

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

Subject:  
2020 First Quarter Groundwater Monitoring Report

Dear Ms. Reams,

On behalf of Chevron Environmental Management Company (Chevron), Arcadis US, Inc. (Arcadis) has prepared the attached *2020 First Quarter Groundwater Monitoring Report* for the first quarter groundwater sampling event of 2020 for the following facility:

**Chevron Branded**

<u>Station No.</u>	<u>ADEC File No.</u>	<u>Hazard ID:</u>	<u>Location</u>
95414	2100.26.062	24602	5210 Old Seward Highway Anchorage, Alaska

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

Sincerely,

Arcadis U.S., Inc.



Nicole Monroe, P.E.  
Project Manager  
EV-149409

Copies:  
Tim Bishop (*electronic copy*)  
Rolph Hanson  
Mark Engelke (*electronic copy*)

ENVIRONMENT

Date:  
May 19, 2020

Contact:  
Nicole Monroe

Phone:  
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Email:  
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Our ref:  
30045460

Chevron Environmental Management Company

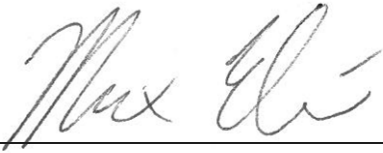
# **2020 FIRST QUARTER GROUNDWATER MONITORING REPORT**

Chevron Service Station No. 95414  
5210 Old Seward Highway  
Anchorage, Alaska  
ADEC File No. 2100.26.062

May 19 2020

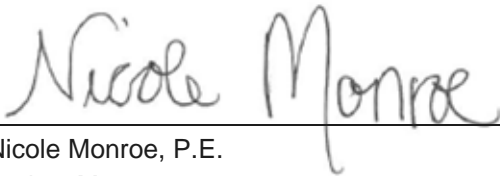
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## 2020 FIRST QUARTER GROUNDWATER MONITORING REPORT



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Max Elias  
Environmental Scientist



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Nicole Monroe, P.E.  
Project Manager  
EV-149409

### **Chevron Service Station No. 95414**

5210 Old Seward Highway  
Anchorage, Alaska

ADEC File No: 2100.26.062  
HAZARD ID No: 24602

Prepared for:

Chevron Environmental Management  
Company

Prepared by:

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Our Ref.:  
30045460

Date:  
May 19, 2020

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Figure 2	Site Plan
Figure 3	Groundwater Contour Map - March 25, 2020.
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## **APPENDICES**

Appendix A	Site Background and History
Appendix B	Field Data Sheets
Appendix C	Laboratory Analytical Report and Chain of Custody Documentation
Appendix D	ADEC Data Review Checklist

**2020 GROUNDWATER MONITORING REPORT  
FIRST QUARTER 2020  
May 19, 2020**

Facility No.: <u>Chevron Service</u> <u>Station No. 95414</u>	Address: <u>5210 Old Seward Highway</u> <u>Anchorage, Alaska</u>
Arcadis Contact Person / Phone No.:	Nicole Monroe / 503-785-9414
Arcadis Project No.:	<hr style="border: 0.5px solid black;"/> 30045460
Primary Agency/Regulatory ID No.:	<hr style="border: 0.5px solid black;"/> Alaska Department of Environmental Conservation (ADEC) / Rebekah Reams / ADEC file ID: 2100.26.062

**WORK CONDUCTED THIS PERIOD [First Quarter 2020]:**

1. Conducted quarterly groundwater monitoring activities on March 25, 2020.
2. Prepared the *2020 First Quarter Groundwater Monitoring Report*.

**WORK PROPOSED NEXT PERIOD [Second Quarter 2020]:**

1. Conduct quarterly groundwater monitoring activities in the Second Quarter of 2020.
2. Prepare the *2020 Second Quarter Groundwater Monitoring Report*.

Current Phase of Project:	Monitoring	
Frequency of Monitoring / Sampling:	Quarterly	
Is Light Non-Aqueous Phase Liquid (LNAPL) Present On-site:	No	
Cumulative LNAPL Recovered to Date:	0.0	(gallons)
Approximate Depth to Groundwater:	6.67 to 8.85	(feet below top of casing)
Approximate Groundwater Elevation:	101.77 to 103.17	(feet relative to NAVD88)
Groundwater Flow Direction	Southwest	
Groundwater Gradient	0.003	(feet per foot)

Current Remediation Techniques:	None
Permits for Discharge:	None
Summary of Unusual Activity:	Unable to access MW-2 due to an ice berm and MW-9R due to lack of an access agreement. MW-4 and MW-7 were obstructed by ice within well.
Agency Directive Requirements:	None

## 1 INTRODUCTION

On behalf of Chevron Environmental Management Company (CEMC), Arcadis US, Inc. (Arcadis), has prepared this report to document the first quarter groundwater sampling event of 2020 for Chevron Service Station No. 95414, located at 5210 Old Seward Highway in Anchorage, Alaska (the site). The site location map and site plan are shown on Figure 1 and Figure 2, respectively.

This work was conducted under the direction of a “Qualified Environmental Professional” (QEP) and “Qualified Sampler” (18 Alaska Administrative Code [AAC] 75.333). Site background and history summaries are attached as Appendix A.

## 2 GROUNDWATER MONITORING

### 2.1 Groundwater Gauging Methods

The 2020 first quarter groundwater sampling event was conducted on March 25, 2020. Site monitoring wells were gauged with an oil/water interface probe to determine depth-to-water and to ascertain if LNAPL was present. In order to prevent the possibility of cross-contamination, wells were gauged in the order of lowest to highest historical petroleum hydrocarbon concentrations in groundwater. In addition, non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water.

### 2.2 Groundwater Elevation and Flow Direction

During the first quarter 2020 sampling event, monitoring wells MW-1 through MW-10 were scheduled to be gauged for groundwater elevations and the presence of LNAPL. The groundwater monitoring event field notes are presented in Appendix B. Monitoring well MW-9R was inaccessible and unable to be gauged due to the lack of an access agreement. Monitoring well MW-2 was inaccessible due to an ice berm located above the well. Monitoring wells MW-4 and MW-7 were unable to be gauged due to ice obstructions within the well.

The inferred groundwater flow direction for the first quarter 2020 monitoring events is to the southwest and is consistent with the historical flow direction. Current and historical groundwater gauging and analytical results are included in Table 1 and Table 3 respectively. A groundwater contour map with a rose diagram of historical flow directions is presented as Figure 3.

## 2.3 Groundwater Sampling Methods

The first quarter groundwater monitoring event was conducted on March 25, 2020. Groundwater samples were collected from MW-8 and MW-10. Monitoring well MW-9R was not accessible and could not be sampled.

Sampling procedures were conducted in accordance with ADEC *Field Sampling Guidance* (ADEC, 2019). Monitoring well caps were removed to allow groundwater levels to stabilize and equilibrate before using an electronic interface probe (EIP) meter capable of 0.01 foot accuracy to measure the depth to groundwater and total well depth. A bladder pump with compressor & control unit with clean/disposable Teflon lined tubing and bladders was used to purge groundwater from the wells and collect samples to minimize the risk of volatile contaminant absorption by the sampling equipment. Water table drawdown was continuously monitored during purging with a water level meter and the flow rate of the pump was adjusted to limit drawdown to 0.1 meter. The intake of the pump was set as close as possible to the soil groundwater interface. Water quality parameters were monitored during purging with a multi-parameter water quality meter equipped with a flow through cell and Turbidity meter. Parameters were recorded every 3 to 5 minutes until a minimum of three (minimum of four if using temperature as an indicator) of the parameters listed below stabilized. The flow rate was reduced to 100-150 ml/minute and samples were collected from the discharge line into laboratory sample bottles. Water quality parameters were considered stable when three successive readings were within the following ADEC limits:

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

Sample bottles were labeled, stored in a cooler packed with ice, and submitted to Pace Analytical (National Centre for Testing & Innovation), Mount Juliet, Tennessee under proper chain-of-custody procedures. Field notes documenting the first quarter event are presented in Appendix B.

Groundwater samples collected from monitoring wells MW-8 and MW-10 were submitted to the analytical laboratory for the following analyses:

- Full-Scan VOCs including benzene, toluene, ethylbenzene, total xylenes (collectively BTEX), and naphthalene by United States Environmental Protection Agency (USEPA) method 8260
- Total petroleum hydrocarbons-gasoline range organics (TPH-g) by Alaska method AK101
- Total petroleum hydrocarbons- diesel range organics (TPH-d) by Alaska method AK102

A groundwater duplicate sample was collected from monitoring well MW-10. The duplicate sample was analyzed for full scan VOCs (including BTEX and naphthalene), TPH-g and TPH-d. The duplicate samples were submitted blind with the sample set to Pace Analytical.

## 2.4 Groundwater Analytical Results

Routine analytical results for BTEX, naphthalene, TPH-g, and TPH-d obtained from the first quarter 2020 groundwater monitoring event are summarized in Table 1 and are shown on Figure 4. Additional constituents analyzed by USEPA method 8260 are summarized in Table 2. Historical analytical groundwater data is summarized in Table 3. Historical data from 2019 for TPH-g and TPH-d were previously inaccurately labeled in reports from 2019 and have been corrected for this report. Historical analytical data for poly aromatic hydrocarbons (PAHs) is included in table 4.

## 3 LABORATORY DATA QUALITY ASSURANCE SUMMARY

As required by ADEC (Technical Memorandum 06-002, dated March 2009), Arcadis completed a laboratory data review checklist for the laboratory report generated for the 2020 first quarter event. The laboratory report is included as Appendix C and data review checklist is included as Appendix D. The following quality assurance (QA) summary describes six parameters, related to the quality and usability of the data presented in this report.

### 3.1 Precision

The relative percent difference (RPD) for field duplicate (FD), laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) were within the control limits.

The precision of the data, as measured by laboratory quality control (QC) indicators, suggest that the data quality objectives (DQOs) were met.

### 3.2 Accuracy

The percent recoveries for LCS/LCSD and surrogates were within the control limits.

The accuracy of the data, as measured by laboratory QC indicators, suggest that the DQOs were met with exception of the estimated data.

### 3.3 Representativeness

The data appear to be representative of site conditions and are generally consistent with historical groundwater monitoring results and expected impacts to groundwater.

### 3.4 Comparability

The laboratory results are presented in the same units as previous report to allow comparison.

### 3.5 Completeness

The results appear to be valid and usable, and thus, the laboratory results have 100% completeness.

### 3.6 Sensitivity

The sensitivity of the analyses was adequate for the samples as the detection limits were less than the ADEC GCLs for compounds.

## 4 CONCLUSIONS AND RECOMMENDATIONS

The groundwater data collected during the first quarter 2020 event indicate the groundwater flow direction, southwest, is generally consistent with historical data.

During the first quarter 2020 groundwater monitoring event, groundwater samples were collected for analysis from monitoring wells MW-8 and MW-10. Analytical results from the monitoring wells are generally consistent with historical data.

Groundwater monitoring will continue in accordance with the current quarterly schedule. The second quarterly sampling event of 2020 will be conducted in late April of 2020.

## 5 REFERENCES

ADEC. *Field Sampling Guidance*. Division of Spill Prevention and Response Contaminated Sites Program. October 2019.

ADEC Technical Memorandum, March 2017. *Data Quality Objectives, Checklists, Quality Assurance Requirements for Laboratory Data, and Sample Handling*. ADEC, Division of Spill Prevention and Response Contaminated Sites Program.

# TABLES





**Table 1. Current Groundwater Gauging and Analytical Results**

Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft)	Datum	DTW (ft bTOC)	LNAPL Thickness (ft)	GW Elev (ft)	TPH-d mg/L	TPH-g mg/L	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	MTBE mg/L	EDB mg/L	EDC mg/L	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>							<b>1.5</b>	<b>2.2</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.0017</b>	<b>0.0017</b>	
MW-1	3/25/2020	110.63	NAVD 88	7.86	0.00	102.77	--	--	--	--	--	--	--	--	--	--	
MW-2	3/25/2020	111.09	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	Well not accessible due to ice berm
MW-3	3/25/2020	111.44	NAVD 88	8.85	0.00	102.59	--	--	--	--	--	--	--	--	--	--	
MW-4	3/25/2020	108.88	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by ice at 4.86 fbtoc
MW-5	3/25/2020	108.76	NAVD 88	6.67	0.00	102.09	--	--	--	--	--	--	--	--	--	--	
MW-6	3/25/2020	111.16	NAVD 88	7.99	0.00	103.17	--	--	--	--	--	--	--	--	--	--	
MW-7	3/25/2020	107.35	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by ice at 4.03 fbtoc
MW-8	3/25/2020	108.70	NAVD 88	6.93	0.00	101.77	<b>0.484 J</b>	<b>0.0606 J</b>	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	<0.0000500	<0.00100	<0.00500	
MW-9R	3/25/2020	108.08	NAVD 88	--	--	--	--	--	--	--	--	--	--	--	--	--	Well not sampled or gauged due to lack of access agreement
MW-10	3/25/2020	109.17	NAVD 88	7.28	0.00	101.89	<b>0.189 J [0.186 J]</b>	<0.1 [<0.1]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00100 [<0.00100]	<0.00300 [<0.00300]	<0.00100 [<0.00100]	<0.00000500 [<0.00000500]	<0.00100 [<0.00100]	<0.00500 [<0.00500]	
QA (EB)	3/25/2020	--	NAVD 88	--	--	--	<0.8	<0.1	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00500	
QA (TB)	3/25/2020	--	NAVD 88	--	--	--	--	--	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	--	<0.00100	<0.00500	

**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  
**Bold** = Value exceeds Method Detection Limit  
**Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level  
 <0.8 = Not detected at or above the Reported Detection Limit  
 NAVD 88 = North American Vertical Datum of 1988  
 ADEC = Alaska Department of Environmental Conservation  
 -- = Not analyzed/ Not measured/ Not Available  
 [ ] = Duplicate Result  
 QA (TB) = Quality Assurance (Trip Blank)  
 QA (EB) = Quality Assurance (Equipment Blank)  
 LNAPL = Light Non-Aqueous Phase Liquid  
 TPH-g = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to United States Environmental Protection Agency (USEPA) Method AK101  
 TPH-d = Total petroleum hydrocarbons, diesel range by LUFT GC/MS according to USEPA Method AK 102  
 Samples analyzed by EPA Method 8260D:  
 Benzene, Toluene, Ethylbenzene and Total xylenes (collectively BTEX)  
 MTBE = Methyl tert-butyl ether  
 EDB = 1,2-Dibromoethane  
 EDC = 1,2-Dichloroethane  
 Naphthalene  
 J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.

## Groundwater Samping Results - VOCs

**Table 2. Additional Current Groundwater Analytical Results**

Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Constituent	Units	Well ID	MW-8	MW-10	QA (EB)	QA (TB)
		Sample Date	3/25/2020	3/25/2020	3/25/2020	3/25/2020
		ADEC Groundwater Cleanup Levels	mg/L	mg/L	mg/L	mg/L
1,1,1-Trichloroethane	mg/L	<b>8</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,1,2,2-Tetrachloroethane	mg/L	<b>0.00076</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,1,2-Trichloroethane	mg/L	<b>0.00041</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,1,2-Trichlorotrifluoroethane (Freon 113)	mg/L	<b>10</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,1-Dichloroethane	mg/L	<b>0.028</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,1-Dichloroethene (Dichloroethylene)	mg/L	<b>0.28</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2,3-Trichlorobenzene	mg/L	<b>0.007</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2,4-Trichlorobenzene	mg/L	<b>0.004</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2,4-Trimethylbenzene	mg/L	<b>0.056</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2-Dibromoethane (ethylene dibromide)	mg/L	<b>0.000075</b>	<0.0000500	<0.0000500 [ $<0.0000500$ ]	<0.0000500	--
1,2-Dichlorobenzene (o-Dichlorobenzene)	mg/L	<b>0.3</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2-Dichloroethane	mg/L	<b>0.0017</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,2-Dichloropropane	mg/L	<b>0.0082</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,3-Dichlorobenzene	mg/L	<b>0.0047</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
1,4-Dichlorobenzene	mg/L	<b>0.0048</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
2-Butanone (Methyl ethyl ketone)	mg/L	--	<0.0100	<0.0100 [ $<0.0100$ ]	<0.0100	<0.0100
4-Methyl-2-pentanone	mg/L	<b>6.3</b>	<0.0100	<0.0100 [ $<0.0100$ ]	<0.0100	<0.0100
Acetone	mg/L	<b>14</b>	<0.0500	<0.0500 [ $<0.0500$ ]	<0.0500	<0.0500
Bromochloromethane	mg/L	--	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Bromodichloromethane	mg/L	<b>0.0013</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Bromoform	mg/L	<b>0.033</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Bromomethane (Methyl bromide)	mg/L	<b>0.0075</b>	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Carbon Disulfide	mg/L	<b>0.81</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Carbon Tetrachloride	mg/L	<b>0.0046</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Chlorobenzene	mg/L	<b>0.078</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Chloroethane	mg/L	--	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Chloroform	mg/L	<b>0.0022</b>	<0.00500	<0.00500 [ $<0.00500$ ]	<b>0.000583 J</b>	<0.00500
Chloromethane (Methyl chloride)	mg/L	<b>0.19</b>	<0.00250	<0.00250 [ $<0.00250$ ]	<0.00250	<0.00250
cis-1,2-Dichloroethene	mg/L	<b>0.036</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
cis-1,3-Dichloropropene	mg/L	<b>0.0047</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Dibromochloromethane	mg/L	<b>0.0087</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Dichlorodifluoromethane (Freon 12)	mg/L	<b>0.2</b>	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Isopropylbenzene	mg/L	--	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Methylene chloride (Dichloromethane)	mg/L	<b>0.1</b>	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Methyl-t-butyl ether	mg/L	<b>0.14</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Styrene	mg/L	<b>1.2</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Tetrachloroethene	mg/L	<b>0.041</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
trans-1,2-Dichloroethene	mg/L	<b>0.36</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
trans-1,3-Dichloropropene	mg/L	<b>0.0047</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Trichloroethene (Trichloroethylene)	mg/L	<b>0.0028</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100
Trichlorofluoromethane (Freon 11)	mg/L	<b>5.2</b>	<0.00500	<0.00500 [ $<0.00500$ ]	<0.00500	<0.00500
Vinyl chloride (Chloroethene)	mg/L	<b>0.00019</b>	<0.00100	<0.00100 [ $<0.00100$ ]	<0.00100	<0.00100

**Notes:**

ID = Identification

MW = Groundwater monitoring well

ADEC = Alaska Department of Environmental Conservation

mg/L = Milligrams per liter

**Bold** = Value exceeds the Reported Detection Limit

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

<0.0100 = Not detected at or above the Reported Detection Limit

-- = Not analyzed/ Not measured/ Not Available

Constituents analyzed by United States Environmental Protection Agency Method 8260D

QA (TB) = Quality Assurance (Trip Blank)

QA (EB) = Quality Assurance (Equipment Blank)

[ ] = Duplicate Result

J = Results are greater than the method detection limit and less than the reporting limit and considered estimated value

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
ADEC Groundwater Cleanup Levels						1.5	2.2	1.1	0.0046	1.1	0.015	0.19	0.14	0.00005	0.005	0.0017	
MW-1	09/03/1998	101.92	7.20	--	94.72	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/20/2000	101.92	7.30	--	94.62	<b>0.295</b>	--	--	--	--	--	--	<0.0020	--	--	--	--
MW-1	09/21/2000	101.92	7.46	--	94.46	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/01/2001	101.92	7.87	--	94.05	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	09/25/2001	101.92	7.48	--	94.44	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/07/2002	109.76	7.42	--	102.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	09/29/2002	109.76	6.77	--	102.99	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/06/2003	109.82	7.40	--	102.42	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	10/03/2003	109.82	6.95	--	102.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	12/18/2003	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/22/2004	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/09/2004	109.82	7.06	--	102.76	--	<b>0.93</b>	--	<b>0.099</b>	<b>0.026</b>	<b>0.0090</b>	<b>0.079</b>	<0.0020	--	--	--	--
MW-1	09/21/2004	109.82	7.80	--	102.02	--	<b>0.78</b>	--	<b>0.080</b>	<b>0.0030</b>	<b>0.0030</b>	<b>0.073</b>	<0.0020	--	--	--	--
MW-1	10/29/2004	109.82	--	--	--	--	<b>0.51</b>	--	<b>0.087</b>	<b>0.0020</b>	<b>0.0010</b>	<b>0.030</b>	<0.00050	--	--	--	--
MW-1	12/06/2004	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/21/2005	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/15/2005	109.82	6.75	--	103.07	--	<b>0.41</b>	--	<b>0.074</b>	<b>0.0020</b>	<b>0.0010</b>	<b>0.0020</b>	<0.0020	--	--	--	--
MW-1	09/28/2005	109.82	6.50	--	103.32	--	<b>0.40</b>	--	<b>0.064</b>	<b>0.0020</b>	<b>0.0010</b>	<b>0.018</b>	<0.0020	--	--	--	--
MW-1	12/07/2005	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	04/07/2006	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/18/2006	109.82	7.63	--	102.19	<b>0.53</b>	<b>0.73</b>	--	<b>0.095</b>	<b>0.0050</b>	<b>0.0040</b>	<b>0.038</b>	--	--	--	--	--
MW-1	09/28/2006	109.82	6.41	--	103.41	<b>0.58</b>	<b>0.21</b>	--	<b>0.010</b>	<b>0.00070</b>	<0.00050	<b>0.0020</b>	--	--	--	--	--
MW-1	12/20/2006	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/15/2007	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/21/2007	109.82	7.32	--	102.5	--	--	--	<b>0.037</b>	<b>0.012</b>	<b>0.0050</b>	<b>0.0040</b>	--	--	--	--	--
MW-1	09/27/2007	109.82	6.71	--	103.11	--	--	--	<b>0.014</b>	<b>0.0008</b>	<b>0.0010</b>	<b>0.0020</b>	--	--	--	--	--
MW-1	05/17/2008	109.82	7.39	--	102.43	--	--	--	<b>0.023</b>	<b>0.0030</b>	<b>0.0040</b>	<b>0.0020</b>	--	--	--	--	--
MW-1	06/26/2008	109.82	6.86	--	102.96	<b>0.39</b>	<b>0.30</b>	--	<b>0.020</b>	<b>0.0020</b>	<b>0.0020</b>	<0.0020	--	--	--	--	--
MW-1	09/17/2008	109.82	6.65	--	103.17	<b>0.43</b>	<b>0.30</b>	--	<b>0.020</b>	<0.0010	<b>0.0010</b>	<b>0.0050</b>	--	--	--	--	--
MW-1	03/20/2009	109.82	7.92	--	101.9	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/09/2009	109.82	6.75	--	103.07	<b>0.36</b>	<b>0.49</b>	--	<b>0.031</b>	<b>0.0057</b>	<b>0.0056</b>	<b>0.016</b>	--	--	--	--	--
MW-1	09/23/2009	109.82	7.59	--	102.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	09/24/2009	109.82	--	--	--	--	<b>0.42</b>	--	<b>0.044</b>	<b>0.0020</b>	<b>0.0025</b>	<b>0.022</b>	--	--	--	--	--
MW-1	12/09/2009	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/22/2010	109.82	7.97	--	101.85	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/06/2010	109.82	7.45	--	102.37	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/10/2010	109.82	7.38	--	102.44	<b>0.55</b>	<b>0.22</b>	--	<b>0.036</b>	<b>0.00060</b>	<b>0.00070</b>	<b>0.0066</b>	--	--	--	--	--
MW-1	10/05/2010	109.82	7.44	--	102.38	--	<b>0.20</b>	--	<b>0.029</b>	<b>0.0012</b>	<0.00050	<b>0.0085</b>	--	--	--	--	--
MW-1	12/21/2010	109.82	6.61	--	103.21	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/09/2011	109.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/13/2011	109.82	7.30	--	102.52	<b>0.60</b>	<b>0.13</b>	--	<b>0.010</b>	<b>0.00070</b>	<0.00050	<b>0.0038</b>	--	--	--	--	--
MW-1	09/15/2011	109.82	7.50	--	102.32	--	<b>0.15</b>	--	<b>0.020</b>	<b>0.0014</b>	<0.00050	<b>0.0078</b>	--	--	--	--	--
MW-1	12/08/2011	109.82	6.59	--	103.23	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/21/2012	109.82	7.80	--	102.02	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/20/2012	109.82	6.38	--	103.44	--	--	--	<b>0.0020</b>	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-1	09/19/2012	109.82	5.94	--	103.88	--	--	--	<b>0.0014J</b>	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-1	11/06/2012	110.54	5.25	--	105.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	04/01/2013	110.54	7.85	--	102.69	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/02/2013	110.54	7.60	--	102.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	09/18/2013	110.54	6.51	--	104.03	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	09/19/2013	110.54	--	--	--	<0.42	<b>0.166</b>	--	<b>0.0186</b>	<0.00100	<0.00100	<0.00300	--	--	--	--	--
MW-1	11/12/2013	110.54	6.59	--	103.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/27/2014	110.54	7.63	--	102.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	05/12/2014	110.54	7.28	--	103.26	<0.42	<b>0.152</b>	--	<b>0.0112</b>	<0.00100	<0.00100	<0.00300	--	--	--	--	--
MW-1	05/12/2014	110.54	--	--	--	<0.40	<0.10	--	<b>0.0026</b>	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-1	09/12/2014	110.54	7.11	--	103.43	<0.40	<0.10	--	<b>0.0023</b>	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-1	11/14/2014	110.54	7.76	--	102.78	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/06/2015	110.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	04/30/2015	110.54	7.72	--	102.82	<b>0.56</b>	<b>0.28</b>	--	<b>0.018</b>	<b>0.00080J</b>	<0.00050	<b>0.012</b>	--	--	--	--	--
MW-1	09/22/2015	110.54	6.28	--	104.26	<b>0.15J</b>	<b>0.048J</b>	--	<b>0.00070J</b>	<0.00050	<0.00050	<b>0.00060J</b>	--	--	--	--	--
MW-1	11/09/2015	110.54	7.36	--	103.18	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	03/09/2016	110.54	6.88	--	103.66	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/06/2016	110.54	7.31	--	103.23	<b>0.40</b>	<b>0.053 J</b>	--	<b>0.003</b>	<0.0005	<0.0005	<b>0.002</b>	--	--	--	--	--
MW-1	09/21/2016	110.54	7.11	--	103.43	<b>0.50</b>	<b>2.2</b>	--	<b>0.0008 J</b>	<0.0005	<0.0005	<b>0.001</b>	--	--	--	--	--
MW-1	11/01/2016	110.54	7.48	--	103.06	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	04/13/2017	110.54	7.75	--	102.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/01/2017	110.54	7.59	--	102.95	<b>0.23 J</b>	<b>0.28</b>	--	<b>0.009</b>	<b>0.002</b>	<b>0.0008 J</b>	<b>0.017</b>	<0.0005	--	--	--	--
MW-1	08/16/2017	110.54	7.53	--	103.01	<b>0.29 J</b>	<b>0.60</b>	--	<b>0.027</b>	<b>0.002</b>	<b>0.0007 J</b>	<b>0.037</b>	<0.0005	--	--	--	--
MW-1	11/10/2017	110.54	6.74	--	103.80	--	--	--	--	--	--	--	--	--	--	--	--

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>																	
						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-1	03/27/2018	110.54	8.01	--	102.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	06/18/2018	110.54	6.59	--	103.95	<b>0.22 J</b>	<b>0.41</b>	--	<b>0.022</b>	<b>0.003</b>	<b>0.001</b>	<b>0.056</b>	<0.0005	--	--	--	--
MW-1	08/08/2018	110.54	7.33	--	103.21	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	10/31/2018	110.54	7.32	--	103.22	<b>0.64 J</b>	<b>0.77</b>	--	<b>0.038</b>	<b>0.003</b>	<b>0.0008 J</b>	<b>0.11</b>	<0.0002	--	--	--	--
MW-1	3/29/2019	110.63	7.61	0.00	103.02	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	5/14/2019	110.63	7.08	0.00	103.55	<0.26 B J	<b>0.2</b>	--	<b>0.004</b>	<0.001 B	<0.0004	<b>0.016</b>	<0.0002	--	--	--	--
MW-1	9/17/2019	110.63	7.65	0.00	102.98	<b>0.35</b>	<b>0.11 J</b>	--	<b>0.0052</b>	< 0.00068 B	< 0.00020 B	<b>0.016</b>	--	--	--	--	--
MW-1	11/04/2019	110.63	7.38	0.00	103.25	--	--	--	--	--	--	--	--	--	--	--	--
MW-1	3/25/2020	110.63	7.86	0.00	102.77	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/03/1998	100.96	8.51	--	92.45	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/20/2000	100.96	8.55	--	92.41	<0.25	--	--	--	--	--	--	<0.0020	--	--	--	--
MW-2	09/21/2000	100.96	8.67	--	92.29	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/26/2000	100.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/01/2001	100.96	9.00	--	91.96	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/25/2001	100.96	8.72	--	92.24	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/07/2002	100.96	8.62	--	92.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/29/2002	100.96	7.94	--	93.02	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/06/2003	110.64	8.53	--	102.11	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/03/2003	110.64	7.94	--	102.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	12/18/2003	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/22/2004	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/09/2004	110.64	8.12	--	102.52	<b>0.53</b>	<b>0.051</b>	--	<b>0.014</b>	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-2	09/21/2004	110.64	8.99	--	101.65	<b>0.43</b>	<b>0.050</b>	--	<b>0.0090</b>	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-2	10/29/2004	110.64	--	--	--	<b>0.24</b>	<b>0.046</b>	<b>0.42</b>	<b>0.017</b>	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--
MW-2	12/06/2004	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/21/2005	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/15/2005	110.64	8.09	--	102.55	<b>0.51</b>	<b>0.034</b>	--	<b>0.0060</b>	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-2	09/28/2005	110.64	8.84	--	101.80	<b>0.060</b>	<b>0.015</b>	--	<b>0.0030</b>	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-2	12/07/2005	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	04/07/2006	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/18/2006	110.64	8.76	--	101.88	<b>0.62</b>	<b>0.075</b>	--	<b>0.011</b>	<0.00050	<0.00050	<b>0.0020</b>	--	--	--	--	--
MW-2	9/28/2006	110.64	7.61	--	103.03	<b>0.26</b> [ <b>&lt;0.24</b> ]	<b>0.084</b> [ <b>0.090</b> ]	--	<b>0.0080</b> [ <b>0.012</b> ]	<0.00050 [ <b>&lt;0.00050</b> ]	<0.00050 [ <b>&lt;0.00050</b> ]	<b>0.0010</b> [ <b>0.0020</b> ]	--	--	--	--	--
MW-2	12/20/2006	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/15/2007	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/21/2007	110.64	8.51	--	102.13	--	--	--	<b>0.0070</b>	<0.00050	<0.00050	<b>0.0030</b>	--	--	--	--	--
MW-2	09/27/2007	110.64	7.89	--	102.75	--	--	--	<b>0.0030</b>	<0.00050	<0.00050	<b>0.0010</b>	--	--	--	--	--
MW-2	05/17/2008	110.64	8.59	--	102.05	--	--	--	<b>0.0040</b>	<0.00050	<0.00050	<b>0.0020</b>	--	--	--	--	--
MW-2	06/26/2008	110.64	8.03	--	102.61	<b>0.50</b>	<b>0.020</b>	--	<b>0.0020</b>	<0.0010	<0.0010	<0.0020	--	--	--	--	--
MW-2	09/17/2008	110.64	7.71	--	102.93	<b>0.49</b>	<b>0.070</b>	--	<b>0.0010</b>	<0.0010	<0.0010	<b>0.0030</b>	--	--	--	--	--
MW-2	03/20/2009	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/08/2009	110.64	7.80	--	102.84	<b>0.26</b>	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	09/23/2009	110.64	8.68	--	101.96	--	<b>0.039</b>	--	<b>0.00080</b>	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	12/09/2009	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/22/2010	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/06/2010	110.64	8.51	--	102.13	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/10/2010	110.64	8.42	--	102.22	<b>0.22</b>	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	10/05/2010	110.64	9.53	--	101.11	--	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	12/21/2010	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/09/2011	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/13/2011	110.64	8.32	--	102.32	<b>0.47</b>	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	09/15/2011	110.64	8.55	--	102.09	--	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	12/08/2011	110.64	7.65	--	102.99	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/21/2012	110.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/20/2012	110.64	7.32	--	103.32	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	09/19/2012	110.64	6.81	--	103.83	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-2	11/06/2012	111.15	6.17	--	104.98	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	04/01/2013	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/02/2013	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/18/2013	111.15	7.45	--	103.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	09/19/2013	111.15	--	--	--	<0.42	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-2	11/12/2013	111.15	7.49	--	103.66	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/27/2014	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	05/12/2014	111.15	8.15	--	103.00	<0.40	<0.10	--	<b>0.0018</b>	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-2	05/12/2014	111.15	--	--	--	<0.45	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-2	09/12/2014	111.15	8.04	--	103.11	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-2	09/12/2014	111.15	--	--	--	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-2	11/14/2014	111.15	8.61	--	102.54	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/06/2015	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	04/30/2015	111.15	8.62	--	102.53	<b>0.62</b>	<0.10	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	--
MW-2	09/22/2015	111.15	8.21	--	102.94	<b>0.070J</b>	<0.10	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	--
MW-2	11/09/2015	111.15	8.22	--	102.93	--	--	--	--	--	--	--	--	--	--	--	--



**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
 Chevron-Branded Service Station 95414  
 5210 Old Seward Highway  
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-2	03/09/2016	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/06/2016	111.15	8.00	--	103.15	0.72	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	--
MW-2	09/21/2016	111.15	7.92	--	103.23	0.78	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	--
MW-2	11/01/2016	111.15	8.33	--	102.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	04/13/2017	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/01/2017	111.15	8.42	--	102.73	0.12 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-2	08/16/2017	111.15	8.42	--	102.73	0.18 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-2	11/10/2017	111.15	7.56	--	103.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	03/27/2018	111.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	06/18/2018	111.15	7.33	--	103.82	0.22 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-2	08/08/2018	111.05	8.11	--	102.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	10/30/2018	111.15	8.01	--	103.14	<0.20 J	<0.014	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	TOC adjusted for 0.1 ft cut
MW-2	3/29/2019	111.09	8.39	0.00	102.70	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	5/14/2019	111.09	7.96	0.00	103.13	<0.28 B J	<0.014	--	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	<0.0002	<0.0003	<0.001	--
MW-2	9/17/2019	111.09	8.54	0.00	102.55	0.43	<0.1	--	--	< 0.000050	< 0.00020 B	<0.00050 B	< 0.000070	< 0.000020	--	<0.0022	--
MW-2	11/04/2019	111.09	8.23	0.00	102.86	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	3/25/2020	111.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well not accessible due to ice berm
MW-3	09/03/1998	100.55	8.60	--	91.95	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/20/2000	100.55	8.50	--	92.05	2.59	--	--	--	--	--	--	<0.010	--	--	--	--
MW-3	09/21/2000	100.55	8.83	--	91.72	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/01/2001	100.55	8.94	--	91.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	09/25/2001	100.55	8.95	--	91.60	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/07/2002	110.84	8.42	--	102.42	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	09/29/2002	110.84	7.74	--	103.10	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/06/2003	110.90	8.78	--	102.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	10/03/2003	110.90	7.73	--	103.17	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	12/18/2003	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/22/2004	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/09/2004	110.90	8.29	--	102.61	3.4	15	--	0.65	0.26	0.59	2.6	<0.0020	--	--	--	--
MW-3	09/21/2004	110.90	9.13	--	101.77	5.9	16	--	0.57	0.18	0.62	2.4	<0.0020	--	--	--	--
MW-3	10/29/2004	110.90	--	--	--	--	10	--	0.33	0.15	0.56	1.6	<0.0010	--	--	--	--
MW-3	12/06/2004	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/21/2005	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/15/2005	110.90	8.72	--	102.18	3.3	14	--	0.57	0.39	0.53	1.9	<0.0020	--	--	--	--
MW-3	09/28/2005	110.90	7.79	--	103.11	2.9	12	--	0.27	0.17	0.54	2.1	<0.0020	--	--	--	--
MW-3	12/07/2005	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	04/07/2006	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/18/2006	110.90	8.57	--	102.33	2.3	15	--	0.42	0.51	0.61	2.5	--	--	--	--	--
MW-3	09/28/2006	110.90	7.24	--	103.66	2.9	12	--	0.20	0.18	0.43	1.6	--	--	--	--	--
MW-3	12/20/2006	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/15/2007	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	5/21/2007	110.90	8.49	--	102.41	2.5 [2.4]	11 [9.4]	--	0.50 [0.41]	0.13 [0.086]	0.50 [0.48]	1.8 [1.7]	--	--	--	--	--
MW-3	9/27/2007	110.90	7.71	--	103.19	3.2 [3.2]	7.2 [11]	--	0.39 [0.38]	0.48 [0.43]	0.50 [0.52]	1.7 [1.7]	--	--	--	--	--
MW-3	5/17/2008	110.90	8.43	--	102.47	2.0 [2.1]	16 [16]	--	0.48 [0.49]	0.54 [0.56]	0.77 [0.75]	2.8 [2.7]	--	--	--	--	--
MW-3	06/26/2008	110.90	8.16	--	102.74	2.6	11	--	0.30	0.20	0.50	1.8	--	--	--	--	--
MW-3	09/17/2008	110.90	7.68	--	103.22	2.1	14	--	0.30	0.50	0.70	2.5	--	--	--	--	--
MW-3	03/20/2009	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/08/2009	110.90	7.95	--	102.95	1.5	13	--	0.26	0.19	0.55	2.0	--	--	--	--	--
MW-3	09/23/2009	110.90	8.86	--	102.04	2.3	14	--	0.39	0.17	0.69	2.4	--	--	--	--	--
MW-3	12/09/2009	110.90	7.99	--	102.91	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/22/2010	110.90	9.22	--	101.68	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/06/2010	110.90	8.29	--	102.61	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/10/2010	110.90	8.56	--	102.34	2.1	12	--	0.38	0.098	0.6	2.3	--	--	--	--	--
MW-3	10/05/2010	110.90	8.69	--	102.21	2.1	10	--	0.20	0.065	0.52	1.5	--	--	--	--	--
MW-3	12/21/2010	110.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/09/2011	110.90	9.21	--	101.69	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/13/2011	110.90	8.40	--	102.50	2.2	8.1	--	0.38	0.057	0.39	1.2	--	--	--	--	--
MW-3	09/15/2011	110.90	8.69	--	102.21	2.5	12	--	0.15	0.14	0.48	1.9	--	--	--	--	--
MW-3	12/08/2011	110.90	7.37	--	103.53	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/21/2012	110.90	9.01	--	101.89	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	6/20/2012	110.90	7.95	--	102.95	2.8 [1.9]	12	--	0.10	0.061	0.47	1.7	--	--	--	--	TPH-d with silica gel cleanup
MW-3	9/19/2012	110.90	6.81	--	104.09	3.2 [1.8]	11	--	0.095	0.038	0.520	1.70	--	--	--	--	--
MW-3	11/06/2012	111.42	6.55	--	104.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	04/01/2013	111.42	9.02	--	102.40	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/02/2013	111.42	8.71	--	102.71	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	09/18/2013	111.42	7.29	--	104.13	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	09/19/2013	111.42	--	--	--	3.4 [2.2]	8.98	--	0.101	0.0365	0.411	1.27	--	--	--	--	--
MW-3	11/12/2013	111.42	7.98	--	103.44	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/27/2014	111.42	8.58	--	102.84	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	05/12/2014	111.42	8.07	--	103.35	2.7	8.46	--	0.142	0.0198	0.317	1.13	--	--	--	--	--
MW-3	05/12/2014	111.42	--	--	--	2.0	9.65	--	0.143	0.0126	0.378	0.804	--	--	--	--	--

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
 Chevron-Branded Service Station 95414  
 5210 Old Seward Highway  
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-3	09/12/2014	111.42	7.95	--	103.47	2.4	6.65	--	0.0320	0.0141	0.216	0.686	--	--	--	--	--
MW-3	11/14/2014	111.42	8.83	--	102.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/06/2015	111.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	04/30/2015	111.42	8.71	--	102.71	5.2	11	--	0.24	0.058	0.40	1.4	--	--	--	--	--
MW-3	09/22/2015	111.42	8.10	--	103.32	3.6	7.6	--	0.26	0.042	0.39	1.3	--	--	--	--	--
MW-3	11/09/2015	111.42	8.12	--	103.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/09/2016	111.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	6/6/2016	111.42	7.98	--	103.44	5.2 [ 6.0]	17 [ 18]	--	0.21 [ 0.22]	0.052 [ 0.054]	0.67 [ 0.72]	3.4 [ 3.6]	--	--	--	--	--
MW-3	09/21/2016	111.42	7.82	--	103.60	2.7	3.7	--	0.088	0.01	0.13	0.48	--	--	--	--	--
MW-3	11/01/2016	111.42	8.22	--	103.20	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	04/13/2017	111.42	8.23	--	103.19	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	06/01/2017	111.42	8.17	--	103.25	2.2	11	--	0.13	0.041	0.41	1.7	<0.001	--	--	--	--
MW-3	08/16/2017	111.42	8.17	--	103.25	2.6 J	13	--	0.12	0.035	0.41	1.8	<0.001	--	--	--	--
MW-3	11/10/2017	111.42	7.65	--	103.77	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	03/27/2018	111.42	8.75	--	102.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	6/18/2018	111.42	7.10	--	104.32	1.4 J [1.4 J]	11 [ 11]	--	0.093 [ 0.090]	0.041 [ 0.040]	0.38 [ 0.38]	1.8 [ 1.8]	<0.0005 [ <0.0005]	--	--	--	--
MW-3	08/09/2018	111.42	8.02	--	103.40	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	10/30/2018	111.42	8.00	--	103.42	2.1 [ 1.6 J]	6.6 [ 6.5]	--	0.093 [ 0.093]	0.023 [ 0.023]	0.30 [ 0.30]	1.1 [ 1.1]	<0.004 [ <0.001]	--	--	--	--
MW-3	3/29/2019	111.44	5.32	0.00	106.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	5/14/2019	111.44	8.12	0.00	103.32	<0.39 B J	1.2	--	0.011	<0.003 B	0.036	0.11	<0.0002	--	--	--	--
MW-3	9/17/2019	111.44	8.81	0.00	102.63	1.6	4.0	--	--	0.0084	0.28 D	0.701 D	<0.000070	<0.0000020	--	0.090 J	--
MW-3	11/04/2019	111.44	8.45	0.00	102.99	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	3/25/2020	111.44	8.85	0.00	102.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	08/16/2000	--	6.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	09/21/2000	--	6.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	09/26/2000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/01/2001	--	6.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	09/25/2001	--	6.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/07/2002	108.14	7.00	--	101.14	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	09/29/2002	108.14	5.67	--	102.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	06/06/2003	108.26	6.18	--	102.08	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	10/03/2003	108.26	5.64	--	102.62	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	12/18/2003	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/22/2004	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	06/09/2004	108.26	5.86	--	102.40	1.0	1.7	--	0.11	0.0040	0.045	0.075	<0.0020	--	--	--	--
MW-4	06/09/2004	108.26	--	--	--	0.61	0.12	--	0.0070	<0.00050	<0.00050	0.0040	<0.0020	--	--	--	--
MW-4	09/21/2004	108.26	6.78	--	101.48	0.32	0.061	--	<0.00050	<0.00050	<0.00050	0.0030	<0.0020	--	--	--	--
MW-4	09/21/2004	108.26	--	--	--	0.43	0.064	--	<0.00050	<0.00050	<0.00050	0.0030	<0.0020	--	--	--	--
MW-4	12/06/2004	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/21/2005	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/15/2005	108.26	5.94	--	102.32	0.84	0.089	--	0.0010	<0.00050	<0.00050	0.0040	<0.0020	--	--	--	--
MW-4	09/28/2005	108.26	9.40	--	98.86	1.8	0.026	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-4	12/07/2005	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	04/07/2006	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/18/2006	108.26	6.61	--	101.65	0.75	0.026	--	<0.00050	<0.00050	<0.00050	0.0010	--	--	--	--	--
MW-4	09/28/2006	108.26	5.44	--	--	1.8	0.10	--	0.0020	<0.00050	<0.00050	0.0010	--	--	--	--	--
MW-4	12/20/2006	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/15/2007	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/21/2007	108.26	6.36	--	101.90	0.64	--	--	0.0010	<0.00050	<0.00050	0.0020	--	--	--	--	--
MW-4	09/27/2007	108.26	5.85	--	102.41	0.85	--	--	<0.00050	<0.00050	<0.00050	0.0010	--	--	--	--	--
MW-4	05/19/2008	108.26	6.53	--	101.73	0.54	--	--	0.0010	<0.00050	<0.00050	0.0020	--	--	--	--	--
MW-4	06/26/2008	108.26	5.91	--	102.35	0.49	0.060	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	--
MW-4	09/17/2008	108.26	5.60	--	102.66	0.44	0.050	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	--
MW-4	03/20/2009	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	06/09/2009	108.26	5.74	--	102.52	0.27	0.032	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	09/23/2009	108.26	6.59	--	101.67	0.11	0.029	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	12/09/2009	108.26	5.44	--	102.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/22/2010	108.26	6.75	--	101.51	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/06/2010	108.26	6.25	--	102.01	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	05/10/2010	108.26	7.15	--	101.11	0.63	0.033	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	10/05/2010	108.26	6.26	--	102.00	0.75	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	12/21/2010	108.26	5.39	--	102.87	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/09/2011	108.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	06/13/2011	108.26	6.08	--	102.18	0.39	0.015	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	09/15/2011	108.26	6.36	--	101.90	0.37	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	12/08/2011	108.26	5.50	--	102.76	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	03/21/2012	108.26	6.67	--	101.59	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	6/20/2012	108.26	5.18	--	103.08	0.17 [ <0.048]	0.019	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	9/19/2012	108.26	4.60	--	103.66	0.24 J [ <0.050]	1 [ 0.014 J]	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-4	11/06/2012	108.94	4.00	--	104.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	04/01/2013	108.94	6.79	--	102.15	--	--	--	--	--	--	--	--	--	--	--	--

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-4	05/02/2013	108.94	6.60	--	102.34	<0.50	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	05/02/2013	108.94	--	--	--	<0.50	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	09/18/2013	108.94	5.32	--	103.62	--	--	--	--	--	--	--	--	--	--	--	
MW-4	9/19/2013	108.94	--	--	--	0.55 [ <0.43]	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	11/12/2013	108.94	5.56	--	103.38	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/27/2014	108.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	05/12/2014	108.94	6.05	--	102.89	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	05/12/2014	108.94	--	--	--	<0.42	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	09/12/2014	108.94	5.96	--	102.98	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-4	11/14/2014	108.94	6.25	--	102.69	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/06/2015	108.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	04/30/2015	108.94	6.37	--	102.57	<b>0.37</b>	<b>0.019 J</b>	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-4	09/22/2015	108.94	5.92	--	103.02	<b>0.073 J</b>	<b>0.014 J</b>	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-4	11/09/2015	108.94	5.96	--	102.98	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/09/2016	108.94	4.06	--	104.88	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/06/2016	108.94	5.72	--	103.22	<b>0.23 J</b>	<b>0.015 J</b>	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-4	09/21/2016	108.94	5.72	--	103.22	<b>0.63</b>	<b>0.014 J</b>	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-4	11/01/2016	108.94	6.09	--	102.85	--	--	--	--	--	--	--	--	--	--	--	
MW-4	04/13/2017	108.94	6.49	--	102.45	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/01/2017	108.94	6.26	--	102.68	<b>0.33</b>	<b>0.021 J</b>	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-4	08/16/2017	108.94	6.26	--	102.68	<b>0.16 J</b>	<b>0.032 J</b>	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-4	11/10/2017	108.94	5.34	--	103.60	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/27/2018	108.94	6.71	--	102.23	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/19/2018	108.94	5.25	--	103.69	<b>0.15 J</b>	<b>0.022 J</b>	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-4	08/08/2018	108.84	6.01	--	102.83	--	--	--	--	--	--	--	--	--	--	--	
MW-4	10/30/2018	108.94	5.93	--	103.01	<0.15 J	<b>0.017 J</b>	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	TOC adjusted for 0.1 ft cut
MW-4	3/29/2019	108.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/14/2019	108.88	5.85	0.00	103.03	<0.27 B J	<b>0.033 J</b>	--	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	--	--	--	
MW-4	9/17/2019	108.88	6.38	0.00	102.5	<b>0.26 [0.25 J]</b>	< 0.1 [ < 0.1]	--	< 0.000030 [0.000035 J]	< 0.000050 [ < 0.000050]	< 0.00020 B [ < 0.00020 B]	< 0.00050 B [ < 0.00050 B]	-- [-]	-- [-]	-- [-]	-- [-]	
MW-4	11/04/2019	108.88	6.09	0.00	102.79	--	--	--	--	--	--	--	--	--	--	--	
MW-4	3/25/2020	108.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by ice at 4.86 ftboc
MW-5	08/16/2000	--	5.97	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/21/2000	--	6.25	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/01/2001	--	6.06	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/25/2001	--	6.40	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/07/2002	108.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/29/2002	108.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	12/07/2002	108.14	6.18	--	101.96	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/06/2003	108.14	6.29	--	101.85	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/03/2003	108.14	4.79	--	103.35	--	--	--	--	--	--	--	--	--	--	--	
MW-5	12/18/2003	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/22/2004	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/09/2004	108.14	6.83	--	101.31	<b>0.70</b>	<b>0.32</b>	--	<b>0.039</b>	<b>0.0010</b>	<b>0.0090</b>	<b>0.020</b>	<0.0020	--	--	--	
MW-5	09/21/2004	108.14	6.65	--	101.49	<b>0.53</b>	<b>0.33</b>	--	<b>0.030</b>	<b>0.0010</b>	<b>0.0030</b>	<b>0.022</b>	<0.0020	--	--	--	
MW-5	12/06/2004	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/21/2005	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/15/2005	108.14	5.87	--	102.27	<b>0.82</b>	<b>0.15</b>	--	<b>0.015</b>	<0.00050	<b>0.0020</b>	<b>0.0030</b>	<0.0020	--	--	--	
MW-5	09/28/2005	108.14	5.42	--	102.72	<b>0.67</b>	<b>0.15</b>	--	<b>0.015</b>	<b>0.00060</b>	<b>0.00090</b>	<b>0.011</b>	<0.0020	--	--	--	
MW-5	12/07/2005	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	04/07/2006	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/18/2006	108.14	6.36	--	101.78	<b>0.62</b>	<b>1.3</b>	--	<b>0.068</b>	<b>0.027</b>	<b>0.034</b>	<b>0.088</b>	--	--	--	--	
MW-5	09/28/2006	108.14	4.56	--	--	<0.24	<b>0.17</b>	--	<b>0.010</b>	<0.00050	<b>0.0010</b>	<b>0.013</b>	--	--	--	--	
MW-5	12/20/2006	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/15/2007	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/21/2007	108.14	6.11	--	102.03	--	--	--	<b>0.094</b>	<b>0.043</b>	<b>0.054</b>	<b>0.16</b>	--	--	--	--	
MW-5	09/27/2007	108.14	5.15	--	102.99	--	--	--	<b>0.030</b>	<b>0.0020</b>	<b>0.0090</b>	<b>0.030</b>	--	--	--	--	
MW-5	05/19/2008	108.14	6.05	--	102.09	--	--	--	<b>0.039</b>	<b>0.0020</b>	<b>0.019</b>	<b>0.012</b>	--	--	--	--	
MW-5	06/26/2008	108.14	5.87	--	102.27	--	<b>0.20</b>	--	<b>0.020</b>	<0.0010	<b>0.0050</b>	<b>0.0030</b>	--	--	--	--	
MW-5	09/17/2008	108.14	6.05	--	102.09	<b>0.41</b>	<b>0.10</b>	--	<b>0.010</b>	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-5	03/20/2009	108.14	7.10	--	101.04	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/08/2009	108.14	5.51	--	102.63	<b>0.57</b>	<b>1.5</b>	--	<b>0.042</b>	<b>0.020</b>	<b>0.041</b>	<b>0.11</b>	--	--	--	--	
MW-5	09/23/2009	108.14	6.38	--	101.76	--	<b>0.42</b>	--	<b>0.024</b>	<b>0.0018</b>	<b>0.0090</b>	<b>0.029</b>	--	--	--	--	
MW-5	12/09/2009	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/22/2010	108.14	6.90	--	101.24	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/06/2010	108.14	5.69	--	102.45	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/10/2010	108.14	5.61	--	102.53	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/05/2010	108.14	--	--	--	--	<b>0.054</b>	--	<b>0.0029</b>	<0.00050	<b>0.00090</b>	<b>0.0039</b>	--	--	--	--	
MW-5	12/21/2010	108.14	5.86	--	102.28	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/09/2011	108.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/13/2011	108.14	5.90	--	102.24	<b>0.59</b>	<b>0.30</b>	--	<b>0.015</b>	<b>0.0032</b>	<b>0.011</b>	<b>0.027</b>	--	--	--	--	
MW-5	09/15/2011	108.14	6.34	--	101.8	--	<b>0.68</b>	--	<b>0.030</b>	<b>0.0017</b>	<b>0.016</b>	<b>0.057</b>	--	--	--	--	



**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments	
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>		
MW-5	12/08/2011	108.14	5.33	--	102.81	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/21/2012	108.14	6.50	--	101.64	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/20/2012	108.14	5.10	--	103.04	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--	
MW-5	09/19/2012	108.14	3.15	--	104.99	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--	
MW-5	11/06/2012	108.66	4.10	--	104.56	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	04/01/2013	108.66	6.84	--	101.82	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	5/2/2013	108.66	6.50	--	102.16	<b>1.2 [ 0.59]</b>	<b>2.54</b>	--	<b>0.0588</b>	<b>0.0205</b>	<b>0.0943</b>	<b>0.219</b>	--	--	--	--	--	TPH-d with silica gel cleanup
MW-5	5/2/2013	108.66	--	--	--	0.98 [ <0.50]	<b>2.64</b>	--	<b>0.0577</b>	<b>0.0204</b>	<b>0.0945</b>	<b>0.213</b>	--	--	--	--	--	
MW-5	09/18/2013	108.66	4.80	--	103.86	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/19/2013	108.66	--	--	--	<0.42	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--	
MW-5	11/12/2013	108.66	5.43	--	103.23	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/27/2014	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/12/2014	108.66	5.53	--	103.13	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	05/13/2014	108.66	--	--	--	<0.40	<b>0.115</b>	--	<b>0.0028</b>	<0.0010	<0.0010	<b>0.0063</b>	--	--	--	--	--	
MW-5	05/13/2014	108.66	--	--	--	<0.40	<b>0.109</b>	--	<b>0.0042</b>	<0.0010	<0.0010	<b>0.0074</b>	--	--	--	--	--	
MW-5	09/12/2014	108.66	5.50	--	103.16	<0.42	<b>0.214</b>	--	<b>0.0020</b>	<0.0010	<0.0010	<b>0.0048</b>	--	--	--	--	--	
MW-5	11/14/2014	108.66	6.39	--	102.27	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/06/2015	108.66	5.00	--	103.66	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	04/30/2015	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/22/2015	108.66	5.53	--	103.13	<b>0.65</b>	<b>0.014 J</b>	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	--	
MW-5	11/09/2015	108.66	8.31	--	100.35	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/09/2016	108.66	5.32	--	103.34	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/06/2016	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	09/21/2016	108.66	5.69	--	102.97	<b>1.1</b>	<b>0.041 J</b>	--	<b>0.0009 J</b>	<0.0005	<0.0005	<b>0.001</b>	--	--	--	--	--	
MW-5	11/01/2016	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	04/13/2017	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/01/2017	108.66	6.02	--	102.64	<b>0.52</b>	<b>0.78</b>	--	<b>0.016</b>	<b>0.004</b>	<b>0.016</b>	<b>0.062</b>	<0.0005	--	--	--	--	
MW-5	08/16/2017	108.66	6.02	--	102.64	<b>0.25 J</b>	<b>0.32</b>	--	<b>0.008</b>	<b>0.0008 J</b>	<b>0.003</b>	<b>0.018</b>	<0.0005	--	--	--	--	
MW-5	11/10/2017	108.66	5.33	--	103.33	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/27/2018	108.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/19/2018	108.39	4.66	--	103.73	<b>0.32 J</b>	<b>0.24</b>	--	<b>0.007</b>	<b>0.0005 J</b>	<b>0.003</b>	<b>0.016</b>	<0.0005	--	--	--	--	
MW-5	08/08/2018	108.39	5.58	--	102.81	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	10/31/2018	108.39	5.64	--	102.75	<b>0.50 J</b>	<b>0.15</b>	--	<b>0.005</b>	<b>0.0003 J</b>	<b>0.0003 J</b>	<b>0.013</b>	<0.0002	--	--	--	--	
MW-5	3/29/2019	108.76	5.95	0.00	102.81	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	5/13/2019	108.76	5.60	0.00	103.16	<0.26 B J	<b>0.35</b>	--	<b>0.008</b>	<0.001 B	<b>0.006</b>	<b>0.027</b>	<0.0002	--	--	--	--	
MW-5	9/17/2019	108.76	6.41	0.00	102.35	<b>0.33</b>	<b>0.22 J</b>	--	<b>0.0066</b>	<0.00059 B	<b>0.00057</b>	<b>0.00138</b>	--	--	--	--	--	
MW-5	11/04/2019	108.76	5.94	0.00	102.82	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	3/25/2020	108.76	6.67	0.00	102.09	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/21/2000	--	8.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/01/2001	--	8.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/25/2001	--	8.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/07/2002	110.58	8.39	--	102.19	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/29/2002	110.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/07/2002	110.61	8.07	--	102.54	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/06/2003	110.61	8.34	--	102.27	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	10/03/2003	110.61	7.85	--	102.76	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/18/2003	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/22/2004	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/09/2004	110.61	7.97	--	102.64	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/21/2004	110.61	8.70	--	101.91	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	10/29/2004	110.61	--	--	--	--	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-6	12/06/2004	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/21/2005	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/15/2005	110.61	7.61	--	103.00	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/28/2005	110.61	7.23	--	103.38	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/07/2005	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	04/07/2006	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/18/2006	110.61	8.51	--	102.10	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/28/2006	110.61	7.04	--	103.57	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	12/20/2006	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/15/2007	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/21/2007	110.61	8.01	--	102.60	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	09/27/2007	110.61	7.38	--	103.23	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	05/17/2008	110.61	7.89	--	102.72	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/26/2008	110.61	7.50	--	103.11	<b>0.35</b>	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	--	
MW-6	09/17/2008	110.61	7.26	--	103.35	<b>0.32</b>	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	--	
MW-6	03/20/2009	110.61	8.53	--	102.08	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/09/2009	110.61	7.50	--	103.11	<b>1.3</b>	<b>0.010</b>	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--	
MW-6	09/23/2009	110.61	8.02	--	102.59	<b>0.36</b>	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--	
MW-6	12/09/2009	110.61	7.37	--	103.24	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/22/2010	110.61	8.55	--	102.06	--	--	--	--	--	--	--	--	--	--	--	--	



**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
 Chevron-Branded Service Station 95414  
 5210 Old Seward Highway  
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-6	05/06/2010	110.61	7.71	--	102.90	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	05/10/2010	110.61	8.40	--	102.21	1.2	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-6	10/05/2010	110.61	7.96	--	102.65	2.4	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-6	12/21/2010	110.61	7.67	--	102.94	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/09/2011	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/13/2011	110.61	7.80	--	102.81	3.7	0.012	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-6	09/15/2011	110.61	7.99	--	102.62	2.8	0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-6	12/08/2011	110.61	7.94	--	102.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/21/2012	110.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	6/20/2012	110.61	7.29	--	103.32	1.5 [ <0.050]	0.012	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-6	07/05/2012	110.61	--	--	--	--	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	--
MW-6	9/19/2012	110.61	6.76	--	103.85	0.81 [ <0.050]	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-6	11/06/2012	111.10	6.54	--	104.56	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	04/01/2013	111.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	5/2/2013	111.10	8.25	--	102.85	<0.50 [ <0.50]	<0.10	--	<0.0010	0.0013	<0.0010	<0.0030	--	--	--	--	TPH-d with silica gel cleanup
MW-6	05/02/2013	111.10	--	--	--	1.5	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-6	09/18/2013	111.10	6.85	--	104.25	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	9/19/2013	111.10	--	--	--	1.2 [ <0.42]	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	TPH-d with silica gel cleanup
MW-6	11/12/2013	111.10	7.43	--	103.67	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/27/2014	111.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	05/12/2014	111.10	7.65	--	103.45	0.89	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-6	05/12/2014	111.10	--	--	--	1.6	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-6	09/12/2014	111.10	5.50	--	105.60	0.89	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-6	11/14/2014	111.10	8.54	--	102.56	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/06/2015	111.10	7.10	--	104.00	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	04/30/2015	111.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	09/22/2015	111.10	7.62	--	103.48	1.4	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	--
MW-6	11/09/2015	111.10	8.31	--	102.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/09/2016	111.10	7.35	--	103.75	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	6/7/2016	111.10	7.88	--	103.22	1.3 [ 1.3]	<0.010 [ <0.010]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	--
MW-6	9/21/2016	111.10	7.44	--	103.66	2.7 [ 2.3]	<0.010 [ <0.010]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	--
MW-6	11/01/2016	111.10	7.80	--	103.30	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	04/13/2017	111.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/01/2017	111.10	7.45	--	103.65	3.0	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-6	08/16/2017	111.10	7.88	--	103.22	1.7 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-6	11/10/2017	111.10	7.42	--	103.68	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	03/27/2018	111.10	8.31	--	102.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	06/18/2018	111.10	6.91	--	104.19	2.4 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--
MW-6	08/09/2018	111.10	7.71	--	103.39	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	10/31/2018	111.10	7.58	--	103.52	2.4 J	<0.014	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	--
MW-6	3/29/2019	111.16	7.85	0.00	103.31	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	5/14/2019	111.16	7.44	0.00	103.72	0.77 J	<0.014	--	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	<0.0002	<0.0003	<0.001	--
MW-6	9/17/2019	111.16	8.08	0.00	103.08	1.2	<0.1	--	--	< 0.00020 B	< 0.00020 B	<0.00050 B	0.0005	< 0.0000020	--	<0.00022	--
MW-6	11/04/2019	111.16	7.72	0.00	103.44	--	--	--	--	--	--	--	--	--	--	--	--
MW-6	3/25/2020	111.16	7.99	0.00	103.17	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	09/29/2002	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	12/07/2002	4.87	101.82	--	101.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	06/06/2003	4.90	101.79	--	101.79	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/03/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/04/2003	3.22	103.47	--	103.47	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	12/18/2003	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	03/22/2004	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	06/09/2004	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	09/21/2004	106.69	6.26	--	100.43	7.3	8.0	--	0.26	0.031	0.29	0.73	<0.0020	--	--	--	--
MW-7	12/06/2004	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	03/21/2005	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	05/15/2005	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	09/28/2005	106.69	4.09	--	102.60	0.22	0.089	--	0.0040	<0.00050	0.0030	0.0040	<0.0020	--	--	--	--
MW-7	12/07/2005	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	04/07/2006	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	05/18/2006	106.69	5.14	--	101.55	3.3	4.5	--	0.18	0.025	0.18	0.45	--	--	--	--	--
MW-7	09/28/2006	106.69	3.55	--	103.14	4.4	3.2	--	0.077	0.0080	0.11	0.22	--	--	--	--	--
MW-7	12/20/2006	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	03/15/2007	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	05/21/2007	106.69	5.05	--	101.64	0.60	3.2	--	0.16	0.014	0.15	0.42	--	--	--	--	--
MW-7	09/27/2007	106.69	4.17	--	102.52	0.36	0.50	--	0.016	0.0020	0.024	0.056	--	--	--	--	--
MW-7	05/19/2008	106.69	5.15	--	101.54	0.85	6.1	--	0.33	0.092	0.33	1.1	--	--	--	--	--
MW-7	06/26/2008	106.69	4.71	--	101.98	1.6	10	--	0.30	0.080	0.40	1.2	--	--	--	--	--
MW-7	09/17/2008	106.69	3.62	--	103.07	0.51	3.6	--	0.10	0.020	0.20	0.50	--	--	--	--	--
MW-7	03/20/2009	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	06/08/2009	106.69	4.45	--	102.24	1.3	10	--	0.32	0.051	0.34	1.1	--	--	--	--	--

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>																	
MW-7	09/23/2009	106.69	5.19	--	101.50	1.5	2.2	1.1	0.0046	1.1	0.015	0.19	0.14	0.00005	0.005	0.0017	
MW-7	12/09/2009	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/22/2010	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/06/2010	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/10/2010	106.69	4.61	--	102.08	1.7	4.5	--	0.18	0.050	0.19	0.54	--	--	--	--	
MW-7	12/21/2010	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/09/2011	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/13/2011	106.69	4.95	--	101.74	1.7	9.3	--	0.32	0.034	0.38	1.2	--	--	--	--	
MW-7	09/15/2011	106.69	5.29	--	101.40	2.1	9.0	--	0.24	0.020	0.34	1.0	--	--	--	--	
MW-7	12/08/2011	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/21/2012	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/20/2012	106.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/19/2012	106.69	4.30	--	102.39	1.1 [ 0.60]	5.1	--	0.076	0.0074	0.12	0.30	--	--	--	--	TPH-d with silica gel cleanup
MW-7	11/06/2012	107.26	2.74	--	104.52	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/01/2013	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/02/2013	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/18/2013	107.26	3.80	--	103.46	--	--	--	--	--	--	--	--	--	--	--	
MW-7	9/19/2013	107.26	--	--	--	1.1 [ 0.80]	2.54	--	0.0661	0.00650	0.113	0.266	--	--	--	--	TPH-d with silica gel cleanup
MW-7	11/12/2013	107.26	4.24	--	103.02	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/27/2014	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/12/2014	107.26	4.62	--	102.64	--	--	--	--	--	--	--	--	--	--	--	
MW-7	05/13/2014	107.26	--	--	--	<0.40	0.963	--	0.0464	0.00370	0.0482	0.0900	--	--	--	--	
MW-7	05/13/2014	107.26	--	--	--	<0.40	0.538	--	0.00830	<0.00100	0.0108	0.0297	--	--	--	--	
MW-7	09/12/2014	107.26	4.50	--	102.76	<0.40	0.219	--	0.0038	<0.0010	0.0042	0.0064	--	--	--	--	
MW-7	11/14/2014	107.26	5.27	--	101.99	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/30/2015	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	09/22/2015	107.26	4.50	--	102.76	0.94	0.011J	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-7	11/09/2015	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/09/2016	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/06/2016	107.26	4.31	--	102.95	1.1	0.041 J	--	<0.0005	<0.0005	<0.0005	0.0007 J	--	--	--	--	
MW-7	09/21/2016	107.26	4.47	--	102.79	1.2	2.3	--	0.081	0.007	0.094	0.17	--	--	--	--	
MW-7	11/01/2016	107.26	5.02	--	102.24	--	--	--	--	--	--	--	--	--	--	--	
MW-7	04/13/2017	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/01/2017	107.26	5.09	--	102.17	1.4	6.9	--	0.18	0.018	0.29	0.53	<0.001	--	--	--	
MW-7	08/16/2017	107.26	5.03	--	102.23	0.73 J	5.2	--	0.12	0.015	0.20	0.54	<0.0005	--	--	--	
MW-7	11/10/2017	107.26	4.63	--	102.63	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/27/2018	107.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	6/19/2018	107.06	3.83	--	103.23	1.0 J [ 1.1 J]	8.6 [ 9.5]	--	0.19 [ 0.18]	0.027 [ 0.025]	0.28 [ 0.26]	0.68 [ 0.69]	<0.0005 [ <0.001]	--	--	--	
MW-7	08/09/2018	107.06	4.45	--	102.61	--	--	--	--	--	--	--	--	--	--	--	
MW-7	10/31/2018	107.06	4.68	--	102.38	1.6 J [ 1.4 J]	6.1 [ 6.0]	--	0.095 [ 0.093]	0.010 [ 0.010]	0.21 [ 0.21]	0.65 [ 0.63]	<0.0004 [ <0.0004]	--	--	--	
MW-7	3/29/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well obstructed by ice
MW-7	5/13/2019	107.35	4.33	0.00	103.02	0.43 J [ <0.42 B J]	2.8 [ 2.9]	--	0.15 [ 0.15]	0.042 [ 0.042]	0.22 [ 0.23]	0.42 D [ 0.45 D]	<0.0002 [ <0.0002]	<0.0002 [ <0.0002]	0.001 [ 0.001]	0.022 [ 0.023]	
MW-7	9/17/2019	107.35	5.26	0.00	102.09	2.2	5.8	--	--	0.018	0.36 D	0.827 D	<0.000070	<0.0000020	--	0.079	
MW-7	11/04/2019	107.35	4.82	0.00	102.53	--	--	--	--	--	--	--	--	--	--	--	
MW-7	3/25/2020	107.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by ice at 4.03 ftboc
MW-8	10/03/2003	108.20	5.55	--	102.65	--	--	--	--	--	--	--	--	--	--	--	
MW-8	12/18/2003	108.20	5.89	--	102.31	--	--	--	--	--	--	--	--	--	--	--	
MW-8	03/22/2004	108.20	7.16	--	101.04	0.90	2.2	--	0.11	0.0050	0.076	0.16	<0.00050	--	--	--	
MW-8	03/22/2004	108.20	--	--	--	0.89	2.6	--	0.11	0.0050	0.078	0.16	<0.00050	--	--	--	
MW-8	06/09/2004	108.20	6.22	--	101.98	1.3	2.6	--	0.15	0.0080	0.11	0.10	<0.0020	--	--	--	
MW-8	09/21/2004	108.20	7.27	--	100.93	1.5	4.1	--	0.23	0.014	0.15	0.34	<0.0020	--	--	--	
MW-8	12/06/2004	108.20	6.67	--	101.53	1.1	4.8	--	0.18	0.015	0.19	0.37	<0.0020	--	--	--	
MW-8	03/21/2005	108.20	7.14	--	101.06	1.0	1.6	--	0.12	0.0030	0.080	0.027	<0.0020	--	--	--	
MW-8	03/21/2005	108.20	--	--	--	0.92	1.7	--	0.12	0.0020	0.078	0.027	<0.0020	--	--	--	
MW-8	5/15/2005	108.20	6.26	--	101.94	0.91 [ 0.60]	4.3 [ 0.086]	--	0.21 [ 0.0010]	0.012 [ <0.00050]	0.17 [ <0.00050]	0.16 [ 0.0030]	<0.0020 [ <0.0020]	--	--	--	
MW-8	09/28/2005	108.20	5.94	--	102.26	0.92	3.5	--	0.25	0.019	0.17	0.24	<0.0020	--	--	--	
MW-8	12/07/2005	108.20	6.01	--	102.19	0.99	1.1	--	0.036	0.0030	0.026	0.027	<0.0020	--	--	--	
MW-8	04/07/2006	108.20	7.30	--	100.90	1.1	1.5	--	0.096	0.0040	0.052	0.077	<0.00050	--	--	--	
MW-8	04/07/2006	108.20	--	--	--	0.98	1.5	--	0.096	0.0040	0.050	0.069	<0.00050	--	--	--	
MW-8	05/18/2006	108.20	7.06	--	101.14	0.72	3.6	--	0.16	0.010	0.14	0.17	--	--	--	--	
MW-8	09/28/2006	108.20	5.82	--	102.38	1.0	4.3	--	0.19	0.016	0.17	0.40	--	--	--	--	
MW-8	12/20/2006	108.20	5.00	--	103.20	0.86	1.0	--	0.038	0.0027	0.027	0.040	--	--	--	--	
MW-8	03/15/2007	108.20	7.37	--	100.83	0.62	0.10	--	0.020	0.0020	0.010	0.020	0.0050	--	--	--	
MW-8	03/15/2007	108.20	--	--	--	0.70	0.030	--	0.020	0.0020	0.010	0.020	<0.010	--	--	--	
MW-8	05/21/2007	108.20	7.04	--	101.16	0.98	1.4	--	0.062	0.0020	0.047	0.030	--	--	--	--	
MW-8	09/27/2007	108.15	6.22	--	101.93	1.6	4.9	--	0.16	0.011	0.14	0.26	--	--	--	--	
MW-8	12/11/2007	108.15	6.24	--	101.91	0.75	1.7	--	0.040	0.0030	0.030	0.070	<0.10	--	--	--	
MW-8	03/04/2008	108.15	6.67	--	101.48	--	--	--	--	--	--	--	--	--	--	--	
MW-8	05/19/2008	108.15	7.08	--	101.07	0.72	4.9	--	0.19	0.014	0.20	0.34	--	--	--	--	
MW-8	06/04/2008	108.15	7.74	--	100.41	0.71	2.9	--	0.10	0.010	0.10	0.20	--	--	--	--	
MW-8	06/26/2008	108.15	6.28	--	101.87	0.70	2.1	--	0.060	0.0040	0.050	0.040	--	--	--	--	



**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-8	09/17/2008	108.15	5.81	--	102.34	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	09/18/2008	108.15	--	--	--	0.98	6.1	--	0.20	0.020	0.20	0.50	--	--	--	--	--
MW-8	12/10/2008	108.15	6.16	--	101.99	0.72	1.2	--	0.040	0.0030	0.020	0.050	<0.010	--	--	--	--
MW-8	03/20/2009	108.15	7.46	--	100.69	0.88	0.97	--	0.027	0.0016	0.015	0.021	<0.010	--	--	--	--
MW-8	06/09/2009	108.15	5.90	--	102.25	0.68	2.4	--	0.078	0.0052	0.073	0.087	--	--	--	--	--
MW-8	09/23/2009	108.15	6.83	--	101.32	0.78	3.6	--	0.15	0.010	0.10	0.20	--	--	--	--	--
MW-8	12/09/2009	108.15	5.99	--	102.16	0.64	1.6	--	0.038	0.0029	0.025	0.062	--	--	--	--	--
MW-8	03/22/2010	108.15	7.33	--	100.82	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	03/25/2010	108.15	--	--	--	0.64	0.87	--	0.024	0.0014	0.012	0.0072	--	--	--	--	--
MW-8	05/06/2010	108.15	6.79	--	101.36	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	05/10/2010	108.15	6.48	--	101.67	0.79	4.8	--	0.14	0.010	0.14	0.28	--	--	--	--	--
MW-8	10/05/2010	108.15	6.88	--	101.27	0.99	2.3	--	0.091	0.0056	0.066	0.083	--	--	--	--	--
MW-8	12/21/2010	108.15	5.60	--	102.55	0.81	1.1	--	0.020	0.0028	0.010	0.032	--	--	--	--	--
MW-8	03/09/2011	108.15	7.41	--	100.74	0.87	1.0	--	0.026	0.0024	0.013	0.039	--	--	--	--	--
MW-8	06/13/2011	108.15	7.60	--	100.55	1.3	2.4	--	0.084	0.0058	0.071	0.11	--	--	--	--	--
MW-8	09/15/2011	108.15	6.91	--	101.24	1.6	4.8	--	0.15	0.013	0.11	0.26	--	--	--	--	--
MW-8	12/8/2011	108.15	5.89	--	102.26	0.86 [ 0.22]	1.6	--	0.042	0.0034	0.029	0.062	--	--	--	--	TPH-d with silica gel cleanup
MW-8	3/21/2012	108.15	6.62	--	101.53	0.73 [ 0.21]	1.4	--	0.027	0.0028	0.016	0.053	--	--	--	--	TPH-d with silica gel cleanup
MW-8	6/20/2012	108.15	5.34	--	102.81	1.1 [ 0.45]	2.7	--	0.090	0.0062	0.079	0.052	--	--	--	--	TPH-d with silica gel cleanup
MW-8	07/05/2012	108.15	--	--	--	--	2.8	--	0.12	0.0088	0.10	0.080	--	--	--	--	--
MW-8	9/19/2012	108.15	4.68	--	103.47	1.2 [ 0.53]	3.7	--	0.14	0.010	0.12	0.22	--	--	--	--	TPH-d with silica gel cleanup
MW-8	11/6/2012	108.70	4.10	--	104.60	0.67 [ 0.33]	2.5	--	0.084	0.0036	0.10	0.019	--	--	--	--	TPH-d with silica gel cleanup
MW-8	4/1/2013	108.70	7.30	--	101.40	0.52 [ <0.45]	0.293	--	0.0084	<0.0010	<0.0010	<0.0030	--	--	--	--	TPH-d with silica gel cleanup
MW-8	05/02/2013	108.70	7.15	--	101.55	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	5/3/2013	108.70	--	--	--	0.53 [ <0.50]	0.394	--	0.0175	<0.00100	0.00660	<0.00300	--	--	--	--	TPH-d with silica gel cleanup
MW-8	05/03/2013	108.70	--	--	--	<0.50	0.53	--	0.0188	<0.00100	0.00800	<0.00300	--	--	--	--	--
MW-8	9/18/2013	108.70	5.63	--	103.07	1.20 [ 0.75]	3.72	--	0.134	0.0112	0.181	0.237	--	--	--	--	TPH-d with silica gel cleanup
MW-8	11/12/2013	108.70	5.84	--	102.86	1.00	3.4	--	0.0980	0.00810	0.145	0.281	--	--	--	--	--
MW-8	03/27/2014	108.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	05/12/2014	108.70	6.48	--	102.22	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	05/13/2014	108.70	--	--	--	0.78	1.84	--	0.0709	0.00370	0.0794	0.0687	--	--	--	--	--
MW-8	05/13/2014	108.70	--	--	--	0.75	2.08	--	0.0951	0.00430	0.0961	0.0865	--	--	--	--	--
MW-8	09/12/2014	108.70	6.32	--	102.38	1.0	2.86	--	0.100	0.00630	0.118	0.135	--	--	--	--	--
MW-8	09/12/2014	108.70	--	--	--	0.99	2.72	--	0.103	0.00650	0.121	0.140	--	--	--	--	--
MW-8	11/14/2014	108.70	6.80	--	101.90	1.5	1.28	--	0.0648	0.00300	0.0589	0.0408	--	--	--	--	--
MW-8	03/06/2015	108.70	5.10	--	103.60	0.46	0.24	--	0.0044	<0.0010	<0.0010	<0.0030	--	--	--	--	--
MW-8	04/30/2015	108.70	7.02	--	101.68	0.41	0.95	--	0.020	0.0010	0.011	0.028	--	--	--	--	--
MW-8	09/22/2015	108.70	6.53	--	102.17	0.62	2.3	--	0.13	0.010	0.12	0.25	--	--	--	--	--
MW-8	11/09/2015	108.70	6.58	--	102.12	1.4	4.3	--	0.11	0.010	0.13	0.32	--	--	--	--	--
MW-8	03/09/2016	108.70	5.74	--	102.96	0.088 J	0.057 J	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	--
MW-8	06/06/2016	108.70	5.57	--	103.13	0.30	0.054 J	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	--
MW-8	09/21/2016	108.70	6.14	--	102.56	1.2	3.1	--	0.10	0.007	0.071	0.19	--	--	--	--	--
MW-8	11/1/2016	108.70	6.74	--	101.96	0.57 J [ 0.58 J]	1.7 J [ 1.8 J]	--	0.022 [ 0.022]	0.002 [ 0.002]	0.012 [ 0.012]	0.051 [ 0.052]	--	--	--	--	--
MW-8	04/13/2017	108.70	7.16	--	101.54	0.28 [ 0.24 J]	0.61 [ 0.52]	--	0.01 [ 0.009]	0.0007 J [ 0.0007 J]	0.004 [ 0.004]	0.006 [ 0.005]	<0.0005 [ <0.0005]	--	--	--	--
MW-8	06/01/2017	108.70	6.83	--	101.87	0.75	1.7	--	0.042	0.003	0.058	0.055	<0.0005	--	--	--	--
MW-8	08/16/2017	108.70	6.85	--	101.85	0.39 J [ 0.48 J]	2.2 [ 2.2]	--	0.059 [ 0.058]	0.004 [ 0.004]	0.040 [ 0.039]	0.038 [ 0.035]	<0.0005 [ <0.0005]	--	--	--	--
MW-8	11/10/2017	108.70	6.34	--	102.36	0.43 [ 0.46]	1.6 [ 1.5]	--	0.017 [ 0.018]	0.001 [ 0.001]	0.015 [ 0.016]	0.026 [ 0.027]	--	--	--	--	--
MW-8	03/27/2018	108.70	7.37	--	101.33	0.44 J [ 0.34 J]	0.55 [ 0.54]	--	0.004 [ 0.004]	<0.0005 [ <0.0005]	<0.0005 [ <0.0005]	0.006 [ 0.006]	<0.0005 [ <0.0005]	--	--	--	--
MW-8	06/19/2018	108.70	5.38	--	103.32	0.27 J	1.1	--	0.023	0.0009 J	0.027	0.004	<0.0005	--	--	--	--
MW-8	08/08/2018	108.70	6.32	--	102.38	0.27 [ 0.29]	0.70 [ 0.68]	--	0.015 [ 0.015]	0.0004 J [ 0.0003 J]	0.007 [ 0.007]	<0.0005 [ <0.0005]	<0.0002 [ <0.0002]	--	--	--	--
MW-8	10/31/2018	108.70	6.51	--	102.19	0.78 J	1.2	--	0.052	0.003	0.029	0.053	<0.0002	--	--	--	--
MW-8	3/29/2019	108.70	6.30	0.00	102.4	1.3	0.48	--	0.02	0.002	0.017	0.051	--	--	--	--	--
MW-8	5/14/2019	108.70	6.30	0.00	102.4	0.54 J	2.8	--	0.06	0.005	0.074	0.13	<0.0002J	--	--	--	--
MW-8	9/17/2019	108.70	6.98	0.00	101.72	0.56	0.28	--	0.0073	< 0.00025 B	< 0.00022 B	0.00136 J	--	--	--	--	--
MW-8	11/04/2019	108.70	6.50	0.00	102.20	0.51 [ 0.64]	1.2 [ 1.2]	--	0.047 [ 0.047]	0.0034 [ 0.0032]	0.03 [ 0.03]	0.0706 [ 0.0696]	-- [ -]	-- [ -]	--	--	--
MW-8	3/25/2020	108.70	6.93	0.00	101.77	0.484 J	0.0606 J	--	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	<0.0000500	<0.00100	<0.00500	--
MW-9	10/03/2003	107.27	4.73	--	102.54	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	12/18/2003	107.27	5.03	--	102.24	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	03/22/2004	107.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	06/09/2004	107.27	5.45	--	101.82	1.0	2.1	--	0.16	0.0070	0.074	0.12	<0.0020	--	--	--	--
MW-9	09/21/2004	107.27	5.57	--	101.70	0.26	<0.010	--	0.00060	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-9	12/06/2004	107.27	5.59	--	101.68	0.69	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	--
MW-9	03/21/2005	107.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	05/15/2005	107.27	5.57	--	101.70	2.6	0.052	--	0.011	<0.00050	0.00080	0.00060	<0.0020	--	--	--	--
MW-9	09/28/2005	107.27	5.22	--	102.05	1.1	1.1	--	0.10	0.0020	0.035	0.057	<0.0020	--	--	--	--
MW-9	12/07/2005	107.27	5.24	--	102.03	0.73	0.33	--	0.065	0.00060	0.040	0.010	<0.0020	--	--	--	--
MW-9	04/07/2006	107.27	6.47	--	100.80	0.096	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--
MW-9	05/18/2006	107.27	6.29	--	100.98	1.2	0.019	--	0.0010	<0.00050	<0.00050	<0.00050	--	--	--	--	--
MW-9	09/28/2006	107.27	4.66	--	102.61	1.6	0.060	--	0.0010	<0.00050	<0.00050	<0.00050	--	--	--	--	--
MW-9	12/20/2006	107.27	3.85	--	103.42	0.54	0.60	--	0.048	0.0013	0.024	0.027	--	--	--	--	--
MW-9	03/15/2007	107.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
MW-9	05/21/2007	107.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9	09/27/2007	107.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	09/27/2007	107.58	5.78	--	101.80	0.41	0.40	--	0.037	0.0020	0.024	0.035	--	--	--	--	
MW-9R	12/11/2007	107.58	6.25	--	101.33	0.63	1.8	--	0.10	0.0050	0.070	0.10	<0.10	--	--	--	
MW-9R	03/04/2008	107.58	6.10	--	101.48	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	05/19/2008	107.58	6.69	--	100.89	0.84	0.20	--	0.017	<0.00050	0.0070	0.011	--	--	--	--	
MW-9R	06/04/2008	107.58	6.28	--	101.30	0.51	2.2	--	0.090	0.0050	0.070	0.10	--	--	--	--	
MW-9R	06/26/2008	107.58	5.90	--	101.68	0.79	5.0	--	0.20	0.020	0.20	0.40	--	--	--	--	
MW-9R	09/17/2008	107.58	5.31	--	102.27	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	09/18/2008	107.58	--	--	--	0.065	0.020	--	0.0040	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-9R	12/10/2008	107.58	8.78	--	98.80	0.80	2.7	--	0.10	0.0080	0.10	0.30	<0.050	--	--	--	
MW-9R	03/19/2009	107.58	7.18	--	100.40	1.1	3.8	--	0.14	0.0081	0.13	0.30	<0.050	--	--	--	
MW-9R	06/09/2009	107.58	5.70	--	101.88	0.80	3.8	--	0.19	0.011	0.16	0.34	--	--	--	--	
MW-9R	09/23/2009	107.58	6.45	--	101.13	0.59	2.5	--	0.16	0.0066	0.094	0.15	--	--	--	--	
MW-9R	12/09/2009	107.58	5.37	--	102.21	0.60	3.7	--	0.15	0.0098	0.15	0.34	--	--	--	--	
MW-9R	03/22/2010	107.58	6.69	--	100.89	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	03/25/2010	107.58	--	--	--	0.60	0.38	--	0.019	0.00060	0.013	0.016	--	--	--	--	
MW-9R	05/06/2010	107.58	6.10	--	101.48	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	05/10/2010	107.58	6.00	--	101.58	0.25	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00150	--	--	--	--	
MW-9R	10/05/2010	107.58	6.23	--	101.35	0.41	1.3	--	0.072	0.0030	0.047	0.066	--	--	--	--	
MW-9R	12/21/2010	107.58	5.57	--	102.01	0.93	2.5	--	0.13	0.0053	0.084	0.15	--	--	--	--	
MW-9R	03/09/2011	107.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/13/2011	107.58	6.01	--	101.57	0.82	1.9	--	0.12	0.0049	0.071	0.12	--	--	--	--	
MW-9R	09/15/2011	107.58	6.40	--	101.18	0.75	1.4	--	0.11	0.0011	0.020	0.040	--	--	--	--	
MW-9R	12/8/2011	107.58	5.34	--	102.24	0.84 [ 0.2]	2.2	--	0.076	0.0019	0.050	0.074	--	--	--	--	TPH-d with silica gel cleanup
MW-9R	3/21/2012	107.58	7.17	--	100.41	0.75 [ 0.33]	0.57	--	0.010	0.00060	0.0038	0.0024	--	--	--	--	TPH-d with silica gel cleanup
MW-9R	6/20/2012	107.58	4.83	--	102.75	2.0 [ 0.63]	4.4	--	0.16	0.011	0.15	0.30	--	--	--	--	TPH-d with silica gel cleanup
MW-9R	07/05/2012	107.58	--	--	--	--	2.3	--	0.064	0.0035	0.061	0.11	--	--	--	--	
MW-9R	9/19/2012	107.58	4.13	--	103.45	0.18J [ 0.065J]	0.58	--	0.019	0.00080J	0.011	0.028	--	--	--	--	
MW-9R	11/6/2012	108.08	3.58	--	104.50	0.15J [ 0.097J]	0.72	--	0.013	0.0011J	0.023	0.033	--	--	--	--	
MW-9R	04/01/2013	108.08	6.92	--	101.16	<0.48	0.415	--	0.0354	0.00140	0.0195	0.0239	--	--	--	--	
MW-9R	05/02/2013	108.08	6.14	--	101.94	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	05/03/2013	108.08	--	--	--	<0.500	0.565	--	0.0238	0.00130	0.0233	0.0273	--	--	--	--	
MW-9R	05/03/2013	108.08	--	--	--	<0.50	0.472	--	0.0407	0.00150	0.0230	0.0289	--	--	--	--	
MW-9R	9/18/2013	108.08	5.15	--	102.93	0.50 [ <0.39]	0.634	--	0.0490	<0.00100	0.0133	0.0198	--	--	--	--	
MW-9R	11/12/2013	108.08	5.39	--	102.69	0.54	0.936	--	0.0306	0.00140	0.0316	0.0542	--	--	--	--	
MW-9R	03/27/2014	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	05/12/2014	108.08	6.03	--	102.05	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	05/13/2014	108.08	--	--	--	<0.40	0.726	--	0.0233	0.00160	0.0276	0.0606	--	--	--	--	
MW-9R	05/13/2014	108.08	--	--	--	<0.40	<0.10	--	0.0022	<0.0010	0.0013	<0.0030	--	--	--	--	
MW-9R	09/12/2014	108.08	5.88	--	102.20	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-9R	11/14/2014	108.08	6.10	--	101.98	<0.40	0.385	--	0.0299	<0.00100	0.0100	0.0203	--	--	--	--	
MW-9R	03/06/2015	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	04/30/2015	108.08	6.40	--	101.68	0.44	0.018 J	--	0.0020	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-9R	09/22/2015	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	11/09/2015	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	03/09/2016	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/06/2016	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	09/21/2016	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	11/01/2016	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	04/13/2017	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/01/2017	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	08/16/2017	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	11/10/2017	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	03/27/2018	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/18/2018	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	08/08/2018	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	10/30/2018	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	3/29/2019	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to access
MW-9R	6/3/2019	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to access
MW-9R	9/17/2019	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to access
MW-9R	11/04/2019	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to access
MW-9R	3/25/2020	108.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Well not sampled or gauged due to lack of access agreement
MW-10	10/03/2003	108.93	4.98	--	103.95	--	--	--	--	--	--	--	--	--	--	--	
MW-10	12/18/2003	108.93	6.65	--	102.28	--	--	--	--	--	--	--	--	--	--	--	
MW-10	03/22/2004	108.93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/09/2004	108.93	7.01	--	101.92	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/21/2004	108.93	7.38	--	101.55	1.5	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	
MW-10	12/06/2004	108.93	7.05	--	101.88	0.64	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	
MW-10	12/06/2004	108.93	--	--	--	1.5	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	



**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
 Chevron-Branded Service Station 95414  
 5210 Old Seward Highway  
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
ADEC Groundwater Cleanup Levels						1.5	2.2	1.1	0.0046	1.1	0.015	0.19	0.14	0.0005	0.005	0.0017	
MW-10	03/21/2005	108.93	7.36	--	101.57	0.43	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	
MW-10	05/15/2005	108.93	6.74	--	102.19	1.6	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.0020	--	--	--	
MW-10	09/28/2005	108.93	6.31	--	102.62	1.0 [ 1.2]	<0.010 [ <0.010]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.0020 [ <0.0020]	--	--	--	--	
MW-10	12/7/2005	108.93	6.69	--	102.24	1.1 [ 1.1]	<0.010 [ <0.010]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.0020 [ <0.0020]	--	--	--	--	
MW-10	04/07/2006	108.93	7.55	--	101.38	0.41	<0.010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-10	5/18/2006	108.93	7.31	--	101.62	2.3 [ 2.6]	<0.010 [ <0.010]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	
MW-10	09/28/2006	108.93	5.47	--	103.46	1.6	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-10	12/20/2006	108.93	5.75	--	103.18	1.0	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-10	03/15/2007	108.93	8.05	--	100.88	0.83	0.80	--	<0.0010	<0.0010	<0.0010	<0.0020	<0.0030	--	--	--	
MW-10	05/21/2007	108.93	7.38	--	101.55	1.2	<0.010	--	<0.00050	<0.00050	<0.00050	0.0010	--	--	--	--	
MW-10	09/27/2007	108.78	6.31	--	102.47	0.87	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-10	12/11/2007	108.78	7.27	--	101.51	1.5	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	<0.0030	--	--	--	
MW-10	03/04/2008	108.78	7.23	--	101.55	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/19/2008	108.78	7.29	--	101.49	3.3	0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-10	06/04/2008	108.78	7.07	--	101.71	0.95	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-10	06/26/2008	108.78	6.85	--	101.93	1.0	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-10	09/17/2008	108.78	5.20	--	103.58	--	--	--	--	--	--	--	--	--	--	--	
MW-10	09/18/2008	108.78	--	--	--	0.24	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
MW-10	12/10/2008	108.78	6.83	--	101.95	1.2	<0.010	--	<0.0010	<0.0010	<0.0010	<0.0020	<0.0030	--	--	--	
MW-10	03/19/2009	108.78	8.04	--	100.74	0.76	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	<0.0025	--	--	--	
MW-10	06/09/2009	108.78	6.52	--	102.26	0.69	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	09/23/2009	108.78	7.40	--	101.38	1.4	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	12/09/2009	108.78	6.67	--	102.11	1.3	0.012	--	0.0012	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	03/22/2010	108.78	7.83	--	100.95	--	--	--	--	--	--	--	--	--	--	--	
MW-10	03/25/2010	108.78	--	--	--	1.5	0.011	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	05/06/2010	108.78	6.61	--	102.17	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/10/2010	108.78	6.61	--	102.17	0.86	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	10/05/2010	108.78	7.40	--	101.38	2.2	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	12/21/2010	108.78	6.64	--	102.14	1.3	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	03/09/2011	108.78	7.98	--	100.80	0.83	0.024	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	06/13/2011	108.78	7.14	--	101.64	1.2	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	09/15/2011	108.78	7.46	--	101.32	1.6	0.013	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	12/8/2011	108.78	6.28	--	102.50	0.55 [ 0.048]	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-10	03/21/2012	108.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	6/20/2012	108.78	6.00	--	102.78	1.3 [ 0.058]	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-10	07/05/2012	108.78	--	--	--	--	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
MW-10	9/19/2012	108.78	5.11	--	103.67	0.56 [ <0.05]	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-10	11/6/2012	109.35	4.94	--	104.41	1.0 [ <0.049]	<0.010	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	TPH-d with silica gel cleanup
MW-10	4/1/2013	109.35	7.43	--	101.92	0.52 [ <0.42]	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	TPH-d with silica gel cleanup
MW-10	05/02/2013	109.35	6.70	--	102.65	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/03/2013	109.35	--	--	--	<0.50	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	05/03/2013	109.35	--	--	--	<0.52	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	9/18/2013	109.35	6.03	--	103.32	0.76 [ <0.48]	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	11/12/2013	109.35	6.41	--	102.94	0.52	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	03/27/2014	109.35	7.14	--	102.21	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	05/12/2014	109.35	6.82	--	102.53	--	--	--	--	--	--	--	--	--	--	--	
MW-10	05/13/2014	109.35	--	--	--	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	05/13/2014	109.35	--	--	--	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	09/12/2014	109.35	6.68	--	102.67	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	11/14/2014	109.35	7.35	--	102.00	0.53	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	03/06/2015	109.35	5.35	--	104.00	<0.40	<0.10	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
MW-10	04/30/2015	109.35	7.44	--	101.91	0.78	<0.010	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
MW-10	9/22/2015	109.35	6.80	--	#VALUE!	0.54 [ 0.55]	<0.010 [ <0.010]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	
MW-10	11/9/2015	109.35	9.11	--	100.24	0.75 [ 0.72]	<0.050 [ <0.050]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	
MW-10	3/9/2016	109.35	5.84	--	103.51	0.42 [ 0.41]	0.10 [ 0.018 J]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	--	
MW-10	06/06/2016	109.35	6.69	--	102.66	0.96	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-10	09/21/2016	109.35	6.81	--	102.54	1.3	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-10	11/01/2016	109.35	7.25	--	102.10	1.4 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-10	04/13/2017	109.35	6.45	--	102.90	0.11 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-10	06/01/2017	109.35	7.26	--	102.09	0.61 [ 0.64]	<0.010 [ <0.010]	--	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	<0.00050 [ <0.00050]	--	--	--	
MW-10	08/16/2017	109.35	7.09	--	102.26	0.19 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-10	11/10/2017	109.35	6.86	--	102.49	0.15 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
MW-10	03/27/2018	109.35	7.88	--	101.47	0.25 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-10	06/19/2018	109.35	5.70	--	103.65	0.19 J	<0.010	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
MW-10	08/08/2018	109.35	6.50	--	102.85	0.27	<0.014	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	
MW-10	10/31/2018	109.35	6.91	--	102.44	0.30 J	<0.014	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	
MW-10	3/29/2019	109.17	6.58	0.00	102.59	<0.014 [ <0.014]	<0.25 B [ <0.25 B]	--	<0.0002 [ <0.0002]	<0.0002 [ <0.0002]	<0.0004 [ <0.0004]	<0.001 [ <0.001]	<0.0002 [ <0.0002]	<0.0002 [ <0.0002]	<0.0003 [ <0.0003]	<0.0003 [ <0.0003]	TPH-d reported to LOQ
MW-10	5/13/2019	109.17	6.58	0.00	102.59	<0.26 B J	<0.014	--	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	<0.0002	<0.0003	<0.001	TPH-d reported

**Table 3. Historical Groundwater Gauging and Analytical Results**  
**Third Quarter 1998 to Current**  
Chevron-Branded Service Station 95414  
5210 Old Seward Highway  
Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	
SP-1	5/14/2019	--	--	--	--	<0.014	--	<0.26 B J	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	--	--	--	
SP-1	9/17/2019	--	--	--	--	<0.098 [ $< 0.091$ ]	< 0.1 [ $< 0.1$ ]	--	< 0.000030 [ $< 0.000030$ ]	< 0.000050 [ $< 0.000050$ ]	< 0.00020 B [ $< 0.00020 B$ ]	<0.00050 B [ $<0.00050 B$ ]	-- [-]	-- [-]	-- [-]	-- [-]	
SP-2	5/14/2019	--	--	--	--	<b>0.039 J</b>	--	<0.26 B J	<b>0.002</b>	<0.001 B	<b>0.0004 J</b>	<b>0.003 J</b>	<0.0002	--	--	--	
SP-2	9/17/2019	--	--	--	--	<b>0.66</b>	< 0.1	--	< 0.000030	< 0.000050	< 0.00020 B	<0.00050 B	--	--	--	--	
SP-3	5/14/2019	--	--	--	--	<0.014 [ $<0.014$ ]	--	<0.051 J [ $<0.26 B J$ ]	<0.0002 [ $<0.0002$ ]	<0.0002 [ $<0.0002$ ]	<0.0004 [ $<0.0004$ ]	<0.001 [ $<0.001$ ]	<0.0002 [ $<0.0002$ ]	--	--	--	TPH-d reported to LOQ
SP-3	9/17/2019	--	--	--	--	<b>0.69</b>	< 0.1	--	< 0.000030	< 0.000050	< 0.00020 B	<0.00050 B	--	--	--	--	
SP-4	5/14/2019	--	--	--	--	<0.014	--	<0.26 B J	<0.0002	<0.0002	<0.0004	<0.001	<0.0002	--	--	--	
SP-4	9/17/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
QA (EQB)	11/4/2019	--	--	--	--	<0.076	<0.1	--	<0.00053	<0.00039	<0.00050	<0.00075	--	--	--	--	
QA (EQB)	3/25/2020	--	--	--	--	<0.8	<0.1	--	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	<0.00000500	<0.00100	<0.00500	
Trip Blank	5/27/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	6/10/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	6/10/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	6/10/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	9/22/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	9/22/2004	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	5/9/2005	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	5/11/2005	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	5/18/2005	--	--	0.00	--	--	--	--	<0.00020	<0.00020	<0.00020	<0.00060	--	--	--	--	
Trip Blank	6/16/2005	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/28/2005	--	--	0.00	--	--	--	--	<0.00020	<0.00020	<0.00020	<0.00060	--	--	--	--	
Trip Blank	5/17/2006	--	--	0.00	--	--	--	--	<0.00020	<0.00020	<0.00020	<0.00060	--	--	--	--	
Trip Blank	7/24/2006	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	
Trip Blank	9/23/2006	--	--	0.00	--	--	--	--	<0.00020	<0.00020	<0.00020	<0.00060	--	--	--	--	
Trip Blank	5/16/2007	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	9/27/2007	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	5/17/2008	--	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	
Trip Blank	6/4/2008	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	9/11/2008	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	9/13/2008	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	9/14/2008	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0020	--	--	--	--	
Trip Blank	5/29/2009	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/17/2009	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/18/2009	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	5/11/2010	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/7/2010	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	4/20/2011	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	7/7/2011	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/28/2011	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/28/2011	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	5/21/2012	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	9/18/2012	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.0015	--	--	--	--	
Trip Blank	5/6/2013	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
Trip Blank	9/16/2013	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
Trip Blank	5/5/2014	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
Trip Blank	9/2/2014	--	--	0.00	--	--	--	--	<0.0010	<0.0010	<0.0010	<0.0030	--	--	--	--	
Trip Blank	4/16/2015	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
Trip Blank	9/22/2015	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
Trip Blank	11/9/2015	--	--	0.00	--	--	--	--	<0.00050	<0.00050	<0.00050	<0.00050	--	--	--	--	
Trip Blank	3/9/2016	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
Trip Blank	6/6/2016	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
Trip Blank	9/21/2016	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	
Trip Blank	4/13/2017	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
Trip Blank	6/1/2017	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
Trip Blank	8/16/2017	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
Trip Blank	11/10/2017	--	--	0.00	--	--	--	--	<0.0005	<b>0.0005 J</b>	<0.0005	<0.0005	--	--	--	--	
Trip Blank	3/27/2018	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
Trip Blank	6/19/2018	--	--	0.00	--	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	
Trip Blank	8/9/2018	--	--	0.00	--	--	--	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	
Trip Blank	10/31/2018	--	--	0.00	--	--	--	--	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	--	--	--	
QA (TB)	9/17/2019	--	--	--	--	--	--	--	--	<b>0.000056 J</b>	<b>0.000059 J</b>	<0.0003 J	<0.000070	--	--	<0.00022	
QA (TB)	11/04/2019	--	--	--	--	--	--	--	<0.000090	<0.00039	<0.00075	<0.00075	<0.000017	--	--	--	
QA (TB)	3/25/2020	--	--	--	--	--	--	--	<0.00100	<0.00100	<0.00100	<0.00300	<0.00100	--	<0.00100	<0.00500	

Notes:  
ID = Identification

**Table 3. Historical Groundwater Gauging and Analytical Results**

**Third Quarter 1998 to Current**  
 Chevron-Branded Service Station 95414  
 5210 Old Seward Highway  
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft)	TPH-d (mg/L)	TPH-g (mg/L)	TPH-r (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	MTBE (mg/L)	EDB (mg/L)	EDC (mg/L)	Naphthalene (mg/L)	Comments
<b>ADEC Groundwater Cleanup Levels</b>						<b>1.5</b>	<b>2.2</b>	<b>1.1</b>	<b>0.0046</b>	<b>1.1</b>	<b>0.015</b>	<b>0.19</b>	<b>0.14</b>	<b>0.00005</b>	<b>0.005</b>	<b>0.0017</b>	

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

**Bold** = Value exceeds Method Detection Limit

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

<0.8 = Not detected at or above the Reported Detection Limit

NAVD 88 = North American Vertical Datum of 1988

ADEC = Alaska Department of Environmental Conservation

-- = Not analyzed/ Not measured/ Not Available

[ ] = Duplicate Result

QA (TB) = Quality Assurance (Trip Blank)

QA (EB) = Quality Assurance (Equipment Blank)

LNAPL = Light Non-Aqueous Phase Liquid

TPH-g = Total petroleum hydrocarbons, gasoline range by LUFT GC/MS according to United States Environmental Protection Agency (USEPA) Method AK101

TPH-d = Total petroleum hydrocarbons, diesel range by LUFT GC/MS according to USEPA Method AK 102

TPH-r = Total petroleum hydrocarbons, residual range organics LUFT GC/MS according to USEPA Method AK 102-SV/103mod-SV

Samples analyzed by EPA Method 8260D:

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

MTBE = Methyl tert-butyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

Naphthalene

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

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-g as C6-C10 and TPH-d as C13-C22. Pace Analytical reports the following carbon ranges: TPH-g as C5-C12 and TPH-d as C12-C22.



**Table 3**  
**Groundwater PAHs Analytical Results**  
**Chevron-Branded Service Station 99014**  
**3608 Minnesota Drive**  
**Anchorage, Alaska**

**Table 4. Historical Groundwater Poly Aromatic Hydrocarbons Analytical Data**  
**Chevron-Branded Service Station 95414**  
**5210 Old Seward Highway**  
**Anchorage, Alaska**

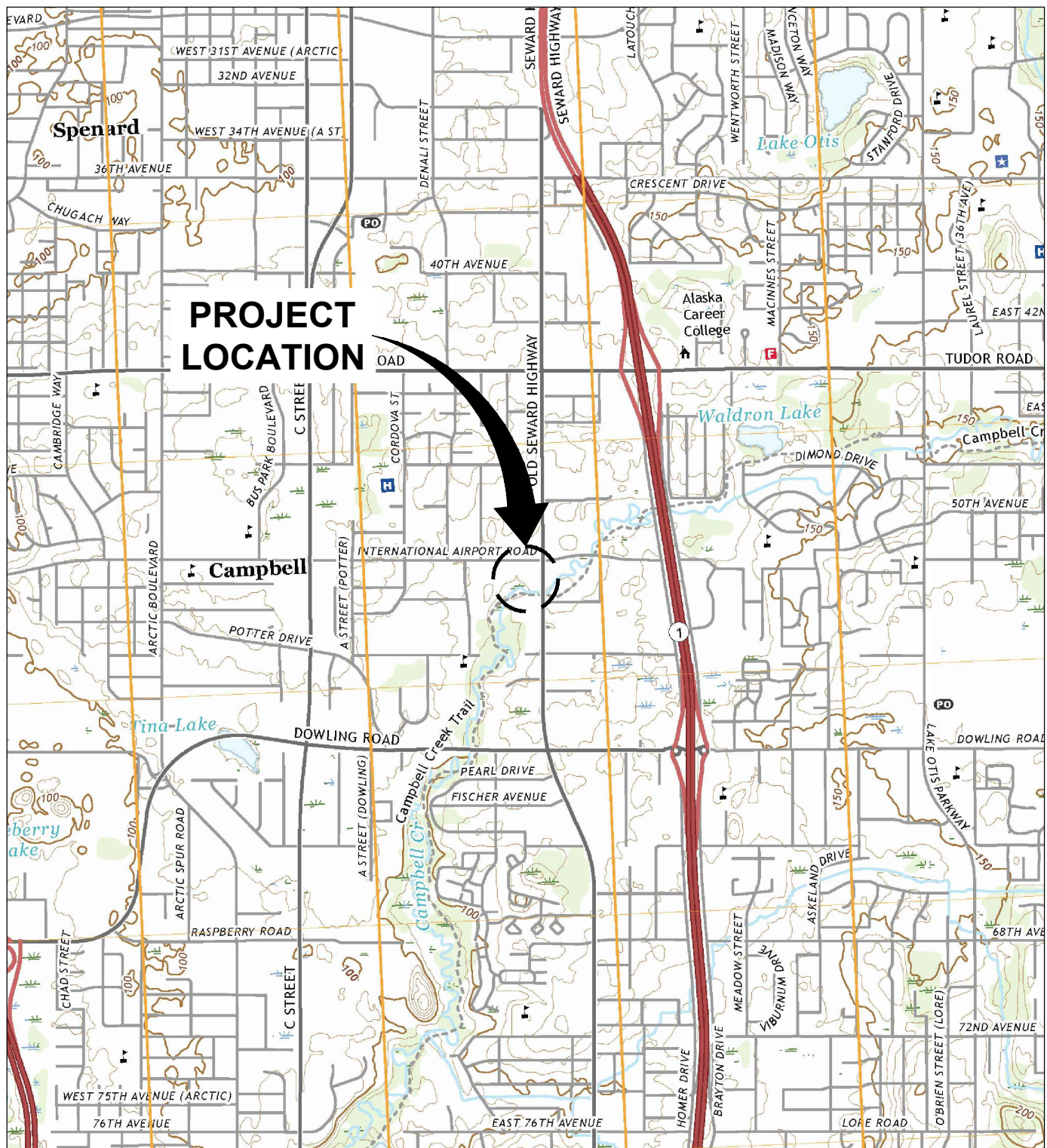
Well ID	Sample Date	Acenaphthene mg/L	Acenaphthylene mg/L	Anthracene mg/L	Benzo(a)anthracene mg/L	Benzo(a)pyrene mg/L	Benzo(b)fluoranthene mg/L	Benzo(g,h,i)perylene mg/L	Benzo(k)fluoranthene mg/L	Chrysene mg/L	Dibenz(a,h)anthracene mg/L	Fluoranthene mg/L	Fluorene mg/L	Indeno(1,2,3-cd)pyrene mg/L	Naphthalene mg/L	Phenanthrene mg/L	Pyrene mg/L	
<b>ADEC Groundwater Cleanup Levels</b>		<b>0.53</b>	<b>0.26</b>	<b>0.043</b>	<b>0.0003</b>	<b>0.00025</b>	<b>0.0025</b>	<b>0.00026</b>	<b>0.00080</b>	<b>0.002</b>	<b>0.00025</b>	<b>0.26</b>	<b>0.29</b>	<b>0.00019</b>	<b>0.0017</b>	<b>0.17</b>	<b>0.12</b>	
MW-1	06/01/2017	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000057	<0.000057	<0.000047	
MW-1	08/16/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	06/18/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-1	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	06/01/2017	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000059	<0.000059	<0.000049	
MW-2	08/16/2017	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000029	<0.000029	<0.000096	
MW-2	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2	06/18/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<b>0.0002</b>	<0.00003	<0.00002	
MW-2	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	06/01/2017	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000060	<0.000060	<0.000050	
MW-3	08/16/2017	<b>0.000041 J / 0.000046</b>	<0.000095 / <0.00001	<0.000095 / <0.000048	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<0.000095 / <0.000097	<b>0.15 / 0.19</b>	0.000039 J / <0.000029	0.000095 / <0.000099	
MW-3	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3	03/27/2018	<b>0.00008 / 0.00006</b>	<b>0.00003 J / 0.00003 J</b>	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<b>0.00005 J / 0.00004 J</b>	<0.00001 / <0.00001	<b>0.10 / 0.094</b>	<0.00003 / <0.00004	<0.00001 / <0.00001	
MW-3	06/18/2018	<b>0.00007 / 0.00007</b>	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<b>0.00004 J / 0.00005</b>	<0.00001 / <0.00001	<b>0.078 / 0.085</b>	<0.00003 / <0.00003	<0.00002 / <0.00002	
MW-3	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/01/2017	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000060	<0.000060	<0.000050	
MW-4	08/16/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	06/19/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-4	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/01/2017	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<b>0.00067</b>	<0.000059	<0.000049	
MW-5	08/16/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	06/19/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	5/13/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	06/01/2017	<b>0.000068</b>	<b>0.000022 J</b>	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<b>0.000037 J</b>	<0.000047	<b>0.098</b>	<0.000057	<0.000047	
MW-6	08/16/2017	<0.000098	<b>0.000012 J</b>	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.00003	<0.00003	<0.000098	
MW-6	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-6	03/27/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00003	<0.00003	<0.00001	
MW-6	06/18/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00003	<0.00003	<0.00002	
MW-6	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/01/2017	<b>0.000010 J</b>	<0.000047	<0.000047	<0.000047	<0.000047	<b>0.000011 J</b>	<b>0.000010 J</b>	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<0.000047	<b>0.024</b>	<0.000057	<0.000047	
MW-7	08/16/2017	<b>0.000039 J</b>	<0.000096	<0.000096	<0.000096	<0.000096	<b>0.000013 J</b>	<b>0.000014 J</b>	<0.000096	<b>0.000013 J</b>	<0.000096	<0.000096	<b>0.000016 J</b>	<0.000096	<b>0.038</b>	<0.000029	<0.000096	
MW-7	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	06/19/2018	<b>0.00006 / 0.00007</b>	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<0.00001 / <0.00001	<b>0.00002 J / 0.00003 J</b>	<0.00001 / <0.00001	<b>0.043 / 0.055</b>	<0.00003 / <0.00003	<0.00002 / <0.00002	
MW-7 (FD)	5/13/2019	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	
MW-8	06/01/2017	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000049	<0.000059	<0.000059	<0.000049	
MW-8	08/16/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	06/19/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	3/29/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-8	5/14/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/01/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	08/16/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	11/10/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	03/27/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9R	06/18/2018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	06/01/2017	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000047 / <0.000049	<0.000057 / <0.000059	<0.000057 / <0.000059	<0.000047 / <0.000049	
MW-10	08/16/2017	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000028	<0.000028	<0.000094	
MW-10	11/10/2017	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000095 / <0.000095	0.000011 J / 0.000010 J	<0.000028 / <0.000028	<0.000028 / <0.000028	0.000095 / <0.000099
MW-10	03/27/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00003	<0.00003	<0.00001	
MW-10	06/19/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<b>0.00005 J</b>	<0.00003	<0.00002
MW-10 (FD)	3/29/2019	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	[-]	
MW-10	5/13/2019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

**Notes:**  
 ID = Identification  
 MW = Groundwater monitoring well  
 mg/L = Milligrams per liter  
 <0.0002 = Not detected at or above the method detection limit (MDL)  
**Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level  
**Bold** = Value exceeds MDL  
 -- = Not Available or Not Analyzed  
 J = The compound was positively identified; however, the associated numerical value is an estimated concentration only.  
 ADEC = Alaska Department of Environmental Conservation  
 PAHs = poly aromatic hydrocarbons by Method SW8270



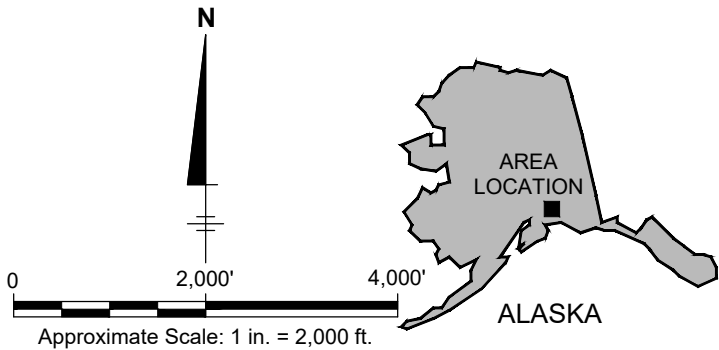
# FIGURES





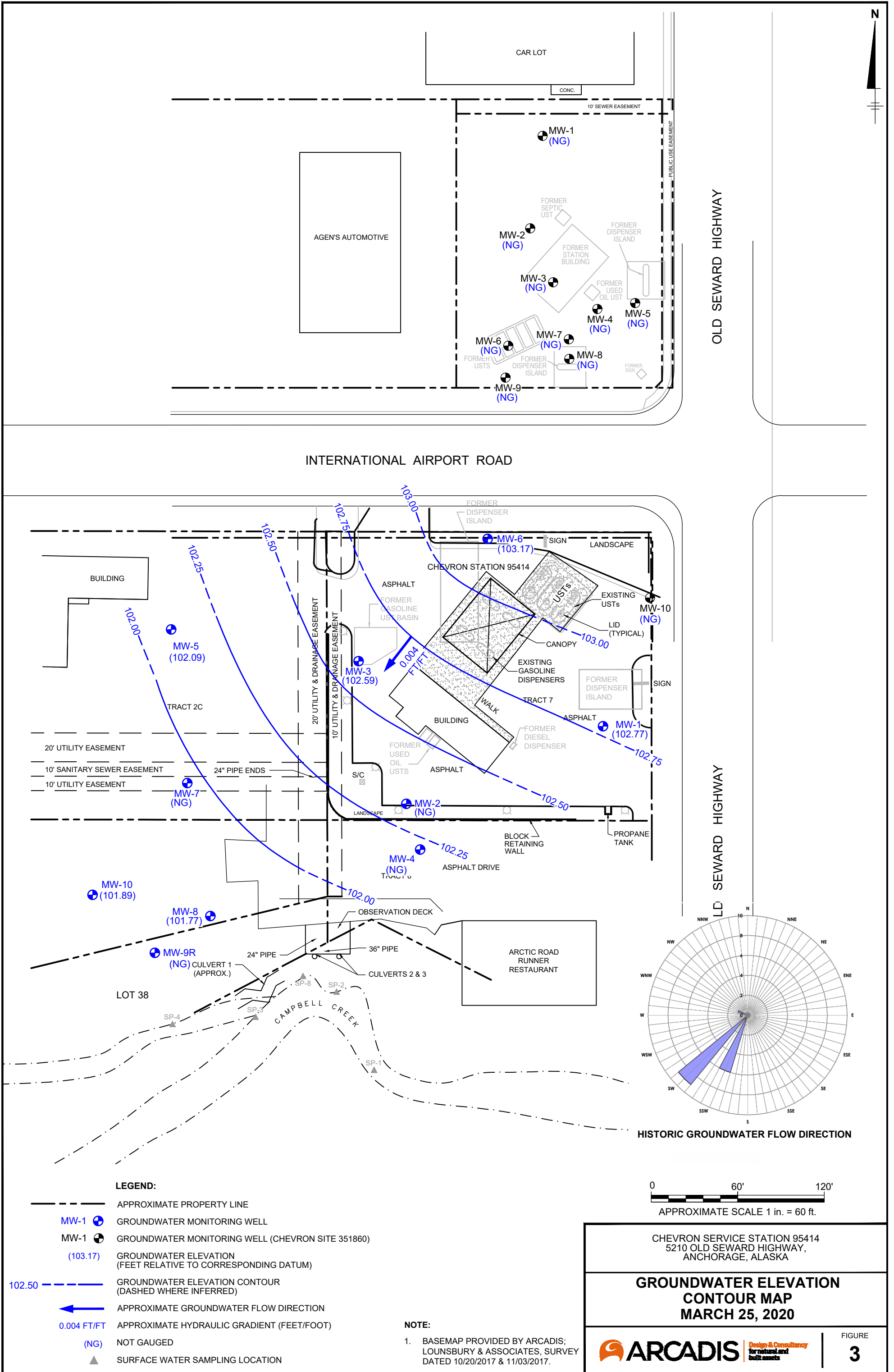
# PROJECT LOCATION

SOURCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., ANCHORAGE A-8 NW, ALASKA, 2019.



CHEVRON SERVICE STATION 95414 5210 OLD SEWARD HIGHWAY, ANCHORAGE, ALASKA	
<b>SITE LOCATION MAP</b>	
	Design & Consultancy for natural and built assets
FIGURE	<b>1</b>

Approximate Scale: 1 in. = 2,000 ft.



**LEGEND:**

- APPROXIMATE PROPERTY LINE
- MW-1 (NG) GROUNDWATER MONITORING WELL
- MW-1 (103.17) GROUNDWATER MONITORING WELL (CHEVRON SITE 351860)
- (103.17) GROUNDWATER ELEVATION (FEET RELATIVE TO CORRESPONDING DATUM)
- 102.50 --- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- ← APPROXIMATE GROUNDWATER FLOW DIRECTION
- 0.004 FT/FT APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)
- (NG) NOT GAUGED
- ▲ SURFACE WATER SAMPLING LOCATION

**NOTE:**

1. BASEMAP PROVIDED BY ARCADIS; LOUNSBURY & ASSOCIATES, SURVEY DATED 10/20/2017 & 11/03/2017.

0 60' 120'  
 APPROXIMATE SCALE 1 in. = 60 ft.

CHEVRON SERVICE STATION 95414  
 5210 OLD SEWARD HIGHWAY,  
 ANCHORAGE, ALASKA

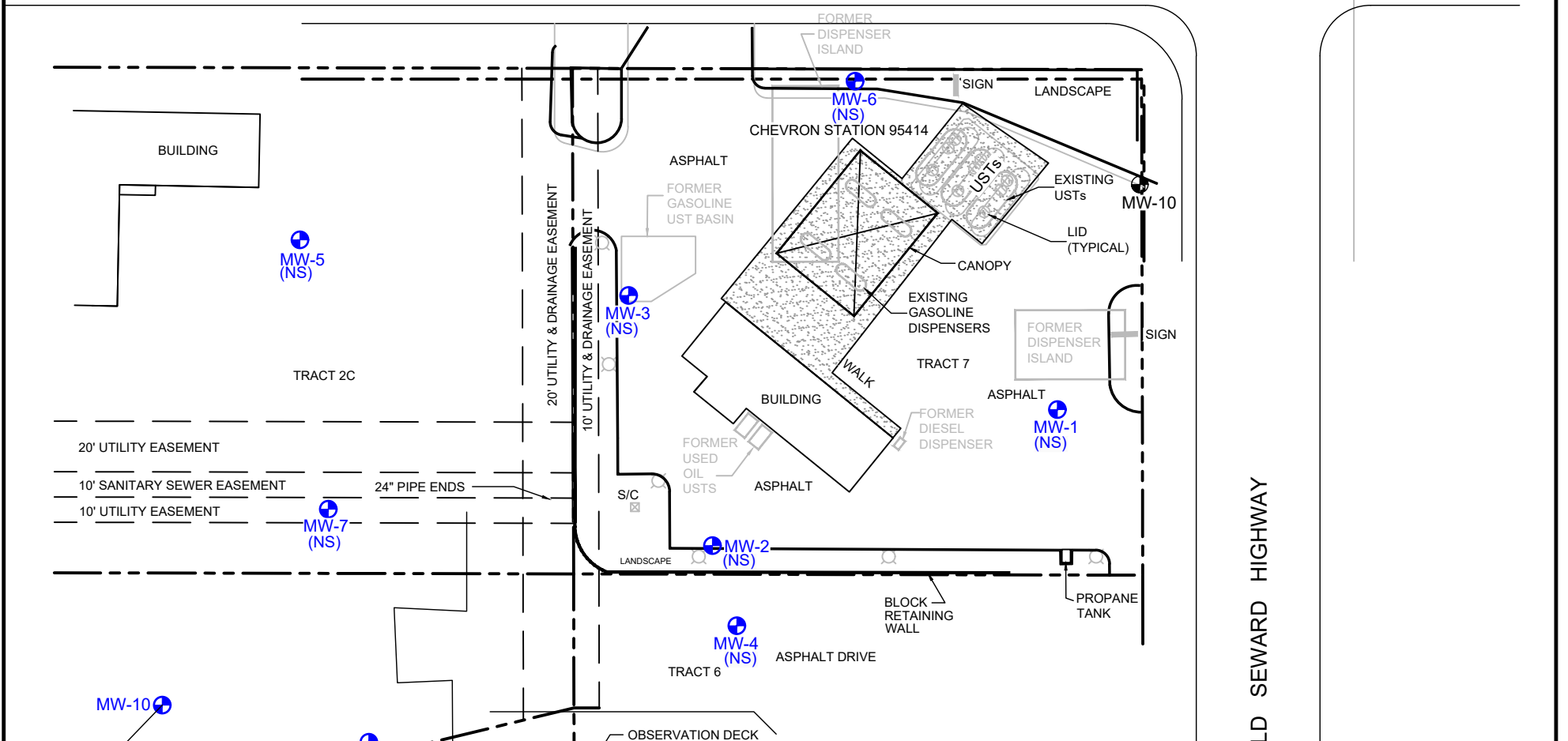
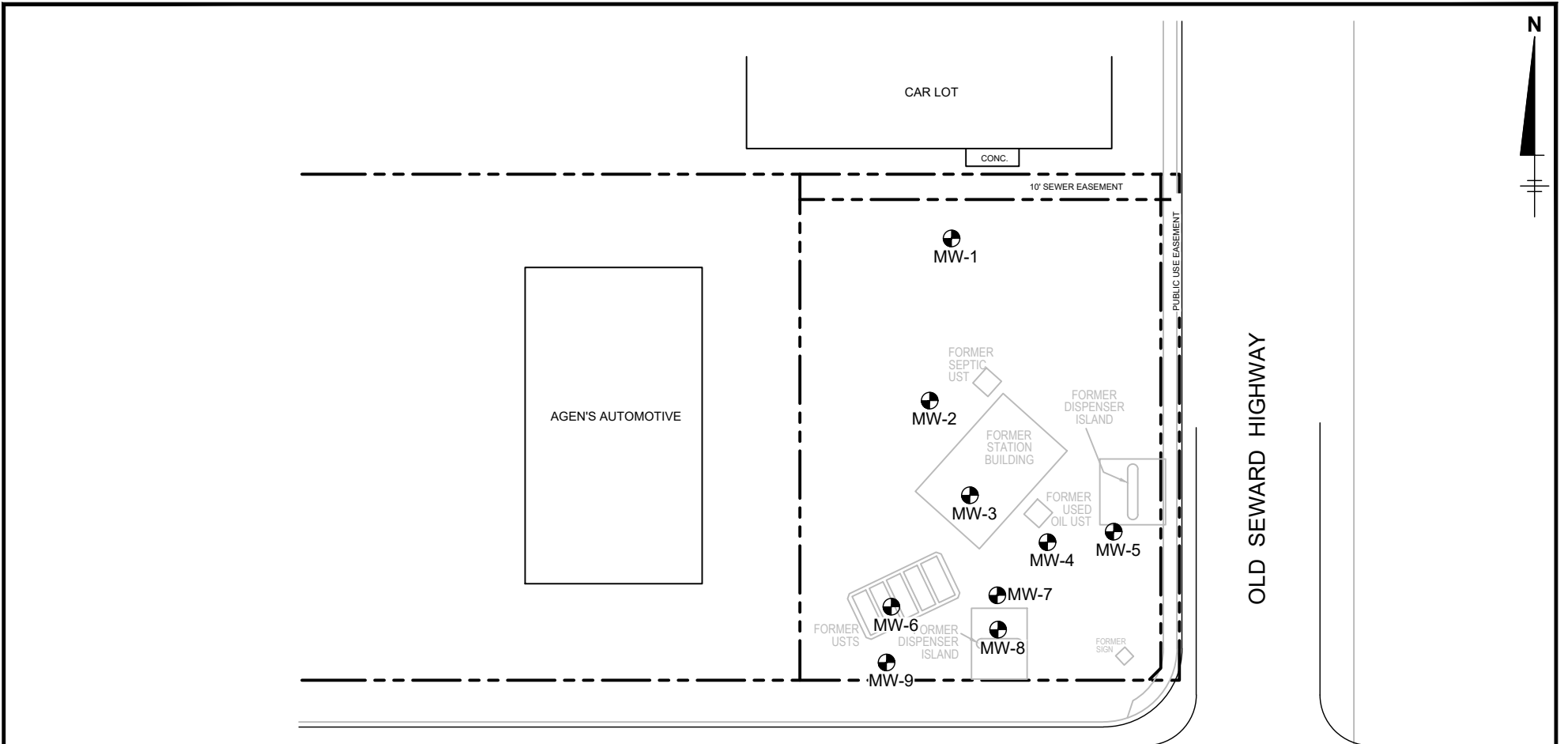
**GROUNDWATER ELEVATION  
 CONTOUR MAP  
 MARCH 25, 2020**



FIGURE

**3**





MW-10	
Date	3/25/2020
TPH-g	<0.1 [ $<0.1$ ]
TPH-d	<b>0.189 J</b> [0.186 J]
Benzene	<0.00100 [ $<0.00100$ ]
Toluene	<0.00100 [ $<0.00100$ ]
Ethylbenzene	<0.00100 [ $<0.00100$ ]
Total Xylenes	<0.00300 [ $<0.00300$ ]
MTBE	<0.00100 [ $<0.00100$ ]
Naphthalene	<0.00500 [ $<0.00500$ ]

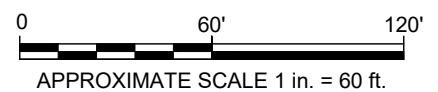
MW-8	
Date	3/25/2020
TPH-g	<b>0.0606 J</b>
TPH-d	<b>0.484 J</b>
Benzene	<0.00100
Toluene	<0.00100
Ethylbenzene	<0.00100
Total Xylenes	<0.00300
MTBE	<0.00100
Naphthalene	<0.00500

- LEGEND:**
- APPROXIMATE PROPERTY LINE
  - MW-3 GROUNDWATER MONITORING WELL
  - MW-3 GROUNDWATER MONITORING WELL (CHEVRON SITE 351860)
  - STREAM SAMPLE LOCATIONS
  - TPH-g TOTAL PETROLEUM HYDROCARBONS, GASOLINE RANGE ORGANICS
  - TPH-d TOTAL PETROLEUM HYDROCARBONS, DIESEL RANGE ORGANICS
  - MTBE METHYL TERT-BUTYL ETHER
  - BOLD** VALUE EXCEEDS THE METHOD DETECTION LIMIT
  - <0.00100 NOT DETECTED AT OR ABOVE THE REPORTED DETECTION LIMIT
  - NS NOT SAMPLED
  - <0.1 [ $<0.1$ ] RESULT [DUPLICATE RESULT]

- J THE COMPOUND WAS POSITIVELY IDENTIFIED; HOWEVER, THE ASSOCIATED NUMERICAL VALUE IS AN ESTIMATED CONCENTRATION ONLY
- USTS UNDERGROUND STORAGE TANKS

MW-8	
WELL ID	
Date	3/25/2020
TPH-g	<b>0.0606 J</b>
TPH-d	<b>0.484 J</b>
Benzene	<0.00100
Toluene	<0.00100
Ethylbenzene	<0.00100
Total Xylenes	<0.00300
MTBE	<0.00100
Naphthalene	<0.00500
CONCENTRATION IN (mg/L)	
ANALYTE	

- NOTE:**
- BASEMAP PROVIDED BY ARCADIS; LOUNSBURY & ASSOCIATES, SURVEY DATED 10/20/2017 & 11/03/2017.



CHEVRON SERVICE STATION 95414  
 5210 OLD SEWARD HIGHWAY,  
 ANCHORAGE, ALASKA

**GROUNDWATER ANALYTICAL  
 RESULT MAP  
 MARCH 25, 2020**

**ARCADIS** | Design & Consultancy  
 for natural and built assets

FIGURE **4**

# APPENDIX A

## Site Background and History



**Chevron Environmental  
Management Company**

## **Appendix A:**

### **Site History and Background**

**Chevron Facility 95414**  
5210 Old Seward Highway  
Anchorage, Alaska  
ADEC File No: 2100.26.062  
HAZARD ID No: 24602

May 19, 2020

## Appendix A: 95414 Site Description and Background

# 1 95414 SITE BACKGROUND AND HISTORY

## 1.1 Site Description and Vicinity

Chevron facility 95414 is located at 5210 Old Seward Highway in Anchorage, Alaska. The site is an active Chevron-branded service station with three underground storage tanks (UST), and four fuel dispensers. The surrounding properties are mixed commercial and industrial; the site is bordered to the north and northwest by properties currently or formerly listed as ADEC contaminated sites.

## 1.2 Site History

The site has operated as a service station since 1969 and was remodeled in 1996, at which time three gasoline USTs, one diesel UST, one used-oil UST, fuel dispenser islands, and product piping were removed and replaced. During the 1996 remodel, petroleum hydrocarbons were detected in soil.

# 2 SITE CHARACTERIZATION

There are currently four groundwater monitoring wells located onsite (MW-1, MW-2, MW-3, and MW-6) and six groundwater monitoring wells located offsite (MW-4, MW-5, MW-7, MW-8, MW-9R, MW-10 and MW-11).

# 3 CURRENT SITE MONITORING ACTIVITIES

The site currently has a network of 10 groundwater monitoring wells located onsite (MW-1, MW-2, MW-3, and MW-6) and offsite (MW-4, MW-5, MW-7, MW-8, MW-9R, MW-10 and MW-11). Monitoring wells MW-8, MW-9, and MW-10 are monitored and sampled quarterly; monitoring wells MW-1 through MW-7 are monitored and sampled semiannually. Additionally, the site is directly north of Campbell Creek, and surface water samples are taken during the second and third quarters when the creek is accessible.

In recent historic sampling, concentrations of benzene, ethylbenzene, total xylenes, gasoline range organics (GRO), and diesel range organics (DRO) have exceeded their respective ADEC Method 2 groundwater cleanup levels in several monitoring wells.

# 4 GEOLOGY AND HYDROGEOLOGY

## 4.1 Site Hydrogeology

The site is in south central Alaska, south of the Knik Arm and north of the Turnagain Arm of Cook Inlet, and immediately north of Campbell Creek. Static groundwater depths from 1998 to the present have ranged between 2.74 and 9.53 feet below top of casing (ft btoc). Historic groundwater flow is to the southwest.

## 5 REFERENCES

GHD Inc. 2018. Second Semiannual 2018 Groundwater Monitoring Report: Chevron-Branded Service Station 95414, 5210 Old Seward Highway, Anchorage, AK. August 9



# APPENDIX B

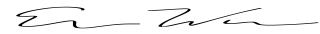
Field Data Sheets



## Daily Log

**Project Name :** 95414 **Weather(°F) :** Cloudy  
**Project Number :** 30043260 **Prepared By:** Evan Wujcik  
**Purpose :** GW sampling event  
**PPE :** Level D  
**Equipment:** Water Quality Meter (i.e. YSI)

Date	Time	Description of Activities
3/25/2020	09:35	Arrive on site Open permit to work Walk site to find Wells
3/25/2020	10:45	Open each accessible well MW-2 Was not accessible due to ice berm MW-9 Not gaged or sampled due to access agreement MW-4 and MW-7 Were obstructed by ice All other wells accessible
3/25/2020	11:00	Gage all accessible Wells Prepare to sample MW-8 and MW-10
3/25/2020	12:01	Purge well and sample MW-10
3/25/2020	12:30	Decon equipment Place samples in cooler Prepare equipment for next sample
3/25/2020	13:04	Sample well MW-8 Decon equipment Place samples in cooler Load vehicle
3/25/2020	13:50	Close permit to work Secure load in vehicle Depart site for office



### Waste Management:

Drums On Site									
Date	Number of Drums upon Arrival	Size of Drums	Type of Drums	Condition of Drums	Waste Drummed Today?	Number of drums Created	Size of drums	Condition of Drums	General Waste Comments
3/25/2020					no				

## Groundwater Gauging Log

<b>Client:</b>		Chevron					
<b>Site ID:</b>		95414					
<b>Site Location:</b>		5210 Old Seward Highway, Anchorage, AK 99501					
<b>Date(s):</b>		03/25/2020					
<b>Sampler(s):</b>		Evan Wujcik					
Well ID	Date	Gauging Time	Static Water Level (ft bmp)	Depth to Product (ft bmp)	Total Depth (ft bmp)	PID Reading (ppm)	Comments
MW-6	03/25/2020	10:25	7.99	--	16.4	0	--
MW-7	03/25/2020	10:58	0.00	--	0	0	Well obstruction by ice 4.03ft btoc
MW-5	03/25/2020	11:01	6.67	--	15.53	--	--
MW-3	03/25/2020	11:10	8.85	--	18.3	0	--
MW-2	03/25/2020	11:12	0.00	--	0	--	Well not accessible due to ice bank
MW-1	03/25/2020	11:15	7.86	--	13.7	0	--
MW-4	03/25/2020	11:19	0.00	--	0	0	Obstruction by ice at 4.86 ft btoc
MW-10	03/25/2020	11:24	7.28	--	11.86	0	--
MW-8	03/25/2020	11:27	6.93	--	12.22	0	--

Project Number 30043260 Well ID MW-10 Date 3/25/2020

Site Location 5210 Old Seward Highway, Anchorage, AK 99501 Site ID 95414 Weather(°F) Clear

Measuring Pt. Description Top of Casing Screen Setting (ft-bmp) NA to NA Casing Diameter (in.) 2 Well Casing Material PVC

Static Water Level (ft-bmp) 7.28 Total Depth (ft-bmp) 11.86 Water Column (ft) 4.58 Gallons in Well 0.74

Pump Intake (ft-bmp) 8 Purge Method Low-Flow Sample Method Low-Flow

Sample Time 12:15 Volumes Purged 1.61 Sample ID MW-10-W-200325 Sampled by Evan Wujcik

Purge Start 11:57 Gallons Purged 1.19 Replicate/Code No. BD-1-W-200325

Purge End 12:14

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Total Volume purged (ml)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
											Color	Odor
12:00		300	7.43	900	8.46	1.36	216	5.04	3.33	28	--	--
12:04	4	300	7.45	1800	8.13	1.38	215	3.47	3.17	29	--	--
12:07	7	300	7.54	2700	7.77	1.37	108	1.70	3.40	34	--	--
12:10	10	300	7.56	3600	7.66	1.35	110	1.12	3.48	37	--	--
12:12	12	300	7.59	4500	7.58	1.33	107	0.65	3.89	40	--	--

#### Comments:

#### Well Casing Volume Conversion

Well diameter (inches) 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-10-W-200325 Sample Time: 12:15 Sample Depth (ft-bmp): 8

Analytes and Methods: GRO AK 101, DRO AK 102, 8260D Full Scan

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

mV = millivolts  
 °F = degrees Fahrenheit  
 °C = degrees Celsius

Project Number 30043260 Well ID MW-8 Date 3/25/2020

Site Location 5210 Old Seward Highway, Anchorage, AK 99501 Site ID 95414 Weather(°F) Cloudy

Measuring Pt. Description Top of Casing Screen Setting (ft-bmp) NA to NA Casing Diameter (in.) 2 Well Casing Material PVC

Static Water Level (ft-bmp) 6.93 Total Depth (ft-bmp) 12.22 Water Column (ft) 5.29 Gallons in Well 0.86

Pump Intake (ft-bmp) 7.6 Purge Method Low-Flow Sample Method Low-Flow

Sample Time 13:15 Volumes Purged 1.38 Sample ID MW-8-W-200325 Sampled by Evan Wujcik

Purge Start 12:51 Gallons Purged 1.19

Purge End 13:12 Replicate/Code No.

Time	Minutes Elapsed	Rate (mL/min)	Depth to Water (ft)	Total Volume purged (ml)	pH (standard units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temperature (°C)	Redox (mV)	Appearance	
											Color	Odor
12:56		300	6.96	900	7.39	1.88	87.6	1.62	5.01	-54	Clear	None
12:59	3	300	6.96	1800	7.34	1.90	81.9	0.56	4.79	-52	Clear	None
13:02	6	300	6.97	2700	7.28	1.90	73.6	0.00	4.51	-53	Clear	None
13:05	9	300	6.96	3600	7.26	1.92	66.4	0.00	4.38	-55	Clear	None

#### Comments:

#### Well Casing Volume Conversion

Well diameter (inches) 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-8-W-200325 Sample Time: 13:15 Sample Depth (ft-bmp): 7.6

Analytes and Methods: GRO AK 101, DRO AK 102, 8260D Full Scan

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

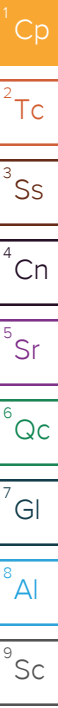
mS/cm = milliSiemens per centimeter  
 NTU = Nephelometric Turbidity Unit  
 mg/L = milligrams per liter

mV = millivolts  
 °F = degrees Fahrenheit  
 °C = degrees Celsius

# APPENDIX C

Laboratory Analytical Report and Chain of Custody Documentation





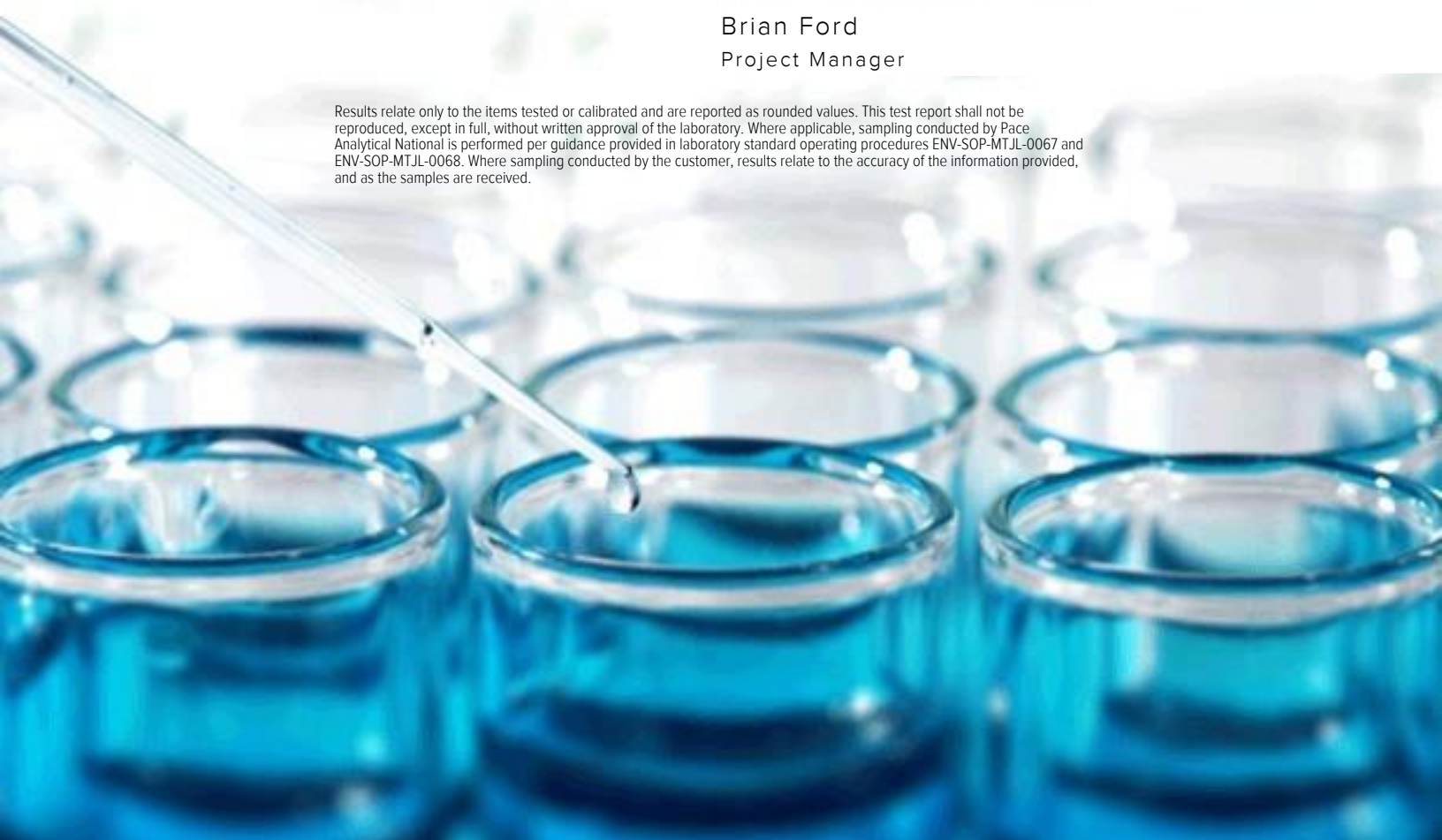
## Arcadis - Chevron - AK

Sample Delivery Group: L1203544  
Samples Received: 03/27/2020  
Project Number: 30043260.5133  
Description: 95414  
Site: 95414  
Report To: Nicole Monroe  
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.





<b>Cp: Cover Page</b>	<b>1</b>	<b>1</b> Cp
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	<b>2</b> Tc
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Sr: Sample Results</b>	<b>5</b>	<b>3</b> Ss
MW-10-W-200325 L1203544-01	<b>5</b>	
MW-8-W-200325 L1203544-02	<b>7</b>	<b>4</b> Cn
EQB-1-W-200325 L1203544-03	<b>9</b>	<b>5</b> Sr
BD-1-W-200325 L1203544-04	<b>11</b>	
TRIP BLANK-200325 L1203544-05	<b>13</b>	<b>6</b> Qc
<b>Qc: Quality Control Summary</b>	<b>15</b>	
Volatile Organic Compounds (GC) by Method AK101	<b>15</b>	<b>7</b> Gl
Volatile Organic Compounds (GC/MS) by Method 8260D	<b>16</b>	
Semi-Volatile Organic Compounds (GC) by Method AK102	<b>21</b>	<b>8</b> Al
<b>Gl: Glossary of Terms</b>	<b>22</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>23</b>	<b>9</b> Sc
<b>Sc: Sample Chain of Custody</b>	<b>24</b>	



# SAMPLE SUMMARY



## MW-10-W-200325 L1203544-01 GW

Collected by  
David Beaudoin

Collected date/time  
03/25/20 12:15

Received date/time  
03/27/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG1451955	1	03/28/20 15:10	03/28/20 15:10	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1452537	1	03/30/20 02:00	03/30/20 02:00	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1454135	1	04/01/20 00:13	04/01/20 00:13	BRA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG1453046	1	03/31/20 23:41	04/04/20 01:00	KME	Mt. Juliet, TN

1  
Cp

2  
Tc

3  
Ss

4  
Cn

5  
Sr

6  
Qc

7  
Gl

8  
Al

9  
Sc

## MW-8-W-200325 L1203544-02 GW

Collected by  
David Beaudoin

Collected date/time  
03/25/20 13:15

Received date/time  
03/27/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG1451955	1	03/28/20 15:34	03/28/20 15:34	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1452537	1	03/30/20 02:19	03/30/20 02:19	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1454135	10	04/01/20 02:57	04/01/20 02:57	BRA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG1453046	1	03/31/20 23:41	04/04/20 01:24	KME	Mt. Juliet, TN

## EQB-1-W-200325 L1203544-03 GW

Collected by  
David Beaudoin

Collected date/time  
03/25/20 12:00

Received date/time  
03/27/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG1451955	1	03/28/20 15:58	03/28/20 15:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1452537	1	03/30/20 00:05	03/30/20 00:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1454135	1	04/01/20 00:37	04/01/20 00:37	BRA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG1453046	1	03/31/20 23:41	04/04/20 01:47	KME	Mt. Juliet, TN

## BD-1-W-200325 L1203544-04 GW

Collected by  
David Beaudoin

Collected date/time  
03/25/20 00:00

Received date/time  
03/27/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method AK101	WG1451955	1	03/28/20 16:22	03/28/20 16:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1452537	1	03/30/20 02:38	03/30/20 02:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1454135	1	04/01/20 01:00	04/01/20 01:00	BRA	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method AK102	WG1453046	1	03/31/20 23:41	04/04/20 02:08	KME	Mt. Juliet, TN

## TRIP BLANK-200325 L1203544-05 GW

Collected by  
David Beaudoin

Collected date/time  
03/25/20 00:00

Received date/time  
03/27/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG1452537	1	03/30/20 00:24	03/30/20 00:24	BMB	Mt. Juliet, TN



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

Brian Ford  
Project Manager

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

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

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

Batch	Lab Sample ID	Analytes
WG1452537	(LCS) R3514713-1, L1203544-01, 02, 03, 04, 05	1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Chloroethane and Vinyl chloride



Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	U		10.0	100	1	03/28/2020 15:10	<a href="#">WG1451955</a>
(S) a,a,a-Trifluorotoluene(FID)	97.5			50.0-150		03/28/2020 15:10	<a href="#">WG1451955</a>

1 Cp

2 Tc

3 Ss

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,3-Trichloropropane	U		0.00200	0.00500	1	04/01/2020 00:13	<a href="#">WG1454135</a>
Acetone	U		10.0	50.0	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2-Dibromoethane	U		0.00410	0.00500	1	04/01/2020 00:13	<a href="#">WG1454135</a>
Acrolein	U	<u>JO</u>	8.87	50.0	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Acrylonitrile	U		1.87	10.0	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Benzene	U		0.331	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Bromobenzene	U		0.352	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Bromochloromethane	U		0.520	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Bromodichloromethane	U		0.380	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Bromoform	U		0.469	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Bromomethane	U		0.866	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
n-Butylbenzene	U		0.361	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
sec-Butylbenzene	U		0.365	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
tert-Butylbenzene	U	<u>JO</u>	0.399	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Carbon disulfide	U		0.275	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Carbon tetrachloride	U		0.379	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Chlorobenzene	U		0.348	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Chlorodibromomethane	U		0.327	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Chloroethane	U	<u>J4</u>	0.453	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Chloroform	U		0.324	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Chloromethane	U		0.276	2.50	1	03/30/2020 02:00	<a href="#">WG1452537</a>
2-Chlorotoluene	U		0.375	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
4-Chlorotoluene	U		0.351	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Dibromomethane	U		0.346	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2-Dichlorobenzene	U		0.349	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,3-Dichlorobenzene	U		0.220	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,4-Dichlorobenzene	U		0.274	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Dichlorodifluoromethane	U		0.551	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1-Dichloroethane	U		0.259	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2-Dichloroethane	U		0.361	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1-Dichloroethene	U		0.398	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2-Dichloropropane	U		0.306	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1-Dichloropropene	U		0.352	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,3-Dichloropropane	U		0.366	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
2,2-Dichloropropane	U		0.321	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Di-isopropyl ether	U		0.320	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Ethylbenzene	U		0.384	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Isopropylbenzene	U		0.326	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
p-Isopropyltoluene	U		0.350	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
2-Butanone (MEK)	U		3.93	10.0	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Methylene Chloride	U		1.00	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Methyl tert-butyl ether	U		0.367	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

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
Naphthalene	U		1.00	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
n-Propylbenzene	U		0.349	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Styrene	U		0.307	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Tetrachloroethene	U		0.372	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Toluene	U		0.412	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1,1-Trichloroethane	U	J4	0.319	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,1,2-Trichloroethane	U	J4	0.383	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Trichloroethene	U		0.398	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Trichlorofluoromethane	U		1.20	5.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Vinyl chloride	U	J4	0.259	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
Xylenes, Total	U		1.06	3.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
o-Xylene	U		0.341	1.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
m&p-Xylene	U		0.719	2.00	1	03/30/2020 02:00	<a href="#">WG1452537</a>
(S) Toluene-d8	108			80.0-120		03/30/2020 02:00	<a href="#">WG1452537</a>
(S) 4-Bromofluorobenzene	91.6			77.0-126		03/30/2020 02:00	<a href="#">WG1452537</a>
(S) 1,2-Dichloroethane-d4	117			70.0-130		03/30/2020 02:00	<a href="#">WG1452537</a>

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

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	189	J	170	800	1	04/04/2020 01:00	<a href="#">WG1453046</a>
(S) o-Terphenyl	72.2			50.0-150		04/04/2020 01:00	<a href="#">WG1453046</a>



Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	60.6	J	10.0	100	1	03/28/2020 15:34	WG1451955
(S) a,a,a-Trifluorotoluene(FID)	97.9			50.0-150		03/28/2020 15:34	WG1451955

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,3-Trichloropropane	U		0.0200	0.0500	10	04/01/2020 02:57	WG1454135
Acetone	U		10.0	50.0	1	03/30/2020 02:19	WG1452537
1,2-Dibromoethane	U		0.0410	0.0500	10	04/01/2020 02:57	WG1454135
Acrolein	U	JO	8.87	50.0	1	03/30/2020 02:19	WG1452537
Acrylonitrile	U		1.87	10.0	1	03/30/2020 02:19	WG1452537
Benzene	U		0.331	1.00	1	03/30/2020 02:19	WG1452537
Bromobenzene	U		0.352	1.00	1	03/30/2020 02:19	WG1452537
Bromochloromethane	U		0.520	5.00	1	03/30/2020 02:19	WG1452537
Bromodichloromethane	U		0.380	1.00	1	03/30/2020 02:19	WG1452537
Bromoform	U		0.469	1.00	1	03/30/2020 02:19	WG1452537
Bromomethane	U		0.866	5.00	1	03/30/2020 02:19	WG1452537
n-Butylbenzene	U		0.361	1.00	1	03/30/2020 02:19	WG1452537
sec-Butylbenzene	U		0.365	1.00	1	03/30/2020 02:19	WG1452537
tert-Butylbenzene	U	JO	0.399	1.00	1	03/30/2020 02:19	WG1452537
Carbon disulfide	U		0.275	1.00	1	03/30/2020 02:19	WG1452537
Carbon tetrachloride	U		0.379	1.00	1	03/30/2020 02:19	WG1452537
Chlorobenzene	U		0.348	1.00	1	03/30/2020 02:19	WG1452537
Chlorodibromomethane	U		0.327	1.00	1	03/30/2020 02:19	WG1452537
Chloroethane	U	J4	0.453	5.00	1	03/30/2020 02:19	WG1452537
Chloroform	U		0.324	5.00	1	03/30/2020 02:19	WG1452537
Chloromethane	U		0.276	2.50	1	03/30/2020 02:19	WG1452537
2-Chlorotoluene	U		0.375	1.00	1	03/30/2020 02:19	WG1452537
4-Chlorotoluene	U		0.351	1.00	1	03/30/2020 02:19	WG1452537
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/30/2020 02:19	WG1452537
Dibromomethane	U		0.346	1.00	1	03/30/2020 02:19	WG1452537
1,2-Dichlorobenzene	U		0.349	1.00	1	03/30/2020 02:19	WG1452537
1,3-Dichlorobenzene	U		0.220	1.00	1	03/30/2020 02:19	WG1452537
1,4-Dichlorobenzene	U		0.274	1.00	1	03/30/2020 02:19	WG1452537
Dichlorodifluoromethane	U		0.551	5.00	1	03/30/2020 02:19	WG1452537
1,1-Dichloroethane	U		0.259	1.00	1	03/30/2020 02:19	WG1452537
1,2-Dichloroethane	U		0.361	1.00	1	03/30/2020 02:19	WG1452537
1,1-Dichloroethene	U		0.398	1.00	1	03/30/2020 02:19	WG1452537
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/30/2020 02:19	WG1452537
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/30/2020 02:19	WG1452537
1,2-Dichloropropane	U		0.306	1.00	1	03/30/2020 02:19	WG1452537
1,1-Dichloropropene	U		0.352	1.00	1	03/30/2020 02:19	WG1452537
1,3-Dichloropropane	U		0.366	1.00	1	03/30/2020 02:19	WG1452537
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/30/2020 02:19	WG1452537
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/30/2020 02:19	WG1452537
2,2-Dichloropropane	U		0.321	1.00	1	03/30/2020 02:19	WG1452537
Di-isopropyl ether	U		0.320	1.00	1	03/30/2020 02:19	WG1452537
Ethylbenzene	U		0.384	1.00	1	03/30/2020 02:19	WG1452537
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/30/2020 02:19	WG1452537
Isopropylbenzene	U		0.326	1.00	1	03/30/2020 02:19	WG1452537
p-Isopropyltoluene	U		0.350	1.00	1	03/30/2020 02:19	WG1452537
2-Butanone (MEK)	U		3.93	10.0	1	03/30/2020 02:19	WG1452537
Methylene Chloride	U		1.00	5.00	1	03/30/2020 02:19	WG1452537
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/30/2020 02:19	WG1452537
Methyl tert-butyl ether	U		0.367	1.00	1	03/30/2020 02:19	WG1452537



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	U		1.00	5.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
n-Propylbenzene	0.427	J	0.349	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Styrene	U		0.307	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Tetrachloroethene	U		0.372	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Toluene	U		0.412	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,1,1-Trichloroethane	U	J4	0.319	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,1,2-Trichloroethane	U	J4	0.383	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Trichloroethene	U		0.398	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Trichlorofluoromethane	U		1.20	5.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Vinyl chloride	U	J4	0.259	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
Xylenes, Total	U		1.06	3.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
o-Xylene	U		0.341	1.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
m&p-Xylene	U		0.719	2.00	1	03/30/2020 02:19	<a href="#">WG1452537</a>
(S) Toluene-d8	109			80.0-120		03/30/2020 02:19	<a href="#">WG1452537</a>
(S) 4-Bromofluorobenzene	90.2			77.0-126		03/30/2020 02:19	<a href="#">WG1452537</a>
(S) 1,2-Dichloroethane-d4	112			70.0-130		03/30/2020 02:19	<a href="#">WG1452537</a>

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

Sample Narrative:

L1203544-02 WG1454135: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	484	J	170	800	1	04/04/2020 01:24	<a href="#">WG1453046</a>
(S) o-Terphenyl	77.7			50.0-150		04/04/2020 01:24	<a href="#">WG1453046</a>



Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	U		10.0	100	1	03/28/2020 15:58	<a href="#">WG1451955</a>
(S) a,a,a-Trifluorotoluene(FID)	98.1			50.0-150		03/28/2020 15:58	<a href="#">WG1451955</a>

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,3-Trichloropropane	U		0.00200	0.00500	1	04/01/2020 00:37	<a href="#">WG1454135</a>
Acetone	U		10.0	50.0	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2-Dibromoethane	U		0.00410	0.00500	1	04/01/2020 00:37	<a href="#">WG1454135</a>
Acrolein	U	<u>JO</u>	8.87	50.0	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Acrylonitrile	U		1.87	10.0	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Benzene	U		0.331	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Bromobenzene	U		0.352	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Bromochloromethane	U		0.520	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Bromodichloromethane	U		0.380	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Bromoform	U		0.469	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Bromomethane	U		0.866	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
n-Butylbenzene	U		0.361	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
sec-Butylbenzene	U		0.365	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
tert-Butylbenzene	U	<u>JO</u>	0.399	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Carbon disulfide	U		0.275	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Carbon tetrachloride	U		0.379	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Chlorobenzene	U		0.348	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Chlorodibromomethane	U		0.327	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Chloroethane	U	<u>J4</u>	0.453	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Chloroform	0.583	<u>J</u>	0.324	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Chloromethane	U		0.276	2.50	1	03/30/2020 00:05	<a href="#">WG1452537</a>
2-Chlorotoluene	U		0.375	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
4-Chlorotoluene	U		0.351	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Dibromomethane	U		0.346	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2-Dichlorobenzene	U		0.349	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,3-Dichlorobenzene	U		0.220	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,4-Dichlorobenzene	U		0.274	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Dichlorodifluoromethane	U		0.551	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1-Dichloroethane	U		0.259	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2-Dichloroethane	U		0.361	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1-Dichloroethene	U		0.398	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2-Dichloropropane	U		0.306	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1-Dichloropropene	U		0.352	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,3-Dichloropropane	U		0.366	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
2,2-Dichloropropane	U		0.321	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Di-isopropyl ether	U		0.320	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Ethylbenzene	U		0.384	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Isopropylbenzene	U		0.326	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
p-Isopropyltoluene	U		0.350	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
2-Butanone (MEK)	U		3.93	10.0	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Methylene Chloride	U		1.00	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Methyl tert-butyl ether	U		0.367	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>



Collected date/time: 03/25/20 12:00

L1203544

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	U		1.00	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
n-Propylbenzene	U		0.349	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Styrene	U		0.307	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Tetrachloroethene	U		0.372	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Toluene	U		0.412	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1,1-Trichloroethane	U	J4	0.319	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,1,2-Trichloroethane	U	J4	0.383	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Trichloroethene	U		0.398	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Trichlorofluoromethane	U		1.20	5.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Vinyl chloride	U	J4	0.259	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
Xylenes, Total	U		1.06	3.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
o-Xylene	U		0.341	1.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
m&p-Xylene	U		0.719	2.00	1	03/30/2020 00:05	<a href="#">WG1452537</a>
(S) Toluene-d8	112			80.0-120		03/30/2020 00:05	<a href="#">WG1452537</a>
(S) 4-Bromofluorobenzene	93.1			77.0-126		03/30/2020 00:05	<a href="#">WG1452537</a>
(S) 1,2-Dichloroethane-d4	116			70.0-130		03/30/2020 00:05	<a href="#">WG1452537</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

## Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	U		170	800	1	04/04/2020 01:47	<a href="#">WG1453046</a>
(S) o-Terphenyl	78.7			50.0-150		04/04/2020 01:47	<a href="#">WG1453046</a>





Volatile Organic Compounds (GC) by Method AK101

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TPHGAK C6 to C10	U		10.0	100	1	03/28/2020 16:22	<a href="#">WG1451955</a>
(S) a,a,a-Trifluorotoluene(FID)	97.8			50.0-150		03/28/2020 16:22	<a href="#">WG1451955</a>

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,3-Trichloropropane	U		0.00200	0.00500	1	04/01/2020 01:00	<a href="#">WG1454135</a>
Acetone	U		10.0	50.0	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2-Dibromoethane	U		0.00410	0.00500	1	04/01/2020 01:00	<a href="#">WG1454135</a>
Acrolein	U	<u>JO</u>	8.87	50.0	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Acrylonitrile	U		1.87	10.0	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Benzene	U		0.331	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Bromobenzene	U		0.352	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Bromochloromethane	U		0.520	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Bromodichloromethane	U		0.380	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Bromoform	U		0.469	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Bromomethane	U		0.866	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
n-Butylbenzene	U		0.361	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
sec-Butylbenzene	U		0.365	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
tert-Butylbenzene	U	<u>JO</u>	0.399	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Carbon disulfide	U		0.275	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Carbon tetrachloride	U		0.379	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Chlorobenzene	U		0.348	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Chlorodibromomethane	U		0.327	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Chloroethane	U	<u>J4</u>	0.453	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Chloroform	U		0.324	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Chloromethane	U		0.276	2.50	1	03/30/2020 02:38	<a href="#">WG1452537</a>
2-Chlorotoluene	U		0.375	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
4-Chlorotoluene	U		0.351	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Dibromomethane	U		0.346	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2-Dichlorobenzene	U		0.349	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,3-Dichlorobenzene	U		0.220	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,4-Dichlorobenzene	U		0.274	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Dichlorodifluoromethane	U		0.551	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1-Dichloroethane	U		0.259	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2-Dichloroethane	U		0.361	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1-Dichloroethene	U		0.398	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2-Dichloropropane	U		0.306	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1-Dichloropropene	U		0.352	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,3-Dichloropropane	U		0.366	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
2,2-Dichloropropane	U		0.321	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Di-isopropyl ether	U		0.320	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Ethylbenzene	U		0.384	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Isopropylbenzene	U		0.326	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
p-Isopropyltoluene	U		0.350	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
2-Butanone (MEK)	U		3.93	10.0	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Methylene Chloride	U		1.00	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Methyl tert-butyl ether	U		0.367	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>



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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Naphthalene	U		1.00	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
n-Propylbenzene	U		0.349	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Styrene	U		0.307	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Tetrachloroethene	U		0.372	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Toluene	U		0.412	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1,1-Trichloroethane	U	J4	0.319	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,1,2-Trichloroethane	U	J4	0.383	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Trichloroethene	U		0.398	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Trichlorofluoromethane	U		1.20	5.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Vinyl chloride	U	J4	0.259	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
Xylenes, Total	U		1.06	3.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
o-Xylene	U		0.341	1.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
m&p-Xylene	U		0.719	2.00	1	03/30/2020 02:38	<a href="#">WG1452537</a>
(S) Toluene-d8	108			80.0-120		03/30/2020 02:38	<a href="#">WG1452537</a>
(S) 4-Bromofluorobenzene	89.0			77.0-126		03/30/2020 02:38	<a href="#">WG1452537</a>
(S) 1,2-Dichloroethane-d4	119			70.0-130		03/30/2020 02:38	<a href="#">WG1452537</a>

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

Semi-Volatile Organic Compounds (GC) by Method AK102

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
AK102 DRO C10-C25	186	J	170	800	1	04/04/2020 02:08	<a href="#">WG1453046</a>
(S) o-Terphenyl	77.4			50.0-150		04/04/2020 02:08	<a href="#">WG1453046</a>



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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Acrolein	U	<u>J0</u>	8.87	50.0	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Acrylonitrile	U		1.87	10.0	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Benzene	U		0.331	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Bromobenzene	U		0.352	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Bromochloromethane	U		0.520	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Bromodichloromethane	U		0.380	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Bromoform	U		0.469	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Bromomethane	U		0.866	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
n-Butylbenzene	U		0.361	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
sec-Butylbenzene	U		0.365	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
tert-Butylbenzene	U	<u>J0</u>	0.399	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Carbon disulfide	U		0.275	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Carbon tetrachloride	U		0.379	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Chlorobenzene	U		0.348	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Chlorodibromomethane	U		0.327	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Chloroethane	U	<u>J4</u>	0.453	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Chloroform	U		0.324	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Chloromethane	U		0.276	2.50	1	03/30/2020 00:24	<a href="#">WG1452537</a>
2-Chlorotoluene	U		0.375	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
4-Chlorotoluene	U		0.351	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Dibromomethane	U		0.346	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2-Dichlorobenzene	U		0.349	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,3-Dichlorobenzene	U		0.220	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,4-Dichlorobenzene	U		0.274	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Dichlorodifluoromethane	U		0.551	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1-Dichloroethane	U		0.259	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2-Dichloroethane	U		0.361	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1-Dichloroethene	U		0.398	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2-Dichloropropane	U		0.306	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1-Dichloropropene	U		0.352	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,3-Dichloropropane	U		0.366	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
2,2-Dichloropropane	U		0.321	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Di-isopropyl ether	U		0.320	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Ethylbenzene	U		0.384	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Isopropylbenzene	U		0.326	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
p-Isopropyltoluene	U		0.350	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
2-Butanone (MEK)	U		3.93	10.0	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Methylene Chloride	U		1.00	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Methyl tert-butyl ether	U		0.367	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Naphthalene	U		1.00	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
n-Propylbenzene	U		0.349	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Styrene	U		0.307	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Tetrachloroethene	U		0.372	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Toluene	U		0.412	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/25/20 00:00

L1203544

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1,1-Trichloroethane	U	J4	0.319	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,1,2-Trichloroethane	U	J4	0.383	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Trichloroethene	U		0.398	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Trichlorofluoromethane	U		1.20	5.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Vinyl chloride	U	J4	0.259	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
Xylenes, Total	U		1.06	3.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
o-Xylene	U		0.341	1.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
m&p-Xylene	U		0.719	2.00	1	03/30/2020 00:24	<a href="#">WG1452537</a>
(S) Toluene-d8	108			80.0-120		03/30/2020 00:24	<a href="#">WG1452537</a>
(S) 4-Bromofluorobenzene	92.5			77.0-126		03/30/2020 00:24	<a href="#">WG1452537</a>
(S) 1,2-Dichloroethane-d4	112			70.0-130		03/30/2020 00:24	<a href="#">WG1452537</a>

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



Method Blank (MB)

(MB) R3515079-2 03/28/20 13:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
TPHGAK C6 to C10	U		10.0	100
(S) a,a,a-Trifluorotoluene(FID)	98.1			60.0-120

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

(LCS) R3515079-1 03/28/20 12:24 • (LCSD) R3515079-3 03/28/20 17:11

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
TPHGAK C6 to C10	400	394	386	98.5	96.5	60.0-120			2.05	20
(S) a,a,a-Trifluorotoluene(FID)				98.5	98.3	60.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3514713-2 03/29/20 23:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	5.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3514713-2 03/29/20 23:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	U		0.256	1.00
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
o-Xylene	U		0.341	1.00
m&p-Xylenes	U		0.719	2.00
(S) Toluene-d8	109			80.0-120
(S) 4-Bromofluorobenzene	89.4			77.0-126
(S) 1,2-Dichloroethane-d4	116			70.0-130

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc

Laboratory Control Sample (LCS)

(LCS) R3514713-1 03/29/20 22:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	22.2	88.8	19.0-160	
Acrolein	25.0	10.3	41.2	10.0-160	



Laboratory Control Sample (LCS)

(LCS) R3514713-1 03/29/20 22:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Acrylonitrile	25.0	23.3	93.2	55.0-149	
Benzene	5.00	4.66	93.2	70.0-123	
Bromobenzene	5.00	5.37	107	73.0-121	
Bromodichloromethane	5.00	5.12	102	75.0-120	
Bromochloromethane	5.00	4.72	94.4	76.0-122	
Bromoform	5.00	4.61	92.2	68.0-132	
Bromomethane	5.00	6.62	132	10.0-160	
n-Butylbenzene	5.00	4.97	99.4	73.0-125	
sec-Butylbenzene	5.00	4.99	99.8	75.0-125	
tert-Butylbenzene	5.00	4.82	96.4	76.0-124	
Carbon disulfide	5.00	4.36	87.2	61.0-128	
Carbon tetrachloride	5.00	5.82	116	68.0-126	
Chlorobenzene	5.00	5.12	102	80.0-121	
Chlorodibromomethane	5.00	4.72	94.4	77.0-125	
Chloroethane	5.00	7.60	152	47.0-150	J4
Chloroform	5.00	5.59	112	73.0-120	
Chloromethane	5.00	6.62	132	41.0-142	
2-Chlorotoluene	5.00	4.37	87.4	76.0-123	
4-Chlorotoluene	5.00	4.87	97.4	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.43	88.6	58.0-134	
Dibromomethane	5.00	5.52	110	80.0-120	
1,2-Dichlorobenzene	5.00	6.03	121	79.0-121	
1,3-Dichlorobenzene	5.00	5.24	105	79.0-120	
1,4-Dichlorobenzene	5.00	5.25	105	79.0-120	
Dichlorodifluoromethane	5.00	4.63	92.6	51.0-149	
1,1-Dichloroethane	5.00	4.78	95.6	70.0-126	
1,2-Dichloroethane	5.00	5.30	106	70.0-128	
1,1-Dichloroethene	5.00	5.35	107	71.0-124	
cis-1,2-Dichloroethene	5.00	5.65	113	73.0-120	
trans-1,2-Dichloroethene	5.00	4.48	89.6	73.0-120	
1,2-Dichloropropane	5.00	4.20	84.0	77.0-125	
1,1-Dichloropropene	5.00	3.88	77.6	74.0-126	
1,3-Dichloropropane	5.00	4.94	98.8	80.0-120	
cis-1,3-Dichloropropene	5.00	4.28	85.6	80.0-123	
trans-1,3-Dichloropropene	5.00	4.78	95.6	78.0-124	
2,2-Dichloropropane	5.00	5.16	103	58.0-130	
Di-isopropyl ether	5.00	5.34	107	58.0-138	
Ethylbenzene	5.00	4.46	89.2	79.0-123	
Hexachloro-1,3-butadiene	5.00	4.58	91.6	54.0-138	
Isopropylbenzene	5.00	4.34	86.8	76.0-127	

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc





Laboratory Control Sample (LCS)

(LCS) R3514713-1 03/29/20 22:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.44	88.8	76.0-125	
2-Butanone (MEK)	25.0	29.0	116	44.0-160	
Methylene Chloride	5.00	5.05	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	25.0	31.6	126	68.0-142	
Methyl tert-butyl ether	5.00	5.29	106	68.0-125	
Naphthalene	5.00	4.74	94.8	54.0-135	
n-Propylbenzene	5.00	5.24	105	77.0-124	
Styrene	5.00	4.55	91.0	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.59	112	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	5.55	111	65.0-130	
Tetrachloroethene	5.00	5.40	108	72.0-132	
Toluene	5.00	4.69	93.8	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	5.59	112	69.0-132	
1,2,3-Trichlorobenzene	5.00	5.18	104	50.0-138	
1,2,4-Trichlorobenzene	5.00	4.68	93.6	57.0-137	
1,1,1-Trichloroethane	5.00	6.59	132	73.0-124	J4
1,1,2-Trichloroethane	5.00	6.22	124	80.0-120	J4
Trichloroethene	5.00	4.83	96.6	78.0-124	
Trichlorofluoromethane	5.00	3.64	72.8	59.0-147	
1,2,3-Trimethylbenzene	5.00	4.57	91.4	77.0-120	
1,2,4-Trimethylbenzene	5.00	4.84	96.8	76.0-121	
1,3,5-Trimethylbenzene	5.00	5.03	101	76.0-122	
Vinyl chloride	5.00	7.11	142	67.0-131	J4
Xylenes, Total	15.0	12.9	86.0	79.0-123	
o-Xylene	5.00	4.28	85.6	80.0-122	
m&p-Xylenes	10.0	8.66	86.6	80.0-122	
(S) Toluene-d8			106	80.0-120	
(S) 4-Bromofluorobenzene			92.2	77.0-126	
(S) 1,2-Dichloroethane-d4			114	70.0-130	

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3514739-2 03/31/20 23:50

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

Laboratory Control Sample (LCS)

(LCS) R3514739-1 03/31/20 22:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,2,3-Trichloropropane	0.0500	0.0570	114	70.0-130	
1,2-Dibromoethane	0.0500	0.0440	88.0	70.0-130	

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl

<sup>8</sup> Al

<sup>9</sup> Sc



Method Blank (MB)

(MB) R3515472-1 04/03/20 23:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
AK102 DRO C10-C25	U		170	800
<i>(S) o-Terphenyl</i>	79.3			60.0-120

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

(LCS) R3515472-2 04/03/20 23:26 • (LCSD) R3515472-3 04/03/20 23:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
AK102 DRO C10-C25	3000	2840	2970	94.7	99.0	75.0-125			4.48	20
<i>(S) o-Terphenyl</i>				81.8	85.5	60.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
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.

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

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

\* 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 National.

## State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	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 <sup>1,6</sup>	90010	South Carolina	84004
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana <sup>1</sup>	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

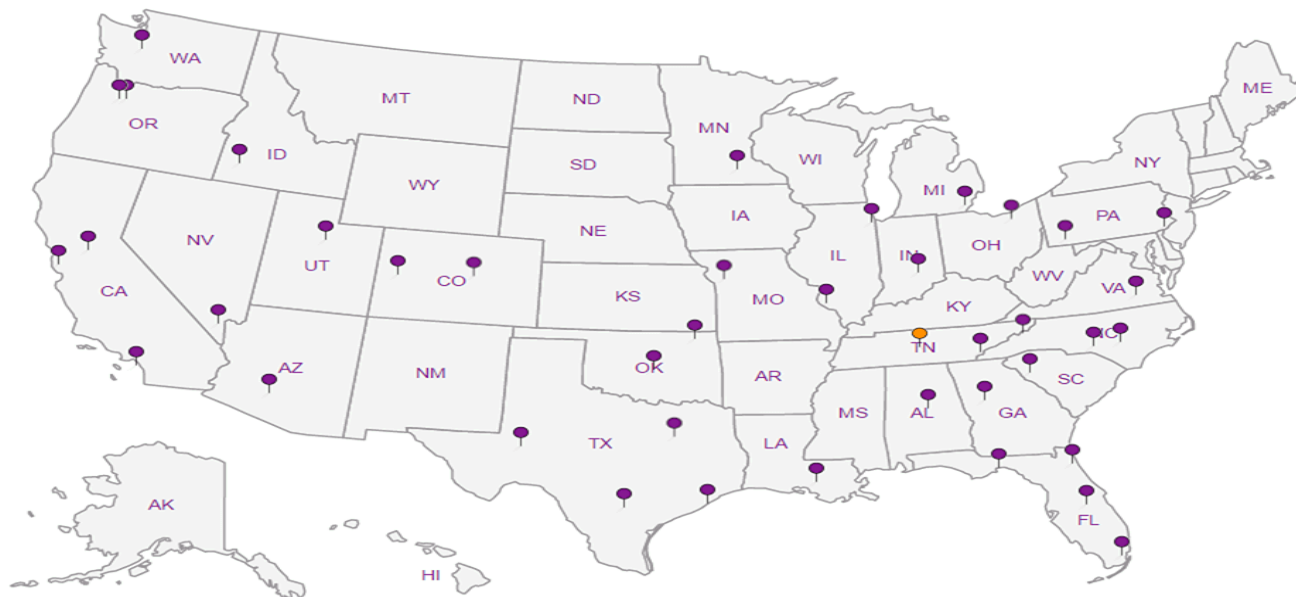
## Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

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

## Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



# APPENDIX D

## ADEC Data Review Checklist



## Laboratory Data Review Checklist

Completed By:

Bhagyashree A Fulzele

Title:

Project Chemist

Date:

April 07,2020

Consultant Firm:

ARCADIS U.S., Inc

Laboratory Name:

Pace Analytical

Laboratory Report Number:

L1203544

Laboratory Report Date:

04/06/2020

CS Site Name:

First quarter 2020 Groundwater Monitoring Report

ADEC File Number:

2100.26.062

Hazard Identification Number:

24602



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

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes  No  N/A  Comments:

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 approved?

Yes  No  N/A  Comments:

No.

2. Chain of Custody (CoC)

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

Yes  No  N/A  Comments:

Yes.

b. Correct analyses requested?

Yes  No  N/A  Comments:

Yes.

3. Laboratory Sample Receipt Documentation

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

Yes  No  N/A  Comments:

Yes.

b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes  No  N/A  Comments:

Yes.

c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

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, etc.?

Yes  No  N/A  Comments:

No discrepancies were observed.

e. Data quality or usability affected?

Comments:

Data quality/usability was not affected.

4. Case Narrative

a. Present and understandable?

Yes  No  N/A  Comments:

Yes.

b. 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. Correct analyses performed/reported as requested on COC?

Yes  No  N/A  Comments:

Yes.

b. All applicable holding times met?

Yes  No  N/A  Comments:

Yes.

c. All soils reported on a dry weight basis?

Yes  No  N/A  Comments:

No soil samples were submitted for analysis.

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

Yes  No  N/A  Comments:

Yes.

e. Data quality or usability affected?

Data quality/usability was not affected.

6. QC Samples

a. Method Blank

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

Yes  No  N/A  Comments:

Yes.

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes  No  N/A  Comments:

Yes.

iii. If above LOQ or project specified objectives, 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:

None of the data qualified for method blank contamination.

v. Data quality or usability affected?

Comments:

Data quality/usability was not affected.

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

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes  No  N/A  Comments:

Yes.

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

Yes  No  N/A  Comments:

Metals/Inorganic analysis was not requested for submitted samples.

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

Yes  No  N/A  Comments:

LCS recoveries for compounds chloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane and vinyl chloride were greater than the control limit in preparation batch WG1452537 for method SW846 8260D. These compound result in associated samples were non-detect and qualification was not required.

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

Yes  No  N/A  Comments:

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:

None of the data qualified for LCS/LCSD recoveries.

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

Comments:

Data quality/usability was not affected.

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

**Note: Leave blank if not required for project**

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

Yes  No  N/A  Comments:

MS/MSD analysis was not requested on project samples.

- ii. Metals/Inorganics – one MS and one 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:

Not Applicable.

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

Yes  No  N/A  Comments:

Not Applicable.

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

Comments:

Not Applicable.

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

Comments:

Data quality/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 – All percent recoveries (%R) reported and within method or laboratory limits and project specified objectives, if applicable? (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes  No  N/A  Comments:

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:

None of the data qualified.

- iv. Data quality or usability affected?

Comments:

Data quality/usability was not affected.

e. Trip Blanks

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

Yes  No  N/A  Comments:

Trip blank sample was collected as TRIP BLANK-200325.

- ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC?  
(If not, a comment explaining why must be entered below)

Yes  No  N/A  Comments:

Yes.

- iii. All results less than LOQ and project specified objectives?

Yes  No  N/A  Comments:

Yes.

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

Comments:

None of the samples were affected.

- v. Data quality or usability affected?

Comments:

Data quality/usability was not affected.

f. Field Duplicate

- i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes  No  N/A  Comments:

Yes.

- ii. Submitted blind to lab?

Yes  No  N/A  Comments:

Field duplicate BD-1-W-200325 was collected from sample MW-10-W-200325.

- 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:

The RPDs between the parent and duplicate samples were acceptable.

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

Comments:

Data quality/usability was not affected.

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

Yes  No  N/A  Comments:

Equipment blank sample was collected as EQB-1-W-200325.

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

Yes  No  N/A  Comments:

Chloroform (0.583 J ug/l) was detected below the reporting limit in EQB-1-W-200325 for method SW846 8260D. A blank action level was established at five times of the reported blank concentration. Chloroform results in associated samples were non-detect; hence, qualification was not required.

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

Comments:

None of the samples were affected.

iii. Data quality or usability affected?

Comments:

Data quality/usability was not affected.

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

a. Defined and appropriate?

Yes  No  N/A  Comments:

Yes.