126		04/11/2024 17:38	WG2265010	
(S) 1,2-Dichloroethane-d4	103			70.0-130		04/11/2024 17:38	WG2265010	⁹ Sc

MW-6-W-20240405

Collected date/time: 04/05/24 07:00

SAMPLE RESULTS - 03

L1723207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	0.421	J	0.0941	1.00	1	04/11/2024 18:02	WG2265010	¹ Cp
Chloroform	U		0.111	5.00	1	04/11/2024 18:02	WG2265010	² Tc
cis-1,2-Dichloroethene	1.57		0.126	1.00	1	04/11/2024 18:02	WG2265010	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/11/2024 18:02	WG2265010	⁴ Cn
Naphthalene	U	C3	1.00	5.00	1	04/11/2024 18:02	WG2265010	⁵ Sr
Tetrachloroethene	8.55		0.300	1.00	1	04/11/2024 18:02	WG2265010	⁶ Qc
Toluene	0.836	J	0.278	1.00	1	04/11/2024 18:02	WG2265010	⁷ Gl
Trichloroethene	U		0.190	1.00	1	04/11/2024 18:02	WG2265010	⁸ Al
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 18:02	WG2265010	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 18:02	WG2265010	
Vinyl chloride	0.516	J	0.234	1.00	1	04/11/2024 18:02	WG2265010	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 18:02	WG2265010	
o-Xylene	U		0.174	1.00	1	04/11/2024 18:02	WG2265010	
m&p-Xylene	U		0.430	2.00	1	04/11/2024 18:02	WG2265010	
(S) Toluene-d8	116			80.0-120		04/11/2024 18:02	WG2265010	
(S) 4-Bromofluorobenzene	116			77.0-126		04/11/2024 18:02	WG2265010	
(S) 1,2-Dichloroethane-d4	109			70.0-130		04/11/2024 18:02	WG2265010	⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	U		0.0941	1.00	1	04/11/2024 18:26	WG2265010	¹ Cp
Chloroform	U		0.111	5.00	1	04/11/2024 18:26	WG2265010	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 18:26	WG2265010	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/11/2024 18:26	WG2265010	⁴ Cn
Naphthalene	U	<u>C3</u>	1.00	5.00	1	04/11/2024 18:26	WG2265010	⁵ Sr
Tetrachloroethene	U		0.300	1.00	1	04/11/2024 18:26	WG2265010	⁶ Qc
Toluene	0.590	<u>J</u>	0.278	1.00	1	04/11/2024 18:26	WG2265010	⁷ GI
Trichloroethene	U		0.190	1.00	1	04/11/2024 18:26	WG2265010	⁸ AI
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 18:26	WG2265010	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 18:26	WG2265010	
Vinyl chloride	U		0.234	1.00	1	04/11/2024 18:26	WG2265010	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 18:26	WG2265010	
o-Xylene	U		0.174	1.00	1	04/11/2024 18:26	WG2265010	
m&p-Xylene	U		0.430	2.00	1	04/11/2024 18:26	WG2265010	
(S) Toluene-d8	116			80.0-120		04/11/2024 18:26	WG2265010	
(S) 4-Bromofluorobenzene	114			77.0-126		04/11/2024 18:26	WG2265010	
(S) 1,2-Dichloroethane-d4	108			70.0-130		04/11/2024 18:26	WG2265010	⁹ Sc

MW-9-W-20240405

Collected date/time: 04/05/24 09:15

SAMPLE RESULTS - 05

L1723207

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	U		0.0941	1.00	1	04/15/2024 22:47	WG2267285	¹ Cp
Chloroform	14.4		0.111	5.00	1	04/15/2024 22:47	WG2267285	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/15/2024 22:47	WG2267285	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/15/2024 22:47	WG2267285	⁴ Cn
Naphthalene	U	<u>C3</u>	1.00	5.00	1	04/15/2024 22:47	WG2267285	⁵ Sr
Tetrachloroethene	U		0.300	1.00	1	04/15/2024 22:47	WG2267285	⁶ Qc
Toluene	0.765	<u>J</u>	0.278	1.00	1	04/15/2024 22:47	WG2267285	⁷ GI
Trichloroethene	U		0.190	1.00	1	04/15/2024 22:47	WG2267285	⁸ AI
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/15/2024 22:47	WG2267285	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/15/2024 22:47	WG2267285	
Vinyl chloride	U		0.234	1.00	1	04/15/2024 22:47	WG2267285	
Xylenes, Total	U		0.174	3.00	1	04/15/2024 22:47	WG2267285	
o-Xylene	U		0.174	1.00	1	04/15/2024 22:47	WG2267285	
m&p-Xylene	U		0.430	2.00	1	04/15/2024 22:47	WG2267285	
(S) Toluene-d8	99.9			80.0-120		04/15/2024 22:47	WG2267285	
(S) 4-Bromofluorobenzene	82.5			77.0-126		04/15/2024 22:47	WG2267285	
(S) 1,2-Dichloroethane-d4	112			70.0-130		04/15/2024 22:47	WG2267285	⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	U		0.0941	1.00	1	04/11/2024 19:15	WG2265010	¹ Cp
Chloroform	8.79		0.111	5.00	1	04/11/2024 19:15	WG2265010	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 19:15	WG2265010	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/11/2024 19:15	WG2265010	⁴ Cn
Naphthalene	U	C3	1.00	5.00	1	04/11/2024 19:15	WG2265010	⁵ Sr
Tetrachloroethene	0.555	J	0.300	1.00	1	04/11/2024 19:15	WG2265010	⁶ Qc
Toluene	0.698	J	0.278	1.00	1	04/11/2024 19:15	WG2265010	⁷ GI
Trichloroethene	U		0.190	1.00	1	04/11/2024 19:15	WG2265010	⁸ AI
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 19:15	WG2265010	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 19:15	WG2265010	
Vinyl chloride	U		0.234	1.00	1	04/11/2024 19:15	WG2265010	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 19:15	WG2265010	
o-Xylene	U		0.174	1.00	1	04/11/2024 19:15	WG2265010	
m&p-Xylene	U		0.430	2.00	1	04/11/2024 19:15	WG2265010	
(S) Toluene-d8	115			80.0-120		04/11/2024 19:15	WG2265010	
(S) 4-Bromofluorobenzene	116			77.0-126		04/11/2024 19:15	WG2265010	
(S) 1,2-Dichloroethane-d4	107			70.0-130		04/11/2024 19:15	WG2265010	⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Benzene	U		0.0941	1.00	1	04/11/2024 16:49	WG2265010
Chloroform	0.378	J	0.111	5.00	1	04/11/2024 16:49	WG2265010
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 16:49	WG2265010
Ethylbenzene	U		0.137	1.00	1	04/11/2024 16:49	WG2265010
Naphthalene	U	C3	1.00	5.00	1	04/11/2024 16:49	WG2265010
Tetrachloroethene	U		0.300	1.00	1	04/11/2024 16:49	WG2265010
Toluene	U		0.278	1.00	1	04/11/2024 16:49	WG2265010
Trichloroethene	U		0.190	1.00	1	04/11/2024 16:49	WG2265010
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/11/2024 16:49	WG2265010
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/11/2024 16:49	WG2265010
Vinyl chloride	U		0.234	1.00	1	04/11/2024 16:49	WG2265010
Xylenes, Total	U		0.174	3.00	1	04/11/2024 16:49	WG2265010
o-Xylene	U		0.174	1.00	1	04/11/2024 16:49	WG2265010
m&p-Xylene	U		0.430	2.00	1	04/11/2024 16:49	WG2265010
(S) Toluene-d8	116			80.0-120		04/11/2024 16:49	WG2265010
(S) 4-Bromofluorobenzene	113			77.0-126		04/11/2024 16:49	WG2265010
(S) 1,2-Dichloroethane-d4	102			70.0-130		04/11/2024 16:49	WG2265010

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Benzene	U		0.0941	1.00	1	04/11/2024 16:00	WG2265010	¹ Cp
Chloroform	U		0.111	5.00	1	04/11/2024 16:00	WG2265010	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/11/2024 16:00	WG2265010	³ Ss
Ethylbenzene	U		0.137	1.00	1	04/11/2024 16:00	WG2265010	⁴ Cn
Naphthalene	U	<u>C3</u>	1.00	5.00	1	04/11/2024 16:00	WG2265010	⁵ Sr
Tetrachloroethene	U		0.300	1.00	1	04/11/2024 16:00	WG2265010	⁶ Qc
Toluene	U		0.278	1.00	1	04/11/2024 16:00	WG2265010	⁷ GI
Trichloroethene	U		0.190	1.00	1	04/11/2024 16:00	WG2265010	⁸ AI
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/15/2024 22:06	WG2267285	
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/15/2024 22:06	WG2267285	
Vinyl chloride	U		0.234	1.00	1	04/11/2024 16:00	WG2265010	
Xylenes, Total	U		0.174	3.00	1	04/11/2024 16:00	WG2265010	
o-Xylene	U		0.174	1.00	1	04/11/2024 16:00	WG2265010	
m&p-Xylene	U		0.430	2.00	1	04/11/2024 16:00	WG2265010	
(S) Toluene-d8	113			80.0-120		04/11/2024 16:00	WG2265010	
(S) Toluene-d8	97.7			80.0-120		04/15/2024 22:06	WG2267285	
(S) 4-Bromofluorobenzene	117			77.0-126		04/11/2024 16:00	WG2265010	
(S) 4-Bromofluorobenzene	85.5			77.0-126		04/15/2024 22:06	WG2267285	
(S) 1,2-Dichloroethane-d4	102			70.0-130		04/11/2024 16:00	WG2265010	
(S) 1,2-Dichloroethane-d4	111			70.0-130		04/15/2024 22:06	WG2267285	⁹ Sc

WG2265010

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

QUALITY CONTROL SUMMARY

[L1723207-01,02,03,04,06,07,08](#)

Method Blank (MB)

(MB) R4057664-2 04/11/24 12:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	1 Cp
Benzene	U		0.0941	1.00	
Chloroform	U		0.111	5.00	
cis-1,2-Dichloroethene	U		0.126	1.00	
Ethylbenzene	U		0.137	1.00	
Naphthalene	U		1.00	5.00	
Tetrachloroethene	U		0.300	1.00	
Toluene	U		0.278	1.00	
Trichloroethene	U		0.190	1.00	
1,2,4-Trimethylbenzene	U		0.322	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-Xylene	U		0.430	2.00	
(S) Toluene-d8	116		80.0-120		
(S) 4-Bromofluorobenzene	116		77.0-126		
(S) 1,2-Dichloroethane-d4	111		70.0-130		

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Laboratory Control Sample (LCS)

(LCS) R4057664-1 04/11/24 11:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	4.76	95.2	70.0-123	
Chloroform	5.00	4.66	93.2	73.0-120	
cis-1,2-Dichloroethene	5.00	4.65	93.0	73.0-120	
Ethylbenzene	5.00	4.40	88.0	79.0-123	
Naphthalene	5.00	3.76	75.2	54.0-135	
Tetrachloroethene	5.00	4.60	92.0	72.0-132	
Toluene	5.00	4.55	91.0	79.0-120	
Trichloroethene	5.00	5.23	105	78.0-124	
1,2,4-Trimethylbenzene	5.00	4.31	86.2	76.0-121	
1,3,5-Trimethylbenzene	5.00	4.52	90.4	76.0-122	
Vinyl chloride	5.00	5.03	101	67.0-131	
Xylenes, Total	15.0	14.1	94.0	79.0-123	
o-Xylene	5.00	4.56	91.2	80.0-122	
m&p-Xylene	10.0	9.53	95.3	80.0-122	
(S) Toluene-d8		107		80.0-120	
(S) 4-Bromofluorobenzene		105		77.0-126	

ACCOUNT:

Arcadis - Chevron - AK

PROJECT:

30063666.19.45

SDG:

L1723207

DATE/TIME:

04/16/24 18:03

PAGE:

13 of 19

WG2265010

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

QUALITY CONTROL SUMMARY

[L1723207-01,02,03,04,06,07,08](#)

Laboratory Control Sample (LCS)

(LCS) R4057664-1 04/11/24 11:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 1,2-Dichloroethane-d4		102		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2267285

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

QUALITY CONTROL SUMMARY

L1723207-05.08

Method Blank (MB)

(MB) R4058244-2 04/15/24 21:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l	
Benzene	U		0.0941	1.00	¹ Cp
Chloroform	U		0.111	5.00	² Tc
cis-1,2-Dichloroethene	U		0.126	1.00	³ Ss
Ethylbenzene	U		0.137	1.00	⁴ Cn
Naphthalene	U		1.00	5.00	⁵ Sr
Tetrachloroethene	U		0.300	1.00	⁶ Qc
Toluene	U		0.278	1.00	⁷ Gl
Trichloroethene	U		0.190	1.00	⁸ Al
1,2,4-Trimethylbenzene	U		0.322	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-Xylene	U		0.430	2.00	
(S) Toluene-d8	102		80.0-120		
(S) 4-Bromofluorobenzene	84.1		77.0-126		
(S) 1,2-Dichloroethane-d4	107		70.0-130		

Laboratory Control Sample (LCS)

(LCS) R4058244-1 04/15/24 20:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	5.00	5.49	110	70.0-123	
Chloroform	5.00	5.12	102	73.0-120	
cis-1,2-Dichloroethene	5.00	5.06	101	73.0-120	
Ethylbenzene	5.00	4.46	89.2	79.0-123	
Naphthalene	5.00	3.20	64.0	54.0-135	
Tetrachloroethene	5.00	4.50	90.0	72.0-132	
Toluene	5.00	5.09	102	79.0-120	
Trichloroethene	5.00	4.07	81.4	78.0-124	
1,2,4-Trimethylbenzene	5.00	5.45	109	76.0-121	
1,3,5-Trimethylbenzene	5.00	5.34	107	76.0-122	
Vinyl chloride	5.00	6.05	121	67.0-131	
Xylenes, Total	15.0	13.5	90.0	79.0-123	
o-Xylene	5.00	4.27	85.4	80.0-122	
m&p-Xylene	10.0	9.22	92.2	80.0-122	
(S) Toluene-d8		99.8		80.0-120	
(S) 4-Bromofluorobenzene		89.3		77.0-126	

ACCOUNT:

Arcadis - Chevron - AK

PROJECT:

30063666.19.45

SDG:

L1723207

DATE/TIME:

04/16/24 18:03

PAGE:

15 of 19

WG2267285

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

QUALITY CONTROL SUMMARY

L1723207-05.08

Laboratory Control Sample (LCS)

(LCS) R4058244-1 04/15/24 20:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
(S) 1,2-Dichloroethane-d4		103		70.0-130	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

L1723207-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1723207-05 04/15/24 22:47 • (MS) R4058244-3 04/16/24 07:00 • (MSD) R4058244-4 04/16/24 07:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Benzene	5.00	U	5.45	5.12	109	102	1	17.0-158			6.24	27
Chloroform	5.00	14.4	19.0	18.6	92.0	84.0	1	29.0-154			2.13	28
cis-1,2-Dichloroethene	5.00	U	5.42	5.00	108	100	1	10.0-160			8.06	27
Ethylbenzene	5.00	U	4.81	4.63	96.2	92.6	1	30.0-155			3.81	27
Naphthalene	5.00	U	3.56	3.27	71.2	65.4	1	12.0-156			8.49	35
Tetrachloroethene	5.00	U	4.41	4.24	88.2	84.8	1	10.0-160			3.93	27
Toluene	5.00	0.765	5.79	5.64	101	97.5	1	26.0-154			2.62	28
Trichloroethene	5.00	U	4.14	4.00	82.8	80.0	1	10.0-160			3.44	25
1,2,4-Trimethylbenzene	5.00	U	6.09	5.62	122	112	1	26.0-154			8.03	27
1,3,5-Trimethylbenzene	5.00	U	6.12	5.60	122	112	1	28.0-153			8.87	27
Vinyl chloride	5.00	U	3.76	3.23	75.2	64.6	1	10.0-160			15.2	27
Xylenes, Total	15.0	U	14.3	13.6	95.3	90.7	1	29.0-154			5.02	28
o-Xylene	5.00	U	4.61	4.34	92.2	86.8	1	45.0-144			6.03	26
m&p-Xylene	10.0	U	9.67	9.29	96.7	92.9	1	43.0-146			4.01	26
(S) Toluene-d8				95.9	97.0			80.0-120				
(S) 4-Bromofluorobenzene				89.3	90.4			77.0-126				
(S) 1,2-Dichloroethane-d4				105	106			70.0-130				

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.	1 Cp
RDL	Reported Detection Limit.	2 Tc
Rec.	Recovery.	3 Ss
RPD	Relative Percent Difference.	4 Cn
SDG	Sample Delivery Group.	5 Sr
(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.	6 Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	7 GI
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	8 AI
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.	9 Sc
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

C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.

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	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.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Arcadis - Chevron - AK880 H St.
Anchorage, AK 99501

Billing Information:

**Attn: Accounts Payable
630 Plaza Dr Ste 600
Highlands Ranch, CO 80129**

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



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/hubs/pas-standard-terms.pdf>

SAC # L1723207
E077

Acctnum: CHEVARCAK

Template: T236662

Prellogin: P1064410

PM: 110 - Brian Ford

PB: BW 3/22

Shipped Via: FedEx 2nd Day

Remarks | Sample # (lab only)

Report to:

Jill Settle

Project Description:
91356City/State
Collected: Anchorage, AKPlease Circle:
RT MT CT ET

Phone: 907-276-8095

Client Project #
30063666.19.45Lab Project #
AK
CHEVARCAK-91356

Collected by (print):

E. Wujuk

Site/Facility ID #
1465 W NORTHERN LIGHTS

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

VOCS 8260* 40ml Amb-HCl

No. of
Cntrs

Immediately

Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

MW-1 -W-20240405

Gmb

GW

-

4.5.24

0745

3

X

MW-2

GW

-

/

MW-3

GW

-

MW-4 -W-20240405

GW

-

0830

3

X

MW-6 -W-20240405

GW

-

0700

3

X

MW-7 -W-20240405

GW

-

1000

3

X

MW-9 -W-20240405

GW

-

0915

9

X

BD-1 -W-20240405

GW

-

-

3

X

EQB ~1-w-20240405

GW

-

1030

3

X

Trip Blank

GW

-

-

-

X

* Matrix:

SS - Soil AIR - Air

F - Filter

GW - Groundwater

B - Bioassay

WW - WasteWater

DW - Drinking Water

OT - Other _____

Remarks: *VOCS 8260=BTEX, naphthalene, 1,2,4-TMB, 1,3,5-TMB, PCE, TCE, cis-1,2-DCE, vinyl chloride, chloroform only.

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VOA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
RAD Screen <0.5 mR/hr:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Samples returned via:
UPS FedEx Courier

Tracking # 7359 4591 0753

Relinquished by : (Signature)

Date:

4.5.24

Time:

1200

Received by: (Signature)

Trip Blank Received: Yes / No

24
HCL / MeOH
TBR

Relinquished by : (Signature)

Date:

Time:

Received by: (Signature)

Temp: ~~45.4~~ °C Bottles Received:

4.14.1 = 4.227

Relinquished by : (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Hold:

Condition:
NCF OK

If preservation required by Login: Date/Time

Attachment C

Historical Groundwater Analytical Results – Third Quarter 1999 through 2022

Table 1. Historical Groundwater Gauging and Analytical Results

Third Quarter 1999 through 2022

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	LNAPL																	Comments
	Sample Date	TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO 1.5	Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)	
	ADEC Groundwater Cleanup Levels					2.2	0.0046	1.1	0.015	0.19	0.14	0.000075	0.0017	0.041	0.0022	0.0017		
MW-1	7/3/1999	95.30	15.61	--	79.69	--	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	
MW-1	10/11/1999	95.30	14.84	--	80.46	--	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	--	--	--	--	--	
MW-1	5/19/2000	95.30	13.64	--	81.66	--	<0.080	<0.0005	<0.0005	<0.0005	<0.0010	<0.002	--	--	--	--	--	
MW-1	9/28/2000	95.30	12.80	--	82.50	--	<0.050	<0.0002	<0.0005	<0.0005	<0.0010	<0.001	--	--	--	--	--	
MW-1	5/4/2001	95.30	14.34	--	80.96	--	<0.050	0.000274	<0.0005	<0.0005	<0.0010	<0.001	--	--	--	--	--	
MW-1	10/4/2001	95.30	14.89	--	80.41	--	<0.050	<0.0002	<0.0005	<0.0005	<0.0010	<0.001	--	--	--	--	--	
MW-1	5/4/2002	95.30	14.78	--	80.52	--	<0.050 / <0.050	0.000361 / <0.0002	0.00103 / <0.0005	<0.0005 / <0.0005	<0.0010 / <0.0010	<0.001 / <0.001	--	--	--	--	--	
MW-1	9/22/2002	95.30	13.74	--	81.56	--	<0.050	<0.0002	<0.0005	<0.0005	<0.0010	<0.001	--	--	--	--	--	
MW-1	5/30/2003	95.39	15.25	--	80.14	--	<0.010 / <0.010	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.002 / <0.002	--	--	--	--	--	
MW-1	10/2/2003	95.39	15.50	--	79.89	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	6/2/2004	95.39	15.23	--	80.16	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	9/22/2004	95.39	15.06	--	80.33	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/11/2005	95.39	15.02	--	80.37	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	6/22/2005	95.39	14.26	--	81.13	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/9/2006	95.39	16.24	--	79.15	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	9/20/2006	95.39	15.69	--	79.70	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/15/2007	95.39	16.23	--	79.16	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	9/23/2007	95.39	16.04	--	79.35	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/5/2008	95.39	16.22	--	79.17	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	7/16/2008	95.39	16.17	--	79.22	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	6/16/2009	95.39	16.40	--	78.99	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	8/27/2009	95.39	16.35	--	79.04	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/6/2010	95.39	16.57	--	78.82	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/19/2011	95.39	16.72	--	78.67	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	8/23/2011	95.39	16.39	--	79.00	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/23/2012	95.39	16.11	--	79.28	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	7/31/2012	95.39	15.91	--	79.48	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/23/2013	95.39	15.68	--	79.71	--	--	--	--	--	--	--	<0.00022	0.00036 J	0.018			
MW-1	5/23/2013	95.39	15.68	--	79.71	--	--	--	--	--	--	--	<0.00022	0.00032 J	0.018			
MW-1	9/17/2013	95.39	15.75	--	79.64	--	--	--	--	--	--	--	--	--	--	--		
MW-1	9/18/2013	--	--	--	--	--	<0.00024	<0.00023	<0.00024	<0.00072	--	--	<0.00022	0.0017	0.015			
MW-1	5/1/2014	95.39	15.82	--	79.57	--	--	--	--	--	--	--	--	--	--	--		
MW-1	5/7/2014	--	--	--	--	--	--	--	--	--	--	--	<0.00013	0.00091 J	0.016			
MW-1	9/23/2014	95.96	15.44	--	80.52	--	--	--	--	--	--	--	<0.00013	0.0020 J	0.016 J			
MW-1	5/3/2015	95.96	16.22	--	79.74	--	--	--	--	--	--	--	<0.0005	0.001	0.021			
MW-1	11/4/2015	95.96	15.78	--	80.18	--	--	--	--	--	--	--	<0.0005	0.001	0.018			
MW-1	4/20/2016	95.96	16.34	--	79.62	--	--	--	--	--	--	--	<0.0005	<0.0005	0.013			
MW-1	10/27/2016	95.96	16.35	--	79.61	--	--	--	--	--	--	<0.0005	<0.0005	0.0008 J	0.016			
MW-1	5/2/2017	79.61	16.67	--	62.94	--	--	--	--	--	--	--	--	--	--	--		
MW-1	10/12/2017	79.61	16.39	--	63.22	--	--	--	--	--	--	--	--	--	--	--		
MW-1	4/18/2018	79.53	15.47	--	64.06	--	--	--	--	--	--	--	--	--	--	--		
MW-1	9/5/2018	79.43	16.19	--	63.24	--	--	--	--	--	--	--	--	--	--	--		
MW-1	4/22/2019	95.92	15.97	--	79.95	--	--	--	--	--	--	--	--	--	--	--		
MW-1	9/20/2019	95.92	15.92	--	80.00	--	--	--	--	--	--	--	--	--	--	--		
MW-1	4/10/2020	95.92	16.00	0.00	79.92	--	--	--	--	--	--	--	--	--	--	--		
MW-1	11/12/2020	95.92	15.50	0.00	80.42	--	--	--	--	--	--	--	--	--	--	--		
MW-1	04/13/2021	95.92	15.92	0.00	80.00	--	--	--	--	--	--	--	--	--	--	--		
MW-1	8/31/2021	95.92	15.25	0.00	80.67	--	--	--	--	--	--	--	--	--	--	--		
MW-1	9/2/2022	95.92	15.05	0.00	80.87	--	--	--	--	--	--	--	--	--	--	--		
MW-2	7/3/1999	94.61	15.30	--	79.31	--	7.14	0.027	0.048	0.268	1.14	<0.100	--	--	--	--		
MW-2	10/11/1999	94.61	14.27	--	80.34	--	20.4 / 21.8	<0.012 / <0.012	0.575 / 0.629	1.43 / 1.56	5.93 / 6.50	<0.125 / <0.125	--	--	--	--		
MW-2	5/19/2000	94.61	12.92	--	81.69	--	8.84	0.0259	0.0124	<0.005	1.22	<0.020 / <0.020	--	--	--	--		
MW-2	9/28/2000	94.61	11.97	--	82.64	--	4.52	<0.0055	0.0388	0.078	1.19	0.0303 / <0.020	--	--	--	--		
MW-2	5/4/2001	94.61	13.75	--	80.86	--	7.02	0.012	0.0429	0.469	1.40	0.0452 / <0.005	--	--	--	--		
MW-2	10/4/2001	94.61	14.35	--	80.26	--	14.2	0.0244	0.101	1.13	3.30	0.0884 / <0.005	--	--	--	--		
MW-2	5/4/2002	94.61	14.23	--	80.38	--	19.2	<0.020	0.118	1.36	4.10	0.115 / <0.050	--	--	--	--		
MW-2	9/22/2002	94.61	13.11	--	81.50	--	3.62	0.00262	0.0201	0.363	0.898	0.0184 / <0.050	--	--	--	--		
MW-2	5/30/2003	94.61	14.54	--	80.07	--	13.0	0.0030	0.040	0.790	1.80	<0.002	--	--	--	--		
MW-2	10/2/2003	94.61	14.81	--	79.80	--	4.60	0.0009	0.006	0.160	0.410	<0.002	--	--	--	--		
MW-2	6/2/2004	94.61	14.49	--	80.12	--	14.0	0.0030	0.029	0.850</td								

Table 1. Historical Groundwater Gauging and Analytical Results

Third Quarter 1999 through 2022

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	LNAPL						Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)	Comments
		TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO mg/l											
ADEC Groundwater Cleanup Levels																		
MW-2	8/27/2009	94.59	15.40	--	79.19	0.12 J	0.31	0.0011 J	<0.0005	0.005	0.0063	0.14	0.000075	0.0017	0.041	0.0022	0.0017	--
MW-2	5/6/2010	94.59	15.58	--	79.01	0.068 J / 0.092 J	<0.010 / <0.010	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0015 / <0.0015	--	--	--	--	--	--	
MW-2	8/5/2010	94.59	15.38	--	79.21	0.071 J	0.024 J	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	
MW-2	5/19/2011	94.59	15.67	--	78.92	0.067 J	<0.010	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	
MW-2	8/23/2011	94.59	15.35	--	79.24	<0.049	0.055 J	<0.0005	<0.0005	0.0005 J	<0.0015	--	--	--	--	--	--	
MW-2	5/23/2012	94.59	15.04	--	79.55	<0.049 J	0.025 J	<0.0005	<0.0005	0.0005 J	<0.0015	--	--	--	--	--	--	
MW-2	7/31/2012	94.59	14.82	--	79.77	0.89	2.9	<0.0060	0.0014 J	0.20	0.26	--	--	--	--	--	--	
MW-2	5/23/2013	94.59	14.51	--	80.08	0.72	1.7	0.00034 J	0.00062 J	0.21	0.26	--	--	<0.00022	0.046	0.0038	--	
MW-2	5/23/2013	94.59	14.51	--	80.08	1.5	0.43	<0.00024	<0.00023	0.031	0.046	--	--	<0.00022	0.018	0.0051	--	
MW-2	9/17/2013	94.59	14.02	--	80.57	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	9/18/2013	--	--	--	1.8	0.68	<0.00024	<0.00023	0.023	0.017	--	--	<0.00022	0.024	0.0052	--		
MW-2	5/1/2014	94.59	14.59	--	80.00	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	5/7/2014	--	--	--	0.35 J / 0.40 J	0.95 / 1.1	<0.00015 / <0.00015	0.00019 J / 0.00023 J	0.076 / 0.084	0.099 / 0.11	--	--	<0.00013 / <0.00013	0.031 / 0.032	0.0060 / 0.0058	--	--	
MW-2	9/23/2014	94.62	14.24	--	80.38	0.48 / 0.42 J	1.1 / 1.1	0.00025 J / 0.00021 J	0.00026 J / 0.00025 J	0.093 / 0.095	0.12 J / 0.13	--	--	<0.00013 / <0.00013	0.049 J / 0.051	0.0056 J / 0.0051	--	
MW-2	5/3/2015	94.62	15.02	--	79.60	<0.051 / <0.050	0.011 J / 0.012 J	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	--	--	<0.0005 / <0.0005	0.003 / 0.003	0.008 / 0.008	--	
MW-2	11/4/2015	94.62	14.48	--	80.14	0.36 / 0.37	0.89 / 0.80	<0.0005 / <0.0005	<0.0005 / <0.0005	0.039 / 0.045	0.063 / 0.076	--	--	<0.0005 / <0.0005	0.032 / 0.040	0.005 / 0.006	--	
MW-2	4/20/2016	94.62	15.12	--	79.50	0.082 J	0.019 J	<0.0005	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.002	0.006	--	
MW-2	10/27/2016	94.62	15.15	--	79.47	<0.053 / 0.27	0.031 J / 0.033 J	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	--	<0.0005 / <0.0005	<0.0005 / <0.0005	0.006 / 0.005	0.006 / 0.006	--	
MW-2	5/2/2017	79.47	15.39	--	62.80	<0.051	0.027 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	0.005	--	
MW-2	10/12/2017	79.47	15.11	--	64.36	<0.050	0.021 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.004	0.005	--	
MW-2	4/18/2018	79.47	15.36	--	64.11	<0.051 J	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	<0.0005	<0.0005	0.002	0.005	--	
MW-2	9/5/2018	79.47	14.95	--	64.52	<0.072 J	<0.014	<0.0002	<0.0002	<0.0002	<0.0005	--	<0.0003	<0.0003	0.004	0.009	--	
MW-2	4/22/2019	94.64	14.79	--	79.85	<0.26 B / <0.27 B	0.021 J [0.019 J]	<0.0002 / <0.0002	<0.0004 / <0.0004	<0.0002 / <0.0002	<0.0004 / <0.0004	--	<0.0002 / <0.0002	<0.0003 / <0.0003	0.003 [0.004]	0.011 [0.01]	--	
MW-2	9/20/2019	94.64	14.73	0.00	79.91	0.17 J	<0.1	<0.000090	<0.00039	0.0021 J	0.0037	--	<0.000014	<0.00050B	0.0041	0.011	--	
MW-2	4/10/2020	94.64	14.95	0.00	79.69	--	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.00453 [0.00557]	0.00725 [0.008501]	<0.00100 [<0.00100]	<0.000500 [<0.000500]	<0.00100 [<0.00100]	0.0207 [0.0222]	0.00907 [0.00808]	0.00537 [0.00601]	--	
MW-2	11/12/2020	94.64	14.26	0.00	80.38	--	<0.00100	0.000145 J	<0.00100	0.0211	0.0280	<0.00100	<0.000500	<0.00100	0.0232	0.00928	0.0178 J	--
MW-2	04/13/2021	94.64	14.6	0.00	80.04	--	<0.00109 J [0.000979 J]	0.000390 J [0.000316 J]	0.0307 [0.0297]	0.0453 [0.0433]	<0.00100 [<0.00100]	<0.000250 [<0.000250]	<0.00100 [<0.00100]	0.0333 J [0.0274 J]	0.0053 [0.00559]	0.0272 [0.0281]	--	
MW-2	8/31/2021	94.64	13.9	0.00	80.74	--	<0.00177 J [0.000159 J]	0.000391 J [0.000381 J]	0.0342 [0.0351]	0.043 [0.0434]	<0.00100 [<0.00100]	<0.000125 [<0.000125]	<0.00100 [<0.00100]	0.0367 [0.0355]	<0.00500 [<0.00500]	0.0205 [0.022]	--	
MW-2	4/11/2022	94.64	14.28	0.00	80.36	--	<0.00100 BJ	0.000361 J	0.0194	0.0506	<0.00100 J	<0.000125	<0.00100 J	0.0518 J	<0.00500 J	0.025	--	
MW-2	9/2/2022	94.64	13.78	0.00	80.86	--	<0.000137 J [0.000117 J]	0.000278 J [<0.001]	0.0183 [0.0162]	0.0271 [0.0235 J]	<0.00100 [<0.00100]	<0.000125 [<0.000125]	<0.00100 [<0.00100]	0.0535 [0.0476]	<0.00500 [<0.00500]	0.0117 J [0.0113 J]	--	
MW-3	7/3/1999	93.57	14.92	--	78.65	--	6.29	0.064	0.349	0.279	0.781	<0.020	--	--	--	--	--	
MW-3																		

Table 1. Historical Groundwater Gauging and Analytical Results

Third Quarter 1999 through 2022

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	LNAPL																	Comments
	Sample Date	TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO mg/l	Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)	
	ADEC Groundwater Cleanup Levels				1.5	2.2	0.0046	1.1	0.015	0.19	0.14	0.00075	0.0017	0.041	0.0022	0.0017	0.0017	
MW-3	4/18/2018	79.42	14.45	--	64.97	<0.05J / <0.05J	0.029 J / 0.025 J	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0005 / <0.0005	--	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0008 J / 0.0008 J	0.005 / 0.005	--	--	
MW-3	9/5/2018	79.42	14.03	--	65.39	<0.18 J / <0.20 J	0.27 / 0.34	0.002	0.0002 J	0.003	0.0027 J	--	<0.0003	<0.002	0.003	0.003	--	TPH-d Non detects reported to LOQ
MW-3	4/22/2019	93.59	13.93	--	79.66	<0.26 B	0.093 J	0.0003 J	0.002	<0.0002	0.001 J	--	<0.0002	<0.0003	0.003 J	0.005	--	
MW-3	9/20/2019	93.59	13.80	0.00	79.79	<0.092	0.11 J	0.00033 J	<0.00039	0.0045	0.0018 J	--	<0.000014	<0.00050B	0.0032	0.0064	--	an:
MW-3	4/10/2020	93.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
MW-3	11/12/2020	93.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	04/13/2021	93.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well due to ice
MW-3	8/31/2021	93.59	13.00	0.00	80.59	--	--	0.00253	0.000903 J	0.0272	0.00970	<0.00100	<0.000125	<0.00100	0.00259	<0.00500	<0.0561 B	
MW-3	4/11/2022	93.59	13.40	0.00	80.19	--	--	0.00648	0.000804 J	0.0412	0.022	<0.00100	<0.000125	<0.00100	0.00227 J	<0.00500	0.00995	
MW-3	9/2/2022	93.59	12.78	0.00	80.81	--	--	0.00545	0.000824 J	0.0339	0.00958	<0.00100	<0.000125	<0.00100	0.00176	<0.00500	<0.0500 J	
MW-4	7/9/1999	94.66	15.01	--	79.65	--	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--
MW-4	10/11/1999	94.66	14.31	--	80.35	--	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005	--	--	--	--	--
MW-4	5/19/2000	94.66	13.22	--	81.44	--	0.867	0.0323	0.133	0.0162	0.110	<0.010	--	--	--	--	--	
MW-4	9/28/2000	94.66	12.45	--	82.21	--	<2.50 / 5.65	0.366 / 0.382	0.338 / 1.65	0.0294 / 0.148	0.441 / 0.951	<0.050 / <0.100	--	--	--	--	--	
MW-4	5/4/2001	94.66	13.78	--	80.88	--	0.190	0.00216	<0.0005	0.036	0.0256	<0.001	--	--	--	--	--	
MW-4	10/4/2001	94.66	15.31	--	79.35	--	<0.050 / <0.050	0.000348 / 0.000359	<0.0005 / <0.0005	0.00491 / 0.00581	0.00275 / 0.00366	<0.001 / <0.001	--	--	--	--	--	
MW-4	5/4/2002	94.66	14.20	--	80.46	--	<0.050	0.000209	0.000601	<0.0005	<0.0010	<0.001	--	--	--	--	--	
MW-4	9/22/2002	94.66	13.19	--	81.47	--	<0.050 / <0.050	<0.0002 / <0.0002	<0.0005 / <0.0005	<0.0005 / <0.0005	<0.0010 / <0.0010	<0.001 / <0.001	--	--	--	--	--	
MW-4	5/30/2003	94.68	14.59	--	80.09	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	
MW-4	10/2/2003	94.68	14.84	--	79.84	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/2/2004	94.68	14.52	--	80.16	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/22/2004	94.68	14.35	--	80.33	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/11/2005	94.68	14.28	--	80.40	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/22/2005	94.68	13.81	--	80.87	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/9/2006	94.68	15.51	--	79.17	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/20/2006	94.68	14.94	--	79.74	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/15/2007	94.68	15.42	--	79.26	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/23/2007	94.68	15.72	--	78.96	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/5/2008	94.68	15.37	--	79.31	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	7/16/2008	94.68	15.31	--	79.37	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	6/16/2009	94.68	15.52	--	79.16	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	8/27/2009	94.68	15.48	--	79.20	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/6/2010	94.68	15.61	--	79.07	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/19/2011	94.68	15.72	--	78.96	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	8/23/2011	94.68	15.40	--	79.28	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/23/2012	94.68	15.09	--	79.59	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	7/31/2012	94.68	14.87	--	79.81	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/23/2013	94.68	14.62	--	80.06	--	--	--	--	--	--	--	<0.00022	0.00096 J	0.016	--	--	Sample collected via Hydrasleeve
MW-4	5/23/2013	94.68	14.62	--	80.06	--	--	--	--	--	--	<0.00022	0.0011	0.015	--	--	--	
MW-4	9/17/2013	94.68	14.12	--	80.56	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/18/2013	--	--	--	--	--	<0.00024	<0.00023	<0.00024	<0.00072	--	<0.00022	0.0044 J	0.021	--	--		
MW-4	5/1/2014	94.68	14.73	--	79.95	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/7/2014	--	--	--	--	--	--	--	--	--	--	<0.00013	<0.00016	0.018	--	--		
MW-4	9/23/2014	94.71	14.37	--	80.34	--	--	--	--	--	--	<0.00013	<0.00013	0.0039 J	0.024	--		
MW-4	5/3/2015	94.71	15.07	--	79.64	--	--	--	--	--	--	<0.0005	<0.0005	0.021	--	--		
MW-4	11/4/2015	94.71	14.53	--	80.18	--	--	--	--	--	--	<0.0005	<0.0005	0.022	--	--		
MW-4	4/20/2016	94.71	15.18	--	79.53	--	--	--	--	--	--	<0.0005	<0.0005	0.018	--	--		
MW-4	10/27/2016	94.71	15.17	--	79.54	--	--	--	--	--	--	<0.0005	<0.0005	0.016	--	--		
MW-4	5/2/2017	79.54	16.42	--	62.87	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	10/12/2017	79.54	15.24	--	64.30	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	4/18/2018	79.54	16.59	--	62.95	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/5/2018	79.54	15.08	--	64.46	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	4/22/2019	94.74	13.98	--	80.76	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/20/2019	94.74	14.91	0.00	79.83	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	4/10/2020	94.74	15.17	0.00	79.57	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/12/2020	94.74	14.48	0.00														

Table 1. Historical Groundwater Gauging and Analytical Results**Third Quarter 1999 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO mg/l	Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)	Comments
	LNAPL						1.5	2.2	0.0046	1.1	0.015	0.19	0.14	0.000075	0.0017	0.041	0.0022	0.0017
ADEC Groundwater Cleanup Levels																		
MW-5	9/20/2006	93.37	13.77	--	79.60	--	0.110	0.0023	<0.0005	0.0028	<0.0015	<0.0025	--	--	--	--	--	--
MW-5	5/15/2007	93.37	14.31	--	79.06	--	0.090	0.003	<0.0010	0.004	<0.00300	<0.010	--	--	--	--	--	--
MW-5	9/23/2007	93.37	14.17	--	79.20	--	0.020	<0.0010	<0.0010	0.001	<0.00300	<0.003	--	--	--	--	--	--
MW-5	5/5/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	5/5/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	10/4/2001	--	13.11	--	--	--	<0.050	0.000756	<0.0005	<0.0005	<0.001	<0.001	--	--	--	--	--	--
MW-6	5/4/2002	--	13.71	--	--	--	<0.050	0.000367	0.000545	<0.0005	<0.001	<0.001	--	--	--	--	--	--
MW-6	9/22/2002	--	12.22	--	--	--	<0.050	0.000271	<0.0005	<0.0005	<0.001	<0.001	--	--	--	--	--	--
MW-6	5/30/2003	92.89	13.29	--	79.60	--	0.014	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	10/2/2003	92.89	13.47	--	79.42	--	0.017	0.0009	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	6/2/2004	92.89	13.27	--	79.62	--	0.015	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	9/22/2004	92.89	13.36	--	79.53	--	0.010	0.0007	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	5/11/2005	92.89	12.98	--	79.91	--	0.013	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	9/22/2005	92.89	12.69	--	80.20	--	0.015	<0.0005	<0.0005	<0.0005	<0.0005	<0.002	--	--	--	--	--	--
MW-6	5/9/2006	92.89	14.14	--	78.75	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0015	<0.002	--	--	--	--	--	--
MW-6	9/20/2006	92.89	13.45	--	79.44	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0015	<0.0025	--	--	--	--	--	--
MW-6	5/15/2007	92.89	13.98	--	78.91	--	<0.010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0025	--	--	--	--	--	--
MW-6	9/23/2007	92.89	13.84	--	79.05	--	0.020	<0.0010	<0.0010	<0.0010	<0.0020	<0.003	--	--	--	--	--	--
MW-6	5/5/2008	92.89	13.89	--	79.00	--	<0.05	0.00063	<0.0005	<0.0005	<0.0015	<0.002	--	--	--	--	--	--
MW-6	7/16/2008	92.89	13.82	--	79.07	0.087	0.06	0.002	<0.001	<0.002	--	--	--	--	--	--	--	--
MW-6	6/16/2009	92.89	14.02	--	78.87	<0.050	0.016 J	0.0016 J	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	8/27/2009	92.89	13.99	--	78.90	<0.050	0.012 J	0.0007 J	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	5/6/2010	92.89	14.25	--	78.64	<0.50	<0.010	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	8/5/2010	92.89	13.98	--	78.91	0.10 J	0.058 J	0.0027	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	5/19/2011	92.89	14.34	--	78.55	0.10 J	0.012 J	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	8/23/2011	92.89	14.02	--	78.87	<0.050	<0.010	0.0006 J	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	5/23/2012	92.89	13.49	--	79.40	<0.048 J	0.037 J	0.0006 J	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--
MW-6	7/31/2012	92.89	13.42	--	79.47	<0.051	0.013 J	0.0011 J	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	Sample collected via Hydrasleeve
MW-6	5/23/2013	92.89	13.21	--	79.68	<0.050	<0.0024	<0.00023	<0.00024	<0.00024	<0.00072	--	--	<0.00022	0.019	0.0029	--	--
MW-6	5/23/2013	92.89	13.21	--	79.68	0.97	<0.050	<0.0024	<0.00023	<0.00024	<0.00072	--	--	<0.00022	0.020	0.0025	--	--
MW-6	9/17/2013	92.89	12.66	--	80.23	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/18/2013	--	--	--	0.71	<0.050	0.00032 J	<0.00023	<0.00024	<0.00024	<0.00072	--	--	<0.00022	0.023	0.00061 J	--	--
MW-6	5/1/2014	92.89	13.34	--	79.55	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	5/8/2014	--	--	--	<0.063	<0.050	0.00024 J	<0.00011	<0.00016	<0.00040	--	--	--	<0.00013	0.013	0.0046	--	--
MW-6	9/23/2014	92.88	12.91	--	79.97	<0.065	<0.050	0.00042 J	<0.00011	<0.00016	<0.00040	--	--	<0.00013	0.026	0.0044	--	--
MW-6	5/3/2015	92.88	13.78	--	79.10	<0.052	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.011	0.007	--	--
MW-6	11/4/2015	92.88	13.16	--	79.72	<0.052	0.012 J	0.0009 J	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.017	0.003	--	--
MW-6	4/20/2016	92.88	13.83	--	79.05	0.081 J	<0.010	<0.0005	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.012	0.002	--	--
MW-6																		

Table 1. Historical Groundwater Gauging and Analytical Results**Third Quarter 1999 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	LNAPL													Comments				
		TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO mg/l	Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)		
ADEC Groundwater Cleanup Levels																			
MW-7	4/18/2018	78.85	13.10	--	65.75	<0.05 J	<0.010	<0.0005	<0.0005	<0.0005	--	<0.0005	<0.0005	<0.0005	<0.0005	--	TPH-d Non detects reported to LOQ		
MW-7	9/5/2018	78.85	12.68	--	66.17	<0.094 J	<0.014	<0.0002	<0.0002	<0.0005	--	<0.0003	<0.002	<0.0002	<0.0002	--			
MW-7	4/22/2019	91.68	12.68	0.00	79.00	<0.26 B	0.016 J	<0.0002	<0.0004	<0.0002	--	<0.0002	0.0007 J	<0.0002	<0.0002	--	Well obstructed by ice could not		
MW-7	9/20/2019	91.68	11.84	0.00	79.84	0.11 J	<0.1	0.000095 J	<0.00039	<0.00050	<0.00114	--	<0.000014	<0.00050B	0.00026 J	<0.00050B	--		
MW-7	4/10/2020	91.68	12.80	0.00	78.88	--	--	--	--	--	--	--	--	--	--	--			
MW-7	11/12/2020	91.68	12.16	0.00	79.52	--	--	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	0.000535 J	<0.00100	<0.00500	0.00252 J			
MW-7	04/13/2021	91.68	12.6	0.00	79.08	--	--	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	0.000399 J	<0.00100	<0.00500	<0.00500			
MW-7	8/31/2021	91.68	11.75	0.00	79.93	--	--	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	0.000599 J	<0.00100	<0.00500	<0.00500			
MW-7	4/11/2022	91.68	12.32	0.00	79.36	--	--	--	--	--	--	--	--	--	--		Frozen		
MW-7	9/2/2022	91.68	11.32	0.00	80.36	--	--	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.005	<0.00500 J		
MW-8	9/20/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--		Sample collected via Hydrasleeve comm		
MW-9	7/31/2012	--	16.03	--	--	<0.051	<0.010	<0.0005	<0.0005	<0.0015	--	--	<0.0005	0.001 J	0.018	--			
MW-9	5/23/2013	--	15.72	--	--	0.10 J	<0.050	<0.00024	<0.00023	<0.00024	<0.00072	--	<0.00022	0.0011	0.017	--			
MW-9	5/23/2013	--	15.72	--	--	0.50 J	<0.050	<0.00024	<0.00023	<0.00024	<0.00072	--	<0.00022	0.0010	0.018	--			
MW-9	9/17/2013	--	15.23	--	--	--	--	--	--	--	--	--	--	--	--				
MW-9	9/18/2013	--	--	--	--	0.41 J	<0.050	<0.00024	<0.00023	<0.00024	<0.00072	--	--	<0.00022	0.0013	0.017	--		
MW-9	5/1/2014	--	15.78	--	--	--	--	--	--	--	--	--	--	--	--	--			
MW-9	5/7/2014	--	--	--	--	<0.060	<0.050	<0.00015	<0.00011	<0.00016	<0.00040	--	--	<0.00013	0.00069 J	0.0086	--		
MW-9	9/23/2014	96.13	15.41	--	80.72	0.063 J	<0.050	<0.00015	<0.00011	<0.00016	<0.00040	--	--	<0.00013	0.00099 J	0.0070	--		
MW-9	5/3/2015	96.13	16.18	--	79.95	<0.051	<0.010	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.0009 J	0.014	--			
MW-9	11/4/2015	96.13	15.69	--	80.44	0.11 J	<0.010	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.001	0.016	--			
MW-9	4/20/2016	96.13	16.31	--	79.82	0.15 J	<0.010	<0.0005	<0.0005	<0.0005	--	--	<0.0005	0.001	0.012	--			
MW-9	10/27/2016	96.13	16.31	--	79.82	<0.050	<0.010	<0.0005	<0.0005	<0.0005	--	<0.0005	<0.0005	<0.0005	0.001	0.018	--		
MW-9	5/2/2017	79.82	16.59	--	63.15	<0.052	0.019 J	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.014	--	
MW-9	10/12/2017	79.82	16.28	--	63.54	<0.051	<0.010	<0.0005	<0.0005	<0.0005	--	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.015	--	TPH-d Non detects reported to LOQ
MW-9	4/18/2018	79.82	16.52	--	63.30	<0.052 J	<0.010	<0.0005	<0.0005	<0.0005	--	<0.0005	<0.0005	<0.0005	<0.0005	0.001	0.006	--	
MW-9	9/5/2018	79.82	16.11	--	63.71	<0.10 J	<0.014	<0.0002	<0.0002	<0.0002	<0.0005	--	<0.0003	<0.0002	<0.0008 J	0.005	--		
MW-9	4/22/2019	96.14	16.88	0.00	79.26	<0.27 B	<0.014	<0.0002	<0.0004	<0.0002	--	<0.0003	<0.0002	<0.0003	<0.0001 B	0.008	--		
MW-9	9/20/2019	96.14	15.85	0.00	80.29	<0.094 [<0.093]	<0.1 [<0.1]	<0.0000090 [<0.0000090]	<0.00039 [<0.00039]	<0.00050 [<0.00050]	<0.00114 [<0.00114]	--	<0.000014 [<0.000014]	<0.000024 [<0.000024]	0.00031 J [0.00034 J]	0.0093 [0.01]	--		
MW-9	4/10/2020	96.14	16.01	0.00	80.13	--	--	<0.00100	0.00293	0.0194	0.0162	<0.00100	<0.000500	<0.00100	<0.00100	0.0117	0.00222 J		
MW-9	11/12/2020	96.14	15.35	0.00	80.79	--	--	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.000300 [<0.000300]	<0.00100 [<0.00100]	<0.000500 [<0.000500]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.0157 [0.0146]	<0.00500 [<0.00500]		
MW-9	04/13/2021	96.14	15.72	0.00	80.42	--	--	<0.00100 J	<0.00100 J	<0.00100 J	<0.00300 J	<0.00100	<0.00000500	<0.00100 J	<0.00100 J	0.00881	<0.00500		
MW-9	8/31/2021	96.14	15.06	0.00	81.08	--	--	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100 J	<0.00100 J	<0.00100 J	0.0128			

Table 1. Historical Groundwater Gauging and Analytical Results**Third Quarter 1999 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	LNAPL													Comments			
		TOC (ft)	DTW (ft bTOC)	Thickness (ft)	GWE ft msl	DRO mg/l	GRO mg/l	Benzene mg/l	Toluene mg/l	Ethylbenzene mg/l	Total Xylenes mg/l	MTBE mg/l	EDB mg/l	EDC mg/l	PCE mg/l	Chloroform mg/l	Naphthalene (mg/L)	
ADEC Groundwater Cleanup Levels																		
QA (TB)	8/31/2021	--	--	--	--	--	1.5	2.2	0.0046	1.1	0.015	0.19	0.14	0.000075	0.0017	0.041	0.0022	0.0017
QA (TB)	4/11/2022	--	--	--	--	--			0.000122 J	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00500	<0.00500
QA (TB)	9/2/2022	--	--	--	--	--			<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00500	<0.00500 J
QA (EQB)	9/20/2019	--	--	--	--	<0.091	<0.1	<0.0000090	0.00074 J	<0.000050	<0.00114	--	<0.000014	0.000034 J	<0.000017	0.00010 J	--	
QA (EQB)	4/10/2020	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500
QA (EQB)	11/12/2020	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500
QA (EQB)	04/13/2021	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500
QA (EQB)	8/31/2021	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	0.00125 J
QA (EQB)	4/11/2022	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500
QA (EQB)	9/2/2022	--	--	--	--	--			<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00500	<0.00500 J

Notes:

ID = Identification

MW = Groundwater monitoring well

TOC = Top of casing

DTW = Depth to groundwater

ft bTOC = Feet below top of casing

ft = Feet relative to NAVD88

GW Elev = Groundwater elevation

mg/L = Milligrams per liter

<0.00100 = Not detected at or above the reported detection limit (RDL)

Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level**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

-- = Not Available or Not Analyzed

LNAPL = Light Non-Aqueous Phase Liquid

[] = Blind Duplicate Sample

NADV88 = North American Vertical Datum of 1988

QA (TB) = Quality Assurance (Trip Blank)

QA (EQB) = Quality Assurance (Equipment Blank)

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 State of Alaska Method AK102.

Samples analytes by USEPA Method 8260D:

Benzene, Toluene, Ethylbenzene, and Total xylenes (collectively BTEX)

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

PCE = Tetrachloroethene

MTBE = Methyl-t-butyl ether

Chloroform

Naphthalene

ADEC = Alaska Department of Environmental Conservation

B = Compound considered non-detect at the listed value due to associated blank contamination.

UJ = The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation

J = The associated numerical value is an estimated concentration only.

LUFT = Leaking Underground Fuel Tank

GC/MS = Gas chromatography/Mass Spectrometry

The laboratory for this site was changed from Eurofins Calscience to Pace Analytical prior to the first quarter 2020 groundwater

monitoring event. Prior to this date, Eurofins Calscience was using the carbon ranges as follows: TPH-d as C13-C22. Pace Analytical

reports the following carbon ranges: TPH-d as C12-C22.

Table 2. Historical Groundwater Analytical Results - Additional VOCs

Second Quarter 2020 through 2022

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Table 2. Historical Groundwater Analytical Results - Additional VOCs**Second Quarter 2020 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	Chlorobenzene	Chlorodibromomethane (Dibromochloromethane)	Chloroethane	Chloromethane	2-Chlorotoluene (o-Chlorotoluene)	4-Chlorotoluene (p-Chlorotoluene)	1,2-Dibromo-3-chloropropane	Dibromomethane (Methylene bromide)	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Dichlorodifluoromethane (Freon 12)	1,1-Dichloroethane
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels		0.078	0.0087	--	0.19	--	--	--	0.0083	0.3	0.3	0.0048	0.2	0.028
MW-2	4/10/2020	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-2	11/12/2020	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-2	04/13/2021	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 J [<0.00500 J]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-2	8/31/2021	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-2	4/11/2022	<0.00100 J	<0.00100 J	<0.00500 J	<0.00250 J	<0.00100 J	<0.00100	<0.00500	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00500 J	<0.00100 J
MW-2	9/2/2022	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 J [<0.00500 J]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-3	8/31/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-3	4/11/2022	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-3	9/2/2022	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-6	04/13/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-6	8/31/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-6	4/11/2022	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-6	9/2/2022	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-7	4/10/2020	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	11/12/2020	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-7	04/13/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-7	8/31/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-7	4/11/2022	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	9/2/2022	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-9	4/10/2020	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100 J	<0.00100	<0.00100	<0.00500	<0.00100
MW-9	11/12/2020	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-9	04/13/2021	<0.00100 J	<0.00100 J	<0.00500	<0.00250 J	<0.00100 J	<0.00100 J	<0.00500 J	<0.00100	<0.00100 J	<0.00100 J	<0.00100 J	<0.00500 J	<0.00100 J
MW-9	8/31/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
MW-9	4/11/2022	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00250 [<0.00250]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 J [<0.00500 J]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	<0.00100 [<0.00100]
MW-9	9/2/2022	<0.00100 J	<0.00100 J	<0.00500 J	<0.00250 J	<0.00100 J	<0.00100 J	<0.00500 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00500 J	<0.00100 J
QA (EB)	4/10/2020	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
QA (EB)	11/12/2020	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
QA (EB)	04/13/2021	<0.00100	<0.00100	<0.00500	<0.00250	<0.00100	<0.00100	<0.00500 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00500	<0.00100
QA (EB)	8/31/2021	<0.00100	<0.00100</											

Table 2. Historical Groundwater Analytical Results - Additional VOCs**Second Quarter 2020 through 2022**Chevron-Branded Service Station-91356
1465 West Northern Lights Boulevard
Anchorage, Alaska

Well ID	Sample Date	1,1-Dichloroethene	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene)	trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene)	1,2-Dichloropropane	1,3-Dichloropropane	2,2-Dichloropropane	1,1-Dichloropropene	cis-1,3-Dichloropropene	trans-1,3-Dichloropropene	Di-isopropyl ether	Hexachloro-1,3-butadiene (Hexachlorobutadiene)	Isopropylbenzene (Cumene)	p-Isopropyltoluene
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels		0.28	0.036	0.36	0.0082	--	--	--	--	--	--	0.0014	0.45	--
MW-2	4/10/2020	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.00448 [0.00420]	0.00457 [0.00457]
MW-2	11/12/2020	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00660	0.0032 [<0.00100]
MW-2	04/13/2021	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 J [<0.00100 J]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.0106 [0.0103]	0.000852 J [0.000870 J]
MW-2	8/31/2021	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.00911 [0.00945]	0.000434 J [0.000437 J]
MW-2	4/11/2022	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	0.00801	0.00505
MW-2	9/2/2022	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 J [<0.00100 J]	0.00683 [0.00618]	0.00306 [0.00254]
MW-3	8/31/2021	<0.00100	0.0110	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00939	0.000770 J
MW-3	4/11/2022	<0.00100	0.00873	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.0139	0.00584
MW-3	9/2/2022	<0.00100	0.0086	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	0.00886	0.00207
MW-6	04/13/2021	<0.00100	0.000685 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	8/31/2021	<0.00100	0.00175	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	4/11/2022	<0.00100	0.00261	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.000170 J	0.000401 J
MW-6	9/2/2022	<0.00100	0.00103	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100
MW-7	4/10/2020	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	11/12/2020	<0.00100	0.000141 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	04/13/2021	<0.00100	0.000129 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	8/31/2021	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	4/11/2022	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/2/2022	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100
MW-9	4/10/2020	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.000310 J	0.000925 J
MW-9	11/12/2020	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-9	04/13/2021	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J
MW-9	8/31/2021	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	4/11/2022	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-9	9/2/2022	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J
QA (EB)	4/10/2020	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	11/12/2020	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	04/13/2021	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	8/31/2021	<0.00100												

Table 2. Historical Groundwater Analytical Results - Additional VOCs**Second Quarter 2020 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	2-Butanone (Methyl ethyl ketone)	Methylene chloride	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	n-Propylbenzene (Propylbenzene)	Styrene	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethylene (Trichloroethylene)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels		5.6	0.11	6.3	0.66	1.2	0.0057	0.00076	0.007	0.004	8	0.00041	0.0028
MW-2	4/10/2020	<0.0100 [<0.0100]	<0.00500 [<0.00500]	0.000932 J [0.000770 J]	0.0147 [0.014]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-2	11/12/2020	<0.0100	<0.00500	<0.0100	0.0206 [<0.00100]	<0.00100	<0.00100 [<0.00100]	<0.00100	<0.00100 [<0.00100]	<0.00100	<0.00100	<0.00100	0.000871 J
MW-2	04/13/2021	<0.0100 [<0.0100]	<0.00500 [<0.00500]	<0.0100 [<0.0100]	0.0279 [0.0275]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-2	8/31/2021	<0.0100 [<0.0100]	<0.00500 [<0.00500]	<0.0100 [<0.0100]	0.0349 J [0.0340 J]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	0.00359 [0.00358]
MW-2	4/11/2022	<0.0100	<0.00500 J	<0.0100	0.0207	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	0.000671 J
MW-2	9/2/2022	<0.0100 [<0.0100]	<0.00500 [<0.00500]	0.000543 J [0.000567 J]	0.0192 [0.0151]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 J [<0.00100 J]	<0.00100 J [<0.00100 J]	<0.00100 J [<0.00100 J]	<0.00100 [<0.00100]	0.0027 [0.00254]
MW-3	8/31/2021	<0.0100	<0.00500	<0.0100	0.0329 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00431
MW-3	4/11/2022	<0.0100	<0.00500	<0.0100	0.0434	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00388
MW-3	9/2/2022	<0.0100	<0.00500	<0.0100	0.0297	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100 J	<0.00100	<0.00100	0.00365
MW-6	04/13/2021	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	8/31/2021	<0.0100	<0.00500	<0.0100	<0.00100 B	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.000411 J
MW-6	4/11/2022	<0.0100	<0.00500	<0.0100	<0.00100 B	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.000323 J
MW-6	9/2/2022	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100 J	<0.00100	<0.00100	0.000342 J
MW-7	4/10/2020	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	11/12/2020	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	04/13/2021	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	8/31/2021	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	4/11/2022	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	9/2/2022	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100 J	<0.00100	<0.00100	<0.00100
MW-9	4/10/2020	<0.0100	<0.00500	<0.0100	0.00122	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	11/12/2020	<0.0100 [<0.0100]	<0.00500 [<0.00500]	<0.0100 [<0.0100]	<0.00100	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-9	04/13/2021	<0.0100	<0.00500 J	<0.0100	<0.00100	<0.00100 J	<0.00100 J	<0.00100	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100 J
MW-9	8/31/2021	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9	4/11/2022	<0.0100 [<0.0100]	<0.00500 [<0.00500]	<0.0100 [<0.0100]	<0.00100 [<0.00100 B]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]
MW-9	9/2/2022	<0.0100 J	<0.00500 J	<0.0100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J
QA (EB)	4/10/2020	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	11/12/2020	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	04/13/2021	<0.0100	<0.00500	<0.0100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	8/31/2021	<0.0100	<0.00500	<0.0100	0.000166 J	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
QA (EB)	4/11/2022	<0.0100	<0.00500	<0.									

Table 2. Historical Groundwater Analytical Results - Additional VOCs**Second Quarter 2020 through 2022**

Chevron-Branded Service Station-91356

1465 West Northern Lights Boulevard

Anchorage, Alaska

Well ID	Sample Date	Trichlorofluoromethane (Freon 11)	1,2,3-Trichloropropane	1,1,2-Trichlorotrifluoroethane (1,1,2-Trichloro-1,2,2-trifluoroethane)	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Comments
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
ADEC Groundwater Cleanup Levels		5.2	0.0000075	10	--	0.056	0.060 mg/L	0.00019	
MW-2	4/10/2020	<0.00500 [<0.00500]	<0.000500 [<0.000500]	<0.00100 [<0.00100]	0.00579 [0.00586]	0.129 [0.124]	0.0345 [0.031]	<0.00100 [<0.00100]	
MW-2	11/12/2020	<0.00500	<0.000500 [<0.000500]	<0.00100	0.00664 [<0.00100]	0.0838	<0.00100 [<0.00100]	<0.00100	
MW-2	04/13/2021	<0.00500 [<0.00500]	<0.000250 [<0.000250]	<0.00100 [<0.00100]	0.00399 [0.00341]	0.121 [0.115]	0.011 [0.00914]	<0.00100 [<0.00100]	
MW-2	8/31/2021	<0.00500 [<0.00500]	<0.000125 [<0.000125]	<0.00100 [<0.00100]	0.00225 [0.00207]	0.0896 [0.0883]	0.00181 [0.0017]	<0.00100 [<0.00100]	
MW-2	4/11/2022	<0.00500 J	<0.000125	<0.00100 J	0.0202	0.200	0.0314	<0.00100 J	
MW-2	9/2/2022	<0.00500 [<0.00500]	<0.000125 [<0.000125]	<0.00100 [<0.00100]	0.0105 [0.00853]	0.115 [0.0935]	0.0107 [0.00786]	<0.00100 [<0.00100]	
MW-3	8/31/2021	<0.00500	<0.000125	<0.00100	0.00534	0.0358	0.00586	<0.00100	
MW-3	4/11/2022	<0.00500	<0.000125	<0.00100	0.0059	<0.00100	0.00439	<0.00100 J	
MW-3	9/2/2022	<0.00500	<0.000125	<0.00100	0.00294	0.0401	0.000736 J	<0.00100	
MW-6	04/13/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-6	8/31/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	0.000853 J	
MW-6	4/11/2022	<0.00500	<0.00000500	<0.00100	<0.00100	0.00111	0.000386 J	0.00107 J	
MW-6	9/2/2022	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	0.000234 J	
MW-7	4/10/2020	--	--	--	--	--	--	--	Well obstructed by ice could not be sampled
MW-7	11/12/2020	<0.00500	<0.00000500	<0.00100	<0.00100	0.000437 J	<0.00100	<0.00100	
MW-7	04/13/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-7	8/31/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-7	4/11/2022	--	--	--	--	--	--	--	
MW-7	9/2/2022	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-9	4/10/2020	<0.00500	<0.0000500	<0.00100	0.00458	0.0157	0.00371	<0.00100	
MW-9	11/12/2020	<0.00500 [<0.00500]	<0.0000500	<0.00100 [<0.00100]	<0.00100	<0.00100 [<0.00100]	<0.00100	<0.00100 [<0.00100]	
MW-9	04/13/2021	<0.00500 J	<0.00000500	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	
MW-9	8/31/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-9	4/11/2022	<0.00500 [<0.00500]	<0.00000500 [<0.00000500]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 J [<0.00100 J]	
MW-9	9/2/2022	<0.00500 J	<0.00000500	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	<0.00100 J	
QA (EB)	4/10/2020	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (EB)	11/12/2020	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (EB)	04/13/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (EB)	8/31/2021	<0.00500	<0.00000500	<0.00100	<0.00100	0.000429 J	<0.00100	<0.00100	
QA (EB)	4/11/2022	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	
QA (EB)	9/2/2022	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (TB)	4/10/2020	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (TB)	11/12/2020	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (TB)	04/13/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (TB)	8/31/2021	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
QA (TB)	4/11/2022	<0.00500	<0.00000500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100 J	
QA (TB)	9/2/2022	<0.00500	<0.00000500	<0.00100	<0.00100	0.000369 J	<0.00100	<0.00100	

Table 2. Historical Groundwater Analytical Results - Additional VOCs

Second Quarter 2020 through 2022

Chevron-Branded Service Station-91356
1465 West Northern Lights Boulevard
Anchorage, Alaska

Notes:

ID = Identification

MW = Groundwater monitoring well

mg/L = Milligrams per liter

<0.00100 = Not detected at or above the Reported Detection Limit

Bold = Detected above laboratory method detection limit (MDL)

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.

[] = Blind Duplicate Sample Result

QA (EQB) = Quality Assurance (Equipment Blank)

QA (TB) = Quality Assurance (Trip Blank)

ADEC = Alaska Department of Environmental Conservation

Constituents analyzed by United States Environmental Protection Agency Method 8260D

Attachment D

ADEC Data Review Checklist

Laboratory Data Review Checklist

Completed By:

Bhagyashree A Fulzele

Title:

Project Chemist

Date:

April 24, 2024

Consultant Firm:

ARCADIS U.S., Inc

Laboratory Name:

Pace Analytical

Laboratory Report Number:

L1723207

Laboratory Report Date:

04/16/2024

CS Site Name:

First Half 2024 Groundwater Monitoring Report

ADEC File Number:

2100.26.065

Hazard Identification Number:

23313

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:

Yes.

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

Comments:

None of the samples were affected.

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

Yes No N/A Comments:

Not applicable.

v. Data quality or usability affected?

Comments:

Data quality or usability was not affected.

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:

Not applicable.

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:

Yes.

- 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:

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:

Not applicable.

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

Comments:

Data quality or usability was not affected.

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-9-W-20240405.

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

Yes No N/A Comments:

Not applicable.

- iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes No N/A Comments:

Yes.

- 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:

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 samples were collected as TRIP BLANK-20240405.

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	Sample Result	Duplicate Result	RPD
MW-4-W-20240405 / BD-1-W-20240405	8260D	Chloroform	9.02	8.79	AC
		Tetrachloroethene	0.676	0.555	AC
		Toluene	0.762	0.698	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-20230413.

- 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:

None of the samples were affected.

- iv. Are data quality or usability affected?

Comments:

Data quality or usability was not affected.

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 ID	Initial/Continuing	Compounds	Recovery
MW-1-W-20240405			
MW-4-W-20240405			
MW-6-W-20240405			
MW-7-W-20240405	CCV %D	Naphthalene	Low
MW-9-W-20240405			
BD-1-W-20240405			
EQB-1-W-20240405			
TRIP BLANK-20240405			

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