

Chevron Environmental Management Company

Conceptual Site Model Summary, Revision 1

**Chevron Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska**

Hazard ID: 23570

ADEC File Number: 2100.26.057

ADEC Site Name: Chevron - #9014

November 20, 2024

Conceptual Site Model Summary

Chevron Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska

Hazard ID: 23570
ADEC File ID: 2100.26.057
ADEC Site Name: Chevron - #9014

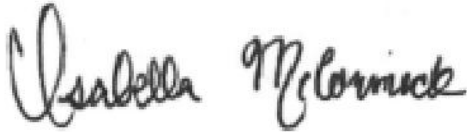
November 20, 2024

Prepared By:
Arcadis U.S., Inc.

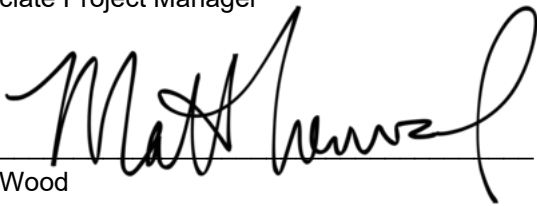
Honolulu, Hawaii 96813
Phone: 808 522 0321
Fax: 808 522 0366

Prepared For:
Chevron Environmental Management Company

Our Ref:
30064218



Isabella McCormick
Associate Project Manager



Matt Wood
Staff Scientist



Nick Wood, P.E.
Senior Engineer

This document is intended only for the use of the individual or entity for which it was prepared and may contain information that is privileged, confidential and exempt from disclosure under applicable law. Any dissemination, distribution or copying of this document is strictly prohibited.

Contents

Acronyms and Abbreviations.....	vi
1 Introduction.....	1
2 Site Background	2
2.1 Site Description and Vicinity	2
2.2 Site History.....	3
3 Geology and Hydrogeology.....	4
3.1 Regional Geology	4
3.2 Site Geology.....	4
3.3 Regional Hydrogeology	4
3.4 Site Hydrogeology	4
4 Contaminant Source and Release Mechanism.....	5
5 Constituents of Potential Concern	6
5.1 Soil	6
5.2 Groundwater	7
5.3 Soil Vapor	8
6 Remediation Summary.....	9
6.1 Chevron Station No. 99014	9
6.2 Thrifty Rent-A-Car.....	10
6.3 Holiday/Williams Service Station	11
7 Site Investigation.....	12
7.1 Chevron Facility No. 99014.....	12
7.1.1 Soil Investigations	12
7.1.2 Soil Exceedances Summary	13
7.1.3 Groundwater Investigations	13
7.1.4 Groundwater Exceedances Summary	14
7.1.5 Soil Vapor Investigations Summary	16
7.1.6 Soil Vapor Exceedances Summary.....	16
7.2 Thrifty Rent-A-Car.....	18
7.2.1 Soil Investigations	18
7.2.2 Soil Exceedances Summary	19
7.2.3 Groundwater Investigations	20

7.2.4 Groundwater Exceedances Summary 20

7.2.5 Soil Vapor Investigations Summary 20

7.2.6 Soil Vapor Exceedances Summary..... 21

7.3 Holiday/Williams Service Station 21

7.3.1 Soil Investigations 21

7.3.2 Soil Exceedances Summary 21

7.3.3 Groundwater Investigations 22

7.3.4 Groundwater Exceedances Summary 23

7.3.5 Soil Vapor Investigations 23

8 Impacted Media 24

9 Transport Mechanisms 25

10 Exposure Media, Pathways, and Receptors 26

10.1 Exposure to Human Receptors 26

10.2 Surface Soil 26

10.3 Subsurface Soil..... 27

10.4 Groundwater 27

10.5 Outdoor Air..... 27

10.6 Indoor Air..... 28

10.7 Surface Water..... 28

10.8 Water Supply Wells 28

10.9 Other Media 29

11 Data Quality Objectives 30

12 Data Gaps and Next Steps 31

12.1 Soil 31

12.2 Groundwater 31

12.3 Soil Vapor 32

13 References 34

Embedded Tables

Table 5-1. Soil Constituents of Potential Concern 6

Table 5-2. Groundwater Constituents of Potential Concern 7

Table 5-3. Soil Vapor Constituents of Potential Concern..... 8

Table 7-1. 1995 Site Remodelling Soil Excavation Details 12
Table 7-2. Groundwater Monitoring Analytical Exceedances Summary Table 15
Table 7-3. Groundwater to Vapor Analytical Exceedances Summary Table 16

Tables

Table 1 Soil Analytical Results
Table 2 Soil Analytical Results – Polycyclic Aromatic Hydrocarbons
Table 3 Soil Analytical Exceedances Summary
Table 4a Historical Groundwater Gauging and Analytical Results
Table 4b Groundwater Analytical Results - VOCs
Table 4c Groundwater Analytical Data - PAHs
Table 5a Current Groundwater Gauging and Analytical Results
Table 5b Current Groundwater Analytical Results - Additional VOCs
Table 5c Current Groundwater Analytical Data – PAHs

Figures

Figure 1 Site Location Map
Figure 2 Site Plan
Figure 3 Groundwater Elevation Contour Map - September 12 and 13, 2023
Figure 4 Groundwater Analytical Results Map - September 12 and 13, 2023
Figure 5 Historical Soil Sampling Locations

Hydrographs

Graph 1 Monitoring Well B6MW Historical Groundwater Elevation and Analytical Data
Graph 2 Monitoring Well MW-1 Historical Groundwater Elevation and Analytical Data
Graph 3 Monitoring Well MW-4 Historical Groundwater Elevation and Analytical Data
Graph 4 Monitoring Well MW-5B Historical Groundwater Elevation and Analytical Data
Graph 5 Monitoring Well MW-7 Historical Groundwater Elevation and Analytical Data
Graph 6 Monitoring Well MW-8 Historical Groundwater Elevation and Analytical Data
Graph 7 Monitoring Well MW-11 Historical Groundwater Elevation and Analytical Data

- Graph 8 Monitoring Well MW-14 Historical Groundwater Elevation and Analytical Data**
- Graph 9 Monitoring Well MW-17 Historical Groundwater Elevation and Analytical Data**
- Graph 10 Monitoring Well MW-18 Historical Groundwater Elevation and Analytical Data**
- Graph 11 Monitoring Well MW-19 Historical Groundwater Elevation and Analytical Data**
- Graph 12 Monitoring Well MW-21 Historical Groundwater Elevation and Analytical Data**
- Graph 13 Monitoring Well MW-22 Historical Groundwater Elevation and Analytical Data**
- Graph 14 Monitoring Well MW-23 Historical Groundwater Elevation and Analytical Data**
- Graph 15 Monitoring Well MW-24 Historical Groundwater Elevation and Analytical Data**
- Graph 16 Monitoring Well MW-25 Historical Groundwater Elevation and Analytical Data**
- Graph 17 Monitoring Well MW-26 Historical Groundwater Elevation and Analytical Data**
- Graph 18 Monitoring Well MW-27 Historical Groundwater Elevation and Analytical Data**
- Graph 19 Monitoring Well MW-17 Historical Groundwater Elevation and Analytical Data**
- Graph 20 Monitoring Well T-2 Historical Groundwater Elevation and Analytical Data**

Appendices

- Appendix A ADEC Human Health Conceptual Site Model Forms**

Acronyms and Abbreviations

µg/L	micrograms per liter
ADEC	Alaska Department of Environmental Conservation
Agra	Agra Earth & Environmental
AKDNR	Alaska Department of Natural Resources
Arcadis	Arcadis U.S., Inc.
AS	air sparge
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
btoc	below top of casing
CEMC	Chevron Environmental Management Company
CL	cleanup level
COPC	constituent of potential concern
CSM	conceptual site model
Discovery	Discovery Drilling Inc. of Anchorage, Alaska
DRO	diesel range organics
EDB	1,2-dibromoethane
ft	foot or feet
GRO	gasoline range organics
Holiday/Williams	Holiday/Williams service station
ID	identification
in	inches
mg/kg	milligrams per kilogram
mi	mile or miles
MTBE	methyl tert butyl ether
PID	photoionization detector
ppmv	parts per million per volume
ROI	radius of influence
RRO	residual range organics
Secor	SECOR International Inc.

Conceptual Site Model Summary

Shannon & Wilson	Shannon and Wilson Inc.
SPH	separate phase hydrocarbon
SVE	soil vapor extraction
the Site	Chevron Station No. 99014 located at 3608 Minnesota Drive, Anchorage, Alaska
Thrifty	Thrifty Rent-a-Car
TPH	total petroleum hydrocarbon
USEPA	United States Environmental Protection Agency
UST	underground storage tank
WELTS	Well Log Tracking System
yds ³	cubic yards

1 Introduction

On behalf of Chevron Environmental Management Company (CEMC), Arcadis U.S., Inc. (Arcadis) has prepared this *Conceptual Site Model Summary* (CSM) for Chevron Station No. 99014 located at 3608 Minnesota Drive in Anchorage, Alaska (herein referred to as “the Site”) for review by the Alaska Department of Environmental Conservation (ADEC). This CSM was completed in accordance with ADEC’s *Guidance on Developing Site Conceptual Models* (ADEC 2017a). The purpose of this CSM is to characterize the environmental conditions and identify potential exposure pathways present at the Site. The Site Location Map and Site Plan are presented on **Figures 1 and 2**.

2 Site Background

2.1 Site Description and Vicinity

The Site is located at 3608 Minnesota Drive, on the northwest corner of the intersection with Spenard Road, in mid-western Anchorage, Alaska (**Figures 1 and 2**). The property's legal description is CONROY RUSHTON #1 LT 1A. The Site's latitude and longitude coordinates are 61.186959° north and 149.913797° west. The Site is bordered to the west by Greenland Drive, beyond which is a Thrifty Car Rental (southwest) and residential homes (northwest). The Thrifty Rent-A-Car (Thrifty) facility has two active ADEC contaminated sites on the property (ADEC file numbers 2100.26.219 and 2100.26.589). Spenard Road is located south of the site beyond which is a service station (Holiday Service Station, formerly Williams Express Store [Holiday/Williams]), which is currently an active ADEC contaminated site (ADEC file number 2100.26.635). Minnesota Drive is east of the site, beyond which is a small drive thru coffee shop (Heavenly Cup) and a leather store (Alaska Leather). A small strip mall with associated parking area is located north of the Site; tenants include a restaurant (Naruto Japanese Restaurant), a cigar, cigarette and tobacco store (Blazing Smokes), a nail studio (Kim's Nails), an urgent care clinic (Alaska Health Care Clinic), and a check cashing business (Alaska Check Cashers) (**Figures 1 and 2**; Arcadis 2010a). The Site is located in a mixed residential and commercial area. The closest residential property is located approximately 50 feet (ft) northwest of the Site.

The Site is currently an active Chevron-branded service station owned and operated by Cook Inlet Marketing Group, Inc. (Arcadis 2010a). The majority of the property is paved with asphalt or concrete except for a few perimeter landscaped areas (**Figure 2**). Current station facilities include two 15,000-gallon gasoline underground storage tanks (USTs) and one 15,000-gallon diesel UST located in the northeast portion of the Site, two pump islands, and a station building (**Figure 3**). The current facilities on the Holiday/Williams property include three 10,000-gallon leaded and unleaded gasoline USTs and one 10,000-gallon diesel UST located in the northern portion of the property (Shannon & Wilson, Inc. [Shannon & Wilson] 2022; **Figure 3**). The Thrifty property does not currently include any active facilities, but the property contains one 4,000 gasoline UST and two 1,000-gallon gasoline USTs that have been closed in place.

There are currently five onsite groundwater monitoring wells (MW-1, MW-4, MW-5B, MW-7, and MW-11), 15 offsite groundwater monitoring wells (MW-8, MW-9, MW-14, MW-17 through MW-19, MW-21 through MW-27, T-1, and T-2), and 10 onsite air sparge (AS) wells (AS-4 through AS-13; **Figure 3**) associated with the Site. Additionally, there is currently one monitoring well associated with the Site located on the Holiday/Williams property (B6MW; **Figure 3**). Monitoring wells B2MW and B5MW on the Holiday/Williams property were associated with the Site but were believed to have been paved over in 2019 and 2017, respectively. In July and August 2023, B2MW was found to be in good condition and B5MW was redeveloped and sampled (Arcadis 2023c). The approximate locations of all active onsite and offsite wells, historical abandoned or destroyed monitoring wells, and historical soil borings are shown on **Figure 3**.

According to the Alaska Department of Natural Resources (AKDNR) Well Log Tracking System (WELTS), there are seven wells within a quarter-mile radius of the Site located at or directly adjacent to 1706 Jefferson Drive, 3405 Outta Place, 3411 Willow Place, 1303 W 39th Avenue, 1207 W 38th Place, 3700 Wilson Street, and 1117 Chugach Way. According to the AKDNR WELTS, four of the wells are public supply wells and three of the wells use is "unknown".

It is anticipated that the Site will continue to be used as a service station for the foreseeable future. There have been no indications or correspondence with the current property owners, Cook Inlet Marketing Group, Inc., to redevelop the Site.

2.2 Site History

Chevron owned the Site and operated the original service station until 1995, at which point the station was sold to E.L Brodie in 2006 (Arcadis 2023a). The Site was remodeled in 1995 and early 1996 including expansion of the station building and installation of the existing two 15,000-gallon gasoline and one 15,000-gallon diesel USTs, pump islands, and associated product piping (**Figure 3**). During remodeling, two 10,000-gallon and one 5,000-gallon unleaded gasoline USTs, one 1,000-gallon waste oil UST, one 500-gallon heating oil UST, three pump islands, associated product piping, and one RV fueling island were removed from the Site (**Figure 3**; Agra 1995b). These original five onsite USTs were last used in June 1995 and reportedly had been installed approximately 20 years prior (Agra Earth & Environmental [Agra] 1995c). Three hydraulic lifts inside the station building were also removed during this work. These former features were primarily located in the southern portion of the Site in the vicinity of the former onsite station building. Current and former Site features are shown on **Figure 3**.

Although there were historical leaks on the Thrifty property west of the Site and on the Holiday/Williams property south of the Site, in 1996 CEMC agreed to assume responsibility for the petroleum hydrocarbon impacts at these properties that originated from the Site.

The Site is currently owned and operated by the Cook Inlet Marketing Group, Inc. and is an active Chevron-branded service station (Arcadis 2023a). Soil sampling has taken place at the Site between 1992 and 2008 (**Tables 1, 2, and 3**) and groundwater monitoring has been conducted at the Site since 1992 (**Tables 4a, 4b, 4c, 5a, 5b, and 5c**). Soil investigations are discussed in more detail in Section 7.1 and groundwater investigations are discussed in more detail in Section 7.3. Remediation efforts performed onsite to date are discussed in Section 6 below.

3 Geology and Hydrogeology

3.1 Regional Geology

The Site is situated southwest of downtown Anchorage in the Anchorage Bowl or marine lowland that extends into the Chugach Mountains (Arcadis 2010a). Glacial sediments can be found from the Chugach Mountains to the Cook Inlet and reach a depth of approximately 1,300 ft near the Cook Inlet. Regional soils are made up of sand and gravelly sand between 15 and 26 ft below ground surface (bgs) and silt and sandy silt between 26 and 27 ft bgs (the total depth explored; Arcadis 2008b).

3.2 Site Geology

The Site is situated on the Bootlegger Cove Formation, a fine-grained glacial outwash that formed during the last ice age (Arcadis 2008b). Previous boring logs indicate that the Site is underlain by coarse gray sand, silt, and clay to a depth of approximately 20 ft bgs. Geotechnical soil samples from 2008 indicated a general description of medium sand (Arcadis 2008b).

3.3 Regional Hydrogeology

The hydrogeologic system underlying the Anchorage region consists of an unconfined aquifer and a deeper confined aquifer (Arcadis 2010a). The unconfined aquifer is made up of gravel, sand, silty sand, and silty clay. Below the unconfined aquifer is a continuous layer of clay and silt known as the Pleistocene Bootlegger Cove Formation.

3.4 Site Hydrogeology

The Site is in south central Alaska, south of the Knik Arm and north of the Turnagain Arm of the Cook Inlet (Arcadis 2023a). From 1992 to present, static groundwater depths at the Site have ranged from 9.57 to 16.89 ft below top of casing (btoc; **Tables 4a** through **4c**). The approximate depth to groundwater from the most recent groundwater monitoring event conducted on September 12 and 13, 2023 was 10.00 (MW-23) to 12.60 (MW-8) ft btoc (Arcadis 2023a). Historical groundwater flow is to the southwest at an approximate gradient of 0.002 to 0.005 ft per ft (**Figure 4**; Arcadis 2023a). Based on December 2006 slug tests, the hydraulic conductivity at the Site is on the order of 1.0E-3 centimeters per second (Arcadis 2007).

4 Contaminant Source and Release Mechanism

Subsurface investigations at the Site indicate that the primary contaminant source was the former service station facilities including the original gasoline USTs, waste oil USTs, and product dispenser piping that were excavated in 1995 to early 1996 (**Figure 3**).

Although there have been historical leaks on the Thrifty property directly west of the Site and the Holiday/Williams property south of the Site, petroleum hydrocarbon impacts from the Site migrated onto these properties. As previously discussed, CEMC has agreed to address the petroleum hydrocarbon impacts both at the Site as well as offsite that originated from the Site.

According to the ADEC Contaminated Sites database, the Site was deemed a Leaking Underground Storage Tank Site in September 1992. The release mechanism is presumed to be leaks in the original USTs, pump islands, and/or associated piping.

5 Constituents of Potential Concern

This section discusses the Site constituents of potential concern (COPCs) in soil, groundwater, and soil vapor as presented in the ADEC Method Two Soil Cleanup Levels (CLs), Tables B1 and B2 (18 AAC 75.341), ADEC Table C Groundwater CLs (18 AAC 75.345), and ADEC Vapor Intrusion Guidance for Contaminated Sites, Appendix E: Target Levels for Exterior or Subslab Soil Gas - Commercial Limits (ADEC 2017b).

5.1 Soil

Soil COPCs are based on previous contaminant concentrations detected in borings completed to install monitoring wells on and offsite during the 1992, 1994, 1995, 1999, 2000, 2001, 2004, 2007, 2008, 2020, and 2021 soil sampling events (**Table 1**). Historical soil analytical data from 1992, 1994, 1999, 2000, 2001, 2004, and 2007 are from Arcadis' 2008 *Remedial System Installation and Offsite Assessment Report* (Arcadis 2008a). Soil analytical data from the June 1995 investigation is from a July 19, 1995, Agra letter report to CEMC (Agra 1995a). Soil analytical data from the November 1995 investigation are from an Agra *Summary Report for Underground Storage Tank Closure* (Agra 1995c). Soil data from 2008 are from Arcadis' 2008 *Offsite Assessment and Second Semi-Annual Groundwater Monitoring Report* (Arcadis 2008b). Soil analytical data from May 2020 is from Shannon & Wilson's 2020 *Soil Sampling, Holiday Station Store No. 630* (Shannon and Wilson 2020). Soil analytical data from September 2021 is from Shannon & Wilson's 2022 *Release Investigation Activities, Holiday Station Store No. 630* (Shannon and Wilson 2022).

Historical soil investigations and contaminant exceedances are summarized in Section 7. Soil COPCs and their associated most stringent ADEC soil CLs are presented in **Table 5-1**, below, as well as the applicable laboratory analysis methods and detection limits.

Table 5-1. Soil Constituents of Potential Concern

Soil COPC	Maximum Allowable Concentrations (mg/kg)	Migration to Groundwater Soil CL (mg/kg)	Laboratory Method ²	Laboratory Detection Limit ² (mg/kg)
GRO	1,400	300 ¹	Alaska Method AK 101	0.001
DRO	12,500	250 ¹	Alaska Method AK 102	0.001
RRO	22,000	11,000 ¹	Alaska Method AK 103	0.001
Benzene	--	0.022	USEPA Method 8021B	0.001
Ethylbenzene	--	0.13	USEPA Method 8021B	0.001
Toluene	--	6.7	USEPA Method 8021B	0.001
Total Xylenes	--	1.5	USEPA Method 8021B	0.001
MTBE	--	0.4	USEPA Method 8021B	0.001

Notes:

¹ = 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, rev. October 18, 2023; Table B2. Method Two – Petroleum hydrocarbon Soil CLs, under 40 Inch Zone.

² = Laboratory analysis methods and method detection limits taken from Arcadis' 2008 Remedial System Installation and Offsite Assessment Report.

Conceptual Site Model Summary

-- = not sampled/not measured/not available

CL = cleanup level – 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, rev. October 18, 2023; Table B1. Method Two – Soil CLs Table

COPC = constituent of potential concern

DRO = diesel range organics

GRO = gasoline range organics

mg/kg = milligrams per kilogram

MTBE = methyl tert butyl ether

RRO = residual range organics

USEPA = United States Environmental Protection Agency

5.2 Groundwater

COPCs are based on groundwater contaminant concentrations detected in monitoring wells on and offsite during the 2020, 2021, 2022, and 2023 semi-annual groundwater sampling events (Arcadis 2020, Arcadis 2021a, Arcadis 2021b, Arcadis 2022a, Arcadis 2022b, Arcadis 2023a; **Tables 4a, 4b, 4c, 5a, 5b, and 5c; Figure 5**). Groundwater COPCs and their associated ADEC Groundwater CLs for Human Health are presented in **Table 5-2**, below, as well as the applicable laboratory analysis method and detection limits. Current and historical groundwater gauging and analytical results can be found in **Tables 4a, 4b, 4c, 5a, 5b, and 5c**, respectively.

Table 5-2. Groundwater Constituents of Potential Concern

Groundwater COPC	Groundwater Human Health CL (µg/L)	Laboratory Analysis Method ¹	Laboratory Detection Limit ² (µg/L)
GRO	2,200	Alaska Method AK101	100
Benzene	4.6	USEPA Method 8260D	1.0
Toluene	1,100	USEPA Method 8260D	1.0
Ethylbenzene	15	USEPA Method 8260D	1.0
Total Xylenes	190	USEPA Method 8260D	3.0
Naphthalene	1.7	USEPA Method 8260D	5.0
1,2,4-Trimethylbenzene	56	USEPA Method 8260D	1.0
1,2-Dibromoethane (Ethylene Dibromide)	0.075	USEPA Method 8260D	0.5
1,2-Dichloroethane	1.7	USEPA Method 8260D	1.0
1,3,5-Trimethylbenzene	60	USEPA Method 8260D	1.0
1,2,3-Trichloropropane	0.0075	USEPA Method 8260D	0.5
1,2,4-Trichlorobenzene	56	USEPA Method 8260D	10
Lead	15	USEPA Method 6010D	0.5

Notes:

¹ = Laboratory analysis methods and laboratory method detection limits are taken from Arcadis' 2022 Second Semi-Annual Groundwater Monitoring Report.

µg/L = micrograms per liter

CL = cleanup level – 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, rev. October 18, 2022; Table C. Groundwater CLs.

COPC = constituent of potential concern

GRO = gasoline range organics

MTBE = methyl tert-butyl ether

USEPA = United States Environmental Protection Agency

5.3 Soil Vapor

Arcadis completed a Vapor Intrusion Pathway Initial Assessment at the Site in 2009, determining that there was not a need for further investigation of the vapor intrusion to indoor air pathway at the Chevron service station building. It was noted that background contamination was likely present, and the continuous operation of the AS/soil vapor extraction (SVE) system onsite explains the presence of the below COPCs at the Site. **Table 5-3** is based on COPCs detected onsite in groundwater during the 2023 semi-annual sampling events and the ADEC 2017 Vapor Intrusion Guidance for Contaminated Sites. The ADEC target levels are based on Appendix F: Target Levels for Groundwater, for Commercial and Residential Properties from the 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites.

Table 5-3. Soil Vapor Constituents of Potential Concern

Vapor COPC	ADEC Commercial Target Levels (µg/m ³)	ADEC Residential Target Levels (µg/m ³)	Analytical Method	Laboratory Detection Limit (µg/m ³)
Benzene	160	36	USEPA Method TO-15	0.64
Toluene	220,000	52,000	USEPA Method TO-15	0.75
Ethylbenzene	490	110	USEPA Method TO-15	0.87
Total Xylenes	4,400	1,000	USEPA Method TO-15	m&p-xylene 1.7 o-xylene 0.87
MTBE	4,700	1,100	USEPA Method TO-15	1.1
Naphthalene	36	8.3	USEPA Method TO-15	3.3
1,2,4-Trimethylbenzene	310	73	USEPA Method TO-15	1.1
1, 3, 5- Trimethylbenzene	NA	NA	USEPA Method TO-15	1.1
1, 2, 3 Trichloropropane	13	3.1	USEPA Method TO-15	--
1,2, Dibromoethane	2.0	0.47	USEPA Method TO-15SIM	0.154
1,2-Dichloroethane	47	11	USEPA Method TO-15	0.81

Notes:

µg/L = micrograms per liter

ADEC = Alaska Department of Environmental Conservation

COPC = constituent of potential concern

NA = Indicates ADEC has not calculated an inhalation screening level for this compound due to a lack of toxicity information for the inhalation exposure pathways. Further evaluation may be required.

6 Remediation Summary

6.1 Chevron Station No. 99014

During the station remodeling that occurred from 1995 to early 1996, three gasoline USTs (plus unleaded, regular unleaded, and supreme unleaded), one waste oil UST, one heating oil UST, three pump islands, associated product piping, and one RV pump located in the vicinity of the onsite station building were removed (**Figure 2**). The five USTs were reportedly in good condition upon removal with no observable holes and minimal surface corrosion (Agra 1995c). Three hydraulic lifts inside the building were also removed during remodeling. During installation of a new water line near Minnesota Drive, impacted soil was encountered and removed. During the work, approximately 854 tons of “highly impacted” soil per the ADEC approved *Temporary Stockpiling of Highly Contaminated Soils Plan* dated July 25, 1995, was excavated, and transported to Anchorage Soil Recycling for thermal desorption treatment and disposal (Agra 1995c). In addition to the UST excavation, remodeling activities also included the installation of the current USTs, pump islands, and associated product piping in the northeast corner of the Site (**Figure 3**).

In May 1996, an AS/SVE system began operation. The SVE system was connected to five vertical wells (MW-1, MW-4, MW-5, MW-7, and MW-11) and two horizontal wells (Horizontal-1 and Horizontal-2) (**Figure 3**; SECOR International Inc. [Secor] 1998). The AS system was connected to three AS wells (AS-1 through AS-3) (**Figure 2**). On October 1, 1998, the AS/SVE system effluent was analyzed for GRO and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Quarterly operational and effluent analytical data were collected from 1998 through 2008 from the original AS/SVE operating system. A separate phase hydrocarbon (SPH) removal program was initiated in May 1999 (Secor 1999). Wells were gauged monthly and those with SPH were purged with a vacuum truck. In the third quarter of 1999, wells MW-11 and T-2 lacked measurable quantities of SPH (**Figure 3**). Approximately 280 gallons of SPH and groundwater were removed between May and September 1999. SPH removal was subsequently discontinued due to insignificant quantities of SPH found in the wells (Secor 1999).

In November 2003, a loud noise coming from the phase converter that powered the AS/SVE system was observed, and the system was shut down. The phase converter was repaired, and the system restarted in December 2003. In May 2005, an SVE radius of influence (ROI) test was conducted. The ROI was calculated to be about 50 ft at 25 inches (in) of water and 70 ft at 65 in of water.

The AS/SVE system was shut down in August 2005, following a verbal agreement between CEMC and ADEC to upgrade the system (Arcadis 2010a). In the fourth quarter of 2005, the AS/SVE electrical system was upgraded, and the system was restarted in November 2006. In the first quarter of 2007, the AS/SVE system was temporarily shut down due to frozen conveyance lines.

A work plan for the installation of a new AS/SVE system was submitted to ADEC in May 2007 and was approved in July 2007 (Arcadis 2007). The new system was installed during the first quarter of 2007 and began operating in June 2008 (**Figure 3**). The new system utilized four existing monitoring wells (MW-1, MW-4, MW-5, and MW-11) as SVE wells and 10 new AS wells (AS-4 through AS-13) (**Figure 3**). Monthly operational and effluent analytical data were collected from 2008 through 2011 from the new AS/SVE operating system.

In 2009, Arcadis completed a Vapor Intrusion Pathway Initial Assessment for the Site. Further investigation of the vapor intrusion to indoor air pathway for the Chevron service station building was not recommended. This was based on background contamination likely being present and the continuous operation of the AS/SVE system.

During the operational period of the AS/SVE system, BTEX and GRO were not detected in the quarterly sampling of the SVE effluent samples (Arcadis 2010a). Approximately 10 pounds of GRO was removed from the subsurface during the reporting period, totaling 46 pounds since the system startup in June 2008.

The AS/SVE system was shut down in June 2010 for expansion, groundwater monitoring, and monthly maintenance activities. During a utility locate for system expansion, two USTs were found on the Thrifty property directly south of the Thrifty building (**Figure 2**). As a result, the AS/SVE system expansion could not be completed, and the existing system was restarted in July 2010 (Arcadis 2010c).

In July, August, and September 2010, operations and maintenance visits were conducted to monitor the AS/SVE system onsite (Arcadis 2010c). On September 29, 2011, ADEC approved a system shutdown to evaluate potential GRO and BTEX rebound. Groundwater analytical results from the May and September 2012 monitoring events indicated rebound was not occurring. The system was never re-started following the shut-down on September 30, 2011. The AS/SVE system removed approximately 182 pounds of GRO from the subsurface from June 2008 through September 2011 (Arcadis 2013). The average GRO mass removal rate was 0.18 pounds per day. Low BTEX concentrations in SVE influent coupled with the decrease in GRO and BTEX concentrations in groundwater within the AS/SVE system ROI indicated that the system had likely reached maximum effectiveness.

In a letter to ADEC dated June 17, 2013, Arcadis requested approval to remove the remediation system for deployment at another facility. Based on SVE influent data, the low mass removal rate, and decreasing trends in onsite monitoring wells, GRO and BTEX soil and groundwater impacts that existed in the zone of influence of the AS/SVE were successfully remediated. In June 2014, the AS/SVE system at the Site was moved to another Chevron site in Fairbanks where it would be reused.

6.2 Thrifty Rent-A-Car

A faulty valve in the piping system for the 4,000-gallon gasoline UST formerly located in the southeast corner of the Thrifty property was repaired in September 1989, indicating a petroleum product release occurred at the Thrifty property before September 1989 (Enviros 1995).

In August 1992, the 4,000-gallon gasoline UST at the Thrifty property was removed (Western Environmental Consultants 1993). According to the ADEC Contaminated Sites database, the UST and associated piping were reportedly in good condition, although soil and groundwater contamination was found. A hydrocarbon odor was detected in the bottom of the excavation and some discoloration was observed in the north end of the excavation. Excavated soils met the screening criteria at the time and were placed back in the excavation. One soil sample from the excavation in the vadose zone showed 940 mg/kg GRO and 1.3 mg/kg benzene both of which exceed current migration to groundwater CLs for soil.

In November 1998, a 1,000-gallon used oil UST leak was confirmed in the vicinity of the northern wall of the Thrifty building and added to the ADEC database. The location of the former UST could not be confirmed from historic documents. In September 2000, the UST was removed, and in July 2001 ADEC Contaminated Site Closure was approved. The

In October 2011, Thrifty's consultant advanced test pits on the Thrifty property in the area where USTs were discovered during the June 2010 SVE expansion mentioned above. It was confirmed that there were two adjacent 1,000-gallon USTs and associated piping directly south of the Thrifty building (**Figure 3**). Thrifty's consultant collected samples from the excavated soil. No petroleum hydrocarbon contaminant exceedances reportedly were

observed in the soil samples; however, this data is not available. The 45 cubic yards of excavated soil was placed back in the excavation pit on a liner.

In May 2014, ADEC approved Thrifty's plan to conduct in-place closure of the two 1,000-gallon USTs on their property and the removal of all accessible piping. In June 2014, the two adjacent 1,000-gallon USTs and associated piping were closed in place (**Figure 2**).

6.3 Holiday/Williams Service Station

In September 1991, a 2,500-gallon UST was removed from the southwest corner of the Holiday/Williams property and soil samples were collected from the excavation (**Figure 2**; Shannon & Wilson 2000). The UST supposedly contained Bunker C heating fuel but was likely abandoned after the property acquired a natural gas supply in 1963.

In 1999, a petroleum release occurred in the northeast portion of the Holiday/Williams property due to an overflow bucket overflow. In 2001, a second petroleum release occurred in the northeast portion of the Holiday/Williams property due to an overflow bucket overflow (**Figure 2**). ADEC gave these release events Hazard ID 22986 and Hazard ID 23316. These releases were cleaned up and a petition for site closure was submitted in July 2009.

In January 2010, a third petroleum spill occurred in the northeast portion of the Holiday/Williams property when a fuel line was ruptured during facility upgrades. As a result, the closure letter was rescinded and soil, groundwater, and vapor sampling followed.

In October 2012, ADEC granted the Holiday/Williams facility a Corrective Action Complete with Institutional Controls determination (Shannon & Wilson 2022). ADEC's Decision Document stated that the remaining contamination on the Holiday/Williams property did not pose an unacceptable human health or environmental risk and that Chevron would continue to monitor groundwater contamination at wells B2MW, B5MW, and B6MW in the northwest portion of the property (**Figure 3**).

In May 2020, during submerged turbine pump upgrade activities on the Holiday/Williams property, petroleum contamination was found. As a result, a new ADEC release event was created and given Hazard ID 27715. Soil samples were collected at the time of the upgrade activities and again during a September 2021 release investigation. This site remains an active ADEC contaminated site.

7 Site Investigation

Various site investigations have been conducted both onsite and offsite and are described in the following sections based on location regarding which property the activity occurred at. Numerous excavations took place and are summarized below.

There were six excavations completed onsite and offsite, sample and stockpiled. See **Table 7-1**, below, for the soil excavations and soil volume details. Seven of the soil samples (T1 through T7) were collected from the gasoline USTs, product line, and dispenser soil excavation; two soil samples (O1 and O2) were collected from the used oil UST excavation; two soil samples (F1 and F2) were collected from the heating oil UST excavation; four soil samples (PI-5 through PI-7, and PI-10) were collected from the product dispenser excavation adjacent to Spenard Road; nine soil samples (PI-1 through PI-4, PI-8, PI-9, and PI-11 through PI-13) were collected from the product dispenser excavation adjacent to Minnesota Drive; and three soil samples (HY-N, HY-S, and HY-C) were collected from the three service bay hydraulic lift excavations (**Table 1**).

Table 7-1. 1995 Site Remodelling Soil Excavation Details

Property	Soil Excavations	Soil Volume (yds ³)
Thrifty (offsite)	Gasoline UST, product line, and product dispenser excavation	230
Chevron (onsite)	Used oil UST excavation	45
Thrifty (offsite)	Heating oil UST excavation	15
Chevron (onsite)	Product dispenser excavation adjacent to Spenard Road	25
Chevron (onsite)	Product dispenser excavation adjacent to Minnesota Drive	244
Chevron (onsite)	Former hydraulic lifts (3x)	N/A
Chevron (onsite)	New water line excavation	234

Notes:

N/A = soil volume is not provided in historical documents available to Arcadis

UST = underground storage tank

yds³ = cubic yards

7.1 Chevron Facility No. 99014

7.1.1 Soil Investigations

In July and August 1995, during Site remodeling activities described in Section 6, a total of 27 surface and subsurface soil samples were collected onsite from the gasoline UST, heating oil UST, used oil UST, two product dispensers, and three hydraulic lift excavation areas (Agra 1995c). The sample IDs, depths, and locations of the soil samples are provided in **Table 1** and on **Figure 5**. The sample depths ranged from 2 to 10 ft bgs (**Table 1**).

The soil samples collected during the 1995 site remodeling were analyzed for GRO, DRO, and BTEX (**Table 1**). Photoionization detector (PID) readings from various locations on the soil stockpile were taken and soil samples

were collected from the areas with the highest PID readings (SS-1 through SS-6; OS-1 and OS-2; and FS-1 and FS-2). Soil categorized as “highly impacted” per the ADEC approved *Temporary Stockpiling of Highly Contaminated Soils Plan* dated July 25, 1995, was transported to Anchorage Soil Recycling for thermal desorption treatment and disposal (Agra 1995c). Approximately 100 cubic yards of soil from the gasoline UST, product line, and product dispenser excavation was also transported to Anchorage Soil Recycling for treatment and disposal; the remaining soil in the stockpile was used as backfill at the Site.

June 1999 soil data from borings S11 through S16 is presented in Arcadis’ 2007 Remediation and Offsite Assessment Workplan (**Table 1**; Arcadis 2007); however, the original report detailing this soil sampling event is not available to Arcadis (see Section 12.1).

In June 2001, Discovery Drilling Inc. of Anchorage, Alaska (Discovery) installed four groundwater monitoring wells (MW-13 through MW-16) offsite (**Figure 2**; Secor 2004a). Soil samples were collected from wells MW-13 through MW-16 and analyzed at the time of installation (**Table 1**). Ethylbenzene and xylenes were detected in the 20 ft bgs soil sample from MW-13 at concentrations of 0.0298 mg/kg and 0.165 mg/kg, respectively. All other soil samples collected were below laboratory detection limits for the analyzed constituents.

In May 2004, Discovery, under the direction of Secor, advanced two soil borings offsite to a depth of approximately 20 to 25 ft bgs that became monitoring wells MW-17 and MW-18 (**Figure 2**; Secor 2004b). Soil samples were collected at 5-ft intervals from the borings and analyzed for GRO, BTEX, and MTBE (**Table 1**).

On July 6, 2023, Arcadis oversaw the replacement of the well boxes at MW-17 and B5MW. These monitoring wells were also redeveloped to be used for sampling purposes. MW-17 is located in the west area of the Holiday Station property and B5MW is located in the northwest area of the Holiday Station property. On August 28, 2023, Arcadis oversaw the decommissioning of MW-5.

7.1.2 Soil Exceedances Summary

Table 1 includes historical soil analytical data with indications of ADEC CL exceedances. **Table 2** includes a summary table of all historical soil ADEC CL exceedances onsite and on the Thrifty and Holiday Williams properties that are available to Arcadis. Although some laboratory reporting limits are above the ADEC CLs, Arcadis did not include these results on **Table 2**. The ‘Migration to Groundwater’ criteria were utilized in **Table 2** because they are the most conservative in ADEC 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, as amended through October 18, 2023, Table B1. Method Two – Soil CLs. Historical soil exceedances are outlined in **Table 2**.

7.1.3 Groundwater Investigations

In June, July, and November 1992, America North/EMCON Inc. installed groundwater monitoring wells MW-1 through MW-10 (**Figure 2**; Secor 2004a). Well MW-10 is located approximately 50 to 80 ft east of MW-1 in the Minnesota Drive right-of-way and therefore is not shown on **Figure 2**. Soil samples were collected from all 10 well borings and analyzed for BTEX (**Table 1**). In February 1994, RZA Agra Alaska Inc. installed monitoring wells MW-11 and MW-12 (**Figure 2**). Soil samples were collected and analyzed for GRO, DRO, and BTEX (**Table 1**). Monitoring wells MW-2, MW-3, and MW-6 were abandoned prior to the 1995 Site remodeling (Agra 1995b).

A door-to-door private drinking water well survey in the vicinity of the Site was conducted in December 2000 (Secor 2004a). Five wells were identified within 900 ft of the Site. In January 2001, three of the wells identified in the survey were sampled and analyzed for GRO, BTEX, fuel oxygenates, ethylene dichloride, ethylene dibromide

(EDB), methanol, and ethanol. These wells were located at 3602 Greenland Drive approximately 200 ft northwest, 3900 Greenland Drive approximately 900 ft southwest (downgradient), and 1801 McKinley Avenue approximately 900 ft southwest (downgradient). In February 2001, the remaining two private drinking water wells were sampled. These wells were located at 3801 McCain Loop approximately 700 ft southeast and 3737 McCain Loop approximately 500 ft southeast. The analytes were not detected in any of the five wells except for 0.206 microgram per liter ($\mu\text{g/L}$) of benzene at 3737 McCain Loop. This result is not considered an exceedance of the ADEC groundwater CL for benzene ($4.6 \mu\text{g/L}$). The groundwater analytical data from this investigation are not available to Arcadis. However, AKDNR WELTS does not provide information for the wells located at 3602 Greenland Drive, 1801 McKinley Avenue, 3801 McCain Loop, or 3737 McCain Loop. AKDNR WELTS does show the in-use well on 3900 Greenland Drive as well as seven additional wells within a quarter-mile radius of the Site. These wells are located at or directly adjacent to 1706 Jefferson Drive, 3405 Outta Place, 3411 Willow Place, 1303 W 39th Avenue, 1207 W 38th Place, 3700 Wilson Street, and 1117 Chugach Way.

In June 2001, four groundwater monitoring wells (MW-13 through MW-16) were installed by Discovery under the direction of Secor (Secor 2004a). In May 2004, two offsite groundwater monitoring wells (MW-17 and MW-18) were installed by Discovery under the supervision of Secor to approximately 20 to 25 ft bgs (**Figure 2**; Secor 2004b).

In April 2004, attempts were made to remove an obstruction in monitoring well MW-9 but were unsuccessful (**Figure 2**). Secor reportedly scheduled MW-9 decommissioning in the spring of 2005, but records confirming the work could not be located. MW-9 was gauged from September 1994 through May 2001 (**Tables 3a** through **3c**; Arcadis 2023b). In 2016, MW-9 was reportedly paved over. Additionally, monitoring well MW-15 had been damaged, presumably by a snowplow, and was decommissioned. MW-15 was gauged in 2001 and 2002 but never sampled (**Tables 3a** through **3c**). On December 8, 2010, Arcadis oversaw the abandonment of groundwater monitoring wells MW-9, MW-13, and MW-20 (Arcadis 2011b). On August 28, 2023, groundwater monitoring well MW-5 was decommissioned in accordance with the approved work plan (Arcadis 2023c).

According to the ADEC Contaminated Sites Database, an additional drinking water well at 1505 West 35th Ave was installed in October 2009, approximately 600 ft northeast (upgradient) of the Site. The groundwater from this well was non-detect for GRO and BTEX.

Semi-annual groundwater monitoring continues at the Site. There are currently five groundwater monitoring wells onsite (MW-1, MW-4, MW-5B, MW-7, and MW-11) and 16 wells offsite (MW-8, MW-14, MW-17 through MW-19, MW-21 through MW-27, B2WS, B5WS, T-1, and T-2; **Figure 3**; Arcadis 2023a). Monitoring wells MW-2, MW-3, MW-5, MW-6, MW-9, MW-10, MW-12, MW-15, T-3, and T-4 have been abandoned or destroyed (**Figure 2**). Monitoring wells MW-10 and MW-12 are located approximately 50 ft east of the Site in the Minnesota Drive right-of-way and therefore are not shown on **Figure 3**. The last groundwater monitoring event onsite took place on September 12 and 13, 2023. Monitoring wells MW-1, MW-4, MW-5B, MW-7, MW-8, MW-11, MW-14, MW-17, MW-18, MW-19, MW-21 through MW-27, T-1, T-2, B6MW, B5MW, and B2MW were gauged for groundwater depth and SPH and sampled using low-flow methods during the event (**Figure 3**; Arcadis 2023a). Monitoring well MW-5 was dry, B2MW and B5MW were not located, and MW-17 was not gauged or sampled due to being paved over.

7.1.4 Groundwater Exceedances Summary

The most recent semi-annual groundwater monitoring and sampling event took place on September 12 and 13, 2023. Groundwater samples were collected for analysis from monitoring wells from B2MW, B5MW, B6MW, MW-

Conceptual Site Model Summary

1, MW-4, MW-5B, MW-7, MW-8, MW-11, MW-14, MW-17, MW-18, MW-19, MW-21 through MW-27, T-1, and T-2 (**Figure 3**; Arcadis 2023a). Groundwater monitoring analytical exceedance results from this event are presented below in **Table 7-3**. The results are generally consistent with historical data. Current gauging and analytical results can be found in **Tables 5a** through **5c** and are discussed in Section 7.4. Historical groundwater gauging and analytical results can be found in **Tables 4a** through **4c**. The most recent groundwater analytical results are shown on **Figure 5**. Further, hydrographs taken from the 2021 groundwater monitoring event are attached to this report.

Table 7-2. Groundwater Monitoring Analytical Exceedances Summary Table

Well ID Groundwater Human Health CL (µg/L)	Date	GRO 2,200	Benzene 4.6	Toluene 1,100	Ethylbenzene 15	Total Xylenes 190	Naphthalene 1.7
Holiday/Williams							
<i>No Exceedances</i>							
Thrifty							
T-2	09/13/2023	5,050	193	--	243 D	2,000D	4.86 J
Chevron							
MW-1	9/13/2023	--	13.1	--	23.8	--	24.2
MW-5B	9/13/2023	--	5.92	--	--	--	--
MW-11	9/12/2023	9,750 [9,560]	134 [137]	--	381 D [391 D]	2,860 D [2,930 D]	12.4 J [12.2J]
MW-21	9/13/2023	29,200 [28,000]	58.2 J [57.9]	--	2,260 [2,220 D]	11,300 [11,200 D]	<1,000 [164]
MW-22	9/13/2023	27,600	639	7,170	938	7,500	--
MW-24	9/13/2023	3,510	52.4	--	153	1,330	--
MW-26	9/13/2023	--	15.6	--	28.5	347	--
MW-27	9/13/2023	14,800	82.6	2,540	1,040	5,630	--
B5MW	9/12/2023	--	58.9	--	--	--	--
B2MW	9/12/2023	--	8.96	--	--	--	--

Notes:

[] = duplicate result

-- = not an exceedance

µg/L = micrograms per liter

CL = cleanup level – 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, rev. October 18, 2023; Table C. Groundwater CLs.

COPC = constituent of potential concern

ID = identification

J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

D= the diluted results were reported and qualified as being reported at a dilution

7.1.5 Soil Vapor Investigations Summary

In August 1995, following site excavation activities described in Section 6.1, PID measurements were obtained from 25 different locations on the soil stockpile (**Figure 3**). Soil vapor sampling via soil vapor probes has not been performed at the Site; however, Arcadis completed a vapor intrusion pathway initial assessment in 2009, along with SVE effluent air sampling on a quarterly basis during the system operational period discussed in Section 6.1.

PID and flame ionization detector readings were collected intermittently between March 1998 and May 2003 from each well that made up the original AS/SVE system including MW-1, MW-4, MW-5, MW-7, MW-11, Horizontal-1, and Horizontal-2. The greatest PID/flame ionization detector reading at each well was 1,100 parts per million per volume (ppmv) at monitoring well MW-11, 526 ppmv at MW-1, 215 ppmv at MW-4, 32.0 at Horizontal-2, 22.3 at Horizontal-1, 6.7 at T-2, 1.9 at MW-7, and 0.8 at MW-5 (Secor 2004c).

7.1.6 Soil Vapor Exceedances Summary

The August 1995 PID readings from the excavated soil stockpile ranged from 26 to 1690 ppm.

According to the 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites, the guidance allows for the evaluation of potential vapor intrusion risk via groundwater samples using Appendix F: Target Levels for Groundwater for Commercial and Residential Properties (ADEC 2017b). **Table 7-2** below lists all Appendix F CL exceedances observed from the most recent groundwater monitoring event in September 2023 (Arcadis 2023a). Groundwater analytical results were compared to both residential and commercial CLs as both commercial and residential properties are located downgradient of the Site.

Table 7-3. Groundwater to Vapor Analytical Exceedances Summary Table

Vapor COPCs	Residential Groundwater Level (µg/L)	Commercial Groundwater Level (µg/L)	Well ID	Date	Report	Results (µg/L)
GRO	NA	NA	MW-11	9/12/2023	2SA2023	9,750 [9,560]
GRO	NA	NA	MW-21	9/13/2023	2SA2023	29,200 [28,000]
GRO	NA	NA	MW-22	9/13/2023	2SA2023	27,600
GRO	NA	NA	MW-24	9/13/2023	2SA2023	3,510
GRO	NA	NA	MW-27	9/13/2023	2SA2023	14,800
GRO	NA	NA	T-2	9/13/2023	2SA2023	5,050
Benzene	16	69	MW-1	9/13/2023	2SA2023	13.1
Benzene	16	69	MW-5B	9/13/2023	2SA2023	5.92
Benzene	16	69	MW-11	9/12/2023	2SA2023	134 [137]
Benzene	16	69	MW-21	9/13/2023	2SA2023	58.2 J [57.9]
Benzene	16	69	MW-22	9/13/2023	2SA2023	639
Benzene	16	69	MW-24	9/13/2023	2SA2023	52.4

Conceptual Site Model Summary

Vapor COPCs	Residential Groundwater Level (µg/L)	Commercial Groundwater Level (µg/L)	Well ID	Date	Report	Results (µg/L)
Benzene	16	69	MW-26	9/13/2023	2SA2023	15.6
Benzene	16	69	MW-27	9/13/2023	2SA2023	82.6
Benzene	16	69	B5MW	9/12/2023	2SA2023	58.9
Benzene	16	69	B6MW	9/12/2023	2SA2023	8.96
Benzene	16	69	T-2	9/13/2023	2SA2023	193
Toluene	19,000	81,000	MW-22	9/13/2023	2SA2023	7,170
Toluene	19,000	81,000	MW-27	9/13/2023	2SA2023	2,540
Ethylbenzene	35	150	MW-1	9/13/2023	2SA2023	23.8
Ethylbenzene	35	150	MW-11	9/12/2023	2SA2023	381 D [391 D]
Ethylbenzene	35	150	MW-21	9/13/2023	2SA2023	2,260 [2,220 D]
Ethylbenzene	35	150	MW-22	9/13/2023	2SA2023	938
Ethylbenzene	35	150	MW-24	9/13/2023	2SA2023	153
Ethylbenzene	35	150	MW-26	9/13/2023	2SA2023	28.5
Ethylbenzene	35	150	MW-27	9/13/2023	2SA2023	1,040
Ethylbenzene	35	150	T-2	9/13/2023	2SA2023	243 D
Total Xylenes	380	1,600	MW-11	9/12/2023	2SA2023	2,860 D [2,930 D]
Total Xylenes	380	1,600	MW-21	9/13/2023	2SA2023	11,300 [11,200 D]
Total Xylenes	380	1,600	MW-22	9/13/2023	2SA2023	7,500
Total Xylenes	380	1,600	MW-24	9/13/2023	2SA2023	1,330
Total Xylenes	380	1,600	MW-26	9/13/2023	2SA2023	347
Total Xylenes	380	1,600	MW-27	9/13/2023	2SA2023	5,630
Total Xylenes	380	1,600	T-2	9/13/2023	2SA2023	2,000 D
Naphthalene	46	200	MW-1	9/13/2023	2SA2023	24.2
Naphthalene	46	200	MW-11	9/12/2023	2SA2023	12.4 J [12.2 J]
Naphthalene	46	200	MW-21	9/13/2023	2SA2023	<1,000 [164]
Naphthalene	46	200	T-2	9/13/2023	2SA2023	4.86 J
1, 2, 4 Trimethylbenzene	73	310	MW-1	9/13/2023	2SA2023	332 D
1, 2, 4 Trimethylbenzene	73	310	MW-11	9/12/2023	2SA2023	1,440 D [1,450 D]

Vapor COPCs	Residential Groundwater Level (µg/L)	Commercial Groundwater Level (µg/L)	Well ID	Date	Report	Results (µg/L)
1, 2, 4 Trimethylbenzene	73	310	MW-21	9/13/2023	2SA2023	2,840 [2,320 D]
1, 2, 4 Trimethylbenzene	73	310	MW-22	9/13/2023	2SA2023	887
1, 2, 4 Trimethylbenzene	73	310	MW-24	9/13/2023	2SA2023	131
1, 2, 4 Trimethylbenzene	73	310	MW-26	9/13/2023	2SA2023	107
1, 2, 4 Trimethylbenzene	73	310	MW-27	9/13/2023	2SA2023	1,050
1, 2, 4 Trimethylbenzene	73	310	T-2	9/13/2023	2SA2023	286 D
1, 2, 4 Trimethylbenzene	73	310	B5MW	9/12/2023	2SA2023	154

Notes:

[] = duplicate result

µg/L = micrograms per liter

COPC = constituent of potential concern

ID = identification

NA = Indicates ADEC has not calculated an inhalation screening level for this chemical due to a lack of toxicity information for the inhalation exposure pathways

SA = semi-annual

J = result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

D= the diluted results were reported and qualified as being reported at a dilution

7.2 Thrifty Rent-A-Car

7.2.1 Soil Investigations

In August 1992, during excavation activities for the 4,000-gallon gasoline UST on the Thrifty property, four soil samples were collected from the bottom of the excavation and the excavated soil stockpile (Western Environmental Consultants 1993). Soil samples TC-3 and TC-2 were collected from the bottom of the excavation at approximately 10 ft bgs. Soil sample TC-1D was collected from under the dispenser at approximately 1.5 ft bgs, and soil sample STKP-1 was collected from the soil with the highest vapor reading in the excavated soil stockpile. Excavated soils met the screening criteria at the time and were placed back in the excavation. One soil sample from the excavation in the vadose zone showed 940 mg/kg GRO and 1.3 mg/kg benzene both of which exceed current migration to groundwater CLs for soil.

In June 1995, Agra advanced two soil borings (TY1 and TY2) on the Thrifty property to a depth of 10 ft bgs (**Figure 3**; Agra 1995a). TY1 was in the vicinity of a former leaking UST pump union and TY2 was in the vicinity of the former dispenser (**Figure 3**). Three soil samples were collected from each boring at approximately 5, 7, and 10 ft bgs (TY1-5, TY1-7.5, TY1-10, TY2-5, TY2-7, and TY2-10) and analyzed for GRO, BTEX, and MTBE

(**Table 1**). Also in June 1995, Agra installed monitoring wells T-1 through T-3 on the Thrifty property and T-4 in Greenland Drive (**Figure 3**; Secor 2004a). T-3 was destroyed shortly after installation.

In August 2007, four additional monitoring wells (MW-19 through MW-22) were installed on the Thrifty property to further delineate impacted groundwater in the vicinity of the Site (**Figure 3**; Arcadis 2008b). Soil samples were collected from monitoring wells MW-19 through MW-22 during their installation (**Table 1**).

In June 2008, five soil borings (SB-1 through SB-3, SB-5, and SB-6) and five groundwater wells (MW-23 through MW-27) were installed offsite on the southern portion of the Thrifty property (**Figure 3**; Arcadis 2008b). The soil borings were advanced to 8 ft bgs. Soil samples were analyzed for GRO, DRO, and BTEX (**Table 1**). Select samples were additionally analyzed for grain size distribution.

In 2011, monitoring well T-4 was abandoned (**Figure 3**) due to an obstruction at approximately 2 ft bgs (Chevron 2008).

In June 2014, in-place closure of two 1,000-gallon USTs on the Thrifty property occurred (**Figure 3**) (Quality Environmental Sampling 2015). At ADEC's request, the contaminated soil generated during the in-place UST closure was disposed of in the Municipality of Anchorage Regional Landfill, and soil samples were collected from the location of the former fuel dispenser for the USTs that was demolished pre-1980 (**Figure 3**). Additionally, groundwater and soil samples were collected from the northeast corner of one of the 1,000-gallon USTs where a localized fuel release had occurred. The analytical results did not indicate a significant fuel release on the Thrifty property (Quality Environmental Sampling 2015).

7.2.2 Soil Exceedances Summary

During the 1995 soil investigation soil samples were collected from TY1 at 5, 7.5, and 10 ft bgs and TY2 at 5, 7, and 10 ft bgs. Based on laboratory analytical results, the soil sample collected from TY1 at 5 ft bgs contained benzene and total xylenes exceeding the 'Migration to Groundwater' ADEC levels and the sample collected at 10 ft bgs exceeded 'Migration to Groundwater' ADEC levels for benzene, ethylbenzene, and total xylenes. The soil sample collected from TY2 at 5 ft bgs exceeded 'Migration to Groundwater' ADEC levels for benzene, the soil sample collected from 8 ft bgs exceeded for benzene, ethylbenzene, and total xylenes, and the soil sample collected from 10 ft bgs exceeded for total petroleum hydrocarbons (TPH)-GRO, benzene, toluene, ethylbenzene, and total xylenes.

During the 2007 groundwater monitoring well installation, soil samples were collected from each installed monitoring well (MW-19 through MW-22) at 5 to 10 ft bgs and 10 to 15 ft bgs. Based on laboratory analytical results, all soil samples collected with the exception of sample MW-19 at 10 to 15 ft bgs exceeded 'Migration to Groundwater' ADEC levels for benzene. Soil samples MW-21 (10-15') and MW-22 (10-15') also exceeded 'Migration to Groundwater' ADEC levels for toluene, ethylbenzene, and total xylenes. Soil samples MW-22 (10-15') exceeded 'Human Health' and 'Maximum Allowable Concentration' ADEC levels for TPH-GRO.

During the June 2008 soil boring and monitoring well installation soil analytical exceedances were noted in the following soil samples: levels of benzene and ethylbenzene above the 'Migration to Groundwater' ADEC levels in MW-25 (13'), MW-26 (12.5'), MW-27(14'), SB-1 (13.5'), SB-3 (12'), and SB-5 (13'). MW-25 contained levels of benzene above the 'Migration to Groundwater' ADEC levels at 9 ft bgs. Soil samples collected from SB-1 (13.5'), SB-3 (12'), and SB-5 (13') contained levels of total xylenes above the 'Migration to Groundwater' ADEC levels. The soil sample collected from MW-27 (14') contained levels of TPH-GRO that exceed 'Human Health' ADEC CULs and 'Maximum allowable concentration' ADEC levels.

Table 1 includes historical soil analytical data with indications of ADEC CL exceedances. **Table 2** includes a summary table of all historical soil ADEC CL exceedances onsite and on the Thrifty and Holiday Williams properties that are available to Arcadis. Although some laboratory reporting limits are above the ADEC CLs, Arcadis did not include these results on the table. The ‘Migration to Groundwater’ criteria were utilized in **Table 2** because they are the most conservative in ADEC 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, as amended through October 18, 2023, Table B1. Method Two – Soil CLs.

7.2.3 Groundwater Investigations

In June 1995, Agra installed monitoring wells T-1 through T-4 on the Thrifty property (**Figure 3**; Secor 2004a). T-3 was destroyed shortly after installation. In February 1995, Enviro, Inc. sampled five groundwater monitoring wells (MW-9, MW-11, T-1, T-2, and T-4) at the Thrifty property (**Figure 3**; Enviro 1995) to determine whether the petroleum contamination came from the Site or Thrifty. Bailers were used to determine if SPH was present in the wells, and low-flow methods were used to collect groundwater samples for ethylene dichloride, EDB, MTBE, and BTEX analysis. To determine the age of SPH in the wells, capillary gas chromatography/flame ionization detection was used to fingerprint the SPH found in MW-11, T-2, and MW-9. The SPH was estimated to be less than four years old as it was relatively unweathered and contained MTBE. Laboratory analytical results from this Thrifty sampling event conducted in February 1995 are included as a reference (Enviro 1995).

In August 2007, four additional monitoring wells (MW-19 through MW-22) were installed on the Thrifty property to further delineate impacted groundwater in the vicinity of the Site (**Figure 3**; Arcadis 2008b). In June 2008, five groundwater wells (MW-23 through MW-27) were drilled/installed on the southern portion of the Thrifty property (**Figure 3**; Arcadis 2008b).

In June 2008, five groundwater wells (MW-23 through MW-27) were installed offsite on the southern portion of the Thrifty property (**Figure 3**; Arcadis 2008b).

In June 2014 during in-place closure of two 1,000-gallon USTs on the Thrifty property took place (**Figure 3**), groundwater and soil samples were collected from the northeast corner of one of the 1,000-gallon USTs where a localized fuel release had occurred. The analytical results did not indicate a significant fuel release on the Thrifty property (Quality Environmental Sampling 2015).

7.2.4 Groundwater Exceedances Summary

Refer to Section 7.4 and **Table 7-3** for a summary of the groundwater monitoring analytical results from the most recent semi-annual groundwater monitoring event on September 12 and 13, 2023.

7.2.5 Soil Vapor Investigations Summary

During the August 1992 4,000-gallon gasoline UST excavation activities, 12 Threshold Limit Value soil vapor readings were collected from the excavated soil using a GASTECH model 1314 calibrated to hexane (Western Environmental Consultants 1993).

In the 2009 Vapor Intrusion Pathway Initial Assessment (Arcadis 2009), Arcadis recommended the installation of three multi-level vapor probes at the Thrifty Car Rental building in areas of highest known groundwater petroleum hydrocarbon impact due to its proximal location to the source area. However, vapor probes have not been installed on the Thrifty property to date, therefore soil vapor samples have not been collected from the property.

7.2.6 Soil Vapor Exceedances Summary

Soil vapor readings collected during the August 1992 4 UST excavation activities, ranged from 12 to 200 ppm for soils excavated from above the tank. Readings from soils below the tank generally ranged from 18 to over 500 ppm.

7.3 Holiday/Williams Service Station

7.3.1 Soil Investigations

In September 1991, a 2,500-gallon UST was removed from the southwest corner of the Holiday/Williams property and soil samples were collected from the excavation (**Figure 3**; Shannon & Wilson 2000). The analytical results indicated that GRO and BTEX were non-detect and DRO and TPH were detected but did not exceed ADEC CLs.

In June 1999, 120 cubic yards of impacted soil was excavated from the Holiday/Williams property during a UST release investigation. In July 1999, three groundwater monitoring wells (B1MW, B2MW, and B3MW) were installed under the direction of Shannon & Wilson on the Holiday/Williams property (**Figure 3**; Shannon & Wilson 2000). B1MW was installed in the impacted soil excavation area and wells B2MW and B3MW were installed in downgradient areas (**Figure 3**). At the time of installation, soil and groundwater samples were collected and analyzed for BTEX and GRO (**Tables 1, 4a, and 4b**). This site was added to the ADEC Contaminated Sites database and given Hazard ID #23316.

In May 2000, Shannon & Wilson conducted plume characterization activities at the former Williams Express store located to the south of the Holiday/Williams service station (**Figure 3**) (Shannon & Wilson 2000). Three soil borings (B4, B5, and B6) were advanced as a part of plume characterization activities. Two soil samples were collected from each boring: one from 12.5 to 14.5 ft bgs and one from 15 to 16.5 ft bgs (B4S3, B4S4, B5S3, B5S4, B6S3, and B6S4). The soil samples were analyzed for GRO, BTEX and total lead (**Table 1**).

In October 2012, ADEC deemed contamination cleanup successful for the Hazard ID #23316 site at the Holiday/Williams property and institutional controls were established. In November 2012, wells B1MW, B3MW, B4MW, B8MW, and B10MW were decommissioned (**Figure 3**).

In May 2020, during submerged turbine pump upgrade activities on the Holiday/Williams property, petroleum contamination was found. This site was added to the ADEC Contaminated Sites database with Hazard ID #27715. Soil samples were collected at the time of the upgrade activities and again during a September 2021 release investigation. Three soil borings were drilled to a depth of 17 to 18 ft bgs and groundwater monitoring wells (MW-1A, MW-2A, and MW-3A) were installed. Two analytical samples from each boring were submitted for laboratory analysis. The samples were collected from just above the soil/water interface and/or from the sample interval with the highest PID measurement. Soil and groundwater laboratory analytical results from the investigation showed contamination that exceeds ADEC CLs. This site remains an active cleanup site on the ADEC Contaminated Sites database.

7.3.2 Soil Exceedances Summary

During the July 1999 monitoring well installation (BMW-1 through BMW-3), a soil sample was collected from each well at 12.5 to 14.5 ft bgs. Soil analytical results reported benzene concentrations above 'Migration to

Groundwater' ADEC levels in BMW-1 and BMW-2. BMW-1 and BMW-2 also contained toluene, ethylbenzene, and total xylenes but the detections were below ADEC CUL levels.

The May 2000 plume characterization event included the installation of three monitoring wells (BMW-4 through BMW-6). Two soil samples were collected from each monitoring well (12.5 to 14 ft bgs and 15 to 16.5 ft bgs). Soil analytical results reported concentrations of benzene in excess of ADEC 'Migration to Groundwater' levels in each of the three samples collected at 15 to 16.5 ft bgs. The soil sample collected from BMW-5 at 15 to 16.5 ft bgs also contained levels of total xylenes above ADEC 'Migration to Groundwater' levels.

The May 2020 event included the installation of three monitoring wells (MW-1A through MW-3A). Soil samples were collected from each boring at approximately 13 ft bgs. Soil analytical results reported exceedances above 'Migration to Groundwater' ADEC CULs of toluene in MW-1A, benzene in MW-2A, and benzene, ethylbenzene, and total xylenes in MW-3A. MW-1A contained levels of benzene, ethylbenzene, and total xylenes above the 'Human Health' ADEC CULs and levels of TPH-GRO above the 'Human Health' and 'Maximum Allowable Concentrations' ADEC CULs.

Table 1 includes historical soil analytical data with indications of ADEC CL exceedances. **Table 2** includes a summary table of all historical soil ADEC CL exceedances onsite and on the Thrifty and Holiday Williams properties that are available to Arcadis. Although some laboratory reporting limits are above the ADEC CLs, Arcadis did not include these results on the table. The 'Migration to Groundwater' criteria were utilized in **Table 2** because they are the most conservative in ADEC 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, as amended through October 18, 2023, Table B1. Method Two – Soil CLs.

7.3.3 Groundwater Investigations

In July 1999, monitoring wells B1MW, B2MW, and B3MW (denoted as BMW-1, BMW-2, and BMW-3 in **Table 1**) were installed on the Holiday/Williams property under the direction of Shannon & Wilson to investigate potential groundwater hydrocarbon impacts (**Figure 3**; Shannon & Wilson 2000). At the time of installation, soil and groundwater samples were collected and analyzed for BTEX and GRO (**Table 5**). B1MW, B2MW, B4MW, and B5MW had exceedances of TPH-GRO and BTEX constituents. The site was added to the ADEC Contaminated Sites database and given Hazard ID #23316.

In May 2000, Shannon & Wilson conducted plume characterization activities at the former Williams Express store located to the south of the Holiday/Williams service station (**Figure 3**) (Shannon & Wilson 2000). Borings B4, B5, and B6 were constructed into monitoring wells B4MW, B5MW, and B6MW (denoted as BMW-4, BMW-5, and BMW-6 in **Table 1**), as shown on **Figure 3**. Immediately following their installation, groundwater samples were collected from monitoring wells B4MW, B5MW, and B6MW using a submersible pump (**Table 5**). Groundwater samples were also collected from monitoring wells B1MW through B3MW using a polyethylene disposable bailer (**Table 5**).

On June 28, 2009, ADEC requested that CEMC sample and analyze Holiday/Williams' wells B2MW, B5MW, and B6MW on a semi-annual basis because they appeared to have petroleum hydrocarbon impacts that originated from the Site (**Figure 3**). B6MW has been gauged and sampled during the four most recent semi-annual events; however, B2MW was paved over in 2019 and B5MW was paved over in 2017 (**Tables 4a** through **4c**). Arcadis is preparing a stand-alone groundwater assessment and monitoring well work plan that will outline the re-installation and/or decommissioning of the paved-over wells.

In October 2012, ADEC deemed contamination cleanup successful for Hazard ID #23316 at the Holiday/Williams property and institutional controls were established. In November 2012, wells B1MW, B3MW, B4MW, B8MW, and B10MW were decommissioned (**Figure 3**).

In May 2020, during submerged turbine pump upgrade activities on the Holiday/Williams property, petroleum contamination was found. This site was added to the ADEC Contaminated Sites database with a new Hazard ID #27715. Monitoring wells MW-1A, MW-2A, and MW-3A were installed during soil boring activities; groundwater laboratory analytical results from the investigation exceeded ADEC CLs. It was recommended that additional groundwater samples be collected from MW-1A through MW-3A to evaluate trends in contaminant concentrations. Installation of an additional groundwater monitoring well downgradient of MW-1A was also recommended to evaluate the extent of the contamination plume. This site remains an active cleanup site on the ADEC Contaminated Sites database.

7.3.4 Groundwater Exceedances Summary

The most recent exceedance results from the groundwater sampling event conducted by Arcadis on September 12 and 13, 2023 are presented in **Table 5a** and discussed in Section 7.4; historical groundwater exceedances for wells sampled on the Holiday/Williams property are presented in **Table 4a**.

The data collected during the September 12 and 13, 2023 event indicated the groundwater flow direction was to the south-southwest. During this event, three wells from the Holiday/Williams property (B2MW, B5MW, and B6MW) were sampled. B5MW and B2MW had exceedances of benzene and B5MW also had an exceedance of 1,2,4-trimethylbenzene. The results are generally consistent with historical data. Current gauging and analytical results can be found in **Tables 5a** through **5c**. Historical groundwater gauging and analytical results can be found in **Tables 4a** through **4c**. The most recent groundwater analytical results are shown on **Figure 4**.

7.3.5 Soil Vapor Investigations

In May 2020, during submerged turbine pump upgrade activities on the Holiday/Williams property, soil samples were collected and screened for VOCs using a Thermo Instruments OVM 580B PID. Freshly exposed soil was placed in sealed plastic bags, warmed to 40 degrees Fahrenheit, and screened within 10 minutes to one hour of collection. Screening was completed by inserting the PID probe into the air space above the soil in the bag.

8 Impacted Media

Assessments have been completed onsite evaluating surface and subsurface soil, groundwater, and vapor. These efforts indicate a data gap or incomplete investigation for subsurface soil impacts; however, there is a decreasing trend in groundwater impacts that remain above ADEC CLs. There is no evidence to support unacceptable impacts to biota, vapor, surface soils, and surface water. Historic groundwater and soil data are presented in **Table 1** and **Table 4c**.

Additionally, historic impacts migrated offsite to neighboring properties and past assessments indicate impacts may remain at these properties. Further delineation in groundwater, soil, and soil gas are warranted at downgradient properties within the area of migrated impacts.

9 Transport Mechanisms

In accordance with the ADEC Guidance on Developing CSMs, there are four types of transport mechanisms to consider: physically transported, chemically transformed, biologically transformed, and accumulation in one or more media. Based on historical reports and the assessments outline in this document, the primary transportation mechanisms are physical transportation and biological transformation.

10 Exposure Media, Pathways, and Receptors

A review of potential receptors at the Site was conducted based on the Site's location and current and expected land use. The Site is a paved lot with small, confined areas of grass and trees, with a station building and island dispensers. The Site is currently owned by Chevron and is in-use as a Chevron-branded service station. The Site is likely to remain under its current commercial land use for the reasonable and foreseeable future. Land use in the immediate Site vicinity is commercial, but the closest residential land use is to the northwest of the Site, across Greenland Drive.

Site COPCs may be retained in site subsurface soils, or become subject to physical transport mechanisms, such as volatilization into indoor or outdoor air, percolation to groundwater, migration in groundwater, and biodegradation/attenuation in subsurface soil and/or groundwater.

Exposure media onsite for the identified receptors, discussed in the sections below, are subsurface soils and groundwater. Because the Site is primarily paved it is unlikely that there are any biological receptors of the contaminants onsite.

The ADEC Human Health CSM Scoping Form and Standardized Graphic are included as **Appendix A**.

10.1 Exposure to Human Receptors

The identified current receptors at the Site include commercial/industrial workers, construction workers, site visitors, trespassers, and residents who may encounter volatiles in outdoor air in the vicinity of the Site. Additional current receptors include building workers onsite and downgradient of the contamination plume who may be subject to volatiles in indoor air.

The identified future receptors at the Site include commercial/industrial workers, construction workers, site visitors, trespassers, and residents if the Site were to be redeveloped and/or additional private drinking water wells were constructed. Recreation users are not considered current or future receptors. The property is unlikely to be used recreationally because it is bordered by busy roadways. Subsistence farmers and consumers are likewise not considered current or future receptors based on the nature of the Site and its urban surroundings.

10.2 Surface Soil

In November 1995, contaminant exceedances were found in soil onsite at 1.5 and 2 ft bgs (**Table 1**; Agra 1995c). The incidental soil ingestion and inhalation of fugitive dust pathways are complete for current and future receptors listed in Section 10.1 because there are landscaped areas onsite where surface soil is exposed, and soil contaminants could be exposed during future land disturbance activities (**Figure 2**).

Surface soil (0 to 2 ft bgs) samples were collected at 1.5 and 2 ft bgs (SS-1 through SS-6, OS-1, OS-2, FS-1, FS-2, and PI-1 through PI-9) in November 1995 (**Table 1** and **Figure 5**; Agra 1995c). Surface soil samples were analyzed for GRO, DRO, TPH, BTEX, total lead, PCBs, and halogenated volatile organic compounds. The samples were not analyzed for any of the soil contaminants evaluated for dermal exposure listed in Appendix B of the ADEC 2017 Guidance on Developing CSMs (ADEC 2017a). However, groundwater samples have historically been analyzed for 12 of the ADEC Soil Contaminants Evaluated for Dermal Exposure including naphthalene, 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene. Of these 12 analytes, only naphthalene has shown

consistent exceedances in groundwater (**Tables 4a** through **4c**). Naphthalene exceedances have been observed at MW-1, MW-4, MW-5B, MW-11, MW-21, MW-22, MW-26, and MW-27 from 2019 through 2022 (**Tables 4a** through **4c**). Naphthalene in groundwater may have originated from leached surface soil contamination. Therefore, the dermal absorption of contaminants from soil exposure pathway is complete for current and future receptors listed in Section 10.1.

10.3 Subsurface Soil

Subsurface soil (2 to 16.5 ft bgs) has been assessed during onsite investigations in 1992, 1994, 1995, 1999, and 2000 (**Table 1**). Soil samples collected from each of these investigations except 2001 contained petroleum hydrocarbon concentrations that exceeded ADEC CLs (**Table 2**). The depths of the subsurface soil exceedances ranged from 2 to 16.5 ft bgs. However, because there is currently no exposed subsurface soil onsite, the incidental soil ingestion, inhalation of fugitive dust, and dermal absorption exposure pathways are incomplete for current receptors.

The incidental soil ingestion exposure pathway is complete for future receptors if soil onsite is exposed during future soil disturbance activities. The dermal absorption exposure pathway is complete only for future receptors. The complete surface soil dermal absorption pathway rationale provided in Section 10.2 is the same rationale for the complete subsurface soil dermal absorption pathway. Naphthalene, a soil contaminant evaluated for dermal exposure listed in Appendix B of the ADEC 2017 Guidance on Developing CSMs, exceeded groundwater CLs in MW-1, MW-4, MW-5B, MW-11, MW-21, MW-22, MW-26, and MW-27 from 2019 through 2021. As such, it is likely naphthalene contamination is present in subsurface soils (**Table 2**; ADEC 2017a). In the event of future ground disturbance activities onsite, naphthalene could be dermally absorbed by future receptors listed in Section 10.1.

10.4 Groundwater

From 1992 to present, static groundwater depths at the Site have ranged from 9.57 to 16.89 ft btoc (**Tables 4a** through **4c**). The approximate depth to groundwater from the most recent groundwater monitoring event conducted on September 12 and 13, 2023 was 10.30 (MW-23) to 12.60 (MW-8) ft btoc (Arcadis 2023a). Historical groundwater flow is to the southwest at an approximate gradient of 0.002 to 0.005 ft per ft (**Figure 4**; Arcadis 2023a). As discussed in Section 10.8, groundwater in the vicinity of the Site may currently be used as drinking water at adjacent properties. Groundwater investigations conducted at the Site indicate COPCs are present in the groundwater in exceedance of the ADEC CLs. All current and historical groundwater analytical data is presented in **Tables 4a** through **4c** and **Tables 5a** through **5c**. The potential exposure pathway of ingestion of groundwater is considered complete for current and future receptors based on ADEC definition. It is recommended that groundwater at the Site not be used as drinking water.

10.5 Outdoor Air

The 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites, Appendix F: Target Levels for Groundwater for Commercial and Residential Properties was used to evaluate the vapor contamination risk onsite (ADEC 2017b). All historical volatile contaminant exceedances were observed at B6MW, MW-1, MW-4, MW-8, MW-11, MW-17, MW-21, MW-22, MW-24, MW-26, MW-27, and T-2 (**Figure 3** and **Tables 4a** through **4c**).

It is assumed that volatile COPCs are present in outdoor air because the Site is an active gas station. Groundwater is located at an average depth of 11.98 ft btoc and unlikely to contribute to an unacceptable risk to human receptors for outdoor air without a preferential pathway. However, surface soil exceedances were observed during the 1995 sampling event, and there are landscaped areas with exposed surface soil onsite (**Figure 2**). In accordance with the ADEC 2017 Guidance on Developing CSMs, the inhalation of outdoor air pathway is considered potentially complete for the current and future receptors listed Section 10.1.

10.6 Indoor Air

As mentioned in Section 10.5, volatile soil vapor COPC exceedances were observed onsite using the 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites, Appendix F: Target Levels for Groundwater. An occupied station building currently exists onsite. Additionally, other occupied buildings including a motel/hostel and several private residences and restaurants are situated directly downgradient and within 30 ft of the contamination plume (**Figure 3**). These occupied buildings are likely subject to preferential pathways including drains, subsurface fractures, and/or utility conduits which could facilitate vapor migration to buildings. The inhalation of indoor air pathway is potentially complete for current and future building occupants onsite and downgradient of the contamination plume in the vicinity of the motel/hostel shown on **Figure 3**.

10.7 Surface Water

The closest surface water bodies to the Site are Lake Spenard approximately 1.6 mi to the southwest and Westchester Lagoon approximately 2.2 mi to the north (**Figure 1**). No surface water studies associated with the Site have been conducted on the listed water bodies. No available records indicate these surface water bodies are used as a drinking water source or for recreation. The surface water pathway is considered incomplete due to the distance from the Site, lack of reasonable transport mechanisms such as physical transport via sheet flow from precipitation, vegetation present between the Site and the closest surface waterbody, and low levels of surface soil contamination.

10.8 Water Supply Wells

A door-to-door private drinking water well survey conducted in December 2000 confirmed five drinking water wells are located within 900 ft of the Site (Secor 2004a). In January 2001, three of the wells identified in the survey were sampled. These wells were located at 3602 Greenland Drive approximately 200 ft northwest, 3900 Greenland Drive approximately 900 ft southwest (downgradient), and 1801 McKinley Avenue approximately 900 ft southwest (downgradient). In February 2001, the remaining two wells were sampled. These wells were located at 3801 McCain Loop approximately 700 ft southeast and 3737 McCain Loop approximately 500 ft southeast. All five wells were sampled and analyzed for GRO, BTEX, MTBE, ethyl-tertiary-butyl ether, isopropyl ether, tertiary-butyl alcohol, tertiary-amyl-methyl ether, 1-2 dichloroethane, EDB, methanol, and ethanol. Analytes were not detected in any of the five wells except for a 0.206 μL concentration of benzene at the 3737 McCain Loop well location, which is below the ADEC CL of 4.6 $\mu\text{g/L}$. However, AKDNR WELTS does not provide information for the wells located at 3602 Greenland Drive, 1801 McKinley Avenue, 3801 McCain Loop, or 3737 McCain Loop. AKDNR WELTS does show the in-use well on 3900 Greenland Drive as well as seven additional wells within a quarter-mile radius of the Site. These wells are located at or directly adjacent to 1706 Jefferson Drive, 3405 Outta Place, 3411 Willow Place, 1303 W 39th Avenue, 1207 W 38th Place, 3700 Wilson Street, and 1117 Chugach Way.

Although the five drinking water wells identified in the December 2000 survey were sampled and did not have CL exceedances, groundwater analytical data is not available for the seven additional wells shown on AKDNR WELTS. Due to the possibility of contaminant CL exceedances in drinking water wells within proximity of the Site, the ingestion of groundwater, dermal absorption of contaminants in groundwater, and inhalation of volatile compounds in tap water pathways are deemed complete for current and future receptors.

10.9 Other Media

All relevant media and receptors for the Site were evaluated based on the ADEC 2017 Guidance on Developing CSMs. The ADEC Human Health CSM (graphical) and the ADEC Human Health Scoping Form and Standardized Graphic Form are included in **Appendix A**.

Exposure pathways for ecological receptors at the Site are incomplete for the following reasons:

- The current site use is an active service station and asphalt parking lot where wildlife is unlikely to access.
- The Site is in a mixed commercial/residential area.
- There is very little to no exposed surface soil onsite, so subsurface soil and groundwater contamination do not have a reasonable path to biological receptors.

11 Data Quality Objectives

The data presented in this report were generated using the data quality objectives outlined in the ADEC Risk Assessment Procedures Manual (ADEC 2018). Data generated as part of the dissolved plume investigations were evaluated for compliance with the data quality objectives. These include:

- **Precision.** If the reported result is near the concentration of concern, it is necessary to be as precise as possible to quantify the likelihood of false negatives and false positives.
- **Accuracy.** If the reported results are within the laboratory quality control percent limits and project specified objectives.
- **Representativeness.** Sample data must accurately reflect the Site characteristics to effectively represent the potential risk to human health or the environment. Hot spots and exposure area media must have representative data.
- **Completeness.** Completeness for critical samples must be 100 percent.
- **Comparability.** Risk levels generated in a quantitative risk assessment may be questionable if incompatible data sets are used together.
- **Sensitivity and Quantitation Limits.** If the laboratory reporting limits are representative of the applicable regulatory reporting limits.

12 Data Gaps and Next Steps

12.1 Soil

Petroleum-impacted subsurface soil has been characterized onsite at a depth of approximately 4 to 20 ft bgs (**Table 1**) and is associated with the original Site features removed during the 1995 station remodeling described in Section 2.3 (e.g., USTs, pump islands, and piping). The only surface soil (0 to 2 ft bgs) investigation conducted onsite occurred in November 1995 (Section 7.1). Surface soil contamination was found above ADEC CLs during this soil investigation. However, it is not known what the current levels are in reference to the CLs. Further surface soil investigation is warranted onsite and offsite at the Thrifty Rental property due to the lack of current surface soil analytical data and past exceedances in the subsurface soil data at the Thrifty property. Additionally, subsurface soil delineation is needed to define the extent of the soil impacts to the northwest. Historic soil sampling in the area has indicated exceedances of the human health and maximum allowable CLs, specifically GRO in PI-3 at 2 ft bgs. There was no additional sampling in this area or delineating the area for petroleum impacts in soil, thus requiring additional investigation into the subsurface in order to determine if impacts extend farther from the Site in the northwest area.

Soil samples collected in 2000, 2007, and 2008 show that subsurface soil contamination between 5 and 20 ft bgs remains downgradient of the Site (**Table 1**); however, the extent has been delineated. Soil COPC concentrations did not exceed ADEC CLs at the furthest downgradient wells (MW-3, MW-14, and MW-15) or the furthest upgradient wells (MW-2) (**Table 1** and **Figure 3**). Soil samples collected during 1992 from upgradient well MW-1 did observe benzene, ethylbenzene, and total xylenes contamination above ADEC CLs in samples at 10 ft bgs and 12.5 ft bgs. Soil samples collected from SB6 and MW-6 along the northern boundary of the plume and from MW-16 and MW-18 along the southern boundary of the plume did not contain COPC concentrations that exceeded ADEC CLs (**Table 1**). It is reasonable to consider the northeast boundary of the contamination plume is adequately delineated. However, MW-20 along the northern boundary of the plume did observe benzene above ADEC CLs in samples from 2007 from depths of 5-10 ft bgs and 10-15 ft bgs.

June 1999 soil data from borings S11 through S16 was presented in Table 2 of Arcadis' 2007 Remediation and Offsite Assessment Workplan (**Table 1**; Arcadis 2007); however, the original report detailing this soil sampling event is not available to Arcadis. A figure showing the locations of borings S11 through S16 is also unavailable to Arcadis.

12.2 Groundwater

Arcadis recommends that groundwater sampling continue as approved in the current groundwater monitoring plan (Arcadis 2023b), with the addition that DRO and RRO be analyzed by methods AK102 and AK103, respectively. Historically, there is no data for DRO or RRO at the site, but there are indications of DRO contamination in the soil both onsite and offsite. In order to close this data gap, Arcadis will continue monitoring as approved in the monitoring plan but will include DRO and RRO in the groundwater monitoring reports moving forward.

In July 2023, Arcadis oversaw the removal of asphalt covering B5MW and the replacement of the well boxes at B2MW and B5MW. The wells were restored to resume semi-annual sampling in order to continue monitoring the groundwater contamination plume (**Tables 4a** through **4c**). Arcadis recommends that monitoring well B6MW continue semi-annually to confirm delineation of the southern boundary of the plume. Benzene and total xylenes

exceedances were observed at B6MW during Arcadis' 2020 and 2021 groundwater monitoring events, however COPC contamination overall is trending downward at B6MW with no exceedances in 2022 and 2023 semi-annual sampling events (**Tables 4a** through **4c**).

The approximate southwest (downgradient) extent of the groundwater contamination plume has not been delineated. COPC concentrations have historically been non-detect or below ADEC CLs at monitoring well MW-14 and current and historical ADEC CL exceedances have not been observed at downgradient monitoring well MW-18 (**Tables 5a** through **5c** and **Figure 3**). However, exceedances of GRO, BTEX, and naphthalene have been consistently documented at monitoring wells MW-21, MW-26, and MW-27 in excess of ADEC (**Tables 5a** through **5c** and **Figure 3**). Occupied buildings including a motel/hostel and few private residences and restaurants are situated directly downgradient of the contamination plume (**Figure 3**). Downgradient building occupants are considered future receptors and potentially current receptors because the extent of the contamination plume in this area is unknown. Arcadis recommends the installation of three additional monitoring wells. One monitoring well installed southwest of monitoring well MW-27 in the vicinity of the "MOTEL/HOSTEL" and "ALASKA CREMATION CENTER" shown on **Figure 3**, one monitoring well installed west of MW-21, and one monitoring well installed northwest of MW-21 to further delineate the downgradient extent of the groundwater plume and evaluate potential vapor intrusion concerns. A work plan proposing location and monitoring well installation details will be submitted to ADEC for approval.

12.3 Soil Vapor

A vapor intrusion assessment was completed in 2009 (Arcadis 2009) and operation of an AS/SVE system was completed from May 1996 through September 2011 (Arcadis 2011a). Near the end of AS/SVE system operations, laboratory analysis did not detect BTEX concentrations above the laboratory method reporting limit in effluent samples collected in July, August, and September 2011. In July, August, and September 2011, GRO concentrations were July (4.0 ppmv), August (3.0 ppmv), and September (3.0 ppmv), respectively. The system successfully removed 8,972 pounds of GRO and 691 pounds of benzene from the subsurface from May 1996 to September 2011. All historical volatile contaminant exceedances were observed at B6MW, MW-1, MW-4, MW-8, MW-11, MW-17, MW-21, MW-22, MW-24, MW-26, MW-27, and T-2 (**Figure 4** and **Tables 4a** through **4c**). Occupied buildings including a motel/hostel and several private residences and restaurants are situated directly downgradient of these wells (**Figure 3**). Downgradient building occupants are considered current and future receptors based on this data.

With approval from ADEC, the AS/SVE system was shut down on September 30, 2011, to evaluate the potential for GRO and BTEX concentration rebound. The system has not been restarted because SVE effluent data, 2012 semi-annual groundwater monitoring data, average low mass removal rates, and decreasing historical trends indicated that GRO and BTEX impacts within the zone of influence were successfully remediated. The 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites, Appendix F: Target Levels for Groundwater for Commercial and Residential Properties (ADEC 2017b) was used to evaluate the vapor intrusion risk both onsite and offsite from the final SVE system effluent data collected in September 2011. As a result, Arcadis recommends the installation of one additional monitoring well in the vicinity of the "MOTEL/HOSTEL", southwest of well MW-27 and west of MW-17 shown on **Figure 3**. This well will be used to further evaluate the downgradient extent of the contamination plume and potential vapor intrusion risk to downgradient building occupants. Should the 2017 ADEC Vapor Intrusion Guidance for Contaminated Sites, Appendix F: Target Levels for Groundwater for Commercial and Residential Properties (ADEC 2017b) be exceeded in this well, Arcadis may recommend vapor

Conceptual Site Model Summary

probe installation in the vicinity of the downgradient buildings to further evaluate potential vapor intrusion concerns.

Additionally, based on recent groundwater monitoring data and historic site impacts, Arcadis will submit a Vapor Intrusion Assessment Work Plan for the Thrifty property. The objective of the work plan will be to assess and address potential impacts that remain in soil gas on the Thrifty property, which will include proposed installation of subslab soil vapor probes.

13 References

- ADEC. 2017a. Guidance on Developing Conceptual Site Models. State of Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, Contaminated Sites Program. January.
- ADEC. 2017b. Vapor Intrusion Guidance for Contaminated Sites. State of Alaska Department of Environmental Conservation, Division of Spill Prevention and Response, Contaminated Sites Program. November.
- ADEC. 2018. Risk Assessment Procedures Manual. February 1.
- Agra. 1995a. Letter to Robert Gondek; Subject: "Soil Borings". July 19.
- Agra. 1995b. Corrective Action Plan. May.
- Agra. 1995c. Summary Report for Underground Storage Tank Closure at Chevron Station #9-9014 Anchorage, Alaska. December.
- Arcadis. 2007. Remediation and Offsite Assessment Workplan. May 17.
- Arcadis. 2008a. Remedial System Installation and Offsite Assessment Report. January 18.
- Arcadis. 2008b. 2008 Offsite Assessment and Second Semi-Annual Groundwater Monitoring Report. December 2.
- Arcadis. 2010a. Remediation System Expansion Workplan. May 18.
- Arcadis. 2010b. Revised 2009 Workplan for Additional Offsite Assessment and Monitoring Well Abandonment. April 28.
- Arcadis. 2010c. Third Quarter 2010 Remediation System Operations and Maintenance Report. December 1.
- Arcadis. 2011a. Third Quarter 2011 Remediation System Operation and Maintenance Report. November 18.
- Arcadis. 2011b. Well Abandonment Report, Chevron Facility 99014. January 17.
- Arcadis. 2013. Request to Remove Remediation System. July 17.
- Arcadis. 2020. 2020 First Semi-Annual Groundwater Monitoring Report. June 25.
- Arcadis. 2021a. 2020 Second Semi-Annual Groundwater Monitoring Report. January 4.
- Arcadis. 2021b. 2021 First Semi-Annual Groundwater Monitoring Report. August 4.
- Arcadis. 2022a. 2021 Second Semi-Annual Groundwater Monitoring Report. January 19.
- Arcadis. 2022b. 2022 First Semi-Annual Groundwater Monitoring Report. August 2.
- Arcadis. 2023a. 2022 Second Semi-Annual Groundwater Monitoring Report. March 24.
- Arcadis. 2023b. 2023 Groundwater Analyte Adjustment and Well Repair Work Plan – Revision 1. June.
- Arcadis 2023c. 2023 Well Decommissioning Report. October 18.
- Enviros, Inc. 1995. Groundwater Sampling and Analysis at Thrifty Car Rental 3730 Spenard Road Anchorage, Alaska. April 3.
- Chevron. 2008. Email from G. Barton (Chevron) to G. Montgomery (Arcadis) re: 99014-Minnesota. December 30.

Conceptual Site Model Summary

Quality Environmental Sampling. 2015. Report of Regulated UST Closures and Site Assessment / Release Investigation, Part II. December 21.

Secor. 1998. Third Quarter 1998 Remedial System Evaluation Report. November 17.

Secor. 1999. Third Quarter 1999 Remedial System Evaluation Report. December 3.

Secor. 2004a. Work Plan for Off-Site Assessment and Monitoring Well Destruction. January 19.

Secor. 2004b. 2004 Offsite Well Installation. October 15.

Secor. 2004c. Fourth Quarter 2003 Remediation System Status Report. January 30.

Shannon & Wilson. 2000. Groundwater Plume Characterization and Limited Corrective Action Plan, Williams Express Store No. 5030, 3727 Spenard Road, Anchorage, Alaska. June 28.

Shannon & Wilson 2020. Soil Sampling, Holiday Station Store No. 630. July 30.

Shannon & Wilson. 2022. Release Investigation Activities Holiday Station Store No. 630. March.

Western Environmental Consultants. 1993. Site Assessment for Tank Closure Facility ID Number 0-000825; Owner: Floyd & Sons Inc.; Thrifty Car Rental; 3730 Spenard Road Anchorage, Alaska 99517. February 5.

Tables

Table 1
Historical Soil Analytical Results
Chevron Service Station 99014
3608 Minnesota Drive, Anchorage, Alaska



Location ID	Sample Date	Depth (ft)	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	MTBE mg/kg	Cadmium	Chromium	Zinc	PCBs	Total Lead	Comments
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	--	--	--	--	--	--	
Human Health			1,400	10,250	11	5,800	49	490	670	92	100,000	30,000	1	400	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	9.1	100,000	4,900	--	--	
MW-1	6/29/1992	10	--	--	0.18	--	0.61	2.3	--	--	--	--	--	--	Chevron Property
MW-1	6/29/1992	12.5	--	--	0.05	--	0.28	--	--	--	--	--	--	--	Chevron Property
MW-2	6/30/1992	5	--	--	<0.025	0.16	0.1	1.1	--	--	--	--	--	--	Chevron Property
MW-2	6/30/1992	12.5	--	--	<0.025	0.1	0.03	0.12	--	--	--	--	--	--	Chevron Property
MW-3	6/30/1992	10.0	--	--	<0.025	0.05	<0.05	0.08	--	--	--	--	--	--	West of Apartments on Greenland Drive
MW-3	6/30/1992	12.5	--	--	<0.025	0.09	0.06	0.72	--	--	--	--	--	--	West of Apartments on Greenland Drive
MW-4	6/29/1992	10.0	--	--	0.06	0.74	0.21	5.3	--	--	--	--	--	--	Chevron Property
MW-4	6/29/1992	12.5	--	--	2.3	57	23	130	--	--	--	--	--	--	Chevron Property
MW-5	6/30/1992	5.0	--	--	<0.025	<0.05	<0.05	<0.05	--	--	--	--	--	--	Chevron Property
MW-5	6/30/1992	10.0	--	--	0.07	0.05	<0.05	0.13	--	--	--	--	--	--	Chevron Property
MW-6	6/30/1992	10.0	--	--	<0.025	<0.05	<0.05	<0.05	--	--	--	--	--	--	Chevron Property
MW-6	6/30/1992	14.5	--	--	<0.025	<0.05	<0.05	<0.05	--	--	--	--	--	--	Chevron Property
MW-7	7/2/1992	10.0	--	--	0.17	0.37	0.06	0.40	--	--	--	--	--	--	Chevron Property
MW-7	7/2/1992	12.5	--	--	0.04	<0.05	<0.05	<0.05	--	--	--	--	--	--	Chevron Property
MW-8	11/5/1992	5	--	--	0.27	0.601	0.072	0.332	--	--	--	--	--	--	Spenard Road ROW
MW-8	11/5/1992	11.5	--	--	1.2	12.5	4.74	33	--	--	--	--	--	--	Spenard Road ROW
MW-9	11/5/1992	10	--	--	0.606	1.7	0.168	0.809	--	--	--	--	--	--	Spenard Road ROW
MW-9	11/5/1992	12.5	--	--	0.518	5.79	6.3	36	--	--	--	--	--	--	Spenard Road ROW
MW-10	11/6/1992	5	--	--	0.036	0.134	0.03	0.207	--	--	--	--	--	--	Minnesota Drive ROW, East of MW-1 (not shown on figures)
MW-10	11/6/1992	12.5	--	--	0.078	0.164	0.033	0.122	--	--	--	--	--	--	Minnesota Drive ROW, East of MW-1 (not shown on figures)
MW-12	2/28/1994	--	<50	<10	<0.1	<0.1	<0.1	<0.1	--	--	--	--	--	--	Minnesota Drive ROW, East of MW-1 (not shown on figures)
MW-12	2/28/1994	--	<50	<10	<0.1	<0.1	<0.1	<0.1	--	--	--	--	--	--	Minnesota Drive ROW, East of MW-1 (not shown on figures)
MW-11	2/23/1994	--	<50	<10	<0.1	<0.1	<0.1	<0.1	--	--	--	--	--	--	Greenland Drive, West of AS-11
MW-11	2/23/1994	--	5,400	29	41	540	170	870	--	--	--	--	--	--	Greenland Drive, West of AS-12
TY1	6/29/1995	5.0	10	--	0.052	0.42	0.10	1.7	<0.50	--	--	--	--	--	Thrifty Property
TY1	6/29/1995	7.5	2.2	--	<0.050	0.12	<0.050	0.37	<0.50	--	--	--	--	--	Thrifty Property
TY1	6/29/1995	10.0	86	--	0.21	3.4	1.7	11	<0.50	--	--	--	--	--	Thrifty Property
TY2	6/29/1995	5.0	7.2	--	0.097	0.39	0.054	1.3	<0.50	--	--	--	--	--	Thrifty Property
TY2	6/29/1995	7.0	89	--	0.55	6.3	0.70	13	<0.50	--	--	--	--	--	Thrifty Property
TY2	6/29/1995	10.0	690	--	0.80	14	16	92	<0.50	--	--	--	--	--	Thrifty Property

Table 1
Historical Soil Analytical Results
Chevron Service Station 99014
3608 Minnesota Drive, Anchorage, Alaska



Location ID	Sample Date	Depth (ft)	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	MTBE mg/kg	Cadmium	Chromium	Zinc	PCBs	Total Lead	Comments
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	--	--	--	--	--	--	
Human Health			1,400	10,250	11	5,800	49	490	670	92	100,000	30,000	1	400	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	9.1	100,000	4,900	--	--	
FS-1	11/1/1995	1.5	<1.0	68	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Fuel Oil UST
FS-2	11/1/1995	1.5	<1.0	210	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Fuel Oil UST
F-1	11/1/1995	4.0	<1.0	26	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Heating Oil UST
F-2	11/1/1995	4.0	<1.0	23	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Heating Oil UST
O-1	11/1/1995	5.0	<1.0	19	<0.050	--	--	--	--	<0.25	25	37	<0.050	<10	Chevron Property, Used Oil UST
O-2	11/1/1995	5.0	<1.0	39	<0.050	--	--	--	--	<0.25	26	35	<0.050	<10	Chevron Property, Used Oil UST
O2-B	11/1/1995	5.0	<5.0	9.4	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Used Oil UST
T-1	11/1/1995	10.0	16	--	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Gasoline UST
T-2	11/1/1995	10.0	740	--	<0.40	--	--	--	--	--	--	--	--	--	Chevron Property, Gasoline UST
T-3	11/1/1995	10.0	280	--	<0.20	--	--	--	--	--	--	--	--	12	Chevron Property, Gasoline UST
T-4	11/1/1995	10.0	1.7	--	<0.050	--	--	--	--	--	--	--	--	12	Chevron Property, Gasoline UST
T-5	11/1/1995	10.0	34	--	0.18	--	--	--	--	--	--	--	--	12	Chevron Property, Gasoline UST
T-6	11/1/1995	10.0	<1.0	--	<0.050	--	--	--	--	--	--	--	--	12	Chevron Property, Gasoline UST
T-7	11/1/1995	10.0	<1.0	--	<0.050	--	--	--	--	--	--	--	--	12	Chevron Property, Gasoline UST
PI-1	11/1/1995	2.0	6,700	--	34	--	--	--	--	--	--	--	--	44	Chevron Property, Product Line / Dispenser Island
PI-2	11/1/1995	2.0	4.1	--	<0.050	--	--	--	--	--	--	--	--	17	Chevron Property, Product Line / Dispenser Island
PI-3	11/1/1995	2.0	9,300	--	11	--	--	--	--	--	--	--	--	73	Chevron Property, Product Line / Dispenser Island
PI-4	11/1/1995	2.0	640	--	<0.020	--	--	--	--	--	--	--	--	17	Chevron Property, Product Line / Dispenser Island
PI-5	11/1/1995	2.0	420	--	0.23	--	--	--	--	--	--	--	--	33	Chevron Property, Product Line / Dispenser Island
PI-6	11/1/1995	2.0	7,400	--	58	--	--	--	--	--	--	--	--	12	Chevron Property, Product Line / Dispenser Island
PI-7	11/1/1995	2.0	<1.0	--	<0.050	--	--	--	--	--	--	--	--	33	Chevron Property, Product Line / Dispenser Island
PI-8	11/1/1995	2.0	<1.0	--	<0.050	--	--	--	--	--	--	--	--	15	Chevron Property, Product Line / Dispenser Island
PI-9	11/1/1995	2.0	6.7	--	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Product Line / Dispenser Island
PI-10	11/1/1995	12.0	2,600	--	3.0	--	--	--	--	--	--	--	--	--	Chevron Property, Product Line / Dispenser Island
PI-11	11/1/1995	11.0	<5.0	--	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Product Line / Dispenser Island
PI-12	11/1/1995	11.0	4,000	--	6.3	--	--	--	--	--	--	--	--	--	Chevron Property, Product Line / Dispenser Island
PI-13	11/1/1995	11.0	1.5	--	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Product Line / Dispenser Island
HY-N	11/1/1995	8.0	<5.0	260	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Hydraulic Lift
HY-S	11/1/1995	8.0	<5.0	23	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Hydraulic Lift
HY-C	11/1/1995	--	<5.0	120	<0.050	--	--	--	--	--	--	--	--	--	Chevron Property, Hydraulic Lift

Table 1
Historical Soil Analytical Results
Chevron Service Station 99014
3608 Minnesota Drive, Anchorage, Alaska



Location ID	Sample Date	Depth (ft)	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	MTBE mg/kg	Cadmium	Chromium	Zinc	PCBs	Total Lead	Comments
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	--	--	--	--	--	--	
Human Health			1,400	10,250	11	5,800	49	490	670	92	100,000	30,000	1	400	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	9.1	100,000	4,900	--	--	
S11	6/22/1999	8	9,670	--	225	1,650	347	1,667	--	--	--	--	--	--	Location unavailable
S12	6/22/1999	8	5.38	--	0.644	1.24	0.0426	0.618	--	--	--	--	--	--	Location unavailable
S13	6/22/1999	7	8,270	--	221	1,400	287	1,429	--	--	--	--	--	--	Location unavailable
S14	6/22/1999	9.5	13.6	--	0.503	1.66	0.167	3.91	--	--	--	--	--	--	Location unavailable
S16	6/22/1999	7	15.6	--	0.226	1.97	0.281	5.05	--	--	--	--	--	--	Location unavailable
B1MW	7/29/1999	12.5-14.5	15.9	--	0.906	1.92	0.102	0.986	--	--	--	--	--	--	Holiday Property
B2MW	7/29/1999	12.5-14.5	3.83	--	0.342	0.296	0.0988	1.048	--	--	--	--	--	--	Holiday Property
B3MW	7/29/1999	12.5-14.5	<1.95	--	<0.00976	<0.0390	<0.0390	<0.0390	--	--	--	--	--	--	Holiday Property
B4MW	5/15/2000	12.5-14	--	--	<0.00708	<0.0283	<0.0283	<0.0283	--	--	--	--	--	--	Holiday Property
B4MW	5/15/2000	15-16.5	--	--	0.0367	<0.0303	<0.0303	<0.0303	--	--	--	--	--	--	Holiday Property
B5MW	5/15/2000	12.5-14	--	--	0.0141	0.049	<0.0353	0.0927	--	--	--	--	--	--	Holiday Property
B5MW	5/15/2000	15-16.5	--	--	1.48	0.045	0.0813	3.41	--	--	--	--	--	--	Holiday Property
B6MW	5/15/2000	12.5-14	--	--	<0.00888	<0.0355	<0.0355	<0.0355	--	--	--	--	--	--	Holiday Property
B6MW	5/15/2000	15-16.5	--	--	1.32	<0.0256	<0.0256	0.238	--	--	--	--	--	--	Holiday Property
MW-13	6/21/2001	10	<5.00	--	<0.0200	<0.0500	<0.0500	<0.100	<0.100	--	--	--	--	--	NE intersection of Minnesota Drive and Spenard Road
MW-13	6/21/2001	20	<3.57	--	<0.0143	<0.0357	0.0398	0.165	<0.0713	--	--	--	--	--	NE intersection of Minnesota Drive and Spenard Road
MW-14	6/21/2001	15	<3.71	--	<0.0148	<0.0371	<0.0371	<0.0742	<0.0742	--	--	--	--	--	Intersection of Wyoming Dr and Spenard Rd
MW-14	6/21/2001	25	<3.21	--	<0.0125	<0.0312	<0.0312	<0.0625	<0.0625	--	--	--	--	--	Intersection of Wyoming Dr and Spenard Rd
MW-15	6/21/2001	15	<4.11	--	<0.0164	<0.0411	<0.0411	<0.0822	<0.0822	--	--	--	--	--	West of Apartments on Greenland Drive
MW-15	6/21/2001	25	<4.32	--	<0.0173	<0.0432	<0.0432	<0.0865	<0.0865	--	--	--	--	--	West of Apartments on Greenland Drive
MW-16	6/21/2001	20	<4.0	--	<0.0160	<0.0400	<0.0400	<0.0801	<0.0801	--	--	--	--	--	Intersection of Greenland Dr and Cleveland Ave
MW-16	6/21/2001	25	<4.02	--	<0.0161	<0.0402	<0.0402	<0.0803	<0.0803	--	--	--	--	--	Intersection of Greenland Dr and Cleveland Ave
MW-17	5/26/2004	10.0	<0.5	--	<0.027	<0.055	<0.055	<0.055	<0.027	--	--	--	--	--	Greenland Dr, NW of B6MW
MW-18	5/26/2004	10.0	<0.5	--	<0.026	<0.052	<0.052	<0.052	<0.026	--	--	--	--	--	Cleveland Dr, Directly South of Apartments
MW-18	5/26/2004	15.0	<0.5	--	<0.030	<0.060	<0.060	<0.060	0.32	--	--	--	--	--	Cleveland Dr, Directly South of Apartments
MW-19	8/16/2007	5-10	<1.4	--	0.03	0.07	<0.01	<0.04	<0.1	--	--	--	--	--	Vacant Lot, NW of Thrifty Property
MW-19	8/16/2007	10-15	<1.4	--	0.01	0.04	<0.01	<0.04	<0.1	--	--	--	--	--	Vacant Lot, NW of Thrifty Property
MW-20	8/16/2007	5-10	<1.3	--	0.02	0.05	<0.01	<0.04	<0.1	--	--	--	--	--	Thrifty Property
MW-20	8/16/2007	10-15	<1.4	--	0.02	0.05	<0.01	<0.04	<0.1	--	--	--	--	--	Thrifty Property
MW-21	8/16/2007	5-10	1.50	--	0.03	0.09	<0.01	0.07	<0.1	--	--	--	--	--	Thrifty Property
MW-21	8/16/2007	10-15	1,100	--	1.5	37	42	240	<12	--	--	--	--	--	Thrifty Property
MW-22	8/17/2007	5-10	3.00	--	0.06	0.2	0.04	0.2	<0.1	--	--	--	--	--	Thrifty Property
MW-22	8/17/2007	10-15	1,600	--	7.4	130	44	280	0.6	--	--	--	--	--	Thrifty Property

Table 1
 Historical Soil Analytical Results
 Chevron Service Station 99014
 3608 Minnesota Drive, Anchorage, Alaska



Location ID	Sample Date	Depth (ft)	GRO mg/kg	DRO mg/kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	MTBE mg/kg	Cadmium	Chromium	Zinc	PCBs	Total Lead	Comments
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	--	--	--	--	--	--	
Human Health			1,400	10,250	11	5,800	49	490	670	92	100,000	30,000	1	400	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	9.1	100,000	4,900	--	--	
MW-27	6/5/2008	8.0	1.2	6.0	0.02	0.1	0.008	0.05	--	--	--	--	--	--	Thrifty Property
MW-27	6/5/2008	12.0	2.5	6.8	0.01	0.1	0.02	0.8	--	--	--	--	--	--	Thrifty Property
MW-27	6/5/2008	14.0	9,200	220	4.7	450	210	1,900	--	--	--	--	--	--	Thrifty Property
MW-26	6/5/2008	8.0	0.7	<4.2	0.02	0.05	0.01	0.06	--	--	--	--	--	--	Thrifty Property
MW-26	6/5/2008	12.5	13	7.4	0.2	1.4	0.3	2.6	--	--	--	--	--	--	Thrifty Property
MW-25	6/6/2008	9.0	2.7	8.0	0.01	0.1	0.03	0.2	--	--	--	--	--	--	Thrifty Property
MW-25	6/6/2008	13.0	18	<4.5	0.04	0.3	0.5	2.6	--	--	--	--	--	--	Thrifty Property
SB-1	6/6/2008	13.5	33	<4.7	0.4	6.0	0.9	6.6	--	--	--	--	--	--	Thrifty Property
SB-1	6/6/2008	8.0	8.9	9.2	0.02	0.2	0.1	1.3	--	--	--	--	--	--	Thrifty Property
SB-2	6/6/2008	13.5	390	98	<0.3	11	12	120	--	--	--	--	--	--	Thrifty Property
SB-2	6/6/2008	8.0	<0.4	<4.1	0.008	0.04	0.007	0.06	--	--	--	--	--	--	Thrifty Property
SB-3	6/6/2008	9.5	0.5	<4.1	0.01	0.05	0.01	0.08	--	--	--	--	--	--	Thrifty Property
SB-3	6/6/2008	12.0	58	<4.3	0.2	0.6	0.3	16	--	--	--	--	--	--	Thrifty Property
MW-23	6/9/2008	9.0	2.0	<4.1	0.07	0.2	0.04	0.3	--	--	--	--	--	--	Thrifty Property
MW-23	6/9/2008	12.5	0.5	<4.2	0.01	0.03	0.01	0.05	--	--	--	--	--	--	Thrifty Property
MW-24	6/9/2008	9.0	1.0	4.8	0.01	0.07	0.01	0.2	--	--	--	--	--	--	Thrifty Property
MW-24	6/9/2008	12.0	3.2	15	0.01	0.09	0.02	0.8	--	--	--	--	--	--	Thrifty Property
SB-5	6/10/2008	8.5	2.1	18	0.02	0.1	0.01	0.07	--	--	--	--	--	--	Thrifty Property
SB-5	6/10/2008	13.0	37	5.3	6.0	2.9	0.3	11	--	--	--	--	--	--	Thrifty Property
SB-6	6/10/2008	9.0	0.7	<4.2	0.01	0.05	0.02	0.08	--	--	--	--	--	--	Thrifty Property
SB-6	6/10/2008	12.5	0.8	<4.2	0.01	0.06	0.02	0.1	--	--	--	--	--	--	Thrifty Property
MW-1A	9/28/2021	10	6.95 B	<10.7	0.0651	1.06	0.0934	1.07	<60.0	--	--	--	--	--	Holiday Property
MW-1A	9/28/2021	10	9.54 B	<10.7	0.0773	1.38	0.128	1.51	<73.5	--	--	--	--	--	Holiday Property, Duplicate sample
MW-1A	9/28/2021	12.5	14.0	11.4 J	0.19	2.44	0.164	2.02	--	--	--	--	--	--	Holiday Property
MW-2A	9/28/2021	10	1.82 J	<10.4	0.00477 J	0.0531	<0.0149	0.495 J	<59.5	--	--	--	--	--	Holiday Property
MW-2A	9/28/2021	12.5	<2.45 B	<11.1	0.00539 J	0.0265	<0.0123	0.0348 J	--	--	--	--	--	--	Holiday Property
MW-3A	9/28/2021	5	<1.26	<10.2	<0.0630	<0.0126	<0.0126	<0.0379	<50.5	--	--	--	--	--	Holiday Property
MW-3A	9/28/2021	12.5	<3.23 B	12.2 J	<0.00810	0.0149 J	<0.0161	<0.0485	--	--	--	--	--	--	Holiday Property

Table 1
Historical Soil Analytical Results
Chevron Service Station 99014
3608 Minnesota Drive, Anchorage, Alaska



Notes:

ID = Identification

MW = Groundwater monitoring well

mg/kg = Milligrams per kilogram

<0.5 = Not detected at or above the reported detection limit (RDL)

Bold and Shaded = Value exceeds Maximum Allowable Concentration

Bold and Shaded = Value exceeds SCL for Human Health

Bold and Shaded = Value exceeds SCL for Migration to Groundwater

Bold = Detected above laboratory method detection limit (MDL)

GRO = Total petroleum hydrocarbons, gasoline

DRO = Total petroleum hydrocarbons, diesel

Samples analytes by USEPA Method 8260D:

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

MTBE = Methyl-tert-butyl ether

ADEC = Alaska Department of Environmental Conservation

-- = Not Measured/Not analyzed

Table 2
 Soil Analytical Results, Polycyclic Aromatic Hydrocarbons
 Chevron Service Station 99014
 3608 Minnesota Drive, Anchorage, Alaska



Location ID	Sample Date	Depth (ft)	1-Methylnaphthalene mg/kg	2-Methylnaphthalene mg/kg	Acenaphthene mg/kg	Acenaphthylene mg/kg	Anthracene mg/kg	Benzo(a)Anthracene mg/kg	Benzo[a]pyrene mg/kg	Benzo[b]Fluoranthene mg/kg	Benzo[g,h,i]perylene mg/kg	Benzo[k]fluoranthene mg/kg	Chrysene mg/kg	Dibenzo[a,h]anthracene mg/kg	Fluoranthene mg/kg	Fluorene mg/kg	Indeno[1,2,3-c,d] pyrene mg/kg	Naphthalene mg/kg	Phenanthrene mg/kg	Pyrene mg/kg	Comments
Maximum Allowable Concentration			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Human Health			68	310	4,600	2,300	2,300		2	15	2,300	150	1500	1.5	3100	3100	15	29	2300	2300	
Migration to Groundwater			0.41	1.3	37	18	390		1.9	20	15000	190	600	6.3	590	36	65	0.038	39	87	
MW-1A	9/28/2021	5	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<10.6	<13.3	<13.3	Holiday Property
MW-1A	9/28/2021	15	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<13.3	<10.6	<13.3	<13.3	Holiday Property, Duplicate sample
MW-2A	9/28/2021	5	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<12.9	<10.4	<12.9	<12.9	Holiday Property
MW-3A	9/28/2021	3	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<12.7	<10.2	<12.7	<12.7	Holiday Property

Notes:
 ID = Identification
 MW = Groundwater monitoring well
 mg/kg = milligrams per kilogram
Bold and Shaded = Value exceeds Maximum Allowable Concentration
Bold and Shaded = Value exceeds SCL for Human Health
Bold and Shaded = Value exceeds SCL for Migration to Groundwater
Bold = Detected above laboratory method detection limit (MDL)
 Polynuclear Aromatics GC/MS are analyzed using the Method 8270D SIM (PAH)
 ADEC = Alaska Department of Environmental Conservation

Table 3
 Historical Soil Analytical Exceedances Summary
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Depth	Sample Date	GRO	DRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Comments
	ft bgs		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(mg/L)	
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	0.14	
Human Health			1,400 ¹	10,250 ¹	11	5,800	49	490	670	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	
Site										
MW-1	10.0	6/29/1992	--	--	0.18	--	0.61	2.3	--	Site
MW-1	12.5	6/29/1992	--	--	0.05	--	0.28	--	--	Site
MW-4	10.0	6/29/1992	--	--	0.06	0.74	0.21	5.30	--	Site
MW-4	12.5	6/29/1992	360	--	2.28	57	23	130	--	Site
MW-5	10.0	6/30/1992	--	--	0.07	0.05	<0.05	0.13	--	Site
MW-7	10.0	7/2/1992	--	--	0.17	0.37	0.06	0.40	--	Site
MW-7	12.5	7/2/1992	--	--	0.04	<0.05	<0.05	<0.05	--	Site
MW-8	5.0	11/5/1995	--	--	0.27	0.601	0.072	0.332	--	Spenard Road ROW
MW-8	11.5	11/5/1992	--	--	1.2	12.5	4.74	33	--	Spenard Road ROW
MW-9	10.0	11/5/1992	--	--	0.606	1.7	0.168	0.809	--	Spenard Road ROW
MW-9	12.5	11/5/1992	--	--	0.518	5.79	6.3	36	--	Spenard Road ROW
MW-10	5.0	11/6/1992	--	--	0.036	0.134	0.03	0.207	--	East of MW-1 in Minnesota Drive ROW- not shown on figure
MW-10	12.5	11/6/1992	--	--	0.078	0.164	0.033	0.122	--	East of MW-1 in Minnesota Drive ROW- not shown on figure
MW-11	13.0	2/23/1994	5,400	29	41	540	170	870	--	Site
Thrifty Property										
TY1	5.0	6/29/1995	10	--	0.052	0.42	0.10	1.7	<0.50	Thrifty Property
TY1	10.0	6/29/1995	86	--	0.21	3.4	1.7	11	<0.50	Thrifty Property
TY2	5.0	6/29/1995	7.2	--	0.097	0.39	0.054	1.3	<0.50	Thrifty Property
TY2	7.0	6/29/1995	89	--	0.55	6.3	0.7	13	<0.50	Thrifty Property
TY2	10.0	6/29/1995	690	--	0.80	14	16	92	<0.50	Thrifty Property
PI-1	2.0	11/1/1995	6,700	--	34	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-3	2.0	11/1/1995	9,300	--	11	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-4	2.0	11/1/1995	640	--	<0.020	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-5	2.0	11/1/1995	420	--	0.23	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-6	2.0	11/1/1995	7,400	--	58	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-10	12.0	11/1/1995	2,600	--	3.0	--	--	--	--	Thrifty Product Line / Dispenser Island
PI-12	11.0	11/1/1995	4,000	--	6.3	--	--	--	--	Thrifty Product Line / Dispenser Island
T-2	10.0	11/1/1995	740	--	<0.40	--	--	--	--	Thrifty Gasoline UST
T-5	10.0	11/1/1995	34	--	0.18	--	--	--	--	Thrifty Gasoline UST
MW-19	5.0-10.0	8/7/2024	<1.4	--	0.03	0.07	<0.01	<0.04	<0.1	Thrifty Property
MW-20	5-10	8/16/2007	<1.3	--	0.02	0.05	<0.01	<0.04	<0.1	Thrifty Property
MW-20	10-15	8/16/2007	<1.4	--	0.02	0.05	<0.01	<0.04	<0.1	Thrifty Property
MW-21	5.0-10.0	8/16/2007	1.50	--	0.03	0.09	<0.01	0.07	<0.1	Thrifty Property
MW-21	10.0-15.0	8/16/2007	1,100	--	1.5	37	42	240	<12	Thrifty Property

Table 3
 Historical Soil Analytical Exceedances Summary
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Depth	Sample Date	GRO	DRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Comments
	ft bgs		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	(mg/L)	
Maximum Allowable Concentration			1,400	12,500	--	--	--	--	0.14	
Human Health			1,400¹	10,250¹	11	5,800	49	490	670	
Migration to Groundwater			300	250	0.022	6.7	0.13	1.5	0.4	
MW-22	5.0-10.0	8/17/2007	3.0	--	0.06	0.2	0.04	0.2	<0.1	Thrifty Property
MW-22	10.0-15.0	8/17/2007	1,600	--	7.4	130	44	280	0.6	Thrifty Property
MW-23	9.0	12/8/2024	--	--	0.07	--	--	--	--	Thrifty Property
MW-25	13.0	6/6/2008	18	<4.5	0.04	0.3	0.5	2.6	--	Thrifty Property
MW-26	12.5	6/5/2008	13.0	7.4	0.2	1.4	0.3	2.6	--	Thrifty Property
MW-27	14.0	6/5/2008	9,200	220	4.7	450	210	1,900	--	Thrifty Property
SB-1	13.5	6/6/2008	33	<4.7	0.4	6.0	0.9	6.6	--	Thrifty Property
SB-2	13.5	6/6/2008	390	98	<0.3	11	12	120	--	Thrifty Property
SB-3	12.0	6/6/2008	58	<4.3	0.2	0.6	0.3	16	--	Thrifty Property
SB-5	13.0	6/10/2008	37	5.3	6.0	2.9	0.3	11	--	Thrifty Property
Holiday Property										
B1MW	12.5-14.5	7/29/1999	15.9	--	0.906	1.92	0.102	0.986	--	Holiday Property
B2MW	12.5-14.5	7/29/1999	3.83	--	0.342	0.296	0.0988	1.048	--	Holiday Property
B4S4	15-16.5	5/15/2000	--	--	0.0367	<0.0303	<0.0303	<0.0303	--	Holiday Property
B5S4	15.0-16.5	5/15/2000	--	--	1.48	0.045	0.0813	3.41	--	Holiday Property
B6S4	15.0-16.5	5/15/2000	--	--	1.32	<0.0256	<0.0256	0.238	--	Holiday Property
S11	8.0	6/22/1999	9,670	--	225	1,650	347	1,667	--	Location unavailable
S12	8.0	6/22/1999	5.4	--	0.644	1.24	0.0426	0.618	--	Location unavailable
S13	7.0	6/22/1999	8,270	--	221	1,400	287	1,429	--	Location unavailable
S14	9.5	6/22/1999	14	--	0.503	1.66	0.167	3.91	--	Location unavailable
S16	7.0	6/22/1999	16	--	0.226	1.97	0.281	5.05	--	Location unavailable
MW-1A	10	9/28/2021	6.95 B	<10.7	0.0651	1.06	0.0934	1.07	<60.0	Holiday Property
MW-1A	10	9/28/2021	9.54 B	<10.7	0.0773	1.38	0.128	1.51	<73.5	Holiday Property
MW-1A	12.5	9/28/2021	14.0	11.4 J	0.19	2.44	0.164	2.02	--	Holiday Property

Notes:

All results are reported in milligrams per kilogram (mg/kg)
 ADEC = Alaska Department of Environmental Conservation
Bold = Value exceeds the Reported Detection Limit (RDL)
 -- = Not analyzed/not applicable
Bold and Shaded = Value exceeds maximum allowable concentration
Bold and Shaded = Value exceeds Maximum Allowable Concentration over Human Health
Bold and Shaded = Value exceeds Maximum Allowable Concentration Over Migration to Groundwater
 GRO = Total petroleum hydrocarbons in Gasoline range organics (C6-C10) by Alaska Series Method AK104
 DRO = Total petroleum hydrocarbons in Diesel range organics (C10-C25) by Alaska Series Method AK105
 ft bgs = Feet below ground surface
 ID = Identification
¹ = Screening level based on soil saturation concentration (CSAT), parenthesis represents the human-health cleanup level
 Samples analytes by USEPA Method 8260D: Benzene, Toluene, Ethylbenzene and Total Xylenes
 MTBE = Methyl-tert-butyl ether

Table 4a
 Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska



Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft amsl)	GRO (µg/L)	DRO (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Comments
ADEC Groundwater Cleanup Levels						2,200	1,500	4.6	1,100	15	190	140	1.7	
B1MW	5/15/2000	--	--	--	--	--	--	540	150	340	4,000	--	--	
B2MW	5/15/2000	--	--	--	--	87,000	--	2,000	9,600	2,600	20,000	--	--	
B2MW	9/10/2003	--	13.28	--	--	24,000	--	140	--	--	--	--	--	
B2MW	3/20/2004	--	12.63	--	--	33,800	--	184	--	--	--	--	--	
B2MW	6/3/2004	--	11.31	--	--	--	--	--	--	--	--	--	--	
B2MW	9/17/2004	--	12.28	--	--	6,170	--	66.9	--	--	--	--	--	
B2MW	4/5/2005	--	13.51	--	--	15,600	--	121	--	--	--	--	--	
B2MW	10/3/2005	--	13.67	--	--	28,400	--	160	--	--	--	--	--	
B2MW	4/18/2006	--	14.45	--	--	12,300	--	72.1	--	--	--	--	--	
B2MW	9/12/2006	--	13.93	--	--	2,500	--	59.4	--	--	--	--	--	
B2MW	3/25/2007	--	14.40	--	--	543	--	26.7	--	--	--	--	--	
B2MW	9/3/2009	--	14.60	--	--	200	--	33.0	<0.500	<0.500	<1.50	<2.50	--	
B2MW	5/13/2010	--	13.82	--	--	120	--	20.0	<0.500	1.00	<1.50	<2.50	--	
B2MW	9/9/2010	--	13.55	--	--	210	--	46.0	<0.500	<0.500	<1.50	<2.50	--	
B2MW	6/21/2011	--	13.47	--	--	210	--	5.00	<0.500	<0.500	<1.50	--	--	
B2MW	9/29/2011	--	13.45	--	--	140	--	2.30	<0.500	<0.500	<1.50	--	--	
B2MW	5/22/2012	--	--	--	--	--	--	--	--	--	--	--	--	
B2MW	9/20/2012	--	12.73	--	--	160	--	3.00	<0.500	<0.500	<1.50	--	--	
B2MW	5/15/2013	98.62	13.09	--	85.53	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
B2MW	5/15/2013	98.62	--	--	--	136	--	<1.00	<1.00	<1.00	<3.00	--	--	
B2MW	9/24/2013	98.62	12.31	--	86.31	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
B2MW	5/15/2014	98.62	12.74	--	85.88	--	--	<1.00	<1.00	<1.00	<3.00	--	--	
B2MW	10/16/2014	98.62	12.55	--	86.07	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
B2MW	4/20/2015	98.62	13.71	--	84.91	180	--	<0.500	<0.500	<0.500	<0.500	--	--	
B2MW	11/24/2015	98.62	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
B2MW	6/28/2016	98.62	13.50	--	85.12	110	--	<0.500	<0.500	<0.500	<0.500	--	--	
B2MW	9/13/2016	98.62	13.18	--	85.44	330	--	11.0	<3.00	3.00 J	16.0	--	--	
B2MW	5/3/2017	98.62	13.62	--	85.00	360 [360]	--	<0.0010 J [0.0040 J]	1.00 [<0.500]	76.0 J [<0.500 J]	75.0 J [<0.500 J]	--	--	
B2MW	9/12/2017	98.62	13.04	--	85.58	350	--	1.00	<0.500	1.00	8.00	<0.500	--	
B2MW	5/18/2018	98.62	13.12	--	85.50	370	--	1.00	<0.500	3.00	3.00	<0.500	--	
B2MW	9/27/2018	98.62	13.09	--	85.53	1,900	--	16.0	<0.200	15.0	310	<0.200	--	
B2MW	5/9/2019	98.67	13.36	0.00	85.31	200	--	0.700 J	<1.00	9.00	2.00 J	<1.00	--	DTW from well survey on 6/3/2019
B2MW	10/7/2019	98.67	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
B2MW	4/27/2020	98.67	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B2MW	10/28/2020	98.67	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B2MW	4/28/2021	98.67	--	--	--	--	--	--	--	--	--	--	--	
B2MW	9/27/2021	98.67	--	--	--	--	--	--	--	--	--	--	--	
B2MW	5/4/2022	98.67	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B3MW	5/15/2000	--	--	--	--	<200	--	<1.00	2.60	<1.00	18.0	--	--	
B4MW	5/15/2000	--	--	--	--	1,600	--	400	<1.00	<1.00	17.0	--	--	
B5MW	5/15/2000	--	--	--	--	56,000	--	9,300	2,900	450	8,500	--	--	
B5MW	9/10/2003	--	13.41	--	--	110,000	--	960	--	--	--	--	--	
B5MW	3/20/2004	--	12.89	--	--	10,900	--	279	--	--	--	--	--	
B5MW	6/3/2004	--	11.40	--	--	--	--	--	--	--	--	--	--	
B5MW	9/17/2004	--	12.40	--	--	58,800	--	219	--	--	--	--	--	
B5MW	4/5/2005	--	13.35	--	--	50,700	--	289	--	--	--	--	--	
B5MW	10/3/2005	--	13.52	--	--	49,700	--	289	--	--	--	--	--	
B5MW	4/18/2006	--	14.31	--	--	41,200	--	185	--	--	--	--	--	
B5MW	9/12/2006	--	13.80	--	--	31,600	--	196	--	--	--	--	--	
B5MW	3/25/2007	--	13.28	--	--	29,000	--	161	--	--	--	--	--	
B5MW	9/3/2009	--	13.49	--	--	27,000	--	92.0	0.630	1,300	7,900	<20.0	--	

Table 4a
 Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska



Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft amsl)	GRO (µg/L)	DRO (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Comments
ADEC Groundwater Cleanup Levels						2,200	1,500	4.6	1,100	15	190	140	1.7	
B5MW	5/13/2010	--	13.69	--	--	18,000	--	70.0	<2.50	700	4,000	<13.0	--	
B5MW	9/9/2010	--	13.39	--	--	22,000	--	80.0	<5.00	900	5,700	<25.0	--	
B5MW	6/21/2011	--	13.33	--	--	8,300	--	53.0	<10.0	330	2,300	--	--	
B5MW	9/29/2011	--	13.30	--	--	8,600	--	48.0	3.90	370	2,500	--	--	
B5MW	5/22/2012	--	12.92	--	--	230	--	<4.00	0.700	<0.500	<1.50	--	--	
B5MW	9/20/2012	--	12.58	--	--	13,000	--	6.00	3.40 J	350	2,300	--	--	
B5MW	5/14/2013	--	--	--	--	--	--	--	--	--	--	--	--	
B5MW	5/15/2013	98.33	12.93	--	85.40	9,150	--	41.7	<1.00	259	1,990	--	--	
B5MW	5/15/2013	98.33	--	--	--	8,670	--	43.9	<10.0	248	1,960	--	--	
B5MW	9/24/2013	98.33	12.12	--	86.21	7,210	--	40.2	<10.0	156	1,470	--	--	
B5MW	5/15/2014	98.33	12.59	--	85.74	7,990	--	33.0	<10.0	175	1,540	--	--	
B5MW	10/16/2014	98.33	12.37	--	85.96	7,400	--	50.1	<10.0	153	1,820	--	--	
B5MW	4/20/2015	98.33	13.51	--	84.82	9,100	--	33.0	<3.00	110	1,200	--	--	
B5MW	11/24/2015	98.33	12.72	--	85.61	7,800 [8,300]	--	0.044 [0.035]	0.600 J [<3.00]	100 [85.0]	830 [920]	--	--	
B5MW	6/28/2016	98.33	13.31	--	85.02	6,100 [6,200]	--	0.023 [0.022]	<3.00 [<3.00]	66.0 [60.0]	620 [570]	--	--	
B5MW	9/13/2016	98.33	12.98	--	85.35	7,400	--	26.0	<3.00	64.0	570	--	--	
B5MW	5/3/2017	98.33	13.46	--	84.87	4,100	--	25.0	<0.500	<0.500	<0.500	--	--	
B5MW	9/11/2017	98.33	--	--	--	--	--	--	--	--	--	--	--	
B5MW	5/18/2018	98.33	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
B5MW	9/26/2018	98.33	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
B5MW	10/07/2019	98.33	--	--	--	--	--	--	--	--	--	--	--	Well Destroyed
B5MW	4/27/2020	98.33	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B5MW	10/28/2020	98.33	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B5MW	4/28/2021	98.33	--	--	--	--	--	--	--	--	--	--	--	
B5MW	9/27/2021	98.33	--	--	--	--	--	--	--	--	--	--	--	
B5MW	5/4/2022	98.33	--	--	--	--	--	--	--	--	--	--	--	Unable to locate well
B6MW	2/13/1996	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	5/30/1996	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	8/20/1996	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	10/22/1996	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	4/22/1997	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	4/21/1998	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/23/1998	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	4/27/1999	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	10/18/1999	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	5/15/2000	--	--	--	--	6,300	--	4,500	<1.00	<1.00	140	--	--	
B6MW	5/22/2000	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
B6MW	9/27/2000	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	5/15/2001	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/28/2001	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	5/4/2002	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/25/2002	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	6/11/2003	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/10/2003	--	13.33	--	--	100,000	--	2,700	--	--	--	--	--	
B6MW	10/7/2003	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	3/20/2004	--	12.87	--	--	43,600	--	869	--	--	--	--	--	
B6MW	6/3/2004	--	11.59	--	--	--	--	--	--	--	--	--	--	
B6MW	9/17/2004	--	12.36	--	--	24,600	--	548	--	--	--	--	--	
B6MW	9/24/2004	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	4/5/2005	--	13.29	--	--	19,200	--	556	--	--	--	--	--	
B6MW	5/13/2005	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/22/2005	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	10/3/2005	--	13.47	--	--	20,200	--	518	--	--	--	--	--	
B6MW	4/18/2006	--	14.28	--	--	26,600	--	884	--	--	--	--	--	
B6MW	5/11/2006	--	--	--	--	--	--	--	--	--	--	--	--	
B6MW	9/12/2006	--	13.77	--	--	17,900	--	121	--	--	--	--	--	

Table 4a
 Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska



Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft amsl)	GRO (µg/L)	DRO (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Comments
ADEC Groundwater Cleanup Levels						2,200	1,500	4.6	1,100	15	190	140	1.7	
MW-9	8/20/1996	98.20	14.63	--	83.58	--	--	--	--	--	--	--	--	
MW-9	10/22/1996	98.20	14.56	--	83.64	197,000	--	4,380	16,500	8,230	50,200	--	--	
MW-9	4/22/1997	98.20	14.99	--	83.22	74,000	--	7,280	12,800	1,950	11,100	--	--	
MW-9	4/21/1998	98.20	14.50	--	83.70	10,400	--	1,900	1,120	144	972	--	--	
MW-9	9/23/1998	98.20	15.96	--	82.24	833	--	41.4	4.59	47.7	76.7	--	--	
MW-9	4/27/1999	98.20	14.35	--	83.85	8,150	--	2,030	214	48.3	473	113/97.8	--	
MW-9	10/18/1999	98.20	13.14	--	85.06	205,000	--	6,990	45,800	3,280	53,300	<2,500	--	
MW-9	5/22/2000	98.20	12.52	--	85.68	251,000	--	14,800	43,100	2,860	52,600	168/145	--	
MW-9	9/27/2000	98.20	13.02	--	85.18	208,000	--	11,400	39,900	2,530	43,500	<1,000	--	
MW-9	5/15/2001	98.20	13.44	--	84.76	112,000	--	5,750	232,200	1,860	35,500	<5.00	--	
MW-9	9/28/2001	98.20	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - due to well damage
MW-9	5/4/2002	92.09	--	--	--	--	--	--	--	--	--	--	--	Unable to locate - paved over
MW-9	9/25/2002	92.09	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
MW-9	6/11/2003	92.09	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
MW-9	10/7/2003	92.09	--	--	--	--	--	--	--	--	--	--	--	Obstruction in well
MW-9	6/3/2004	92.09	--	--	--	--	--	--	--	--	--	--	--	Obstruction in well
MW-9	9/24/2004	92.09	--	--	--	--	--	--	--	--	--	--	--	Obstruction in well
MW-9	5/13/2005	92.09	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/19/2007	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	5/13/2008	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/17/2008	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	5/19/2009	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	5/12/2010	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	9/9/2010	92.02	--	--	--	--	--	--	--	--	--	--	--	
MW-9	6/28/2016	92.02	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
MW-9	9/13/2016	92.02	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
MW-9	5/3/2017	92.02	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
MW-9	9/11/2017	92.02	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
MW-9	9/26/2018	92.02	--	--	--	--	--	--	--	--	--	--	--	Unable to access - paved over
MW-10	11/1/1992	97.60	13.19	--	84.41	--	100	--	--	--	--	--	--	
MW-10	5/1/1993	97.60	14.11	--	83.49	--	ND	--	--	--	--	--	--	
MW-10	8/1/1993	97.60	13.37	--	84.23	--	ND	--	--	--	--	--	--	
MW-10	11/1/1993	97.60	13.24	--	84.36	--	ND	--	--	--	--	--	--	
MW-10	6/1/1994	97.60	13.61	--	83.99	--	ND	--	--	--	--	--	--	
MW-10	9/1/1994	97.60	13.78	--	83.82	--	ND	--	--	--	--	--	--	
MW-10	5/15/2001	97.60	12.95	--	84.65	<50.0	--	<0.200	<0.500	<0.500	<1.00	--	--	
MW-11	6/1/1994	97.41	12.72	--	84.69	--	--	40,000	68,000	5,700	29,000	--	--	
MW-11	9/1/1994	97.41	12.97	--	84.44	--	--	25,000	46,000	4,400	23,000	--	--	
MW-11	12/20/1994	97.41	14.07	--	84.00	--	--	--	--	--	--	--	--	
MW-11	3/22/1995	97.41	14.60	--	83.73	--	--	--	--	--	--	--	--	
MW-11	6/15/1995	97.41	12.42	--	84.99	290,000	--	41,000	110,000	8,800	44,000	--	--	
MW-11	10/24/1995	97.33	12.13	--	85.20	--	--	--	--	--	--	--	--	
MW-11	2/13/1996	97.33	13.13	--	84.20	140,000 [220,000]	--	16,000 [18,000]	61,000 [69,000]	4,700 [6,000]	24,000 [31,000]	--	--	
MW-11	5/30/1996	97.33	13.28	--	84.07	--	--	--	--	--	--	--	--	
MW-11	8/20/1996	97.33	12.93	--	84.40	444,000 [467,000]	--	27,900 [27,800]	69,400 [72,100]	8,760 [7,430]	47,900 [43,800]	--	--	
MW-11	10/22/1996	97.33	13.29	--	84.04	448,000	--	37,400	126,000	10,200	54,900	--	--	
MW-11	4/22/1997	97.33	13.82	--	83.61	--	--	--	--	--	--	--	--	
MW-11	4/21/1998	97.33	12.90	--	84.43	286,000	--	12,900	84,500	8,050	63,400	--	--	
MW-11	9/23/1998	97.33	14.27	--	83.06	153,000	--	3,780	36,500	5,490	46,800	--	--	
MW-11	4/27/1999	97.33	13.11	--	84.22	191,000	--	4,080	37,900	5,780	37,300	<2.500	--	
MW-11	10/18/1999	97.33	11.90	--	85.43	369,000	--	4,170	42,400	11,600	92,600	<1,000	--	
MW-11	5/22/2000	97.33	11.10	--	86.23	112,000	--	2,910	18,300	3,180	27,000	81.7	--	
MW-11	9/27/2000	97.33	11.80	--	85.53	166,000 [161,000]	--	4,100 [4,450]	28,200 [30,000]	5,620 [5,640]	38,800 [40,800]	<1,000 [<1,000]	--	
MW-11	5/15/2001	97.33	12.20	--	85.13	79,300	--	1,820	14,000	2,030	24,400	<5.00	--	

Table 4a
Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska



Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft amsl)	GRO (µg/L)	DRO (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Comments
ADEC Groundwater Cleanup Levels						2,200	1,500	4.6	1,100	15	190	140	1.7	
MW-17	6/21/2011	90.23	--	--	--	1,200	--	140	<0.500	3.90	340	--	--	
MW-17	9/29/2011	90.23	12.31	--	77.92	<10.0	--	<0.500	<0.500	<0.500	<1.50	--	--	
MW-17	5/22/2012	90.23	11.85	--	78.38	67.0	--	8.00	<0.500	<0.500	6.50	--	--	
MW-17	9/20/2012	90.23	11.61	--	78.62	16.0	--	19.0	<0.500	<0.500	40.0	--	--	
MW-17	5/16/2013	97.05	11.91	--	85.14	317	--	15.2	<1.00	1.10	100	--	--	
MW-17	5/16/2013	97.05	--	--	--	322	--	18.9	<1.00	1.20	111	--	--	
MW-17	9/23/2013	97.05	11.12	--	85.93	1,650	--	89.4	<1.00	12.1	397	--	--	
MW-17	5/14/2014	97.05	11.63	--	85.42	2,310	--	67.3	<2.00	13.7	812	--	--	
MW-17	10/15/2014	97.05	11.37	--	85.68	5,280	--	79.0	<2.00	21.8	1,690	--	--	
MW-17	4/20/2015	97.05	12.51	--	84.54	--	--	--	--	--	--	--	--	
MW-17	11/17/2015	97.05	--	--	--	--	--	--	--	--	--	--	--	Unable to access - frozen
MW-17	6/29/2016	97.05	12.39	--	84.66	4,000 [4,200]	--	0.028 [0.037]	<3.00 [<0.500]	17.0 [25.0]	950 [890]	--	--	
MW-17	9/13/2016	97.05	12.03	--	85.02	560 [450]	--	<0.500 J [0.0007 J]	<0.500 [<0.500]	<0.500 [<0.500]	64.0 [97.0]	--	--	
MW-17	5/4/2017	97.05	12.44	--	84.61	990	--	9.00	65.0	74.0	490	--	--	
MW-17	9/12/2017	97.05	11.91	--	85.14	2,500 [2,600]	--	0.0170 [0.0170]	<0.500 [<0.500]	11.0 [11.0]	570 [590]	2.00 [2.00]	--	
MW-17	5/17/2018	97.05	11.97	--	85.08	1,200	--	6.00	<0.500	5.00	250	1.00 J	--	
MW-17	9/27/2018	97.05	11.96	--	85.09	2,100	--	7.00	<0.200	8.00	560	0.700 J	--	
MW-17	5/10/2019	97.05	12.20	0.00	84.85	1,300	--	7.00	<1.00	5.00	320	0.200 J	--	Unable to survey - well located in right of way
MW-17	10/07/2019	97.05	12.23	0.00	84.82	1,900	--	9.00	<0.200	8.10	420 D J	<2.00	1.30	
MW-17	4/27/2020	97.05	--	--	--	--	--	--	--	--	--	--	--	Unable to access well, Well in right of way
MW-17	10/30/2020	97.05	11.55	0.00	85.50	12.3 J	--	0.640 J	<1.00	<1.00	1.86 J	<1.00	<5.00	Well Gauged on 10/28/2020
MW-17	4/28/2021	97.05	11.77	0.00	85.28	333	--	6.51	<1.00	2.32	95.3	<1.00	<5.00	
MW-17	9/27/2021	97.05	11.81	0.00	85.24	806	--	2.40	<1.00 B	2.56	178	<1.00	<5.00 J	
MW-17	5/4/2022	97.05	11.70	0.00	85.35	354	--	1.99	<1.00	0.848 J	95.2	0.281 J	<5.00 J	
MW-17	8/25/2022	97.05	--	0.00	--	--	--	--	--	--	--	--	--	Well paved over
MW-18	6/3/2004	--	10.69	--	--	<10.0	--	<0.500	<0.500	<0.500	<0.500	2.00	--	
MW-18	9/24/2004	--	11.21	--	--	<10.0	--	<0.500	<0.500	<0.500	<0.500	<2.00	--	
MW-18	5/13/2005	--	11.75	--	--	20.0	--	<0.500	<0.500	<0.500	<0.500	<2.00	--	
MW-18	9/22/2005	--	12.01	--	--	--	--	--	--	--	--	--	--	
MW-18	9/23/2005	--	--	--	--	<10.0	--	<0.500	<0.500	<0.500	<0.500	<2.00	--	
MW-18	5/11/2006	--	13.11	--	--	<10.0	--	<0.500	<0.500	<0.500	0.600	3.00	--	
MW-18	9/26/2006	--	12.41	--	--	--	--	--	--	--	--	--	--	
MW-18	5/22/2007	--	12.95	--	--	<10.0	--	<0.500	<0.500	<0.500	<0.500	4.00	--	
MW-18	9/19/2007	89.38	12.90	--	76.48	--	--	--	--	--	--	--	--	
MW-18	5/13/2008	89.38	12.34	--	77.04	--	--	--	--	--	--	--	--	
MW-18	5/14/2008	89.38	--	--	--	<10.0	--	<1.00	<1.00	<1.00	<2.00	<3.00	--	
MW-18	9/17/2008	89.38	12.21	--	77.17	--	--	--	--	--	--	--	--	
MW-18	5/19/2009	89.38	12.40	--	76.98	<10.0	--	<0.500	<0.500	<0.500	<1.50	<2.50	--	
MW-18	9/3/2009	89.38	12.47	--	76.91	--	--	--	--	--	--	--	--	
MW-18	5/12/2010	89.38	13.41	--	75.97	<10.0	--	<0.500	<0.500	<0.500	<1.50	<2.50	--	
MW-18	9/8/2010	89.38	12.43	--	76.95	--	--	--	--	--	--	--	--	
MW-18	6/21/2011	89.38	12.27	--	77.11	<10.0	--	<0.500	<0.500	<0.500	<1.50	--	--	
MW-18	9/29/2011	89.38	--	--	--	--	--	--	--	--	--	--	--	
MW-18	5/22/2012	89.38	11.67	--	77.71	<10.0	--	<0.500	<0.500	<0.500	<1.50	--	--	
MW-18	9/20/2012	89.38	11.55	--	77.83	<10.0	--	<0.500	<0.500	<0.500	<1.50	--	--	
MW-18	5/14/2013	96.14	11.75	--	84.39	--	--	--	--	--	--	--	--	
MW-18	5/16/2013	96.14	--	--	--	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
MW-18	5/16/2013	96.14	--	--	--	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
MW-18	9/23/2013	96.14	10.95	--	85.19	--	--	--	--	--	--	--	--	
MW-18	5/15/2014	96.14	11.55	--	84.59	<100	--	<1.00	<1.00	<1.00	<3.00	--	--	
MW-18	10/15/2014	96.14	11.29	--	84.85	--	--	--	--	--	--	--	--	
MW-18	4/20/2015	96.14	12.18	--	83.96	--	--	--	--	--	--	--	--	
MW-18	11/17/2015	96.14	--	--	--	--	--	--	--	--	--	--	--	Unable to access - frozen
MW-18	6/29/2016	96.14	12.36	--	83.78	<10.0	--	<0.500	<0.500	<0.500	<0.500	--	--	
MW-18	9/13/2016	96.14	11.59	--	84.55	--	--	--	--	--	--	--	--	Unable to Sample

Table 4a
 Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Well ID	Sample Date	TOC (ft amsl)	DTW (ft bTOC)	LNAPL thickness (ft)	GW Elev (ft amsl)	GRO (µg/L)	DRO (ug/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	Comments
ADEC Groundwater Cleanup Levels						2,200	1,500	4.6	1,100	15	190	140	1.7	
T-2	9/14/2016	97.97	11.97	--	86.00	1,500	--	230	110	29.0	50.0	--	--	
T-2	5/4/2017	97.97	12.37	--	85.60	210	--	2.00	<0.500	13.0	<0.500	--	--	
T-2	9/13/2017	97.97	11.87	--	86.10	650	--	66.0	8.00	8.00	140	<0.500	--	
T-2	5/18/2018	97.97	11.92	--	86.05	310	--	45.0	16.0	8.00	26.0	<0.500	--	
T-2	9/28/2018	97.97	11.94	--	86.03	1,400	--	340	72.0	46.0	74.0	<0.200	--	
T-2	5/8/2019	97.76	12.26	0.00	85.50	2,100	--	220	430 D	90.0	420	<1.00	--	DTW from well survey on 6/3/2019
T-2	10/08/2019	97.76	12.26	0.00	85.50	400 [470]	--	35.0 [41.0]	2.00 [2.00]	7.70 [6.70]	148 [121]	<2.00 [<2.00]	<0.500 B [<0.500 B]	
T-2	4/27/2020	97.76	11.97	0.00	85.79	1,830	--	70.0	39.9	95.0	1,190	<1.00 J	1.55 J	
T-2	10/29/2020	97.76	11.66	0.00	86.10	12,300	--	996	3,420	771	4,270	<10.0	<50.0	Well Gauged on 10/28/2020
T-2	4/30/2021	97.76	11.73	0.00	86.03	17,000	--	440	2,080	535	6,070	<100	<500	
T-2	9/28/2021	97.76	11.82	0.00	85.94	16,600	--	795	2,340	606	3,740	<100	<500 J	
T-2	5/4/2022	97.76	Dry	0.00	Dry	--	--	--	--	--	--	--	--	Well Dry
T-2	8/26/2022	97.76	10.88	0.00	86.88	553	--	126	20.3	123	72.7	0.111 J	1.29 J	
T-3	9/1/1994	--	12.21	--	--	--	--	--	--	--	--	--	--	
T-4	9/1/1994	--	--	--	--	--	--	3,100	750	100	890	--	--	
T-4	3/1/1995	--	--	--	--	--	--	2,600	750	9.00	--	5,600	--	
T-4	8/20/1996	--	12.32	--	--	--	--	--	--	--	--	--	--	
T-4	10/22/1996	--	12.70	--	--	--	--	--	--	--	--	--	--	
T-4	4/22/1997	--	12.93	--	--	5,680	--	882	333	213	1,070	--	--	
T-4	4/21/1998	--	12.43	--	--	--	--	--	--	--	--	--	--	
T-4	9/23/1998	--	13.29	--	--	--	--	--	--	--	--	--	--	
T-4	4/27/1999	--	12.21	--	--	--	--	--	--	--	--	--	--	Unable to sample due to ice blockage
T-4	10/18/1999	--	11.24	--	--	799	--	241	<2.50	<2.50	43.1	28.5/60.6	--	
T-4	5/22/2000	--	10.25	--	--	387	--	55.8	5.39	4.15	31.7	7.64	--	
T-4	9/27/2000	--	11.08	--	--	86.0	--	7.51	<0.500	<0.500	5.66	6.81/9.79	--	
T-4	5/15/2001	--	11.25	--	--	8,110	--	3,200	<50.0	<50.0	469	92.3	--	
T-4	9/28/2001	--	11.43	--	--	410	--	87.1	1.31	6.00	25.6	16.8/25.0	--	
T-4	5/4/2002	90.44	11.55	--	78.89	187	--	76.7	1.67	0.993	4.23	16.7/16.3	--	
T-4	9/25/2002	90.44	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - Due to flooding
T-4	6/11/2003	90.44	11.18	--	79.26	580	--	110	3.00	5.00	29.0	18.0	--	
T-4	10/7/2003	90.44	11.27	--	79.17	520	--	140	4.00	0.800	19.0	10.0	--	
T-4	6/3/2004	90.44	9.87	--	80.57	830	--	51.0	68.0	26.0	160	3.00	--	
T-4	9/24/2004	90.44	10.72	--	79.72	220	--	15.0	30.0	5.00	25.0	<2.00	--	
T-4	5/14/2005	90.44	11.51	--	78.93	17,000	--	430	1,800	500	2,900	7.00	--	
T-4	9/23/2005	90.44	12.02	--	78.42	580	--	40.0	150	15.0	64.0	<2.00	--	
T-4	5/11/2006	90.44	12.57	--	77.87	23,000	--	770	2,700	860	4,100	6.00	--	
T-4	9/26/2006	--	11.94	--	--	29,000	--	710	3,600	1,400	7,700	10.0	--	
T-4	5/22/2007	--	12.07	--	--	31,000	--	700	2,800	1,300	7,000	7.00	--	
T-4	9/19/2007	90.45	12.06	--	78.39	10,000	--	400	400	600	2,200	<20.0	--	
T-4	5/13/2008	90.45	11.68	--	78.77	11,000	--	300	500	500	2,200	<20.0	--	
T-4	9/18/2008	90.45	11.59	--	78.86	100	--	2.00	<1.00	5.00	10.0	<3.00	--	
T-4	5/19/2009	90.45	--	--	--	--	--	--	--	--	--	--	--	
T-4	9/3/2009	90.45	--	--	--	--	--	--	--	--	--	--	--	
T-4	5/12/2010	90.45	--	--	--	--	--	--	--	--	--	--	--	
T-4	9/8/2010	90.45	--	--	--	--	--	--	--	--	--	--	--	

Table 4a
 Historical Groundwater Gauging and Analytical Results - July 1992 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Notes:

ID = Identification
 MW, T = 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
 ug/L = Micrograms per liter
 ADEC = Alaska Department of Environmental Conservation
 <0.00100 = Not detected at or above the reported detection limit (RDL)
Bold = At or above the method detection limit (MDL)

Bold and Shaded Value exceeds ADEC Groundwater Cleanup Level

Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
 -- = Not Measured/Not analyzed

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

Samples analytes by USEPA Method 8260D:

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

MTBE = Methyl-tert-butyl ether

Naphthalene

<0.00100 J = The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation

J = The associated numerical value is an estimated concentration only

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

D = Results reported from dilution of original sample

R = The sample results are rejected as unusable. The compound may or may not be present in the sample.

NAVD 88 = North American Vertical Datum of 1988

LNAPL = Light Non-Aqueous Phase Liquid

[] = Blind Duplicate Sample Result

The laboratory for this site was changed from Eurofins Calscience to Pace Analytical prior to the second quarter 2020 groundwater monitoring event. Prior to this date, Eurofins Calscience was using the carbon ranges as follows: TPH-g as C6-C10. Pace Analytical reports the following carbon ranges: TPH-g as C5-C12.

Well ID	Sample Date	Acetone (µg/L)	Acrolein (µg/L)	Acrylonitrile (µg/L)	Bromobenzene (µg/L)	Bromomethane (µg/L)	Bromochloromethane (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	sec-Butylbenzene (µg/L)	tert-Butylbenzene (µg/L)	Carbon disulfide (µg/L)	Carbon Tetrachloride (µg/L)
ADEC Groundwater Cleanup Levels		14,000	--	--	62	7.5	--	1.3	33	2,000	690	810	4.6
MW-26	5/5/2022	<500	<500 J	<100	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-26	8/26/2022	164 J	<500 J	<100	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0 J	<10.0
MW-27	4/27/2020	<50.0 J	<50.0 J	<10.0 J	<1.00	<5.00	<1.00	<1.00	<1.00	2.89	<1.00	<1.00	<1.00
MW-27	10/30/2020	<2,500	<2,500	<500	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
MW-27	4/29/2021	<2,500 [231]	<2,500 [<50.0]	<500 J [<10.0]	<50.0 [<1.00]	<250 [<5.00]	<50.0 [<1.00]	<50.0 [<1.00]	<50.0 [<1.00]	<50.0 [2.60]	<50.0 [<1.00]	<50.0 [<1.00]	<50.0 [<1.00]
MW-27	9/28/2021	<2,500	<2,500 J	<500	<50.0	<250	<50.0	<50.0	<50.0	6.40 J	<50.0	<50.0	<50.0
MW-27	5/5/2022	<2,500	<2,500 J	<500	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
MW-27	8/26/2022	<2,500	<2,500 J	<500	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0 J	<50.0
T-1	4/27/2020	<50.0 J [<50.0 J]	<50.0 J [<50.0 J]	<10.0 J [<10.0 J]	<1.00 [<1.00]	<5.00 [<5.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]
T-1	10/29/2020	<50.0	<50.0	<10.0	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
T-1	4/28/2021	--	--	--	--	--	--	--	--	--	--	--	--
T-1	9/28/2021	<50.0	<50.0 J	<10.0	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
T-1	5/5/2022	<50.0	<50.0 J	<10.0	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
T-1	8/26/2022	<50.0	<50.0 J	<10.0	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00
T-2	4/27/2020	<50.0 J	<50.0 J	<10.0 J	<1.00	<5.00	<1.00	<1.00	<1.00	0.225 J	<1.00	<1.00	<1.00
T-2	10/29/2020	<500	<500	<100	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
T-2	4/30/2021	<5,000	<5,000	<1,000	<100	<500	<100	<100	<100	<100	<100	<100	<100
T-2	9/28/2021	<5,000	<5,000 J	<1,000	<100	<500	<100	<100	<100	<100	<100	<100	<100
T-2	5/5/2022	--	--	--	--	--	--	--	--	--	--	--	--
T-2	8/26/2022	<50.0	<50.0	<10.0	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00

Notes:
 ID = Identification
 MW = Groundwater monitoring well
 ug/L = Micrograms per liter
 <0.00100 = Not detected at or above the Reported Detection Limit
Bold = Detected above laboratory method detection limit (MDL)
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
 J = The associated numerical value is an estimated concentration only
 B = Compound considered non-detect at the listed value due to associated blank contamination.
 [] = Blind Duplicate Sample Result
 ADEC = Alaska Department of Environmental Conservation
 Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4b
Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska

Well ID	Sample Date	Chlorodibromo-methane (Dibromochloro-methane)									Dibromomethane (Methylene bromide)	1,2-Dichlorobenzene
		Chlorobenzene (µg/L)	Chloroethane (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	2-Chlorotoluene (o-Chlorotoluene) (µg/L)	4-Chlorotoluene (p-Chlorotoluene) (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dibromoethane (µg/L)			
ADEC Groundwater Cleanup Levels		78	8.7	--	2.2	190	--	--	--	0.075	8.3	300
MW-26	5/5/2022	<10.0	<10.0	<50.0	<50.0	<25.0	<10.0	<10.0	<50.0	<0.500	<10.0	<10.0
MW-26	8/26/2022	<10.0	<10.0	<50.0	<50.0	<25.0 J	<10.0	<10.0	<50.0	<0.500	<10.0	<10.0
MW-27	4/27/2020	<1.00	<1.00	<5.00	<5.00	<2.50 J	<1.00	<1.00	<5.00 J	<10.0	<1.00	<1.00
MW-27	10/30/2020	<50.0	<50.0	<250	<250	<125	<50.0	<50.0	<250	<10.0	<50.0	<50.0
MW-27	4/29/2021	<50.0 [<1.00]	<50.0 [<1.00]	<250 [<5.00]	<250 [<5.00]	<125 [<2.50]	<50.0 [<1.00]	<50.0 [<1.00]	<250 [<5.00]	<5.00 [<5.00]	<50.0 [<1.00]	<50.0 [<1.00]
MW-27	9/28/2021	<50.0	<50.0	<250	<250	<125	<50.0	<50.0	<250	<0.500	<50.0	<50.0
MW-27	5/5/2022	<50.0	<50.0	<250	<250	<125	<50.0	<50.0	<250	4.00	<50.0	<50.0
MW-27	8/26/2022	<50.0	<50.0	<250	<250	<125 J	<50.0	<50.0	<250	<2.50	<50.0	<50.0
T-1	4/27/2020	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 [<5.00]	<5.00 [<5.00]	<2.50 J [<2.50 J]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 J [<5.00 J]	<0.00500 [<0.00500]	<1.00 [<1.00]	<1.00 [<1.00]
T-1	10/29/2020	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00
T-1	4/28/2021	--	--	--	--	--	--	--	--	--	--	--
T-1	9/28/2021	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00
T-1	5/5/2022	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00
T-1	8/26/2022	<1.00	<1.00	<5.00	<5.00	<2.50 J	<1.00	<1.00	<5.00	<0.00500	<1.00	<1.00
T-2	4/27/2020	<1.00	<1.00	<5.00	<5.00	<2.50 J	<1.00	<1.00	<5.00 J	<5.00	<1.00	<1.00
T-2	10/29/2020	<10.0	<10.0	<50.0	<50.0	<25.0	<10.0	<10.0	<50.0	<5.00	<10.0	<10.0
T-2	4/30/2021	<100	<100	<500	<500	<250	<100	<100	<500	<5.00	<100	<100
T-2	9/28/2021	<100	<100	<500	<500	<250	<100	<100	<500	<2.50	<100	<100
T-2	5/5/2022	--	--	--	--	--	--	--	--	--	--	--
T-2	8/26/2022	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00	<5.00	<0.500	<1.00	<1.00

Notes:
ID = Identification
MW = Groundwater monitoring well
ug/L = Micrograms per liter
<0.00100 = Not detected at or above the Reported Detection Limit
Bold = Detected above laboratory method detection limit (MDL)
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
J = The associated numerical value is an estimated concentration only
B = Compound considered non-detect at the listed value due to associated blank contamination.
[] = Blind Duplicate Sample Result
ADEC = Alaska Department of Environmental Conservation
Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4b
 Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska



Well ID	Sample Date	Dichlorodifluoromethane					cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		1,3-Dichloropropane	cis-1,3-Dichloropropane
		1,2-Dichloroethane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	(Freon 12)	1,1-Dichloroethane	Dichloroethylene	Dichloroethylene	1,2-Dichloropropane			
ADEC Groundwater Cleanup Levels		1.7	300	4.8	200	28	36	360	8.2	--	--	
MW-17	10/30/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-17	4/28/2021	0.325 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	
MW-17	9/27/2021	0.343 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-17	5/4/2022	0.314 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-18	9/27/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-18	8/25/2022	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-19	4/27/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-19	10/29/2020	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 [<5.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	
MW-19	4/29/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-19	9/28/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-19	5/4/2022	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-19	8/25/2022	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-21	4/27/2020	--	--	--	--	--	--	--	--	--	--	
MW-21	10/30/2020	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<100 [<5.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	
MW-21	4/28/2021	--	--	--	--	--	--	--	--	--	--	
MW-21	9/28/2021	<200	<200	<200	<1,000	<200	<200	<200	<200	<200	<200	
MW-21	5/5/2022	<200	<200	<200	<1,000	<200	<200	<200	<200	<200	<200	
MW-21	8/26/2022	<200	<200	<200	<1,000 J	<200	<200	<200	<200	<200	<200	
MW-22	4/27/2020	--	--	--	--	--	--	--	--	--	--	
MW-22	10/29/2020	<20.0	<20.0	<20.0	<100	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	
MW-22	4/30/2021	<250 [0.782 J]	<250 [<1.00]	<250 [<1.00]	<1,250 [<5.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	
MW-22	9/28/2021	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]	<250 [<1.00]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	
MW-22	5/5/2022	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	
MW-22	8/26/2022	<250	<250	<250	<1,250 J	<250	<250	<250	<250	<250	<250	
MW-23	4/27/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-23	10/29/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-23	4/28/2021	--	--	--	--	--	--	--	--	--	--	
MW-23	9/28/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-23	5/5/2022	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-23	8/26/2022	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-24	4/28/2020	0.346 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-24	10/29/2020	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
MW-24	4/30/2021	--	--	--	--	--	--	--	--	--	--	
MW-24	9/28/2021	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
MW-24	5/5/2022	1.15 J	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
MW-24	8/26/2022	1.02 J [1.13 J]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 J [<50.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	
MW-25	4/27/2020	--	--	--	--	--	--	--	--	--	--	
MW-25	10/29/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-25	4/29/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-25	9/27/2021	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-25	5/5/2022	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-25	8/26/2022	<1.00	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-26	4/27/2020	--	--	--	--	--	--	--	--	--	--	
MW-26	10/29/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-26	4/30/2021	--	--	--	--	--	--	--	--	--	--	
MW-26	9/28/2021	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	

Table 4b
 Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Well ID	Sample Date	Constituents										
		1,2-Dichloroethane (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Dichlorodifluoromethane (Freon 12) (µg/L)	1,1-Dichloroethane (µg/L)	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) (µg/L)	trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene) (µg/L)	1,2-Dichloropropane (µg/L)	1,3-Dichloropropane (µg/L)	cis-1,3-Dichloropropene (µg/L)	
ADEC Groundwater Cleanup Levels		1.7	300	4.8	200	28	36	360	8.2	--	--	
MW-26	5/5/2022	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
MW-26	8/26/2022	<10.0	<10.0	<10.0	<50.0 J	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
MW-27	4/27/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
MW-27	10/30/2020	<50.0	<50.0	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
MW-27	4/29/2021	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<250 [<i><5.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	
MW-27	9/28/2021	<50.0	<50.0	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
MW-27	5/5/2022	<50.0	<50.0	<50.0	<250	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
MW-27	8/26/2022	<50.0	<50.0	<50.0	<250 J	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	
T-1	4/27/2020	<1.00 [0.140 J]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	
T-1	10/29/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-1	4/28/2021	--	--	--	--	--	--	--	--	--	--	
T-1	9/28/2021	0.245 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-1	5/5/2022	0.126 J	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-1	8/26/2022	0.214 J	<1.00	<1.00	<5.00 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-2	4/27/2020	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-2	10/29/2020	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	
T-2	4/30/2021	<100	<100	<100	<500	<100	<100	<100	<100	<100	<100	
T-2	9/28/2021	<100	<100	<100	<500	<100	<100	<100	<100	<100	<100	
T-2	5/5/2022	--	--	--	--	--	--	--	--	--	--	
T-2	8/26/2022	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	

Notes:

- ID = Identification
- MW = Groundwater monitoring well
- ug/L = Micrograms per liter
- <0.00100 = Not detected at or above the Reported Detection Limit
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- Bold and Italicized** : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- [] = Blind Duplicate Sample Result
- ADEC = Alaska Department of Environmental Conservation
- Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4b
Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska



Well ID	Sample Date	trans-1,3-Dichloropropene (µg/L)	1,3-Dichloropropene (µg/L)	Di-isopropyl ether (µg/L)	Hexachloro-1,3-butadiene (Hexachlorobutadiene) (µg/L)	Isopropylbenzene (Cumene) (µg/L)	p-Isopropyltoluene (µg/L)	2-Butanone (Methyl ethyl ketone) (µg/L)	Methylene chloride (µg/L)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (µg/L)	n-Propylbenzene (Propylbenzene) (µg/L)	Styrene (µg/L)
ADEC Groundwater Cleanup Levels		--	4.7	--	1.4	450	--	5600	110	6,300	660	1,200
MW-26	5/5/2022	<10.0	<10.0	<10.0	<10.0	28.0	1.54 J	<100	<50.0	<100	37.7	<10.0
MW-26	8/26/2022	<10.0	<10.0	<10.0	<10.0	17.7	<10.0	<100	<50.0	<100	27.6	<10.0
MW-27	4/27/2020	<1.00	<1.00	<1.00	<1.00	68.8	1.43	<10.0	<5.00 J	<10.0	106	<1.00
MW-27	10/30/2020	<50.0	<50.0	<50.0	<50.0	65.3	<50.0	<500	<250	<500	124	<50.0
MW-27	4/29/2021	<50.0 [<1.00]	<1.00	<50.0 [<1.00]	<50.0 [<1.00]	67.8 [75.4]	<50.0 [1.90]	<500 J [<10.0]	<250 [<5.00]	<500 J [<10.0]	176 [143]	<50.0 [<1.00]
MW-27	9/28/2021	<50.0	<50.0	<50.0	<50.0 J	63.8	<50.0	<500	<250	<500	157 J	<50.0
MW-27	5/5/2022	<50.0	<50.0	<50.0	<50.0	39.1 J	9.07 J	<500	<250	<500	68.9	<50.0
MW-27	8/26/2022	<50.0	<50.0	<50.0	<50.0	22.4 J	<50.0	<500	<250	<500	46.3 J	<50.0
T-1	4/27/2020	<1.00 [<1.00]	<1.00	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<10.0 [<10.0]	<5.00 J [<5.00 J]	<10.0 [<10.0]	<1.00 [<1.00]	<1.00 [<1.00]
T-1	10/29/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00
T-1	4/28/2021	--	--	--	--	--	--	--	--	--	--	--
T-1	9/28/2021	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00
T-1	5/5/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<10.0	<5.00	<10.0	<1.00	<1.00
T-1	8/26/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<10.0	<5.00	<10.0	0.170 J	<1.00
T-2	4/27/2020	<1.00	<1.00	<1.00	<1.00	11.5	<1.00	<10.0	<5.00 J	<10.0	13.8	<1.00
T-2	10/29/2020	<10.0	<10.0	<10.0	<10.0	23.2	<10.0	<100	<50.0	<100	34.2	<10.0
T-2	4/30/2021	<100	<100	<100	<100	20.5 J	<100	<1,000	<500	<1,000	27.5 J	<100
T-2	9/28/2021	<100	<100	<100	<100 J	18.2 J	<100	<1,000	<500	<1,000	31.1 J	<100
T-2	5/5/2022	--	--	--	--	--	--	--	--	--	--	--
T-2	8/26/2022	<1.00	<1.00	<1.00	<1.00 J	4.99	<1.00	<10.0	<5.00	<10.0	7.73	<1.00

Notes:

- ID = Identification
- MW = Groundwater monitoring well
- ug/L = Micrograms per liter
- <0.00100 = Not detected at or above the Reported Detection Limit
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level

Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level

J = The associated numerical value is an estimated concentration only

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

[] = Blind Duplicate Sample Result

ADEC = Alaska Department of Environmental Conservation

Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4b
Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska



Well ID	Sample Date	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	(1,1,2-Trichloro-1,2,2-trifluoroethane) (Freon 113) (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)
ADEC Groundwater Cleanup Levels		5.7	0.76	10,000	41	7	8,000	0.41	2.8	5,200
B6MW	4/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
B6MW	10/30/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
B6MW	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
B6MW	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
B6MW	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
B6MW	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-1	4/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-1	10/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-1	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-1	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-1	5/4/2022	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-1	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-4	4/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-4	10/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-4	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-4	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-4	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-4	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-5B	4/28/2020	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-5B	10/28/2020	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-5B	4/29/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-5B	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-5B	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-5B	8/25/2022	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 J [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 J [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 J [<i><5.00</i>]
MW-7	4/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-7	10/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-7	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-7	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-7	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-7	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-8	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-8	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-11	4/27/2020	--	--	--	--	--	--	--	--	--
MW-11	11/19/2020	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-11	4/28/2021	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-11	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-11	5/4/2022	--	--	--	--	--	--	--	--	--
MW-11	8/25/2022	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-14	4/27/2020	--	--	--	--	--	--	--	--	--
MW-14	11/19/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-14	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-14	9/27/2021	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 J [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
MW-14	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-14	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-17	4/27/2020	--	--	--	--	--	--	--	--	--

Table 4b
 Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska



Well ID	Sample Date	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	(1,1,2-Trichloro-1,2,2-trifluoroethane) (Freon 113) (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)
ADEC Groundwater Cleanup Levels		5.7	0.76	10,000	41	7	8,000	0.41	2.8	5,200
MW-17	10/30/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-17	4/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-17	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-17	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-18	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	0.197 J	<1.00	<1.00	<5.00
MW-18	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	0.199 J	<1.00	<1.00	<5.00 J
MW-19	4/27/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-19	10/29/2020	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 [<5.00]
MW-19	4/29/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-19	9/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-19	5/4/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-19	8/25/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-21	4/27/2020	--	--	--	--	--	--	--	--	--
MW-21	10/30/2020	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [0.364 J]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<20.0 [<1.00]	<100 [<5.00]
MW-21	4/28/2021	--	--	--	--	--	--	--	--	--
MW-21	9/28/2021	<200	<200	<200	<200	<200 J	<200	<200	<200	<1,000
MW-21	5/5/2022	<200	<200	<200	<200	<200	<200	<200	<200	<1,000
MW-21	8/26/2022	<200	<200	<200 J	<200	<200 J	<200	<200	<200	<1,000 J
MW-22	4/27/2020	--	--	--	--	--	--	--	--	--
MW-22	10/29/2020	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<100
MW-22	4/30/2021	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<250 [<1.00]	<1,250 [<5.00]
MW-22	9/28/2021	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 J [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]
MW-22	5/5/2022	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]
MW-22	8/26/2022	<250	<250	<250 J	<250	<250 J	<250	<250	<250	<1,250 J
MW-23	4/27/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-23	10/29/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-23	4/28/2021	--	--	--	--	--	--	--	--	--
MW-23	9/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-23	5/5/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-23	8/26/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-24	4/28/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-24	10/29/2020	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0
MW-24	4/30/2021	--	--	--	--	--	--	--	--	--
MW-24	9/28/2021	<10.0	<10.0	<10.0	<10.0	<10.0 J	<10.0	<10.0	<10.0	<50.0
MW-24	5/5/2022	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0
MW-24	8/26/2022	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 J [<10.0]	<10.0 [<10.0]	<10.0 J [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<10.0 [<10.0]	<50.0 J [<50.0]
MW-25	4/27/2020	--	--	--	--	--	--	--	--	--
MW-25	10/29/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-25	4/29/2021	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-25	9/27/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
MW-25	5/5/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-25	8/26/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
MW-26	4/27/2020	--	--	--	--	--	--	--	--	--
MW-26	10/29/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-26	4/30/2021	--	--	--	--	--	--	--	--	--
MW-26	9/28/2021	<10.0	<10.0	<10.0	<10.0	<10.0 J	<10.0	<10.0	<10.0	<50.0

Table 4b
 Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Well ID	Sample Date	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	(1,1,2-Trichloro-1,2,2-trifluoroethane) (Freon 113) (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)	1,2,3-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)
ADEC Groundwater Cleanup Levels		5.7	0.76	10,000	41	7	8,000	0.41	2.8	5,200
MW-26	5/5/2022	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0
MW-26	8/26/2022	<10.0	<10.0	<10.0 J	<10.0	<10.0 J	<10.0	<10.0	<10.0	<50.0 J
MW-27	4/27/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
MW-27	10/30/2020	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<250
MW-27	4/29/2021	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<500 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<50.0 [<i><1.00</i>]	<250 [<i><5.00</i>]
MW-27	9/28/2021	<50.0	<50.0	<50.0	<50.0	<50.0 J	<50.0	<50.0	<50.0	<250
MW-27	5/5/2022	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<250
MW-27	8/26/2022	<50.0	<50.0	<50.0 J	<50.0	<50.0 J	<50.0	<50.0	<50.0	<250 J
T-1	4/27/2020	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]
T-1	10/29/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
T-1	4/28/2021	--	--	--	--	--	--	--	--	--
T-1	9/28/2021	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00
T-1	5/5/2022	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
T-1	8/26/2022	<1.00	<1.00	<1.00 J	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00 J
T-2	4/27/2020	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00
T-2	10/29/2020	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0
T-2	4/30/2021	<100	<100	<100	<100	<100	<100	<100	<100	<500
T-2	9/28/2021	<100	<100	<100	<100	<100 J	<100	<100	<100	<500
T-2	5/5/2022	--	--	--	--	--	--	--	--	--
T-2	8/26/2022	<1.00	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00

Notes:

- ID = Identification
- MW = Groundwater monitoring well
- ug/L = Micrograms per liter
- <0.00100 = Not detected at or above the Reported Detection Limit
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- Bold and Italicized** : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- [] = Blind Duplicate Sample Result
- ADEC = Alaska Department of Environmental Conservation
- Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4b
 Historical Groundwater Analytical Results (Additional VOCs) - Second Quarter 2020 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Well ID	Sample Date	1,2,3-Trichloropropane (µg/L)	1,2,3-Trimethylbenzene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Vinyl Chloride (µg/L)	n-Butylbenzene (µg/L)	1,1 Dichloroethene (µg/L)	1,1-Dichloropropene (µg/L)	Comments
ADEC Groundwater Cleanup Levels		0.0075	--	4	56	60	0.19	1,000	280	--	
MW-26	5/5/2022	<0.500	72.5	<10.0	309	44.2	<10.0	<10.0	<10.0	<10.0	
MW-26	8/26/2022	<0.500	43.4	<10.0	181	30.4	<10.0	<10.0	<10.0	<10.0	
MW-27	4/27/2020	<10.0	451	<1.00	1,500	362	<1.00	2.29	<1.00	<1.00	
MW-27	10/30/2020	<10.0	446	<50.0	1,480	371	<50.0	<50.0	<50.0	<50.0	
MW-27	4/29/2021	<5.00 [3.00 J]	332 [312]	<50.0 [<1.00]	1,520 [1,330]	396 [379]	<50.0 [<1.00]	<50.0 [2.13]	<50.0 [<1.00]	<50.0 [<1.00]	
MW-27	9/28/2021	<0.500	478	<50.0 J	1,700	452	<50.0	<50.0 J	<50.0	<50.0	
MW-27	5/5/2022	2.00 J	210	<50.0	917	267	<50.0	<50.0	<50.0	<50.0	
MW-27	8/26/2022	<2.50	98.9	<50.0	448	132	<50.0	<50.0	<50.0	<50.0	
T-1	4/27/2020	<0.00500 [<0.00500]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	
T-1	10/29/2020	<0.00500	0.144 J	<1.00	0.480 J	0.124 J	<1.00	<1.00	<1.00	<1.00	
T-1	4/28/2021	--	--	--	--	--	--	--	--	--	Vehicle parked over well
T-1	9/28/2021	<0.00500	<1.00	<1.00 J	<1.00	<1.00	<1.00	<1.00 J	<1.00	<1.00	
T-1	5/5/2022	<0.00500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	
T-1	8/26/2022	<0.00500	0.294 J	<1.00	1.36	0.153 J	<1.00	<1.00	<1.00	<1.00	
T-2	4/27/2020	<5.00	38.4	<1.00	116	14.9	<1.00	<1.00	<1.00	<1.00	
T-2	10/29/2020	<5.00	97.7	<10.0	280	51.3	<10.0	<10.0	<10.0	<10.0	
T-2	4/30/2021	<5.00	94.8 J	<100	329	78.2 J	<100	<100	<100	<100	
T-2	9/28/2021	<2.50	87.6 J	<100 J	246	54.2 J	<100	<100 J	<100	<100	
T-2	5/5/2022	--	--	--	--	--	--	--	--	--	
T-2	8/26/2022	<0.500	4.70	<1.00 J	28.2	0.306 J	<1.00	<1.00	<1.00	<1.00	

Notes:
 ID = Identification
 MW = Groundwater monitoring well
 ug/L = Micrograms per liter
 <0.00100 = Not detected at or above the Reported Detection Limit
Bold = Detected above laboratory method detection limit (MDL)
Bold and Shaded = Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
 J = The associated numerical value is an estimated concentration only
 B = Compound considered non-detect at the listed value due to associated blank contamination.
 [] = Blind Duplicate Sample Result
 ADEC = Alaska Department of Environmental Conservation
 Constituents analyzed by United States Environmental Protection Agency Method 8260D

Table 4c
Historical Groundwater Polyaromatic Hydrocarbons Analytical Data - September 2017 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska

Well ID	Sample Date	1-methylnaphthalene (µg/L)	2-methylnaphthalene (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(g,h,i)perylene (µg/L)	Benzo(k)Fluoranthene (µg/L)	Chrysene (µg/L)
ADEC Groundwater Cleanup Levels		11	36	530	260	1800	0.30	0.250	2.50	600.00	25.000	250.00
MW-22	5/17/2018	--	--	0.01 J [0.01 J]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]
MW-22	9/27/2018	--	--	0.03 J [0.05 J]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]
MW-22	5/8/2019	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-22	10/8/2019	0.650	0.850	<5.30	<2.70	<0.110	<0.0530	<0.110	<0.0530	<0.0530	<0.0530	<0.110
MW-22	10/29/2020	0.807	1.06	0.0272 J	<0.0500	<0.0500	<0.0500 B	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-22	4/30/2021	0.603 [0.144 J]	0.814 [0.150 J]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.270 [<0.270]	<0.0540 [<0.0540]
MW-22	9/28/2021	0.910 [0.888]	1.16 [1.11]	0.0253 J [0.0318 J]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	<0.0500 [0.0228 J]	<0.0500 B [<0.0500 B]	<0.0500 B [<0.0500 B]	<0.250 [<0.250 B]	<0.0500 B [<0.0500 B]
MW-22	5/5/2022	0.528 [0.519]	0.683 [0.656]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.250 [<0.250]	<0.0500 [<0.0500]
MW-22	8/26/2022	0.626	0.851	<0.0500	<0.0500	<0.0500	0.070	<0.0500	0.101	<0.0500	0.135 J	0.127
MW-23	8/26/2022	--	--	--	--	--	--	--	--	--	--	--
MW-24	8/26/2022	--	--	--	--	--	--	--	--	--	--	--
MW-25	8/26/2022	--	--	--	--	--	--	--	--	--	--	--
MW-26	5/18/2018	--	--	0.02 J	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-26	9/28/2018	--	--	0.02 J	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
MW-26	5/8/2019	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-26	10/8/2019	0.500 J	0.640 J	<1.00	<0.520	<1.00	<0.520	<1.00	<0.520	0.130 J	<0.520	<1.00
MW-26	10/29/2020	0.321 J	0.363 J	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-26	4/30/2021	--	--	--	--	--	--	--	--	--	--	--
MW-26	9/28/2021	0.216 J	0.233 J	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500 B	<0.0500 B	<0.250	<0.0500
MW-26	5/5/2022	0.284 J	0.259 J	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-26	8/26/2022	0.203 J	0.217 J	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-27	9/13/2017	--	--	0.110	0.014 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098
MW-27	5/18/2018	--	--	0.070 [0.080]	<0.01 [<0.01]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]
MW-27	9/28/2018	--	--	0.100	<0.0100	<0.010	<0.00001	<0.010	<0.010	<0.010	<0.010	<0.010
MW-27	5/9/2019	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-27	10/8/2019	2.50	3.80	0.0890 J	0.0140 J	<0.100	<0.0500	<0.100	<0.0500	<0.0500	<0.0500	<0.100
MW-27	4/27/2020	3.43	5.30	0.066	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-27	10/30/2020	2.54	3.75	0.063	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-27	4/29/2021	2.27 [2.26]	3.43 [3.46]	0.0545 [0.0542]	<0.0500 [<0.0500]	<0.0500 [0.0202 J]	0.0258 J [0.0268 J]	0.0229 J [0.0286 J]	0.0273 J [0.0292 J]	<0.0500 [<0.0500]	0.0358 J [0.0414 J]	0.0265 J [0.0285 J]
MW-27	9/28/2021	3.64	5.40	0.114	<0.0525	<0.0525	<0.0525 B	0.0279 J	<0.0525 B	<0.0525 B	<0.263 B	<0.0525 B
MW-27	5/5/2022	1.93	2.81	0.054	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.0500
MW-27	8/26/2022	1.58	2.63	0.066	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	0.0193 J
T-1	8/26/2022	--	--	--	--	--	--	--	--	--	--	--
T-2	8/26/2022	--	--	--	--	--	--	--	--	--	--	--

Notes:
PAHs = Polyaromatic hydrocarbons by Method 8270E-SIM
ADEC = Alaska Department of Environmental Conservation
<0.0000500 = Not detected at or above the reported detection limit (RDL)
Bold = At or above the method detection limit (MDL)
Bold and Shaded Value exceeds ADEC Groundwater Cleanup Level
Bold and Italicized : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
(µg/L) = Micrograms per liter
J = The associated numerical value is an estimated concentration only
B = Compound considered non-detect at the listed value due to associated blank contamination.
-- = Not measured / not analyzed
[] = Duplicate Sample Results
Non detects are reported to MDL until 2018.

Table 4c
Historical Groundwater Polyaromatic Hydrocarbons Analytical Data - September 2017 to August 2022
Chevron-Branded Service Station No. 99014
3608 Minnesota Drive
Anchorage, Alaska

Well ID	Sample Date	Dibenz(a,h)anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	2-Chloronaphthalene (µg/L)
ADEC Groundwater Cleanup Levels		0.25	800	290	2.500	1.70	170	120	750
B6MW	8/25/2022	--	--	--	--	--	--	--	--
MW-1	8/25/2022	--	--	--	--	--	--	--	--
MW-5B	9/13/2017	<0.0095	<0.0095	<0.0095	<0.0095	5.20	<0.029	<0.0095	--
MW-5B	5/16/2018	<0.010 [<0.009]	<0.010 [<0.009]	<0.010 [<0.009]	<0.010 [<0.009]	6.0 [6.0]	<0.030 [<0.030]	<0.020 [<0.020]	--
MW-5B	9/26/2018	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	<0.010 [<0.010]	7.0 [6.0]	<0.030 [<0.030]	<0.020 [<0.020]	--
MW-5B	5/9/2019	<0.500	<0.500	<0.500	<0.500	1.00	<0.500	<0.500	--
MW-5B	10/7/2019	<0.100	<0.200	<0.100	<0.0510	1.50	<0.100	<0.100	--
MW-5B	4/28/2020	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	0.242 J [0.254 J]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.500 [<0.500]
MW-5B	10/28/2020	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.500 [<0.500]	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	<0.500 [<0.500]
MW-5B	4/29/2021	<0.0500 J	<0.0500 J	<0.0500	<0.0500 J	<0.500 J	<0.0500 J	<0.0500 J	<0.500 J
MW-5B	9/27/2021	<0.0500 J	0.0170 J	<0.0500	<0.0500	<0.500	<0.0500	0.0216 J	<0.500
MW-5B	5/4/2022	<0.0500	0.0126 J	<0.0500	<0.0500	<0.500	<0.0500	<0.0500	0.0193 J
MW-5B	8/25/2022	<0.0500 [<0.0500]	0.0408 J [0.0240 J]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.500 [<0.500]	0.0779 [0.0228 J]	0.0302 J [0.0416 J]	<0.500 [<0.500]
MW-7	8/25/2022	--	--	--	--	--	--	--	--
MW-8	8/25/2022	--	--	--	--	--	--	--	--
MW-11	5/18/2018	<0.010	<0.010	0.200	<0.010	3.00	0.00005 J	<0.020	--
MW-11	9/27/2018	<0.010	0.010 J	5.00	<0.010	7.00	0.000	<0.020	--
MW-11	5/10/2019	<0.500	<0.500	0.200 J	<0.500	2.00	<0.500	<0.500	--
MW-11	10/7/2019	<0.100	<0.210	0.260	<0.0520	2.30	0.063 J	<0.100	--
MW-11	11/19/2020	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	0.0275 J [0.0262 J]	<0.0500 [<0.0500]	0.201 J [0.209 J]	<0.0500 [0.0243 J]	<0.0500 [0.0182 J]	<0.500 [<0.500]
MW-11	4/28/2021	<0.0500 [<0.0500]	<0.0500 [<0.0500]	0.0210 J [0.0353 J]	<0.0500 [<0.0500]	<0.500 [4.84]	<0.0500 [0.0204 J]	<0.0500 [<0.0500]	<0.500 [<0.500]
MW-11	9/27/2021	<0.0500	<0.0500	0.061	<0.0500	0.455 J	<0.0500	<0.0500	<0.500
MW-11	--	--	--	--	--	--	--	--	--
MW-11	8/25/2022	<0.0500	0.0158 J	0.111	<0.0500	0.214 J	0.053	0.0170 J	<0.500
MW-14	8/25/2022	--	--	--	--	--	--	--	--
MW-17	5/17/2018	0.010 J	0.040 J	<0.010	0.030 J	0.500	<0.030	0.050 J	--
MW-17	9/27/2018	<0.010	0.020 J	<0.010	<0.010	0.800	<0.030	0.020 J	--
MW-18	8/25/2022	--	--	--	--	--	--	--	--
MW-19	8/25/2022	--	--	--	--	--	--	--	--
MW-21	5/17/2018	<0.009	<0.009	0.300	<0.009	110	0.080 J	<0.020	--
MW-21	9/28/2018	<0.010 [<0.010]	<0.010 [<0.010]	0.400 [0.400]	<0.010 [<0.010]	120 [120]	0.100 [0.090]	<0.020 [<0.020]	--
MW-21	5/9/2019	<0.500	<0.500	0.200 J	<0.500	23.0	<0.500	<0.500	--
MW-21	10/8/2019	<0.110	<0.210	0.150	<0.0530	36.0	0.083 J	<0.110	--
MW-21	10/30/2020	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	0.326 [0.320]	<0.0500 [<0.0500]	80.2 [82.1]	0.0800 [0.0900]	<0.0500 B [<0.0500 B]	<0.500 [<0.500]
MW-21	4/28/2021	--	--	--	--	--	--	--	--
MW-21	9/28/2021	<0.0500	<0.0500 B	0.213	<0.0500 B	56.6	0.065	<0.0500 B	<0.500
MW-21	5/5/2022	<0.0500	0.0119 J	0.230	<0.0500	48.1	0.085	<0.0500	<0.500
MW-21	8/26/2022	<0.0500 J	<0.0500 J	0.0529 J	<0.0500 J	12.4 J	0.0255 J	<0.0500 J	<0.500 J

Table 4c
 Historical Groundwater Polyaromatic Hydrocarbons Analytical Data - September 2017 to August 2022
 Chevron-Branded Service Station No. 99014
 3608 Minnesota Drive
 Anchorage, Alaska

Well ID	Sample Date	Dibenz(a,h)anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	2-Chloronaphthalene (µg/L)
ADEC Groundwater Cleanup Levels		0.25	800	290	2.500	1.70	170	120	750
MW-22	5/17/2018	<0.010 [<0.010]	<0.010 [<0.010]	0.060 [0.060]	<0.010 [<0.010]	9.0 [8.0]	<0.030 [<0.030]	<0.020 [<0.020]	--
MW-22	9/27/2018	<0.010 [<0.010]	<0.010 [<0.010]	0.090 J [0.200 J]	<0.010 [<0.010]	23.0 [19.0]	0.050 J [0.050 J]	<0.020 [<0.020]	--
MW-22	5/8/2019	<0.500	<0.500	<0.500	<0.500	3.00	<0.500	<0.500	--
MW-22	10/8/2019	<0.110	<0.210	<5.30	<0.0530	5.70	0.033 J	<0.110	--
MW-22	10/29/2020	<0.0500	<0.0500 B	0.059	<0.0500	9.21	0.0401 J	<0.0500 B	<0.500
MW-22	4/30/2021	<0.0540 [<0.0540]	<0.0540 [<0.0540]	0.0354 J [0.0297 J]	<0.0540 [<0.0540]	5.71 J [0.138 J]	<0.0540 [<0.0540]	<0.0540 [<0.0540]	<0.540 [<0.540]
MW-22	9/28/2021	<0.0500 [<0.0500]	<0.0500 B [<0.0500 B]	0.0708 [0.0652]	<0.0500 B [<0.0500 B]	9.37 [9.09]	0.0301 J [0.0295 J]	<0.0500 B [<0.0500 B]	<0.500 [<0.500]
MW-22	5/5/2022	<0.0500 [<0.0500]	<0.0500 [<0.0500]	0.0436 J [0.0419 J]	<0.0500 [<0.0500]	6.24 [6.26]	<0.0500 [0.0221 J]	<0.0500 [<0.0500]	<0.500 [<0.500]
MW-22	8/26/2022	<0.0500	0.0164 J	0.056	<0.0500	6.46	<0.0500	<0.0500	<0.500
MW-23	8/26/2022	--	--	--	--	--	--	--	--
MW-24	8/26/2022	--	--	--	--	--	--	--	--
MW-25	8/26/2022	--	--	--	--	--	--	--	--
MW-26	5/18/2018	<0.010	<0.010	0.040 J	<0.010	7.00	<0.030	<0.020	--
MW-26	9/28/2018	<0.010	<0.010	0.100	<0.010	8.00	<0.030	<0.020	--
MW-26	5/8/2019	<0.500	<0.500	<0.500	<0.500	5.00	<0.500	<0.500	--
MW-26	10/8/2019	<1.00	<2.10	<1.00	<0.520	3.90	<1.00	<1.00	--
MW-26	10/29/2020	<0.0500	<0.0500 B	0.0317 J	<0.0500	2.69	0.0188 J	<0.0500	<0.500
MW-26	4/30/2021	--	--	--	--	--	--	--	--
MW-26	9/28/2021	<0.0500	<0.0500 B	0.0180 J	<0.0500	1.79	<0.0500	<0.0500 B	<0.500
MW-26	5/5/2022	<0.0500	0.0136 J	0.0220 J	<0.0500	2.19	<0.0500	<0.0500 B	<0.500
MW-26	8/26/2022	<0.0500	<0.0500	0.081	<0.0500	1.67	<0.0500	<0.0500	<0.500
MW-27	9/13/2017	<0.0098	<0.0098	0.330	<0.0098	36.0	0.067	<0.0098	--
MW-27	5/18/2018	<0.010 [<0.010]	<0.010 [<0.010]	0.300 [0.300]	<0.010 [<0.010]	32.0 [33.0]	0.050 J [0.060 J]	<0.020 [<0.020]	--
MW-27	9/28/2018	<0.010	<0.010	0.600	<0.010	61.0	0.100	<0.020	--
MW-27	5/9/2019	<0.500	<0.500	0.200 J	<0.500	5.00	<0.500	<0.500	--
MW-27	10/8/2019	<0.100	<0.200	0.240	<0.0500	18.0	0.050 J	<0.100	--
MW-27	4/27/2020	<0.0500	<0.0500	0.223	<0.0500	21.4	0.0421 J	<0.0500	<0.500
MW-27	10/30/2020	<0.0500	<0.0500 B	0.191	<0.0500	16.6	0.0469 J	<0.0500	<0.500
MW-27	4/29/2021	0.0294 J [<0.0500]	0.0278 J [0.0190 J]	0.203 [0.199]	<0.0500 [<0.0500]	12.1 [12.1]	0.0569 [0.0487 J]	0.0300 J [0.0235 J]	0.0261 J [0.0175 J]
MW-27	9/28/2021	<0.0525	<0.0525 B	0.397	<0.0525 B	27.7	0.096	<0.0525 B	<0.525
MW-27	5/5/2022	<0.0500	0.0164 J	0.180	<0.0500	10.5	0.0391 J	<0.0500 B	<0.500
MW-27	8/26/2022	<0.0500	0.0128 J	0.196	<0.0500	7.97	0.0483 J	<0.0500	<0.500
T-1	8/26/2022	--	--	--	--	--	--	--	--
T-2	8/26/2022	--	--	--	--	--	--	--	--

Notes:

- PAHs = Polyaromatic hydrocarbons by Method 8270E-SIM
- ADEC = Alaska Department of Environmental Conservation
- <0.0000500 = Not detected at or above the reported detection limit (RDL)
- Bold** = At or above the method detection limit (MDL)
- Bold and Shaded** Value exceeds ADEC Groundwater Cleanup Level
- Bold and Italicized** : Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- (µg/L) = Micrograms per liter
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- = Not measured / not analyzed
- [] = Duplicate Sample Results
- Non detects are reported to MDL until 2018.

Table 5a
 Current Groundwater Gauging and Analytical Results
 Second Semi-Annual 2023
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Sample Date	TOC (ft bTOC)	DTW (feet bTOC)	GW Elev. (feet)	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	EDB (µg/L)	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) (µg/L)	trans-1,2-Dichloroethene (trans-1,2- Dichloroethylene) (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,2,3-Trichloropropane (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Naphthalene (µg/L)	Lead (µg/L)	Comments
ADEC Groundwater Cleanup Levels					2,200	4.6	1,100	15	190	0.075	36	360	4	0.0075	56	60	1.7	15.0	
MW-1	09/13/23	99.19	12.12	87.07	2,130	13.1	<1.46 B	23.8	15.9	<0.500 J	<1.00	<1.00	<1.00	<0.500 J	332 D	54.8	24.2	5.49 J	
MW-4	09/13/23	98.30	11.22	87.08	<100	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	<1.00	<1.00	<5.00	<6.00	
MW-5B	09/12/23	98.98	12.11	86.87	171	5.92	<1.00	<1.00 B	<3.00	<0.0500 J	<1.00	<1.00	<1.00	<0.0500 J	<1.00	<1.00	<5.00 J	<6.00	
MW-7	09/12/23	98.11	10.98	87.13	<100	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	<1.00	<1.00	<5.00 J	<6.00	
MW-8	09/12/23	99.20	12.60	86.60	<100 B	0.683 J	<1.00	<1.00 B	9.38	<0.0500 J	<1.00	<1.00	<1.00	<0.0500 J	9.77	0.402 J	<5.00 J	<6.00	
MW-11	09/12/23	98.04	11.16	86.88	9,750 [9,560]	134 [137]	47.4 [48.5]	381 D [391 D]	2,860 D [2,930 D]	<5.00 J [<5.00 J]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 J [<5.00 J]	1,440 D [1,450 D]	328 D [330 D]	12.4 J [12.2 J]	<6.00 [3.33 J]	
MW-14	09/12/23	96.55	10.40	86.15	<100 B	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	<1.00	<1.00	<5.00 J	3.37 J	
MW-17	09/12/23	97.37	11.18	86.19	<100 B	0.582 J	<1.00	<1.00	0.719 J	<0.0500 J	<1.00	<1.00	<1.00	<0.0500 J	7.28	<1.00	<5.00 J	<6.00	
MW-18	09/12/23	96.26	10.56	85.70	<100	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	7.28	<1.00	<5.00 J	6.31	
MW-19	09/12/23	98.33	11.25	87.08	<100	<1.00	<1.00	<1.00	0.455 J	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	0.468 J	<1.00	<5.00 J	<6.00	
MW-21	09/13/23	98.28	11.55	86.73	29,200 [28,000]	58.2 J [57.9]	907 [870]	2,260 [2,220 D]	11,300 [11,200 D]	<5.00 J [<5.00 J]	<200 [<10.0]	<200 [<10.0]	<200 [<10.0]	<5.00 J [<5.00 J]	2,840 [2,320 D]	731 [688]	<1,000 [164]	<6.00 [<6.00]	
MW-22	09/13/23	98.51	11.70	86.81	27,600	639	7,170	938	7,500	<5.00 J	<500	<500	<500	<5.00 J	887	232 J	<2,500	<6.00	
MW-23	09/13/23	97.38	10.30	87.08	<100 B	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	<1.00	<1.00	<5.00	<6.00	
MW-24	09/13/23	97.96	11.03	86.93	3,510	52.4	327	153	1,330	<0.500 J	<10.0	<10.0	<10.0	<0.500 J	131	23.9	<50.0	<6.00	
MW-25	09/12/23	98.60	11.67	86.93	<100	<1.00	<1.00	<1.00	<3.00	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	<1.00	<1.00	<5.00 J	<6.00	
MW-26	09/13/23	98.44	11.64	86.80	718	15.6	60.4	28.5	347	<0.500 J	<10.0	<10.0	<10.0	<0.500 J	107	2.76 J	<50.0	5.23 J	
MW-27	09/13/23	98.45	11.88	86.57	14,800	82.6	2,540	1,040	5,630	<5.00 J	<50.0	<50.0	<50.0	<5.00 J	1,050	323	<250	<6.00	
T-1	09/13/23	97.39	10.32	87.07	<100 B	<1.00	<1.00	2.77	15.3	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	2.47	0.296 J	<5.00	<6.00	
T-2	09/13/23	98.00	11.22	86.78	5,050	193	85.5	243 D	2,000 D	<0.500 J	<1.00	<1.00	<1.00	<0.500 J	286 D	46.5	4.86 J	<6.00	
B6MW	09/12/23	98.29	12.10	86.19	<100 B	<1.00	<1.00	<1.00	0.529 J	<0.0500 J	<1.00	<1.00	<1.00	<0.0500 J	<1.00	<1.00	<5.00 J	4.54 J	
B5MW	09/12/23	98.58	12.23	86.35	899	58.9	<1.00 B	4.20	78.5	<0.500 J	<1.00	<1.00	<1.00	<0.500 J	154	13.9	1.63 J	3.39 J	
B2MW	09/12/23	98.87	12.51	86.36	<134 B	8.96	<1.00	<1.00	2.09 J	<0.00500 J	<1.00	<1.00	<1.00	<0.00500 J	2.84	0.196 J	<5.00 J	<6.00	

Notes

Acronyms and Abbreviations:

- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- GRO = Total petroleum hydrocarbons, gasoline range organics
- EDB = 1,2-Dibromoethane
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Methods:

1. GRO analyzed by Alaska Method AK101.
2. VOC analyzed by USEPA Method 8260D
3. Lead analyzed by USEPA Method 6010D

Reference:

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

Table 5b
 Current Groundwater Analytical Results- Additional VOCs
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Sample Date	Acetone (µg/L)	Acrolein (µg/L)	Acrylonitrile (µg/L)	Bromobenzene (µg/L)	Bromochloromethane (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	n-Butylbenzene (µg/L)	sec-Butylbenzene (µg/L)
ADEC Groundwater Cleanup Levels		14,000	--	--	62	--	1.3	33	7.5	1,000	2,000
MW-1	04/26/23	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	0.289 J	0.174 J
MW-1	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-4	04/26/23	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
MW-4	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-5	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<50.0 [<50.0]	<50.0 [<50.0]	<10.0 [<10.0]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 [<5.00]	0.550 J [0.537 J]	2.00 [1.94]
MW-5B	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-7	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
MW-7	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-8	04/25/23	<50.0 J	<50.0 J	<10.0	<1.00	<1.00	<1.00	<1.00 J	<5.00	<1.00	0.199 J
MW-8	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-11	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	0.832 J	2.29
MW-11	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-14	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
MW-14	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-17	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-17	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-18	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-18	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-19	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
MW-19	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-21	04/26/23	<10,000	<10,000	<2,000	<200	<200	<200	<200	<1,000	<200	25.6 J
MW-21	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-22	04/26/23	<12,500 [<500]	<12,500 [<500]	<2,500 [<100]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]	<250 [<10.0]	<250 [<10.0]
MW-22	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-23	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-23	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-24	04/26/23	<500	<500	<100	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0
MW-24	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-25	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
MW-25	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-26	04/26/23	<500	<500	<100	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0
MW-26	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-27	04/26/23	<2,500	<2,500	<500	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0
MW-27	09/13/23	--	--	--	--	--	--	--	--	--	--
T-1	04/25/23	<50.0 J	<50.0	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
T-1	09/13/23	--	--	--	--	--	--	--	--	--	--
T-2	04/26/23	<50.0	<50.0	<10.0	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00
T-2	09/13/23	--	--	--	--	--	--	--	--	--	--

Well ID	Sample Date	Acetone (µg/L)	Acrolein (µg/L)	Acrylonitrile (µg/L)	Bromobenzene (µg/L)	Bromochloromethane (µg/L)	Bromodichloromethane (µg/L)	Bromoform (µg/L)	Bromomethane (µg/L)	n-Butylbenzene (µg/L)	sec-Butylbenzene (µg/L)
ADEC Groundwater Cleanup Levels		14,000	--	--	62	--	1.3	33	7.5	1,000	2,000
B6MW	04/25/23	<50.0 J	<50.0 J	<10.0 J	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	0.231 J
B6MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B5MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B5MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B2MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B2MW	09/12/23	--	--	--	--	--	--	--	--	--	--

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Well ID	Sample Date	tert-Butylbenzene (µg/L)	Carbon Disulfide (µg/L)	Carbon Tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chlorodibromo-methane (Dibromochloro-methane) (µg/L)	Chloroethane (Ethyl Chloride) (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	2-Chlorotoluene (o-Chlorotoluene) (µg/L)	4-Chlorotoluene (p-Chlorotoluene) (µg/L)
ADEC Groundwater Cleanup Levels		690	810	4.6	78	8.7	21,000	2.2	190	--	--
MW-1	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-1	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-4	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-4	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-5	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<5.00 [<5.00]	<5.00 [<5.00]	<2.50 [<2.50]	<1.00 [<1.00]	<1.00 [<1.00]
MW-5B	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-7	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00 B	<2.50	<1.00	<1.00
MW-7	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-8	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-8	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-11	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-11	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-14	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-14	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-17	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-17	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-18	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-18	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-19	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-19	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-21	04/26/23	<200	<200	<200	<200	<200	<1,000	<1,000	<500	<200	<200
MW-21	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-22	04/26/23	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<1,250 [<50.0]	<1,250 [<50.0]	<625 [<25.0]	<250 [<10.0]	<250 [<10.0]
MW-22	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-23	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-23	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-24	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<50.0	<25.0	<10.0	<10.0
MW-24	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-25	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
MW-25	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-26	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<50.0	<25.0	<10.0	<10.0
MW-26	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-27	04/26/23	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<250	<125	<50.0	<50.0
MW-27	09/13/23	--	--	--	--	--	--	--	--	--	--
T-1	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
T-1	09/13/23	--	--	--	--	--	--	--	--	--	--
T-2	04/26/23	<1.00	0.119 J	<1.00	<1.00	<1.00	<5.00	<5.00	<2.50	<1.00	<1.00
T-2	09/13/23	--	--	--	--	--	--	--	--	--	--

Well ID	Sample Date	tert-Butylbenzene (µg/L)	Carbon Disulfide (µg/L)	Carbon Tetrachloride (µg/L)	Chlorobenzene (µg/L)	Chlorodibromo-methane (Dibromochloro-methane) (µg/L)	Chloroethane (Ethyl Chloride) (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	2-Chlorotoluene (o-Chlorotoluene) (µg/L)	4-Chlorotoluene (p-Chlorotoluene) (µg/L)
ADEC Groundwater Cleanup Levels		690	810	4.6	78	8.7	21,000	2.2	190	--	--
B6MW	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<5.00 B	<2.50	<1.00	<1.00
B6MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B5MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B5MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B2MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B2MW	09/12/23	--	--	--	--	--	--	--	--	--	--

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Table 5b
 Current Groundwater Analytical Results- Additional VOCs
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Sample Date	1,2-Dibromo-3-chloropropane (µg/L)	Dibromomethane (Methylene bromide) (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Dichlorodifluoromethane (Freon 12) (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) (µg/L)
ADEC Groundwater Cleanup Levels		--	8.3	300	300	4.8	200	28	280	36
MW-1	04/26/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-1	09/13/23	--	--	--	--	--	--	--	--	<1.00
MW-4	04/26/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-4	09/13/23	--	--	--	--	--	--	--	--	<1.00
MW-5	04/25/23	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<5.00 [<i><5.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]
MW-5B	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-7	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-7	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-8	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-8	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-11	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00 J	<5.00	<1.00	<1.00	<1.00
MW-11	09/12/23	--	--	--	--	--	--	--	--	<1.00 [<i><1.00</i>]
MW-14	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-14	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-17	04/25/23	--	--	--	--	--	--	--	--	--
MW-17	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-18	04/25/23	--	--	--	--	--	--	--	--	--
MW-18	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-19	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-19	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-21	04/26/23	<1,000	<200	<200	<200	<200	<1,000	<200	<200	<200
MW-21	09/13/23	--	--	--	--	--	--	--	--	<200 [<i><10.0</i>]
MW-22	04/26/23	<1,250 [<i><50.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<1,250 [<i><50.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]
MW-22	09/13/23	--	--	--	--	--	--	--	--	<500
MW-23	04/25/23	--	--	--	--	--	--	--	--	--
MW-23	09/13/23	--	--	--	--	--	--	--	--	<1.00
MW-24	04/26/23	<50.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0
MW-24	09/13/23	--	--	--	--	--	--	--	--	<10.0
MW-25	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
MW-25	09/12/23	--	--	--	--	--	--	--	--	<1.00
MW-26	04/26/23	<50.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0
MW-26	09/13/23	--	--	--	--	--	--	--	--	<10.0
MW-27	04/26/23	<250	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0	<50.0
MW-27	09/13/23	--	--	--	--	--	--	--	--	<50.0
T-1	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
T-1	09/13/23	--	--	--	--	--	--	--	--	<1.00
T-2	04/26/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
T-2	09/13/23	--	--	--	--	--	--	--	--	<1.00

Well ID	Sample Date	1,2-Dibromo-3-chloropropane (µg/L)	Dibromomethane (Methylene bromide) (µg/L)	1,2-Dichlorobenzene (µg/L)	1,3-Dichlorobenzene (µg/L)	1,4-Dichlorobenzene (µg/L)	Dichlorodifluoromethane (Freon 12) (µg/L)	1,1-Dichloroethane (µg/L)	1,1-Dichloroethene (µg/L)	cis-1,2-Dichloroethene (cis-1,2-Dichloroethylene) (µg/L)
ADEC Groundwater Cleanup Levels		--	8.3	300	300	4.8	200	28	280	36
B6MW	04/25/23	<5.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00
B6MW	09/12/23	--	--	--	--	--	--	--	--	<1.00
B5MW	04/25/23	--	--	--	--	--	--	--	--	--
B5MW	09/12/23	--	--	--	--	--	--	--	--	<1.00
B2MW	04/25/23	--	--	--	--	--	--	--	--	--
B2MW	09/12/23	--	--	--	--	--	--	--	--	<1.00

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Well ID	Sample Date	trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene) (µg/L)	1,2-Dichloropropane (µg/L)	1,3-Dichloropropane (µg/L)	2,2-Dichloropropane (µg/L)	1,1-Dichloropropene (µg/L)	cis-1,3-Dichloropropene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Di-isopropyl ether (µg/L)	Hexachloro-1,3-butadiene (Hexachlorobutadiene) (µg/L)
ADEC Groundwater Cleanup Levels		360	8.2	--	--	--	--	--	--	1.4
MW-1	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-1	09/13/23	<1.00	--	--	--	--	--	--	--	--
MW-4	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-4	09/13/23	<1.00	--	--	--	--	--	--	--	--
MW-5	04/25/23	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> <td><1.00 [<lt;1.00]< td=""> </lt;1.00]<></td></lt;1.00]<>	<1.00 [<lt;1.00]< td=""> </lt;1.00]<>
MW-5B	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-7	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-7	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-8	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00 J
MW-8	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-11	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-11	09/12/23	<1.00 [<lt;1.00]< td=""> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> </lt;1.00]<>	--	--	--	--	--	--	--	--
MW-14	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-14	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-17	04/25/23	--	--	--	--	--	--	--	--	--
MW-17	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-18	04/25/23	--	--	--	--	--	--	--	--	--
MW-18	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-19	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-19	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-21	04/26/23	<200	<200	<200	<200	<200	<200	<200	<200	<200
MW-21	09/13/23	<200 [<lt;10.0]< td=""> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> <td>--</td> </lt;10.0]<>	--	--	--	--	--	--	--	--
MW-22	04/26/23	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> <td><250 [<lt;10.0]< td=""> </lt;10.0]<></td></lt;10.0]<>	<250 [<lt;10.0]< td=""> </lt;10.0]<>
MW-22	09/13/23	<500	--	--	--	--	--	--	--	--
MW-23	04/25/23	--	--	--	--	--	--	--	--	--
MW-23	09/13/23	<1.00	--	--	--	--	--	--	--	--
MW-24	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-24	09/13/23	<10.0	--	--	--	--	--	--	--	--
MW-25	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-25	09/12/23	<1.00	--	--	--	--	--	--	--	--
MW-26	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW-26	09/13/23	<10.0	--	--	--	--	--	--	--	--
MW-27	04/26/23	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
MW-27	09/13/23	<50.0	--	--	--	--	--	--	--	--
T-1	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
T-1	09/13/23	<1.00	--	--	--	--	--	--	--	--
T-2	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
T-2	09/13/23	<1.00	--	--	--	--	--	--	--	--

Well ID	Sample Date	trans-1,2-Dichloroethene (trans-1,2-Dichloroethylene) (µg/L)	1,2-Dichloropropane (µg/L)	1,3-Dichloropropane (µg/L)	2,2-Dichloropropane (µg/L)	1,1-Dichloropropene (µg/L)	cis-1,3-Dichloropropene (µg/L)	trans-1,3-Dichloropropene (µg/L)	Di-isopropyl ether (µg/L)	Hexachloro-1,3-butadiene (Hexachlorobutadiene) (µg/L)
ADEC Groundwater Cleanup Levels		360	8.2	--	--	--	--	--	--	1.4
B6MW	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
B6MW	09/12/23	<1.00	--	--	--	--	--	--	--	--
B5MW	04/25/23	--	--	--	--	--	--	--	--	--
B5MW	09/12/23	<1.00	--	--	--	--	--	--	--	--
B2MW	04/25/23	--	--	--	--	--	--	--	--	--
B2MW	09/12/23	<1.00	--	--	--	--	--	--	--	--

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Well ID	Sample Date	Isopropylbenzene (Cumene) (µg/L)	p-Isopropyltoluene (µg/L)	2-Butanone (Methyl ethyl ketone) (µg/L)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (µg/L)	Methylene chloride (µg/L)	n-Propylbenzene (Propylbenzene) (µg/L)	Styrene (µg/L)	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)
ADEC Groundwater Cleanup Levels		450	--	5,600	6,300	110	660	1,200	5.7	0.76	41
MW-1	04/26/23	0.303 J	<1.00	<10.0	<10.0	<5.00	0.722 J	<1.00	<1.00	<1.00	<1.00
MW-1	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-4	04/26/23	<1.00	<1.00	<10.0	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-4	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-5	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	11.9 [12.3]	<1.00 [<1.00]	<10.0 [<10.0]	<10.0 [<10.0]	<5.00 [<5.00]	14.6 [15.0]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]	<1.00 [<1.00]
MW-5B	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-7	04/25/23	<1.00	<1.00	<10.0 J	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-7	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-8	04/25/23	2.47	<1.00	<10.0	<10.0	<5.00	2.41	<1.00	<1.00	<1.00	<1.00
MW-8	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-11	04/25/23	8.23	<1.00	<10.0 J	<10.0	<5.00	26.0	<1.00	<1.00	<1.00	<1.00
MW-11	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-14	04/25/23	<1.00	<1.00	<10.0 J	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-14	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-17	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-17	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-18	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-18	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-19	04/25/23	<1.00	<1.00	<10.0 J	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-19	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-21	04/26/23	220	<200	<2,000	<2,000	<1,000	538	<200	<200	<200	<200
MW-21	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-22	04/26/23	26.4 J [21.8]	<250 [<10.0]	<2,500 [<100]	<2,500 [<100]	<1,250 [<50.0]	44.5 J [37.6]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]	<250 [<10.0]
MW-22	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-23	04/25/23	--	--	--	--	--	--	--	--	--	--
MW-23	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-24	04/26/23	8.83 J	<10.0	<100	<100	<50.0	11.6	<10.0	<10.0	<10.0	<10.0
MW-24	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-25	04/25/23	<1.00	<1.00	<10.0 J	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
MW-25	09/12/23	--	--	--	--	--	--	--	--	--	--
MW-26	04/26/23	20.4	<10.0	<100	<100	<50.0	30.8	<10.0	<10.0	<10.0	<10.0
MW-26	09/13/23	--	--	--	--	--	--	--	--	--	--
MW-27	04/26/23	41.1 J	<50.0	<500	<500	<250	90.0	<50.0	<50.0	<50.0	<50.0
MW-27	09/13/23	--	--	--	--	--	--	--	--	--	--
T-1	04/25/23	<1.00	<1.00	<10.0 J	<10.0	<5.00	0.185 J	<1.00	<1.00	<1.00	<1.00
T-1	09/13/23	--	--	--	--	--	--	--	--	--	--
T-2	04/26/23	3.52	0.132 J	<10.0	1.39 J	<5.00	4.36	<1.00	<1.00	<1.00	<1.00
T-2	09/13/23	--	--	--	--	--	--	--	--	--	--

Well ID	Sample Date	Isopropylbenzene (Cumene) (µg/L)	p-Isopropyltoluene (µg/L)	2-Butanone (Methyl ethyl ketone) (µg/L)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone) (µg/L)	Methylene chloride (µg/L)	n-Propylbenzene (Propylbenzene) (µg/L)	Styrene (µg/L)	1,1,1,2-Tetrachloroethane (µg/L)	1,1,2,2-Tetrachloroethane (µg/L)	Tetrachloroethene (Tetrachloroethylene) (µg/L)
ADEC Groundwater Cleanup Levels		450	--	5,600	6,300	110	660	1,200	5.7	0.76	41
B6MW	04/25/23	4.55	<1.00	4.41 J	<10.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00
B6MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B5MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B5MW	09/12/23	--	--	--	--	--	--	--	--	--	--
B2MW	04/25/23	--	--	--	--	--	--	--	--	--	--
B2MW	09/12/23	--	--	--	--	--	--	--	--	--	--

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Table 5b
 Current Groundwater Analytical Results- Additional VOCs
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Sample Date	1,2,3-Trichlorobenzene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)	1,2,3-Trichloropropane (µg/L)	1,1,2-Trichlorotrifluoroethane (1,1,2-Trichloro-1,2,2-trifluoroethane) (Freon 113) (µg/L)
ADEC Groundwater Cleanup Levels									
		7	4	8,000	0.41	2.8	5,200	0.0075	10,000
MW-1	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.500	<1.00 J
MW-1	09/13/23	--	<1.00	--	--	--	--	<0.500 J	--
MW-4	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00 J
MW-4	09/13/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-5	04/25/23	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<1.00 [<i><1.00</i>]	<5.00 [<i><5.00</i>]	<0.0500 [<i><0.0500</i>]	<1.00 J [<i><1.00 J</i>]
MW-5B	09/12/23	--	<1.00	--	--	--	--	<0.0500 J	--
MW-7	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00
MW-7	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-8	04/25/23	<1.00	<1.00 J	<1.00	<1.00	<1.00	<5.00	<0.0500	<1.00
MW-8	09/12/23	--	<1.00	--	--	--	--	<0.0500 J	--
MW-11	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.0500 J	<1.00
MW-11	09/12/23	--	<1.00 [<i><1.00</i>]	--	--	--	--	<5.00 J [<i><5.00 J</i>]	--
MW-14	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00
MW-14	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-17	04/25/23	--	--	--	--	--	--	--	--
MW-17	09/12/23	--	<1.00	--	--	--	--	<0.0500 J	--
MW-18	04/25/23	--	--	--	--	--	--	--	--
MW-18	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-19	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00
MW-19	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-21	04/26/23	<200	<200	<200	<200	<200	<1,000	<2.50	<200 J
MW-21	09/13/23	--	<200 [<i><10.0</i>]	--	--	--	--	<5.00 J [<i><5.00 J</i>]	--
MW-22	04/26/23	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<250 [<i><10.0</i>]	<1,250 [<i><50.0</i>]	<2.50 [<i><2.50</i>]	<250 J [<i><10.0 J</i>]
MW-22	09/13/23	--	<500	--	--	--	--	<5.00 J	--
MW-23	04/25/23	--	--	--	--	--	--	--	--
MW-23	09/13/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-24	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<0.500	<10.0 J
MW-24	09/13/23	--	<10.0	--	--	--	--	<0.500 J	--
MW-25	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00
MW-25	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--
MW-26	04/26/23	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<0.500	<10.0 J
MW-26	09/13/23	--	<10.0	--	--	--	--	<0.500 J	--
MW-27	04/26/23	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<2.50	<50.0 J
MW-27	09/13/23	--	<50.0	--	--	--	--	<5.00 J	--
T-1	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.00500	<1.00
T-1	09/13/23	--	<1.00	--	--	--	--	<0.00500 J	--
T-2	04/26/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.500	<1.00 J
T-2	09/13/23	--	<1.00	--	--	--	--	<0.500 J	--

Well ID	Sample Date	1,2,3-Trichlorobenzene (µg/L)	1,2,4-Trichlorobenzene (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1,2-Trichloroethane (µg/L)	Trichloroethene (Trichloroethylene) (µg/L)	Trichlorofluoromethane (Freon 11) (µg/L)	1,2,3-Trichloropropane (µg/L)	1,1,2-Trichlorotrifluoroethane (1,1,2-Trichloro-1,2,2-trifluoroethane) (Freon 113) (µg/L)
ADEC Groundwater Cleanup Levels		7	4	8,000	0.41	2.8	5,200	0.0075	10,000
B6MW	04/25/23	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<0.0500	<1.00
B6MW	09/12/23	--	<1.00	--	--	--	--	<0.0500 J	--
B5MW	04/25/23	--	--	--	--	--	--	--	--
B5MW	09/12/23	--	<1.00	--	--	--	--	<0.500 J	--
B2MW	04/25/23	--	--	--	--	--	--	--	--
B2MW	09/12/23	--	<1.00	--	--	--	--	<0.00500 J	--

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Table 5b
 Current Groundwater Analytical Results- Additional VOCs
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska



Well ID	Sample Date	1,2,3-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Vinyl Chloride (µg/L)	Comments
ADEC Groundwater Cleanup Levels						
MW-1	04/26/23	1.76	5.94	1.80	<1.00	
MW-1	09/13/23	--	332 D	54.8	--	
MW-4	04/26/23	<1.00	<1.00	<1.00	<1.00	PVC cut down after gauging/sampling. Well plug replaced.
MW-4	09/13/23	--	<1.00	<1.00	--	
MW-5	04/25/23	--	--	--	--	Not enough water to sample
MW-5B	04/25/23	0.609 J [0.554 J]	37.3 [37.3]	0.222 J [0.160 J]	<1.00 [<1.00]	
MW-5B	09/12/23	--	<1.00	<1.00	--	
MW-7	04/25/23	<1.00	<1.00	<1.00	<1.00	
MW-7	09/12/23	--	<1.00	<1.00	--	
MW-8	04/25/23	0.920 J	6.20	0.235 J	<1.00	
MW-8	09/12/23	--	9.77	0.402 J	--	
MW-11	04/25/23	18.1	125 D	42.5	<1.00	
MW-11	09/12/23	--	1,440 D [1,450 D]	328 D [330 D]	--	
MW-14	04/25/23	<1.00	<1.00	<1.00	<1.00	
MW-14	09/12/23	--	<1.00	<1.00	--	
MW-17	04/25/23	--	--	--	--	Well paved over
MW-17	09/12/23	--	7.28	<1.00	--	
MW-18	04/25/23	--	--	--	--	Not gauged or sample due to ice blockage at 3ft
MW-18	09/12/23	--	<1.00	<1.00	--	
MW-19	04/25/23	<1.00	<1.00	<1.00	<1.00	
MW-19	09/12/23	--	0.468 J	<1.00	--	
MW-21	04/26/23	573	2,570	643	<200	
MW-21	09/13/23	--	2,840 [2,320 D]	731 [688]	--	
MW-22	04/26/23	208 J [191]	752 [706]	202 J [171]	<250 [<10.0]	
MW-22	09/13/23	--	887.00	232 J	--	
MW-23	04/25/23	--	--	--	--	Not gauged or sample due to ice blockage at 2ft
MW-23	09/13/23	--	<1.00	<1.00	--	
MW-24	04/26/23	28.3	102	21.9	<10.0	
MW-24	09/13/23	--	131	23.9	--	
MW-25	04/25/23	<1.00	<1.00	<1.00	<1.00	PVC cut down 2in after gauging/sampling
MW-25	09/12/23	--	<1.00	<1.00	--	
MW-26	04/26/23	47.6	215	30.5	<10.0	
MW-26	09/13/23	--	107	2.76 J	--	
MW-27	04/26/23	191	915	267	<50.0	
MW-27	09/13/23	--	1,050	323	--	
T-1	04/25/23	0.407 J	2.19	0.305 J	<1.00	
T-1	09/13/23	--	2.47	0.296 J	--	
T-2	04/26/23	32.4	97.7	20.9	<1.00	
T-2	09/13/23	--	286 D	46.5	--	

Well ID	Sample Date	1,2,3-Trimethylbenzene (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)	Vinyl Chloride (µg/L)	Comments
ADEC Groundwater Cleanup Levels		--	56	60	0.19	
B6MW	04/25/23	<1.00	<1.00	<1.00	<1.00	
B6MW	09/12/23	--	<1.00	<1.00	--	
B5MW	04/25/23	--	--	--	--	Unable to locate
B5MW	09/12/23	--	154	13.9	--	
B2MW	04/25/23	--	--	--	--	Unable to locate
B2MW	09/12/23	--	2.84	0.196 J	--	

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Method:

1. VOC analyzed by USEPA Method 8260 except where noted above.

Reference:

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

Table 5c
 Current Groundwater Analytical Results- Poly Aromatic Hydrocarbons
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska

Well ID	Sample Date	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(g,h,i) perylene (µg/L)	Benzo(k) fluoranthene (µg/L)	2-Chloro-naphthalene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)
ADEC Groundwater Cleanup Levels		530	260	43	0.3	0.25	2.5	0.26	0.8	750	2.0	0.25
B5MW	04/25/23	--	--	--	--	--	--	--	--	--	--	--
B2MW	04/25/23	--	--	--	--	--	--	--	--	--	--	--
B6MW	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-1	04/26/23	--	--	--	--	--	--	--	--	--	--	--
T-1	04/25/23	--	--	--	--	--	--	--	--	--	--	--
T-2	04/26/23	--	--	--	--	--	--	--	--	--	--	--
MW-4	04/26/23	--	--	--	--	--	--	--	--	--	--	--
MW-5	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-5B	04/25/23	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.250 [<i><0.250</i>]	<0.500 [<i><0.500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]
MW-7	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-8	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-11	04/25/23	0.0480 J	<0.0525 J	<0.0525 J	<0.0525 J	<0.0525 J	<0.0525 J	<0.0525 J	<0.263 J	<0.525 J	<0.0525 J	<0.0525 J
MW-14	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-19	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-21	04/26/23	0.127	<0.0500	<0.0500	<0.0500	<0.0500	0.0196 J	0.0220 J	<0.250	<0.500	<0.0500	<0.0500
MW-22	04/26/23	<0.0500 [0.0190 J]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]	<0.250 [<i><0.250</i>]	<0.500 [<i><0.500</i>]	<0.0500 [<i><0.0500</i>]	<0.0500 [<i><0.0500</i>]
MW-24	04/26/23	--	--	--	--	--	--	--	--	--	--	--
MW-25	04/25/23	--	--	--	--	--	--	--	--	--	--	--
MW-26	04/26/23	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.500	<0.0500	<0.0500
MW-27	04/26/23	0.0442 J	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.0500	<0.250	<0.500	<0.0500	<0.0500

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

Analytical Methods:

1. PAH analyzed by USEPA Method 8270E-SIM.

Reference:

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

Table 5c
 Current Groundwater Analytical Results- Poly Aromatic Hydrocarbons
 Chevron Service Station 99014
 3608 Minnesota Drive,
 Anchorage, Alaska

Well ID	Sample Date	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	1-Methyl-naphthalene (µg/L)	2-Methyl-naphthalene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	Comments
ADEC Groundwater Cleanup Levels		260	290	0.19	11	36	1.7	170	120	
B5MW	04/25/23	--	--	--	--	--	--	--	--	
B2MW	04/25/23	--	--	--	--	--	--	--	--	PVC cut down after gauging/sampling. Well plug replaced.
B6MW	04/25/23	--	--	--	--	--	--	--	--	Not enough water to sample
MW-1	04/26/23	--	--	--	--	--	--	--	--	
T-1	04/25/23	--	--	--	--	--	--	--	--	
T-2	04/26/23	--	--	--	--	--	--	--	--	
MW-4	04/26/23	--	--	--	--	--	--	--	--	
MW-5	04/25/23	--	--	--	--	--	--	--	--	
MW-5B	04/25/23	<0.0500 [<0.0500]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	0.512 [0.705]	<0.500 [<0.500]	0.738 [0.979]	<0.0500 [<0.0500]	<0.0500 [<0.0500]	Well paved over
MW-7	04/25/23	--	--	--	--	--	--	--	--	Not gauged or sample due to ice blockage at 3ft
MW-8	04/25/23	--	--	--	--	--	--	--	--	
MW-11	04/25/23	<0.0525 J	0.142 J	<0.0525 J	0.895 J	1.20 J	0.253 J	0.0363 J	<0.0525 J	
MW-14	04/25/23	--	--	--	--	--	--	--	--	
MW-19	04/25/23	--	--	--	--	--	--	--	--	Not gauged or sample due to ice blockage at 2ft
MW-21	04/26/23	<0.0500 B	0.361	<0.0500	7.73	13.0	71.2	0.144	0.0318 J	
MW-22	04/26/23	<0.0500 B [<0.0500 B]	0.0443 J [0.0369 J]	<0.0500 [<0.0500]	0.581 [0.481 J]	0.756 [0.640]	4.87 [4.22]	0.0255 J [0.0181 J]	0.0324 J [<0.0500]	PVC cut down 2in after gauging/sampling
MW-24	04/26/23	--	--	--	--	--	--	--	--	
MW-25	04/25/23	--	--	--	--	--	--	--	--	
MW-26	04/26/23	<0.0500	<0.0500	<0.0500	0.188 J	0.239 J	1.79	<0.0500	<0.0500	
MW-27	04/26/23	<0.0500	0.138	<0.0500	1.66	2.79	8.16	0.0351 J	<0.0500	

Notes

Acronyms and Abbreviations:

- = Not Available or Not Analyzed
- [] = Blind Duplicate Sample Result
- <0.00100 = Not detected at or above the reported detection limit (RDL)
- µg/L = Micrograms per liter
- ADEC = Alaska Department of Environmental Conservation
- Bold** = Detected above laboratory method detection limit (MDL)
- Bold and Italicized** = Constituent considered non-detect, however Laboratory RDL is greater than the ADEC Groundwater Cleanup Level
- Bold and Shaded** = Value exceeds ADEC Groundwater Cleanup Level
- DTW = Depth to groundwater
- feet = Relative to NAVD88
- bTOC = Below top of casing
- GW Elev = Groundwater elevation
- ID = Identification
- MW = Groundwater monitoring well
- TOC = Top of casing
- J = The associated numerical value is an estimated concentration only
- B = Compound considered non-detect at the listed value due to associated blank contamination.
- D = The diluted results were reported and qualified as being reported at a dilution

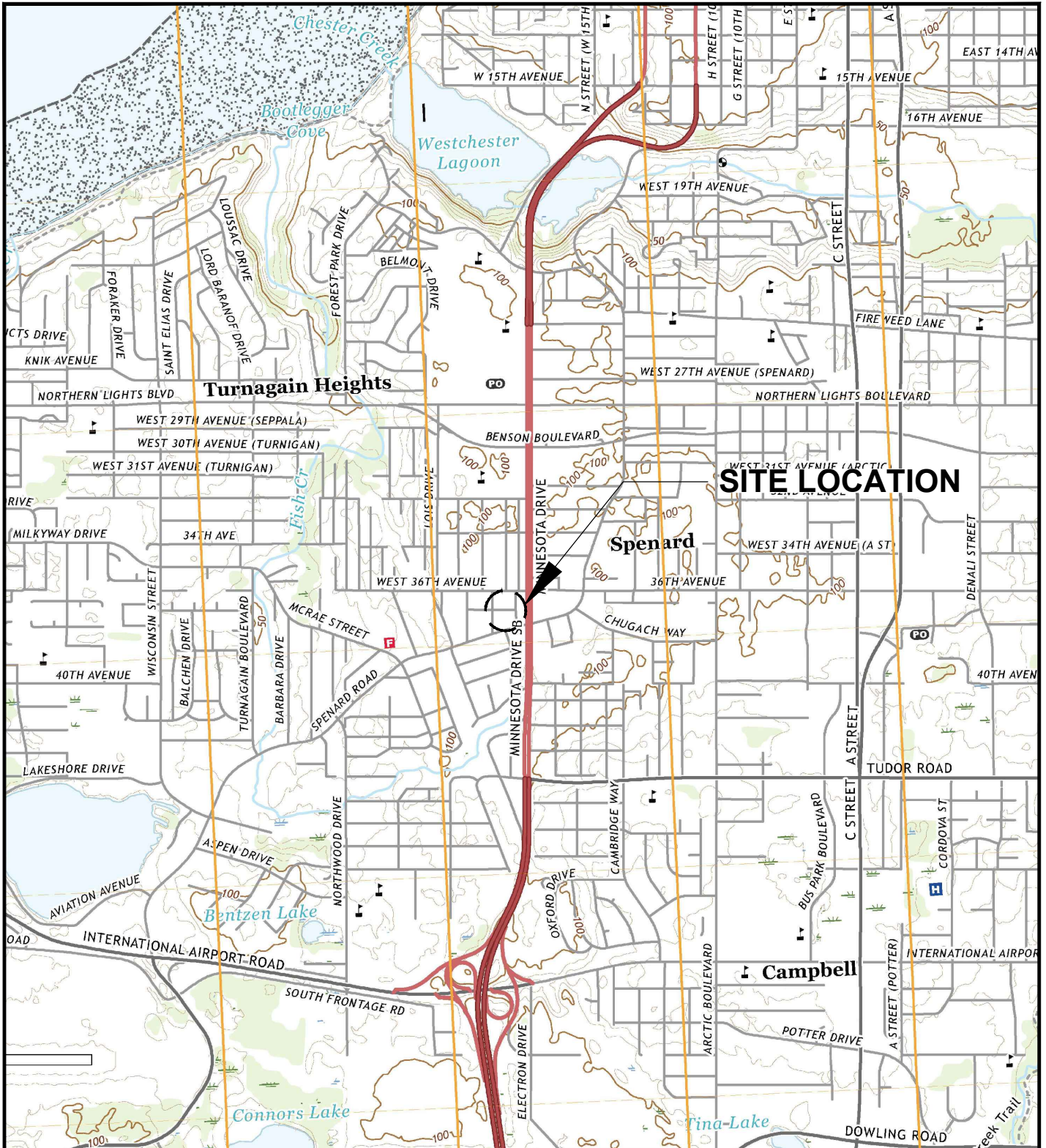
Analytical Methods:

1. PAH analyzed by USEPA Method 8270E-SIM.

Reference:

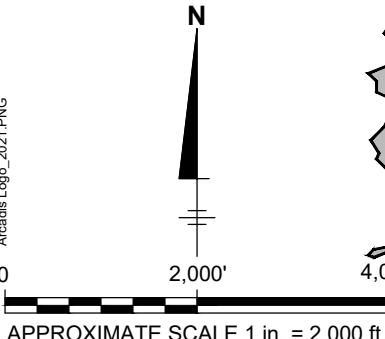
18 AAC 75. Department of Environmental Conservation, State of Alaska, Oil and Other Hazardous Substances Pollution Control, Table C. Groundwater Cleanup Levels, as amended through February 5, 2023.

Figures



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

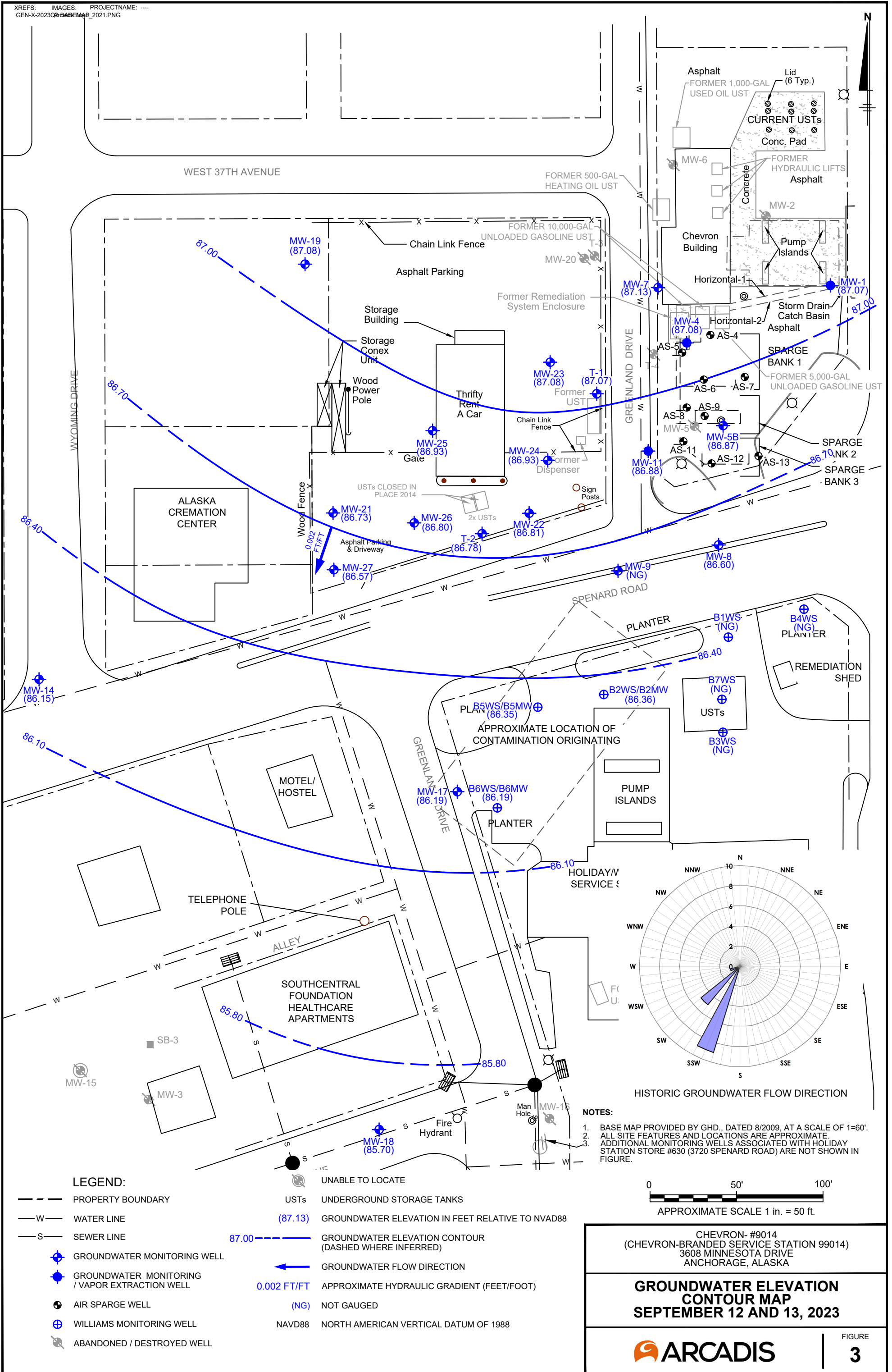
PROJECTNAME: ---
 IMAGES: AK Anchorage A-8 NW_20190703.jpg
 Arcadis Logo_2021.PNG
 XREFS:

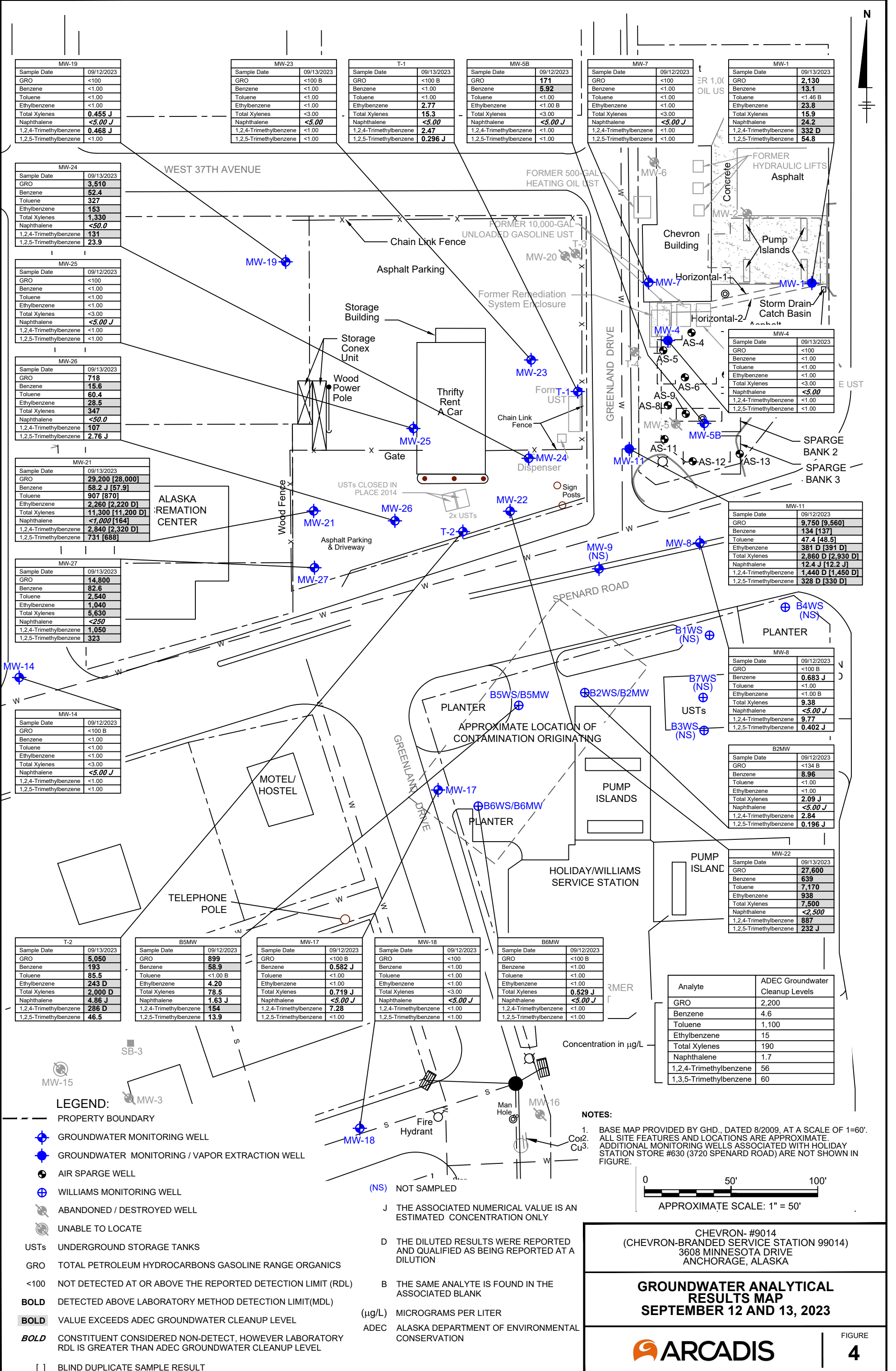


CHEVRON- #9014
 (CHEVRON-BRANDED SERVICE STATION 99014)
 3608 MINNESOTA DRIVE
 ANCHORAGE, ALASKA

SITE LOCATION MAP

XREFS: IMAGES: PROJECTNAME: ---
 GEN-X-20230114-01.dwg

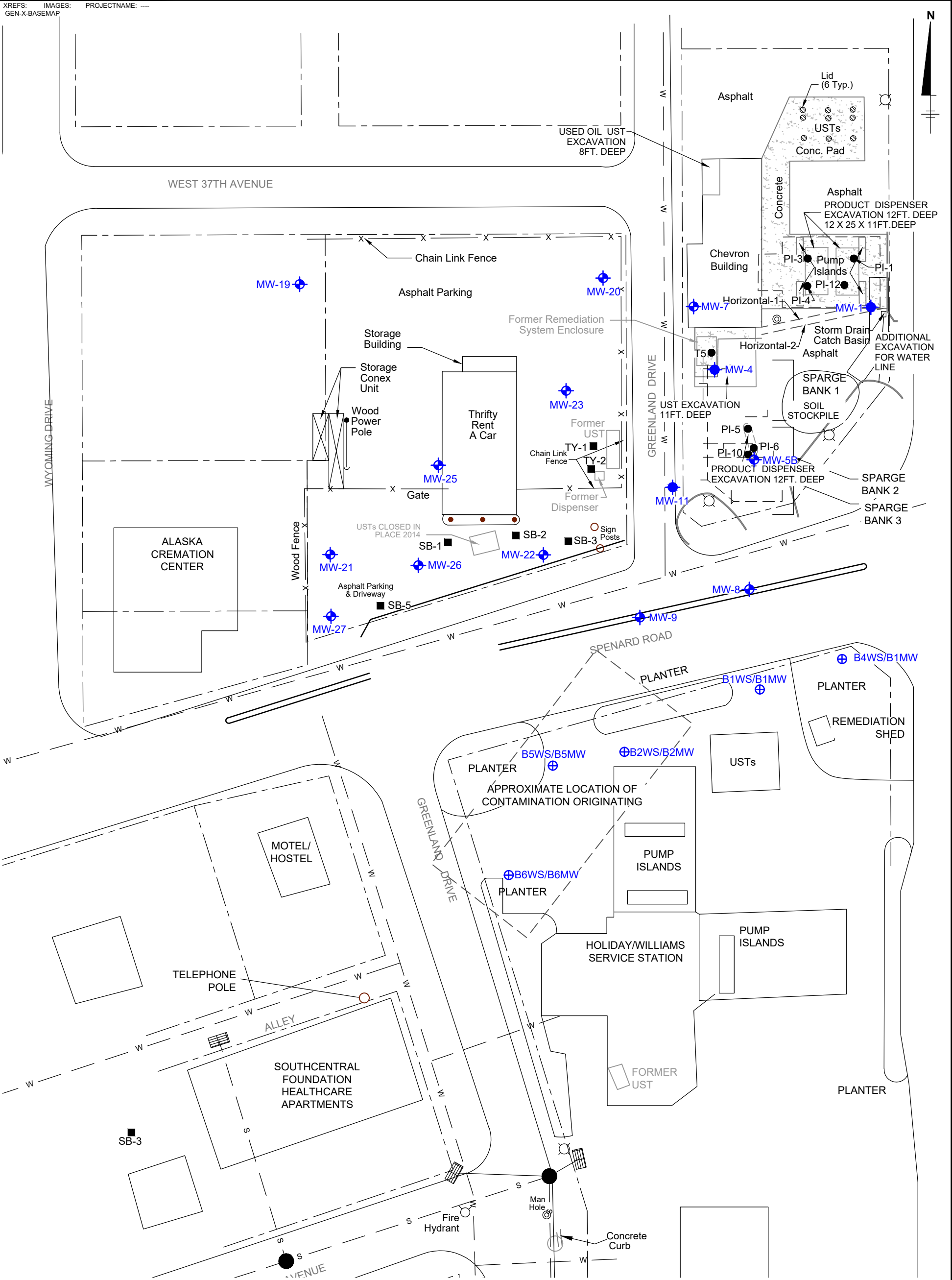




CHEVRON- #9014
 (CHEVRON-BRANDED SERVICE STATION 99014)
 3608 MINNESOTA DRIVE
 ANCHORAGE, ALASKA

GROUNDWATER ANALYTICAL RESULTS MAP
SEPTEMBER 12 AND 13, 2023

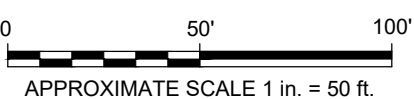




LEGEND:

---	PROPERTY BOUNDARY
— W —	WATER LINE
— S —	SEWER LINE
⊕	GROUNDWATER MONITORING WELL
⊕	WILLIAMS MONITORING WELL
■	SOIL BORING
●	HISTORICAL SOIL BORING
USTs	UNDERGROUND STORAGE TANKS

- NOTES:**
1. BASE MAP PROVIDED BY GHD., DATED 8/2009, AT A SCALE OF 1=60'.
 2. ALL SITE FEATURES AND LOCATIONS ARE APPROXIMATE.

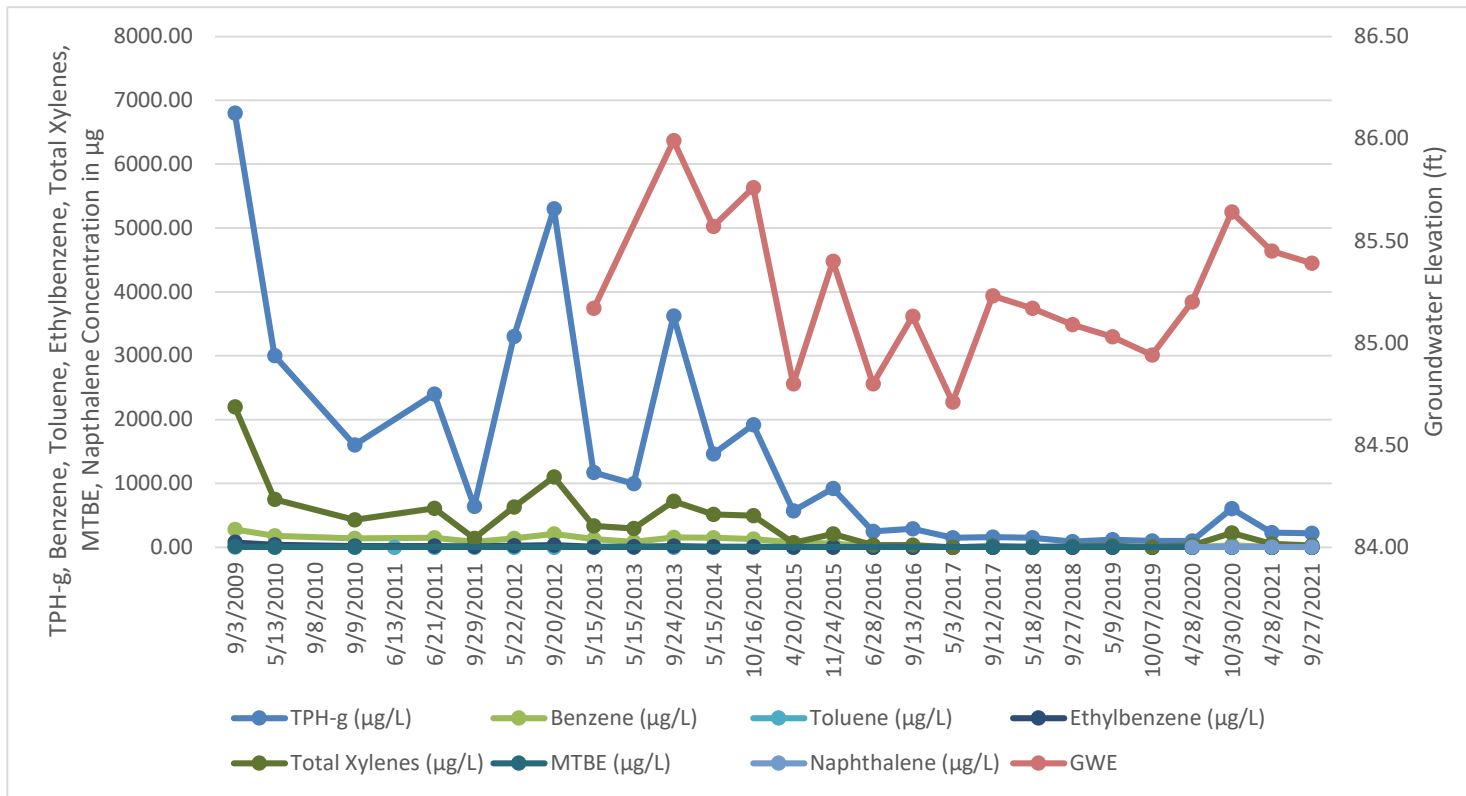


CHEVRON-BRANDED SERVICE STATION 99014
3608 MINNESOTA DRIVE
ANCHORAGE, ALASKA


HISTORICAL SOIL SAMPLING LOCATIONS

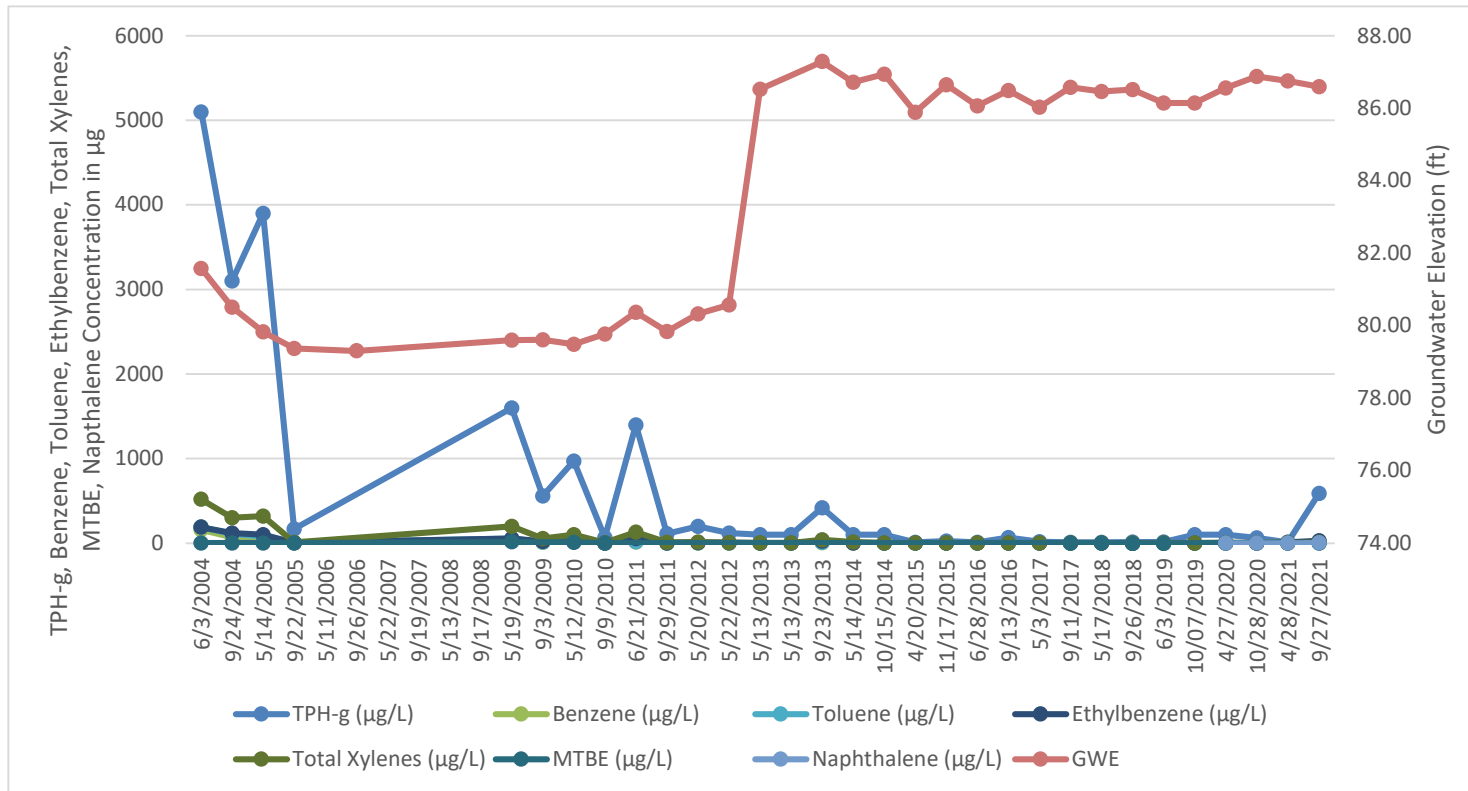
ARCADIS | FIGURE 5

Hydrographs




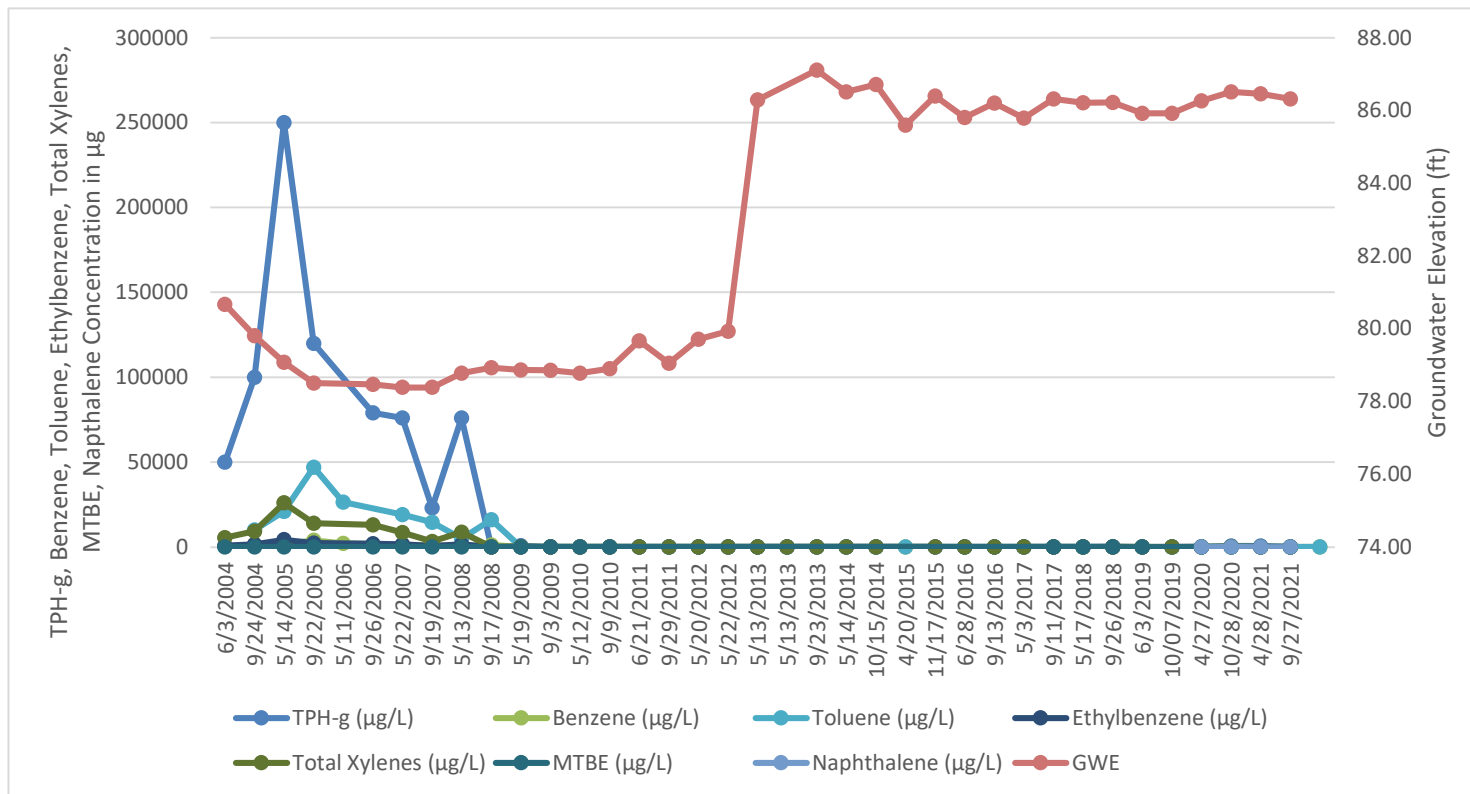
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well B6MW Historical Groundwater Elevation and Analytical Data	
	Graph 1



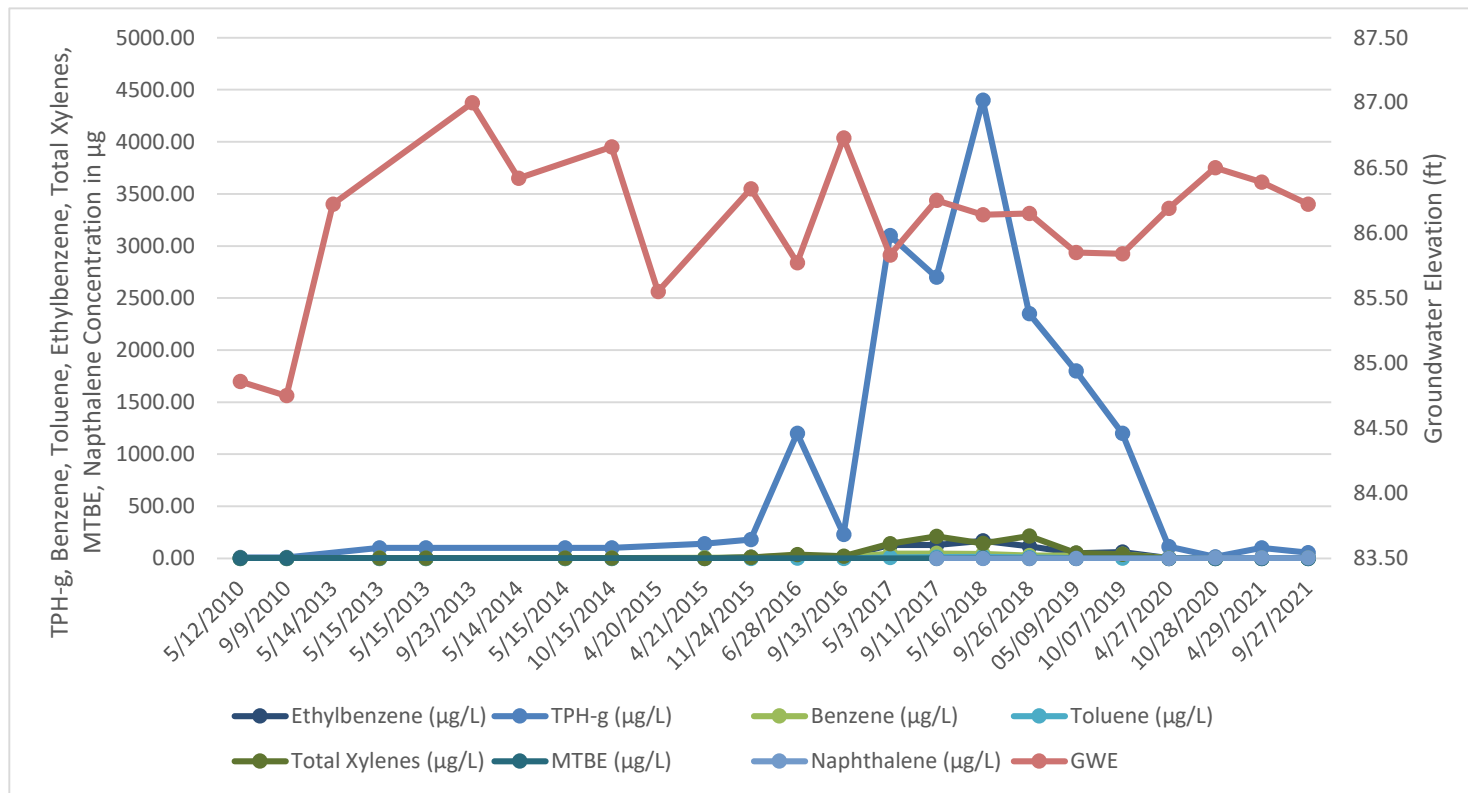
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-1 Historical Groundwater Elevation and Analytical Data	
	Graph 2




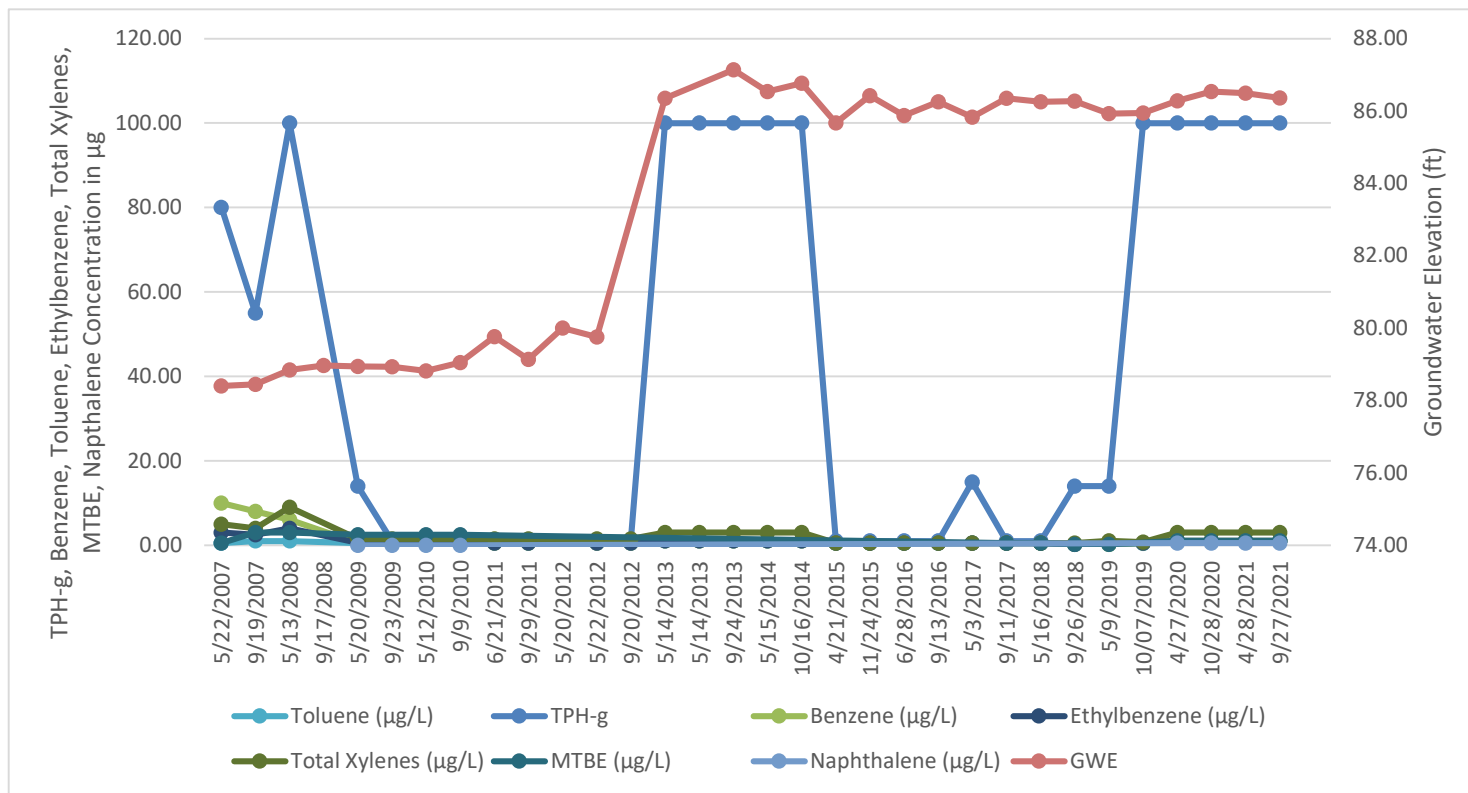
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-4 Historical Groundwater Elevation and Analytical Data	
 ARCADIS <small>Design & Consultancy for natural and built assets</small>	Graph 3




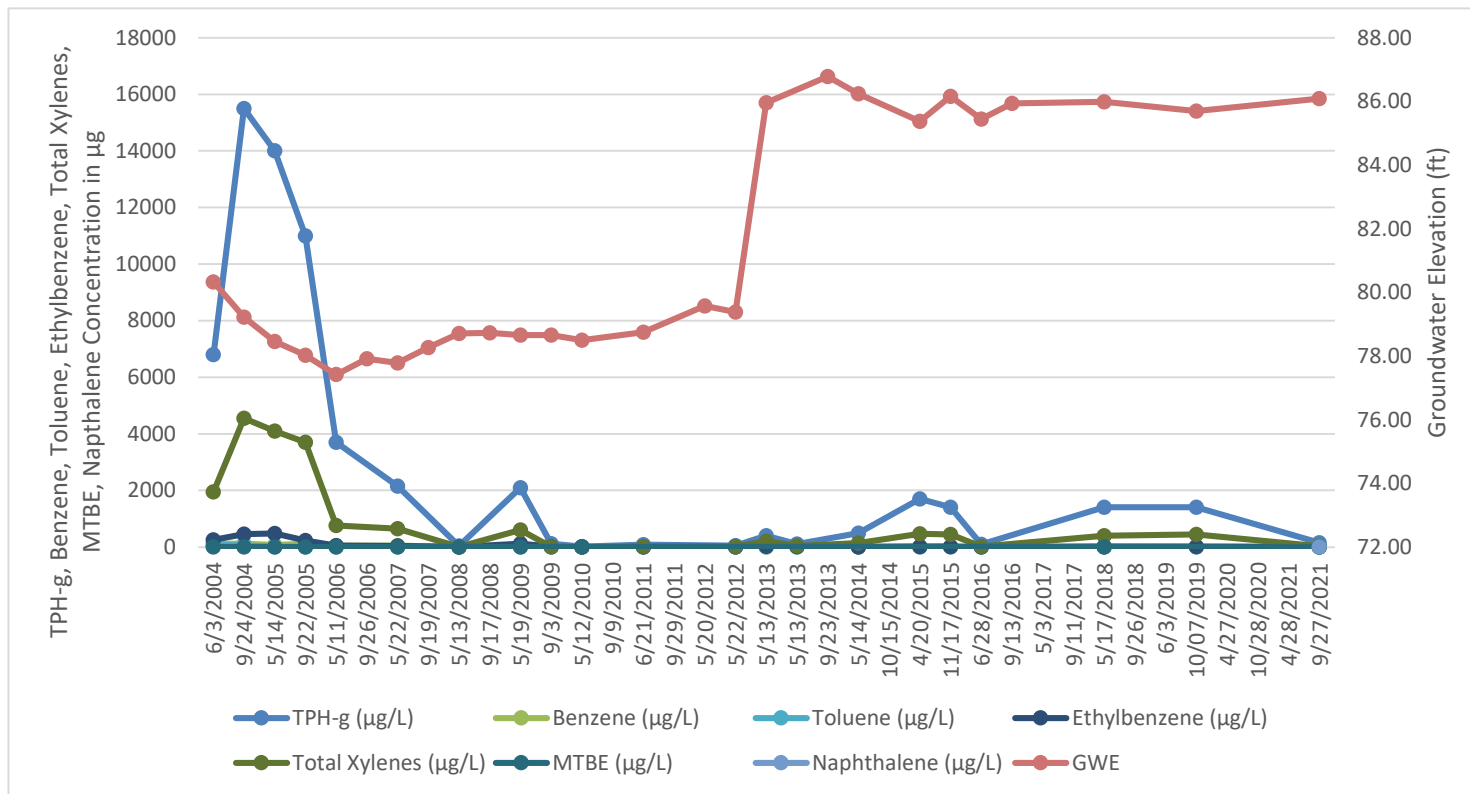
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-5B Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 4




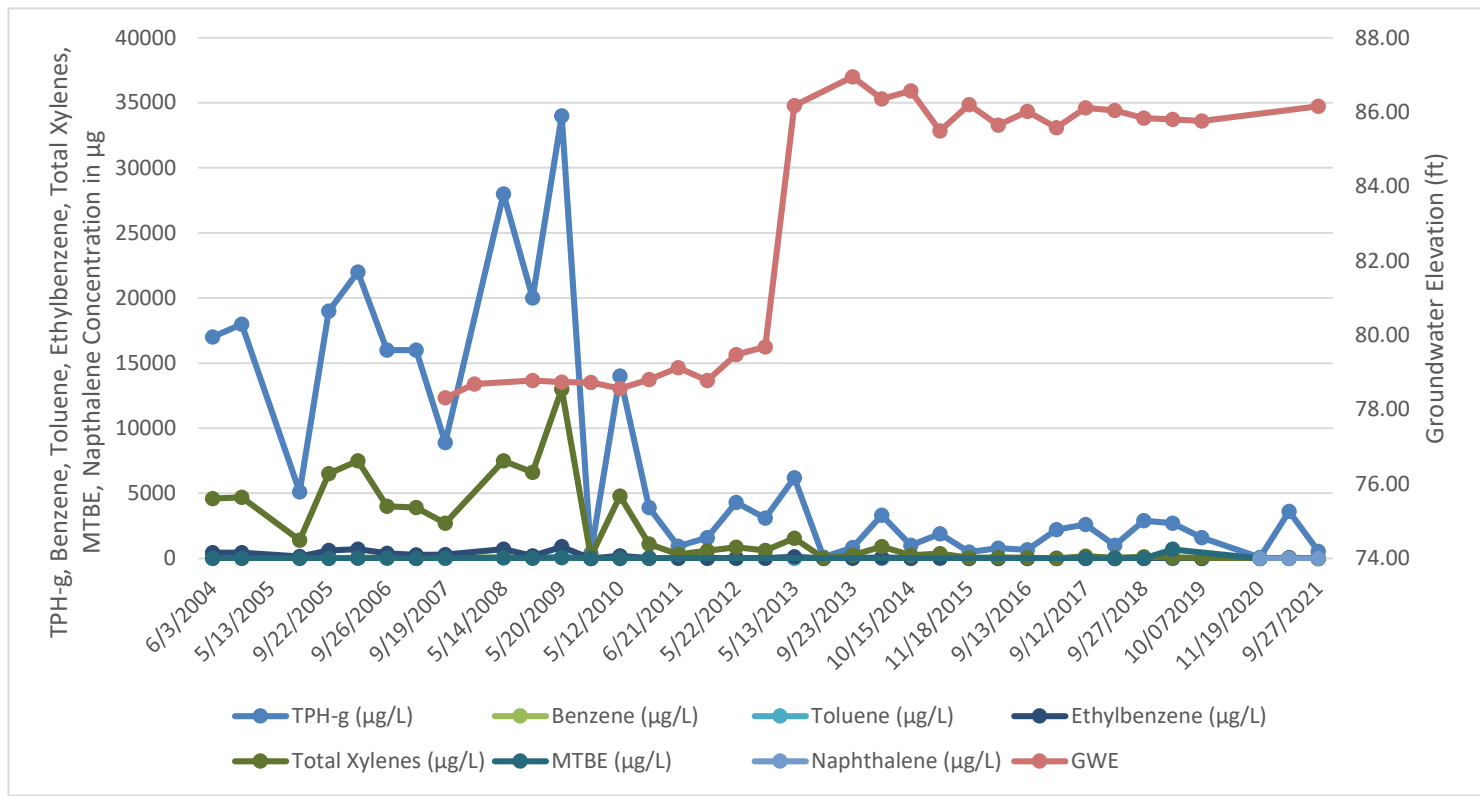
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-7 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 5




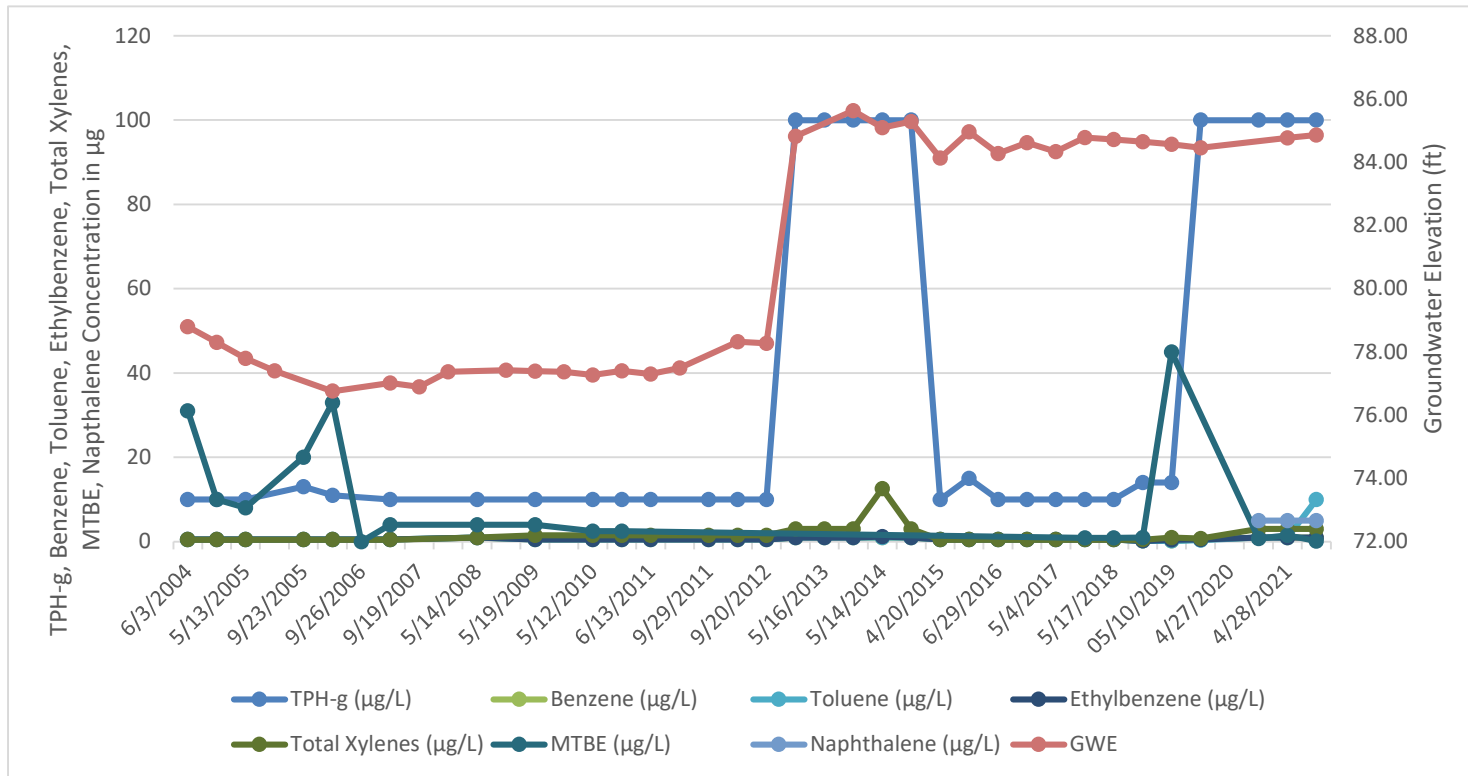
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-8 Historical Groundwater Elevation and Analytical Data	
 Design & Consultancy for natural and built assets	Graph 6




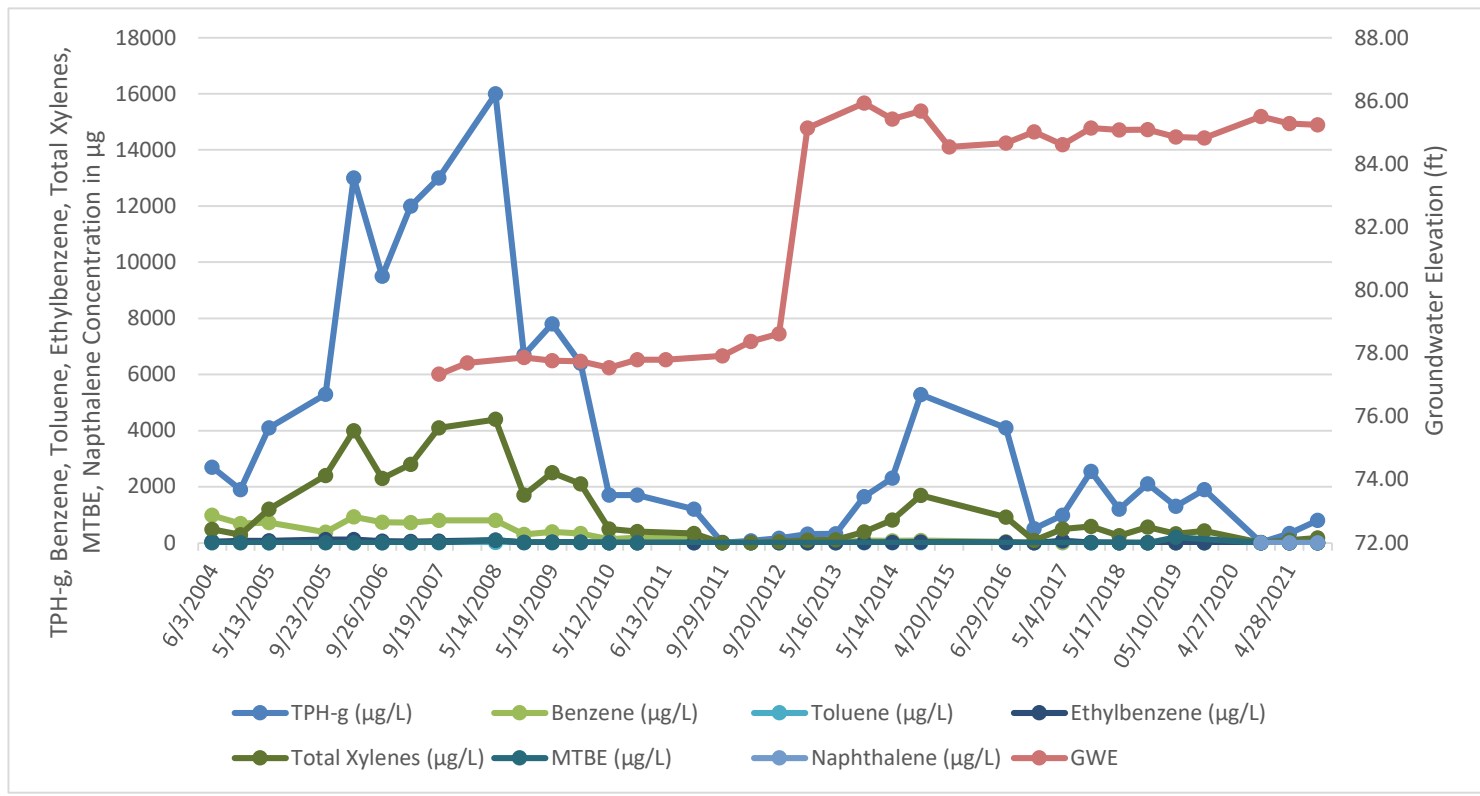
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-11 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 7




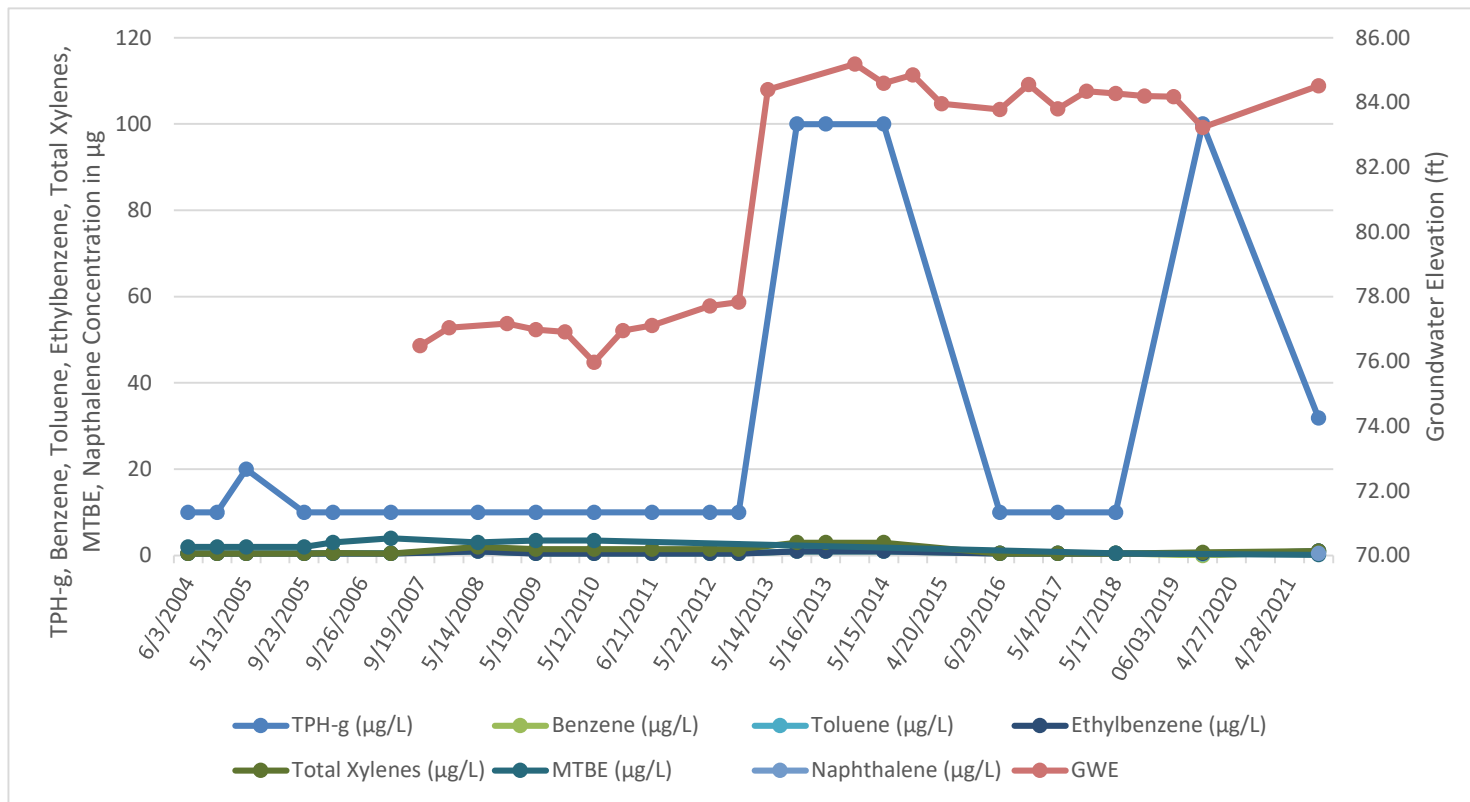
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-14 Historical Groundwater Elevation and Analytical Data	
 ARCADIS <small>Design & Consultancy for natural and built assets</small>	Graph 8




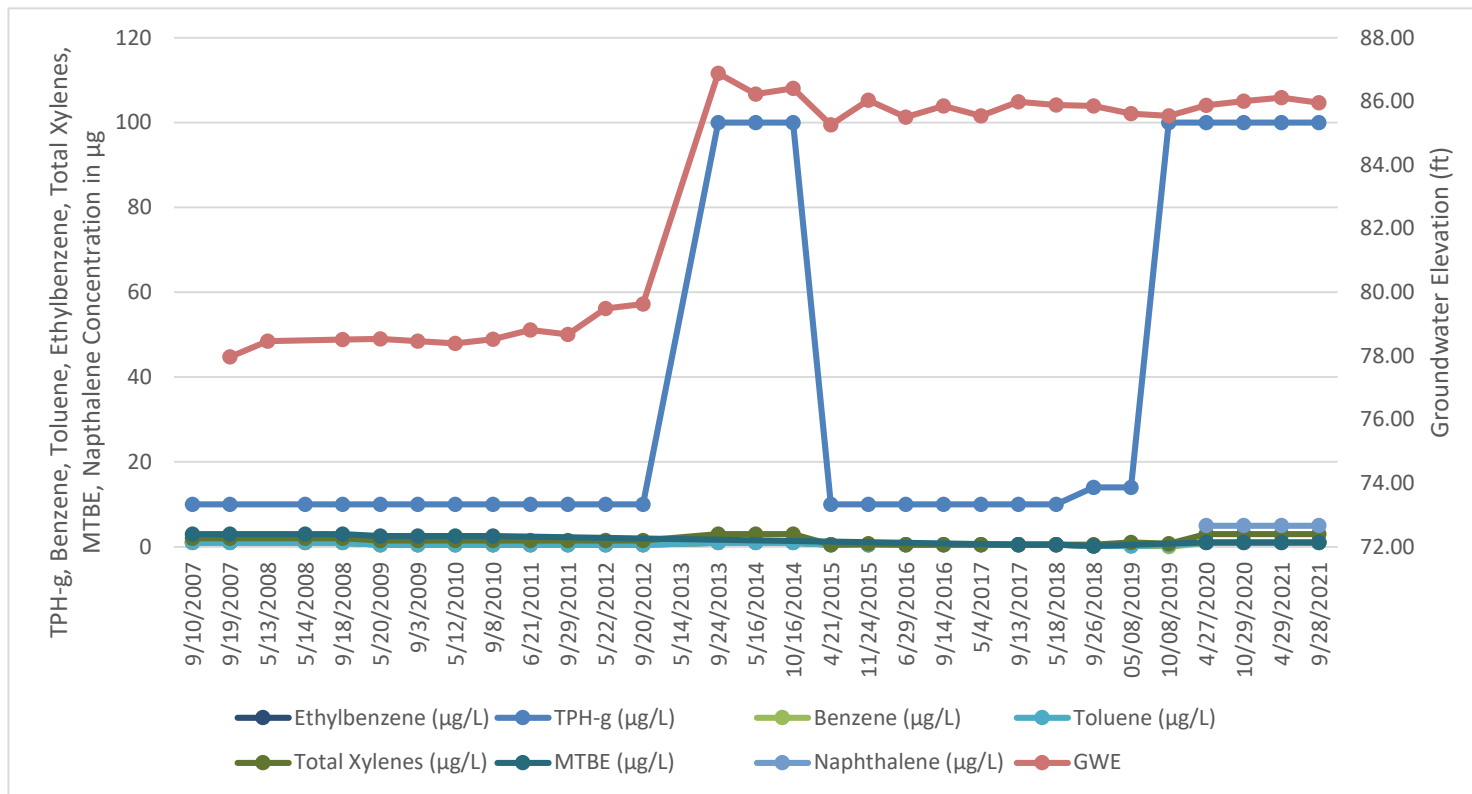
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-17 Historical Groundwater Elevation and Analytical Data	
	Graph 9




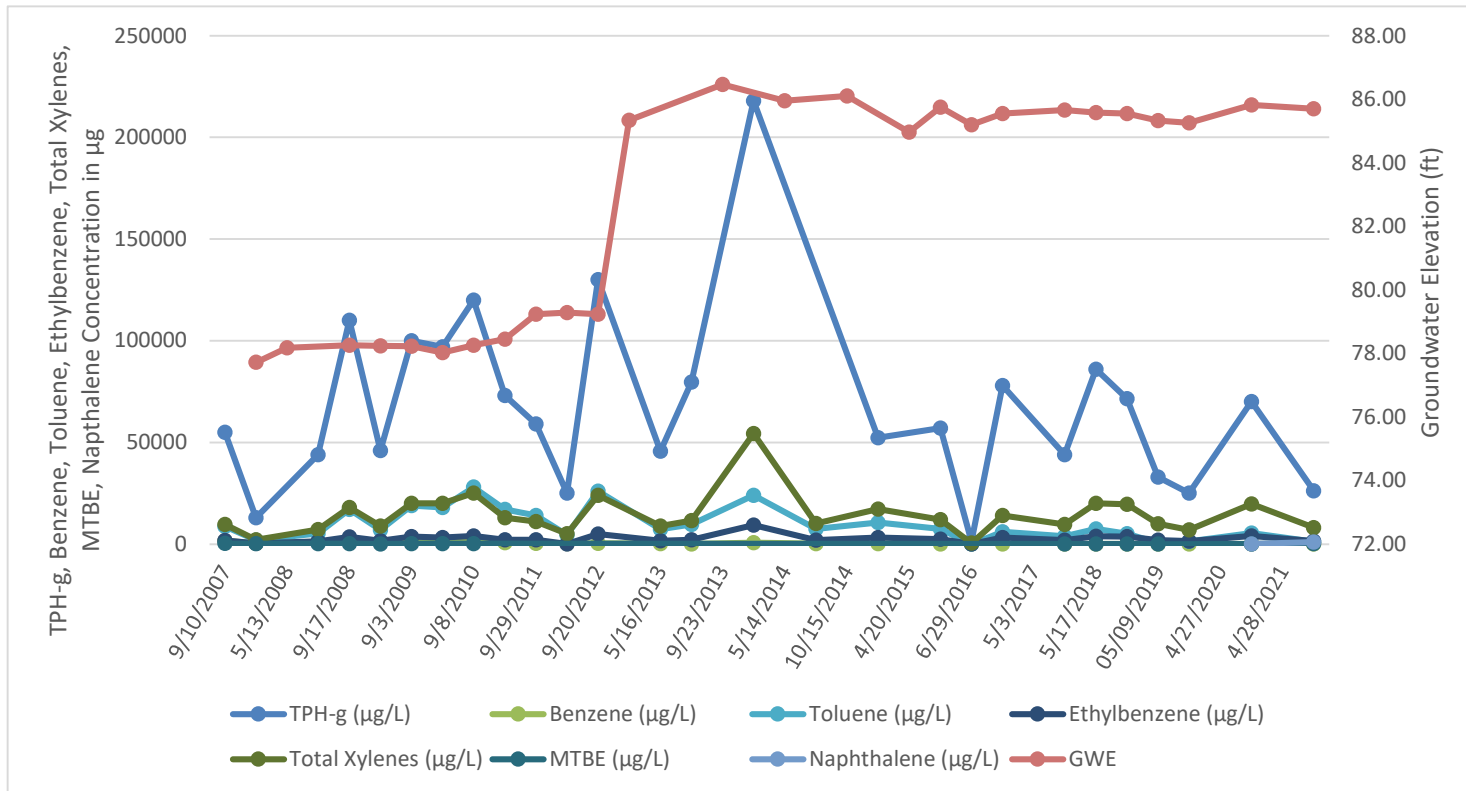
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-18 Historical Groundwater Elevation and Analytical Data	
 ARCADIS <small>Design & Consultancy for natural and built assets</small>	Graph 10




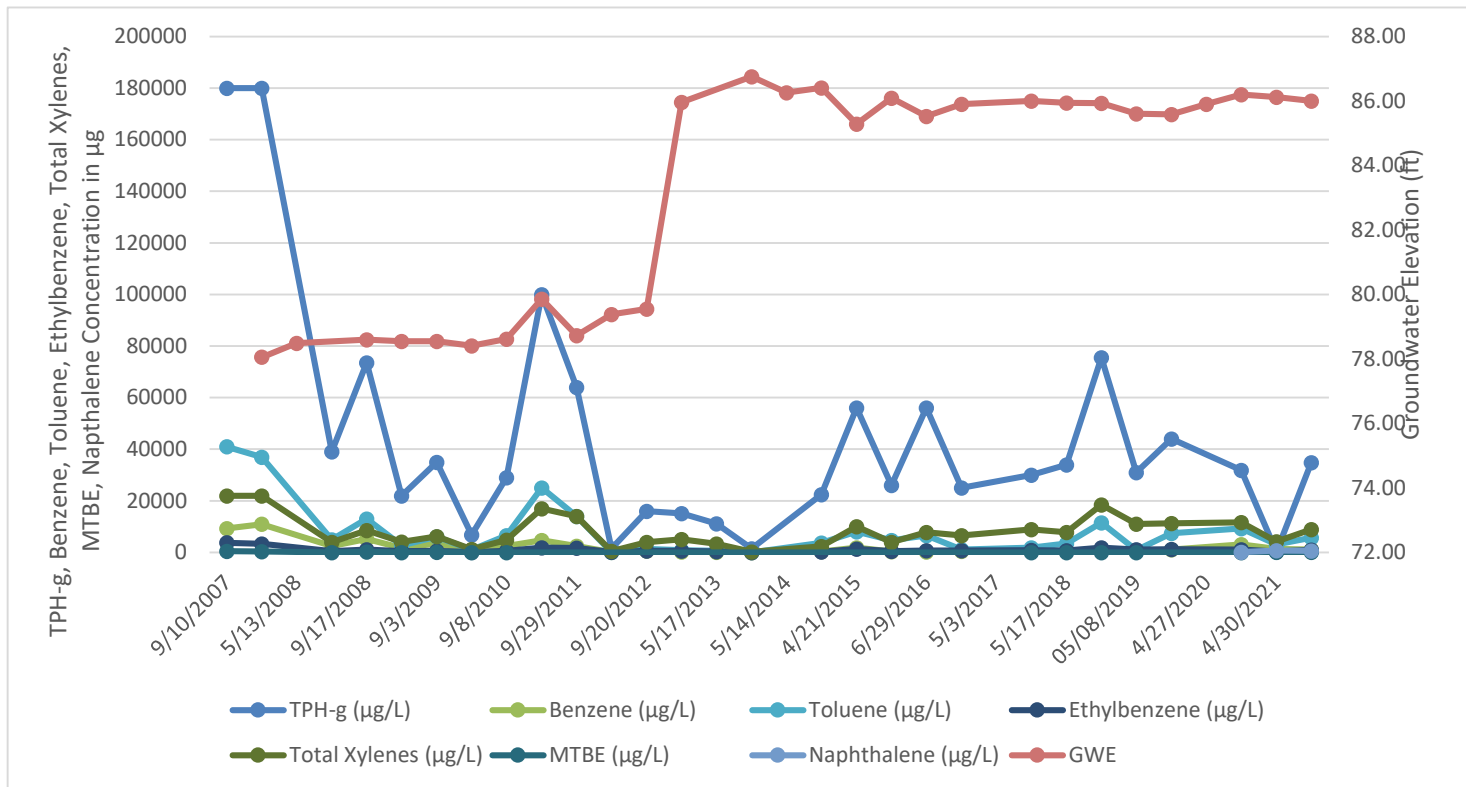
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-19 Historical Groundwater Elevation and Analytical Data	
 ARCADIS <small>Design & Consultancy for natural and built assets</small>	Graph 11




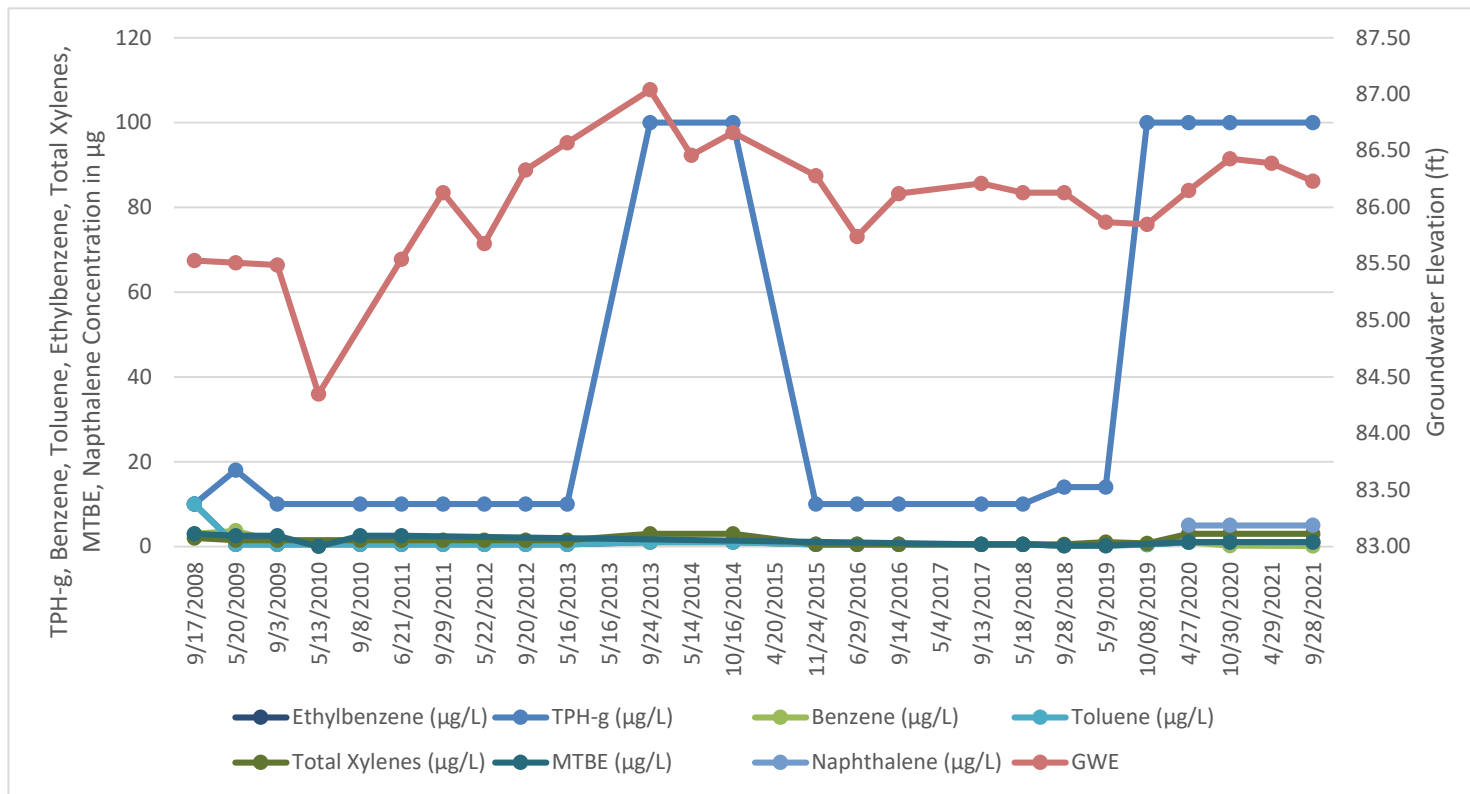
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-21 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 12




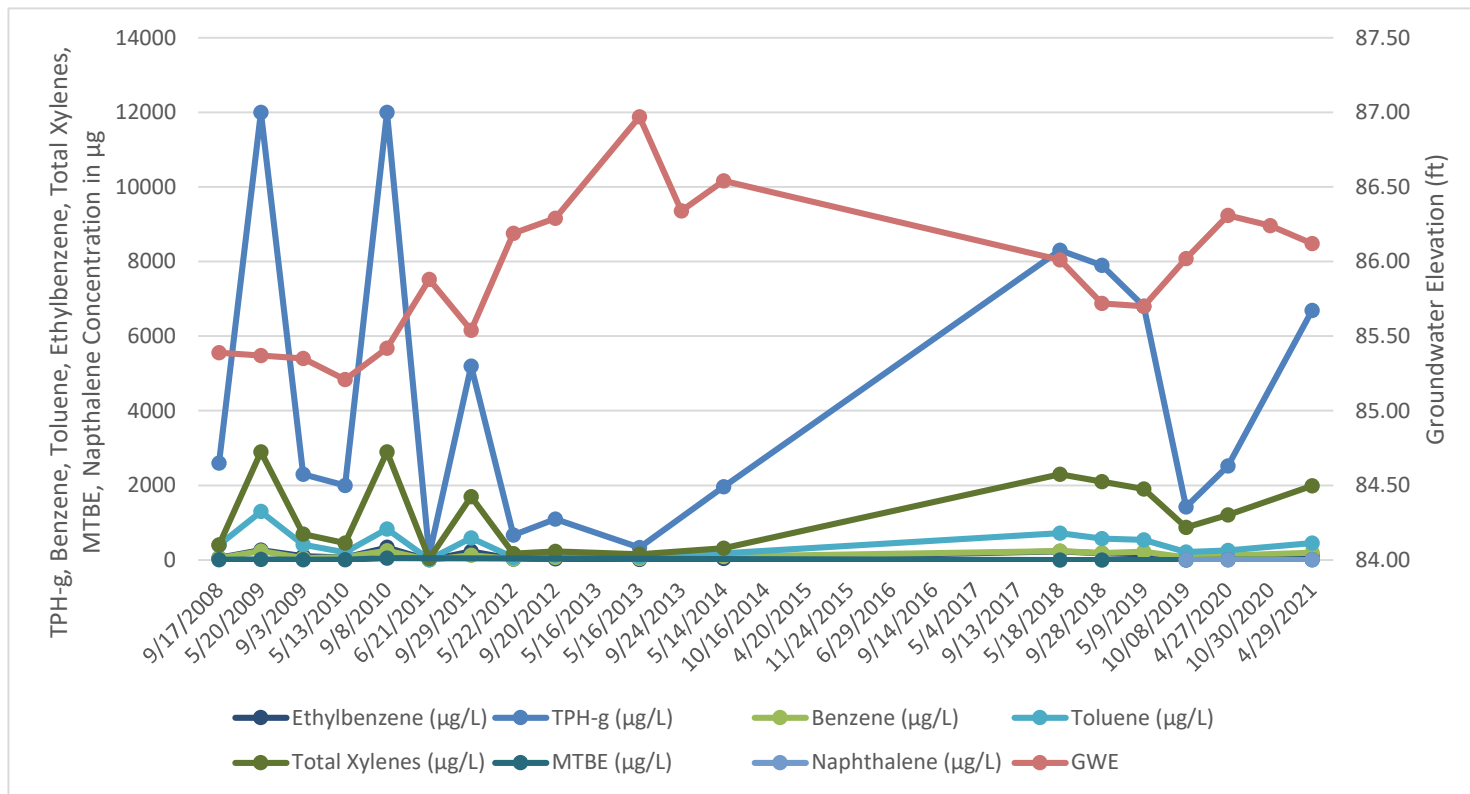
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-22 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 13




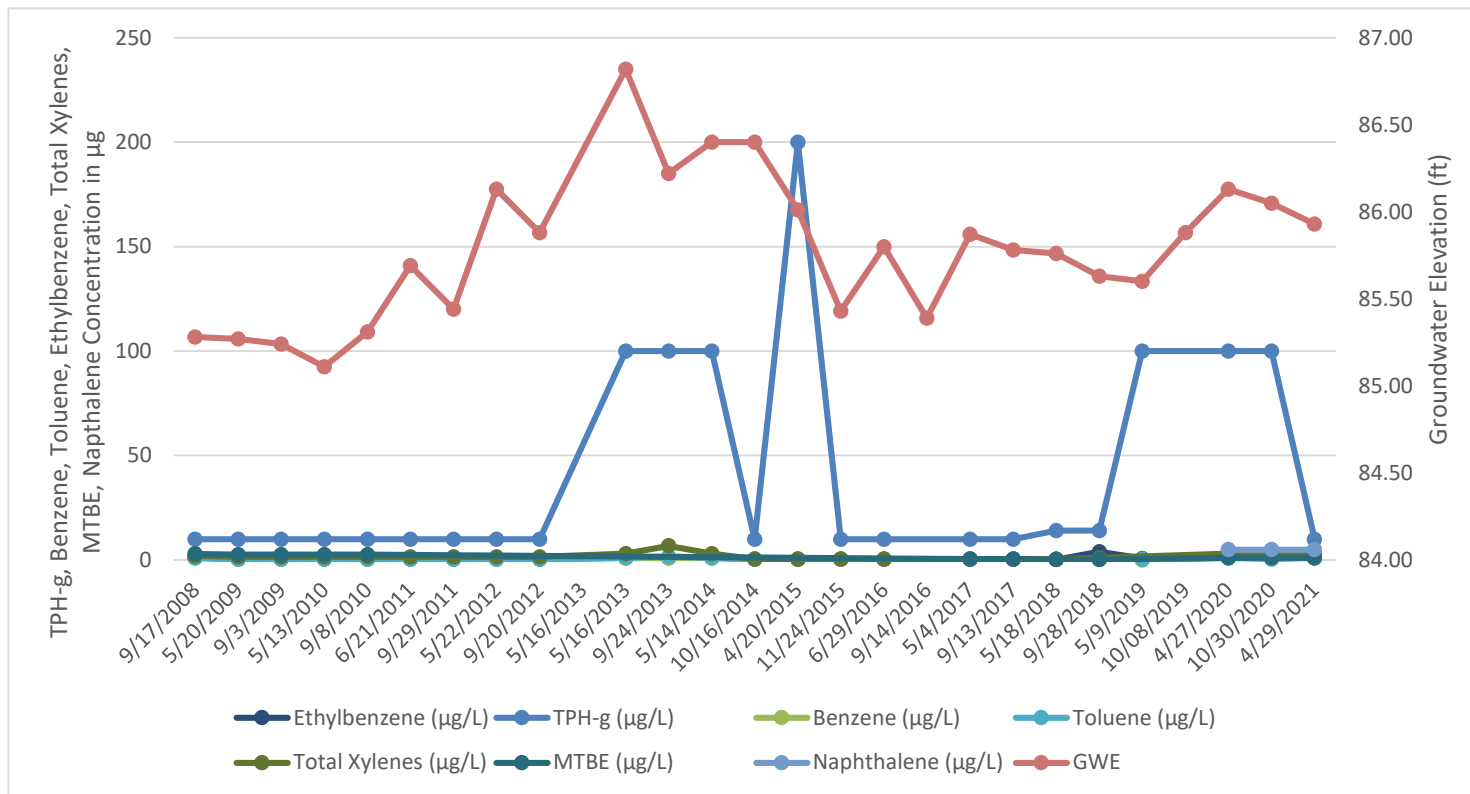
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-23 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 14




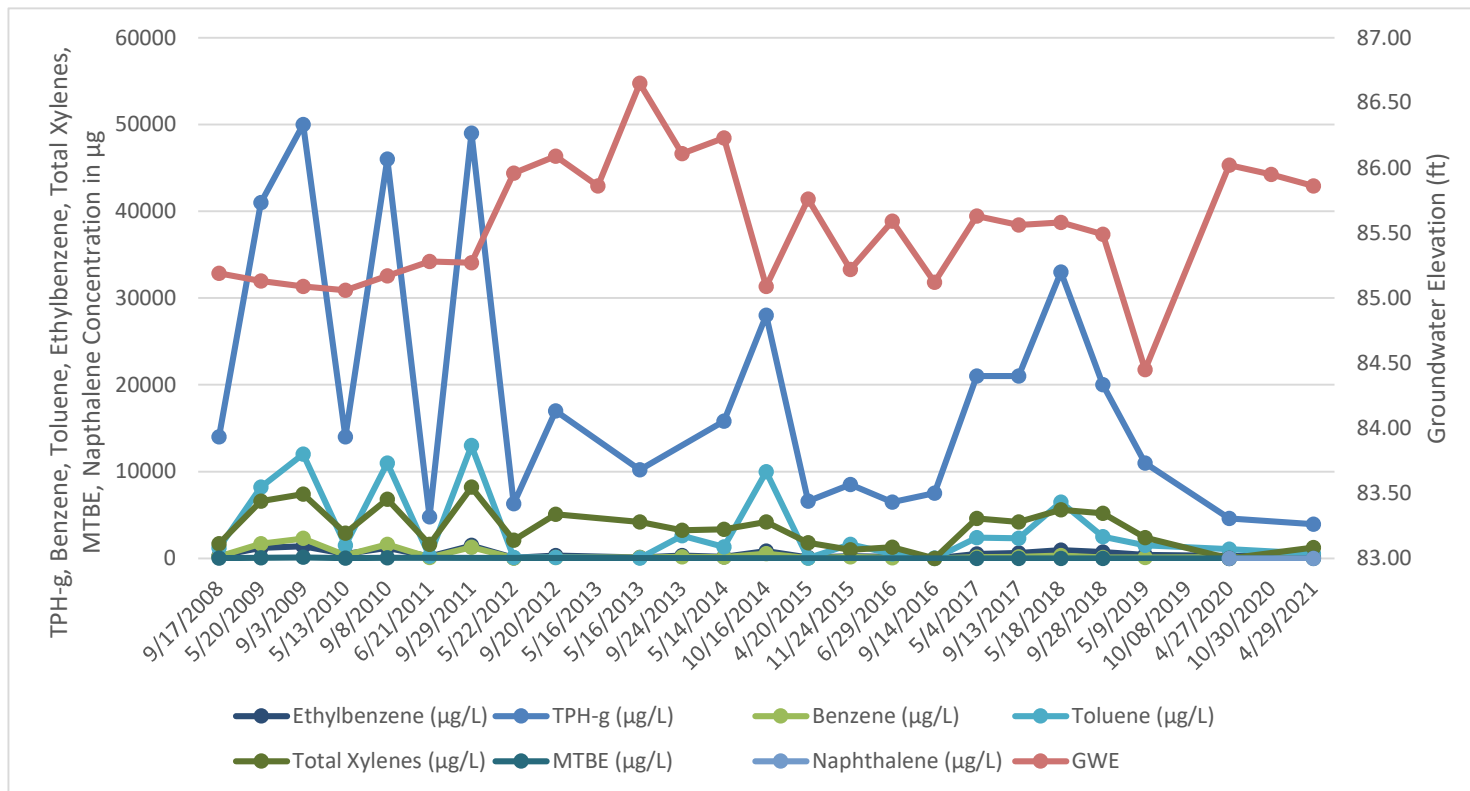
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-24 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 15




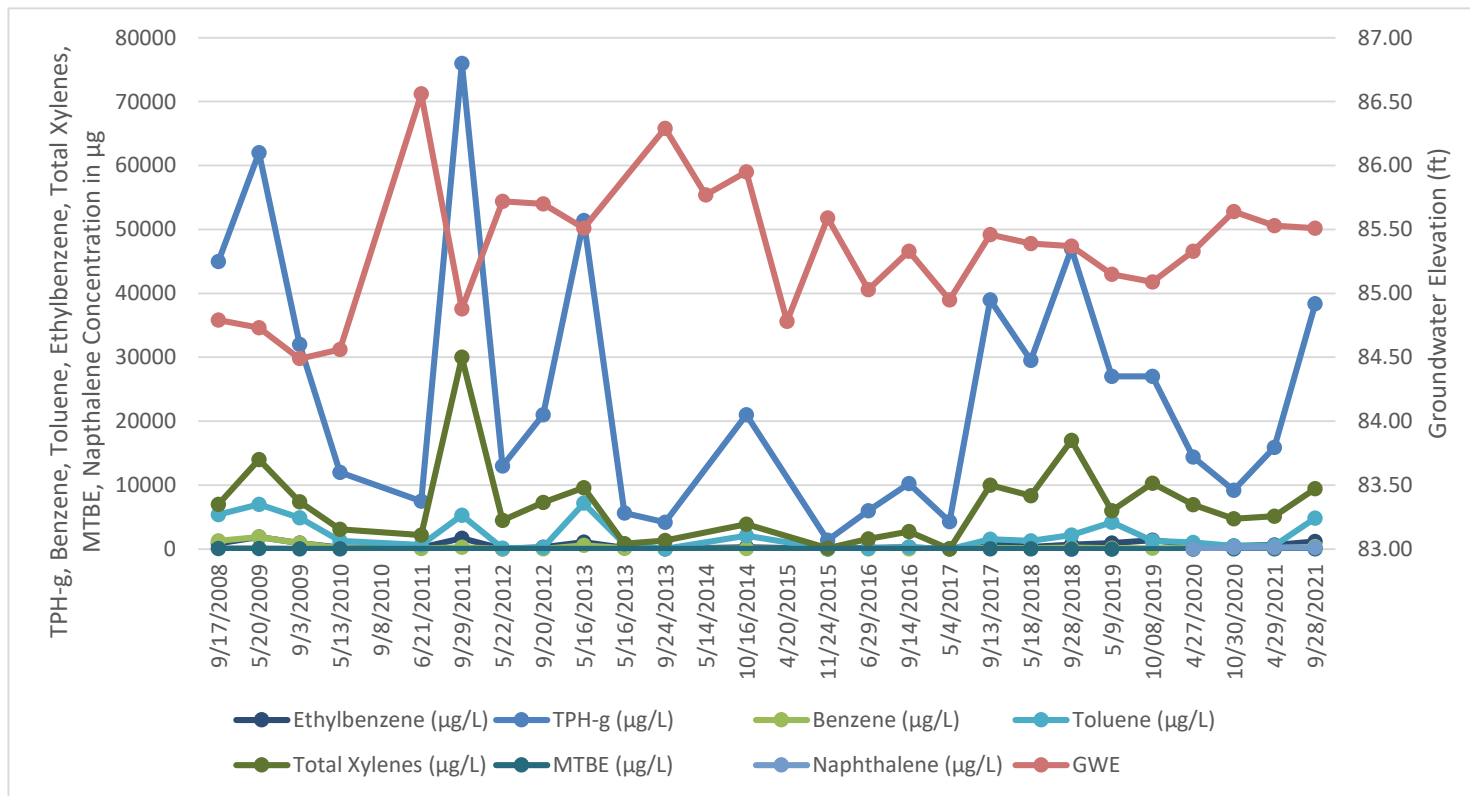
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-25 Historical Groundwater Elevation and Analytical Data	
 Design & Consultancy for natural and built assets	Graph 16




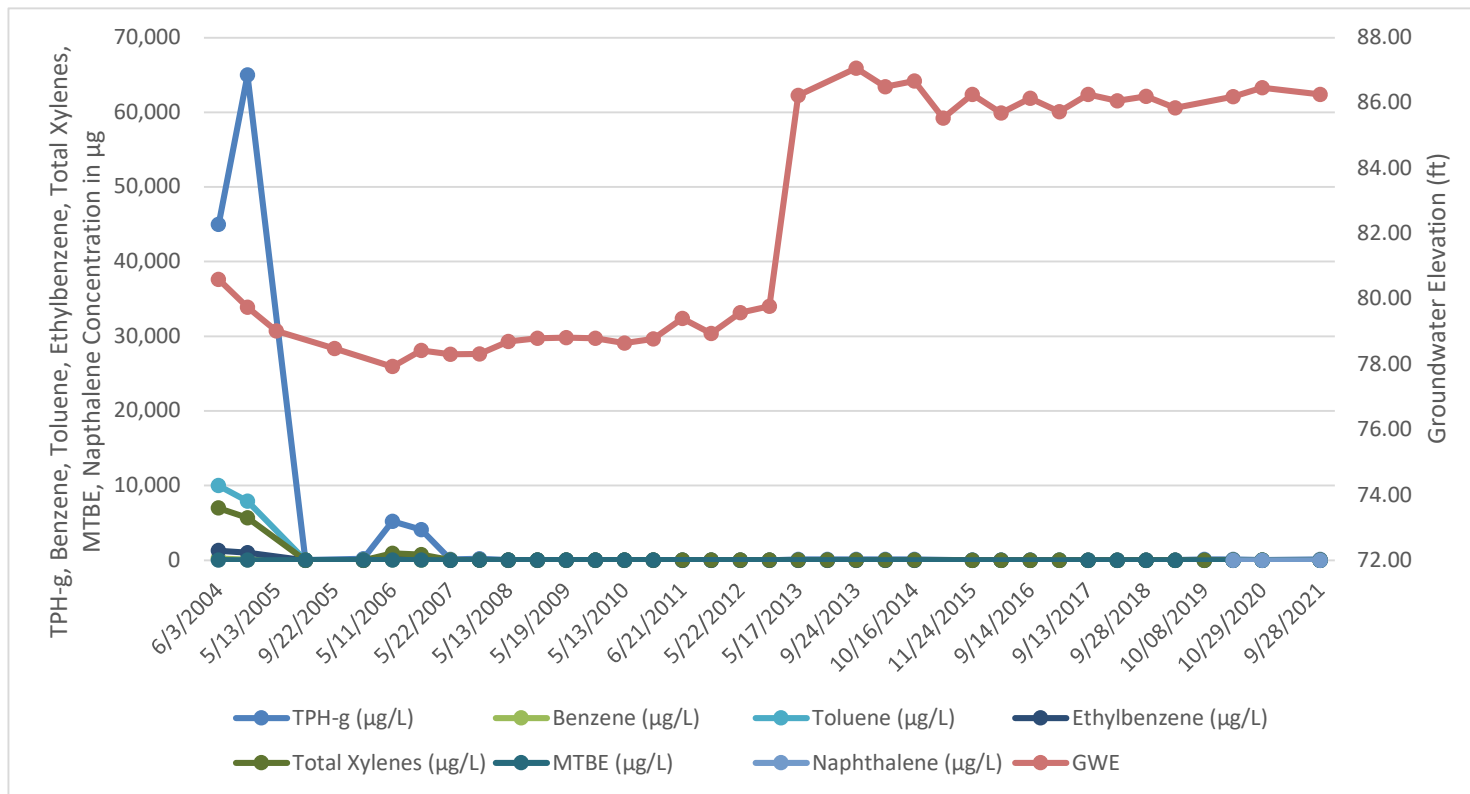
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-26 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 17




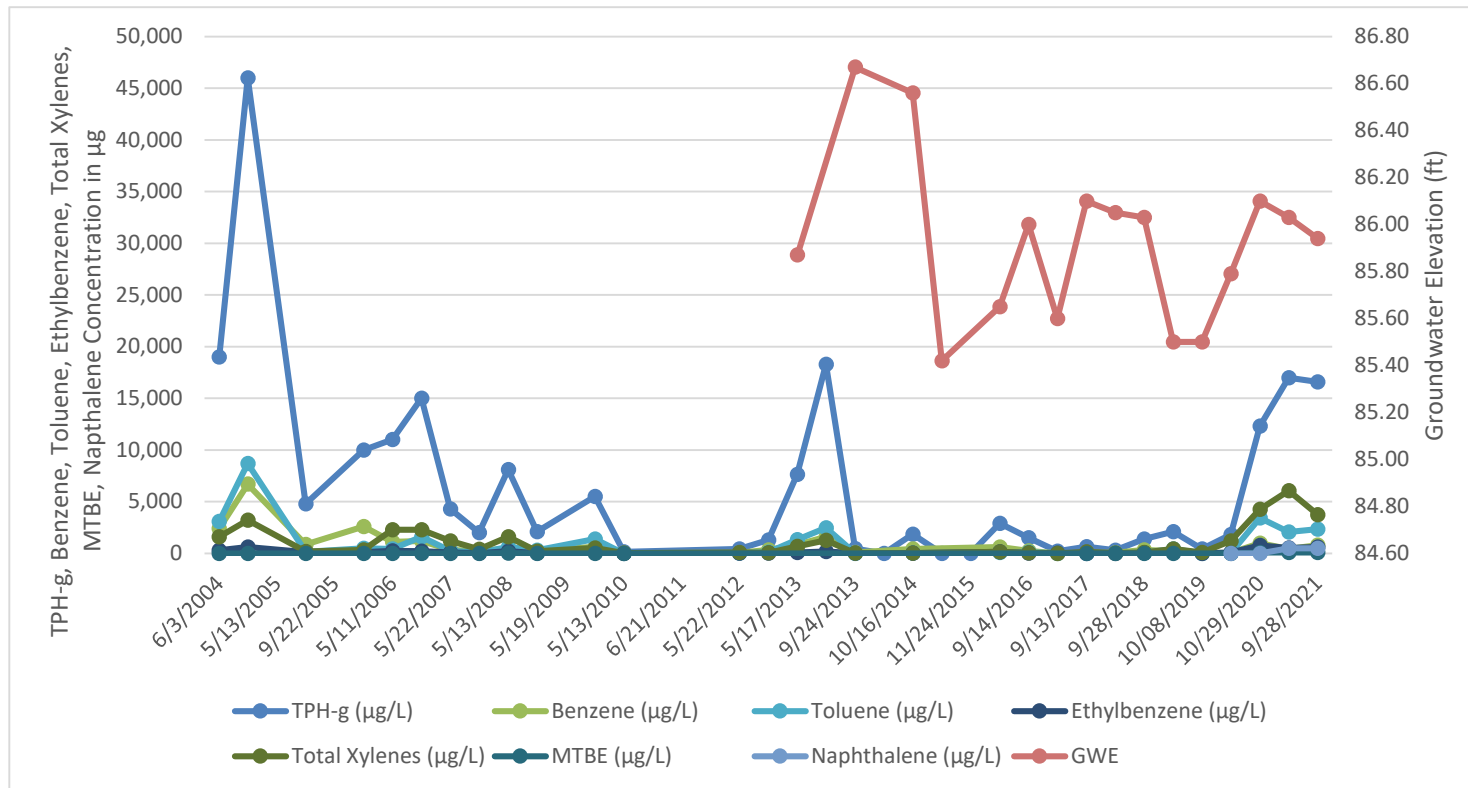
LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well MW-27 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 18



LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well T-1 Historical Groundwater Elevation and Analytical Data	
 Design & Consultancy for natural and built assets	Graph 19



LEGEND:	
TPH-g	Gasoline range organics
GWE	Groundwater Elevation
µg/L	Micrograms per liter
ft	Feet relative to NAVD88 (North American Vertical Datum 1988)
Note: Half of detection limit value used for non-detect results	

Chevron Site No. 99014 3608 Minnesota Drive Anchorage, Alaska Conceptual Site Model	
Monitoring Well T-2 Historical Groundwater Elevation and Analytical Data	
 <small>Design & Consultancy for natural and built assets</small>	Graph 20

Appendix A

ADEC Human Health Conceptual Site Model Form

Appendix A - Human Health Conceptual Site Model Scoping Form and Standardized Graphic

Site Name:

File Number:

Completed by:

Introduction

The form should be used to reach agreement with the Alaska Department of Environmental Conservation (DEC) about which exposure pathways should be further investigated during site characterization. From this information, summary text about the CSM and a graphic depicting exposure pathways should be submitted with the site characterization work plan and updated as needed in later reports.

General Instructions: Follow the italicized instructions in each section below.

1. General Information:

Sources (*check potential sources at the site*)

- | | |
|--|--|
| <input type="checkbox"/> USTs | <input type="checkbox"/> Vehicles |
| <input type="checkbox"/> ASTs | <input type="checkbox"/> Landfills |
| <input type="checkbox"/> Dispensers/fuel loading racks | <input type="checkbox"/> Transformers |
| <input type="checkbox"/> Drums | <input type="checkbox"/> Other: <input type="text"/> |

Release Mechanisms (*check potential release mechanisms at the site*)

- | | |
|---------------------------------|--|
| <input type="checkbox"/> Spills | <input type="checkbox"/> Direct discharge |
| <input type="checkbox"/> Leaks | <input type="checkbox"/> Burning |
| | <input type="checkbox"/> Other: <input type="text"/> |

Impacted Media (*check potentially-impacted media at the site*)

- | | |
|--|--|
| <input type="checkbox"/> Surface soil (0-2 feet bgs*) | <input type="checkbox"/> Groundwater |
| <input type="checkbox"/> Subsurface soil (>2 feet bgs) | <input type="checkbox"/> Surface water |
| <input type="checkbox"/> Air | <input type="checkbox"/> Biota |
| <input type="checkbox"/> Sediment | <input type="checkbox"/> Other: <input type="text"/> |

Receptors (*check receptors that could be affected by contamination at the site*)

- | | |
|--|--|
| <input type="checkbox"/> Residents (adult or child) | <input type="checkbox"/> Site visitor |
| <input type="checkbox"/> Commercial or industrial worker | <input type="checkbox"/> Trespasser |
| <input type="checkbox"/> Construction worker | <input type="checkbox"/> Recreational user |
| <input type="checkbox"/> Subsistence harvester (i.e. gathers wild foods) | <input type="checkbox"/> Farmer |
| <input type="checkbox"/> Subsistence consumer (i.e. eats wild foods) | <input type="checkbox"/> Other: <input type="text"/> |

* bgs - below ground surface

2. Exposure Pathways: *(The answers to the following questions will identify complete exposure pathways at the site. Check each box where the answer to the question is "yes".)*

a) Direct Contact -

1. Incidental Soil Ingestion

Are contaminants present or potentially present in surface soil between 0 and 15 feet below the ground surface? (Contamination at deeper depths may require evaluation on a site-specific basis.)

If the box is checked, label this pathway complete:

Comments:

2. Dermal Absorption of Contaminants from Soil

Are contaminants present or potentially present in surface soil between 0 and 15 feet below the ground surface? (Contamination at deeper depths may require evaluation on a site specific basis.)

Can the soil contaminants permeate the skin (see Appendix B in the guidance document)?

If both boxes are checked, label this pathway complete:

Comments:

b) Ingestion -

1. Ingestion of Groundwater

Have contaminants been detected or are they expected to be detected in the groundwater, or are contaminants expected to migrate to groundwater in the future?

Could the potentially affected groundwater be used as a current or future drinking water source? Please note, only leave the box unchecked if DEC has determined the groundwater is not a currently or reasonably expected future source of drinking water according to 18 AAC 75.350.

If both boxes are checked, label this pathway complete:

Comments:

2. Ingestion of Surface Water

Have contaminants been detected or are they expected to be detected in surface water, or are contaminants expected to migrate to surface water in the future?

Could potentially affected surface water bodies be used, currently or in the future, as a drinking water source? Consider both public water systems and private use (i.e., during residential, recreational or subsistence activities).

If both boxes are checked, label this pathway complete:

Comments:

3. Ingestion of Wild and Farmed Foods

Is the site in an area that is used or reasonably could be used for hunting, fishing, or harvesting of wild or farmed foods?

Do the site contaminants have the potential to bioaccumulate (see Appendix C in the guidance document)?

Are site contaminants located where they would have the potential to be taken up into biota? (i.e. soil within the root zone for plants or burrowing depth for animals, in groundwater that could be connected to surface water, etc.)

If all of the boxes are checked, label this pathway complete:

Comments:

c) Inhalation-

1. Inhalation of Outdoor Air

Are contaminants present or potentially present in surface soil between 0 and 15 feet below the ground surface? (Contamination at deeper depths may require evaluation on a site specific basis.)

Are the contaminants in soil volatile (see Appendix D in the guidance document)?

If both boxes are checked, label this pathway complete:

Comments:

2. Inhalation of Indoor Air

Are occupied buildings on the site or reasonably expected to be occupied or placed on the site in an area that could be affected by contaminant vapors? (within 30 horizontal or vertical feet of petroleum contaminated soil or groundwater; within 100 feet of non-petroleum contaminated soil or groundwater; or subject to "preferential pathways," which promote easy airflow like utility conduits or rock fractures)

Are volatile compounds present in soil or groundwater (see Appendix D in the guidance document)?

If both boxes are checked, label this pathway complete:

Comments:

3. Additional Exposure Pathways: *(Although there are no definitive questions provided in this section, these exposure pathways should also be considered at each site. Use the guidelines provided below to determine if further evaluation of each pathway is warranted.)*

Dermal Exposure to Contaminants in Groundwater and Surface Water

Dermal exposure to contaminants in groundwater and surface water may be a complete pathway if:

- Climate permits recreational use of waters for swimming.
- Climate permits exposure to groundwater during activities, such as construction.
- Groundwater or surface water is used for household purposes, such as bathing or cleaning.

Generally, DEC groundwater cleanup levels in 18 AAC 75, Table C, are deemed protective of this pathway because dermal absorption is incorporated into the groundwater exposure equation for residential uses.

Check the box if further evaluation of this pathway is needed:

Comments:

Inhalation of Volatile Compounds in Tap Water

Inhalation of volatile compounds in tap water may be a complete pathway if:

- The contaminated water is used for indoor household purposes such as showering, laundering, and dish washing.
- The contaminants of concern are volatile (common volatile contaminants are listed in Appendix D in the guidance document.)

DEC groundwater cleanup levels in 18 AAC 75, Table C are protective of this pathway because the inhalation of vapors during normal household activities is incorporated into the groundwater exposure equation.

Check the box if further evaluation of this pathway is needed:

Comments:

Inhalation of Fugitive Dust

Inhalation of fugitive dust may be a complete pathway if:

- Nonvolatile compounds are found in the top 2 centimeters of soil. The top 2 centimeters of soil are likely to be dispersed in the wind as dust particles.
- Dust particles are less than 10 micrometers (Particulate Matter - PM₁₀). Particles of this size are called respirable particles and can reach the pulmonary parts of the lungs when inhaled.

DEC human health soil cleanup levels in Table B1 of 18 AAC 75 are protective of this pathway because the inhalation of particulates is incorporated into the soil exposure equation.

Check the box if further evaluation of this pathway is needed:

Comments:

Direct Contact with Sediment

This pathway involves people's hands being exposed to sediment, such as during some recreational, subsistence, or industrial activity. People then incidentally ingest sediment from normal hand-to-mouth activities. In addition, dermal absorption of contaminants may be of concern if the the contaminants are able to permeate the skin (see Appendix B in the guidance document). This type of exposure should be investigated if:

- Climate permits recreational activities around sediment.
- The community has identified subsistence or recreational activities that would result in exposure to the sediment, such as clam digging.

Generally, DEC direct contact soil cleanup levels in 18 AAC 75, Table B1, are assumed to be protective of direct contact with sediment.

Check the box if further evaluation of this pathway is needed:

Comments:

4. Other Comments *(Provide other comments as necessary to support the information provided in this form.)*

[Empty rectangular box for providing other comments]

Appendix A - HUMAN HEALTH CONCEPTUAL SITE MODEL GRAPHIC FORM

Site: _____

Completed By: _____

Date Completed: _____

Instructions: Follow the numbered directions below. Do not consider contaminant concentrations or engineering/land use controls when describing pathways.

(1) Media	(2) Transport Mechanisms
<input type="checkbox"/> Surface Soil (0-2 ft bgs)	<input type="checkbox"/> Direct release to surface soil <i>check soil</i>
	<input type="checkbox"/> Migration to subsurface <i>check soil</i>
	<input type="checkbox"/> Migration to groundwater <i>check groundwater</i>
	<input type="checkbox"/> Volatilization <i>check air</i>
	<input type="checkbox"/> Runoff or erosion <i>check surface water</i>
	<input type="checkbox"/> Uptake by plants or animals <i>check biota</i>
<input type="checkbox"/> Other (list): _____	
<input type="checkbox"/> Subsurface Soil (2-15 ft bgs)	<input type="checkbox"/> Direct release to subsurface soil <i>check soil</i>
	<input type="checkbox"/> Migration to groundwater <i>check groundwater</i>
	<input type="checkbox"/> Volatilization <i>check air</i>
	<input type="checkbox"/> Uptake by plants or animals <i>check biota</i>
	<input type="checkbox"/> Other (list): _____
<input type="checkbox"/> Ground-water	<input type="checkbox"/> Direct release to groundwater <i>check groundwater</i>
	<input type="checkbox"/> Volatilization <i>check air</i>
	<input type="checkbox"/> Flow to surface water body <i>check surface water</i>
	<input type="checkbox"/> Flow to sediment <i>check sediment</i>
	<input type="checkbox"/> Uptake by plants or animals <i>check biota</i>
<input type="checkbox"/> Other (list): _____	
<input type="checkbox"/> Surface Water	<input type="checkbox"/> Direct release to surface water <i>check surface water</i>
	<input type="checkbox"/> Volatilization <i>check air</i>
	<input type="checkbox"/> Sedimentation <i>check sediment</i>
	<input type="checkbox"/> Uptake by plants or animals <i>check biota</i>
	<input type="checkbox"/> Other (list): _____
<input type="checkbox"/> Sediment	<input type="checkbox"/> Direct release to sediment <i>check sediment</i>
	<input type="checkbox"/> Resuspension, runoff, or erosion <i>check surface water</i>
	<input type="checkbox"/> Uptake by plants or animals <i>check biota</i>
	<input type="checkbox"/> Other (list): _____

(3) Exposure Media	(4) Exposure Pathway/Route	(5) Current & Future Receptors						
		Residents (adults or children)	Commercial or Industrial workers	Site visitors, trespassers, or recreational users	Construction workers	Farmers or subsistence harvesters	Subsistence consumers	Other
<input type="checkbox"/> soil	<input type="checkbox"/> Incidental Soil Ingestion							
	<input type="checkbox"/> Dermal Absorption of Contaminants from Soil							
	<input type="checkbox"/> Inhalation of Fugitive Dust							
<input type="checkbox"/> groundwater	<input type="checkbox"/> Ingestion of Groundwater							
	<input type="checkbox"/> Dermal Absorption of Contaminants in Groundwater							
	<input type="checkbox"/> Inhalation of Volatile Compounds in Tap Water							
<input type="checkbox"/> air	<input type="checkbox"/> Inhalation of Outdoor Air							
	<input type="checkbox"/> Inhalation of Indoor Air							
	<input type="checkbox"/> Inhalation of Fugitive Dust							
<input type="checkbox"/> surface water	<input type="checkbox"/> Ingestion of Surface Water							
	<input type="checkbox"/> Dermal Absorption of Contaminants in Surface Water							
	<input type="checkbox"/> Inhalation of Volatile Compounds in Tap Water							
<input type="checkbox"/> sediment	<input type="checkbox"/> Direct Contact with Sediment							
<input type="checkbox"/> biota	<input type="checkbox"/> Ingestion of Wild or Farmed Foods							

Arcadis U.S., Inc.
500 Ala Moana Boulevard, Suite 7400
Honolulu
Hawaii 96813
Phone: 808 522 0321
Fax: 808 522 0366
www.arcadis.com