Transmittal

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To: Robert Weimer
Alaska Department of Environmental Conservation (ADEC)
555 Cordova Street
Anchorage, Alaska 95501

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1	First Semiannual 2018 Groundwater Monitoring Report	Report 54	

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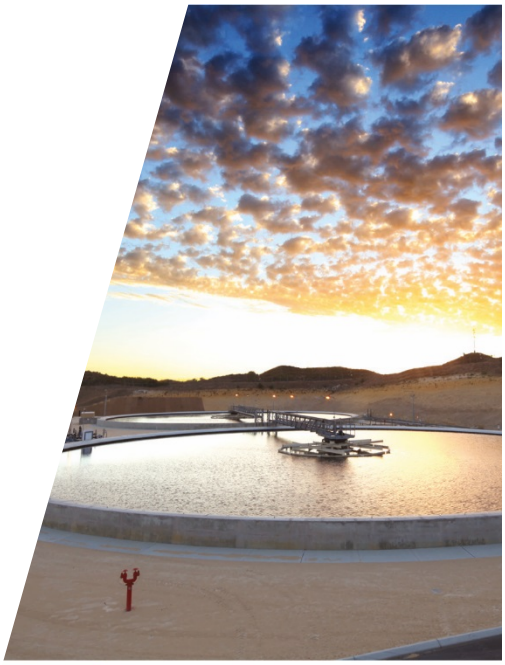
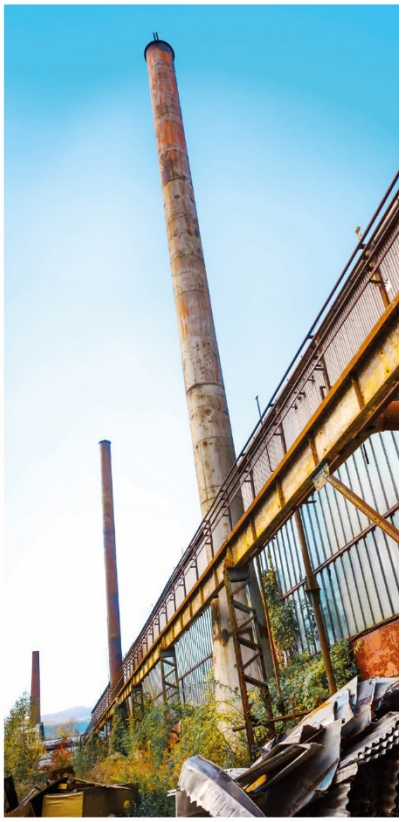


First Semiannual 2018 Groundwater Monitoring Report

Former Unocal Service Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska
ADEC File ID: 2100.26.117
Hazard ID: 23360



Chevron Environmental Management Company

First Semiannual 2018 Groundwater Monitoring Report

Former Unocal Service Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska
ADEC File ID: 2100.26.117
Hazard ID: 23360

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Acronyms and Abbreviations

AAC	Alaska Administrative Code
ADEC	Alaska Department of Environmental Conservation
BTEX	benzene, toluene, ethylbenzene, and xylenes
COPCs	constituents of potential concern
CSM	conceptual site model
DRO	diesel range organics
EPA	Environmental Protection Agency
ft btoc	feet below top of casing
GAC	granular activated carbon
GHD	GHD Services, Inc.
GRO	gasoline range organics
No	number
P.G.	Professional Geologist
UST	underground storage tank
VOCs	volatile organic compounds

1. Introduction

GHD is submitting this *First Semiannual 2018 Groundwater Monitoring Report* to the Alaska Department of Environmental Conservation (ADEC) on behalf of Chevron Environmental Management Company (Chevron) for former Unocal service station 4652/Chevron Site 306448. Groundwater monitoring and sampling was performed by GHD in accordance with the ADEC's August 2017 Field Sampling Guidance. Reporting was performed by GHD in accordance with ADEC's March 7, 2017 Site Characterization Work Plan and Reporting Guidance for Investigation of Contaminated Sites.

Project objectives are to monitor current groundwater conditions to evaluate petroleum hydrocarbon attenuation.

1.1 Site Description and Background

The site is located at 1441 C Street in Anchorage, Alaska (Figure 1). The property's legal description is THIRD ADDITION BLK 31D LT 7A. The latitude and longitude are 61.208085° north and 149.887301° west. The site operated as a Unocal service station consisting of three underground storage tanks (USTs), dispenser islands, and piping. The site was demolished in 1987 and is currently a vacant lot.

Land use surrounding the site is primarily commercial with some residential. An apartment complex is located north of the site. Businesses are located south, east and west of the site.

Five groundwater monitoring wells are present onsite and three groundwater monitoring wells are located offsite to the south. Three onsite and three offsite wells are monitored and sampled semiannually (Figure 2). Site photographs are presented in Appendix A.

1.2 Hydrogeology

The site is located in south central Alaska east of Cook Inlet. Historical static groundwater depths have ranged between 3.33 and 14.11 feet below top of casing (ft btoc) from 1986 to present. Static groundwater depths ranged from 5.11 (MW-23) to 10.53 ft btoc (MW-19) on June 7, 2018. Groundwater flow was to the southeast with a gradient of 0.07, which is consistent with historical data (Figure 2).

1.3 Conceptual Site Model

GHD completed a conceptual site model (CSM) for this site. Human health CSM scoping and graphics forms are included as Appendix B.

1.4 Constituents of Potential Concern - Cleanup Levels

Site constituents of potential concern (COPCs) are:

Table 1.1 Constituents of Potential Concern

COPCs	ADEC Cleanup Levels	
	Groundwater (mg/L)	Soil (mg/kg)
DRO	1.5	250
GRO	2.2	300
Benzene	0.0046	0.022

mg/L - milligrams per liter
mg/kg - milligrams per kilogram
DRO - diesel range organics
GRO - gas range organics

ADEC Table C Groundwater Cleanup Levels (Title 18 Alaska Administrative Code (AAC) 75.345) and ADEC Method Two Soil Cleanup Levels, Tables B1 and B2, under 40 inch zone, migration to groundwater (Title 18 AAC 75.341) are the default site cleanup levels for groundwater and soil.

2. Groundwater Monitoring and Sampling

GHD gauged groundwater monitoring wells MW-4, MW-5, MW-11A, and MW-19 through MW-23 and sampled groundwater monitoring wells MW-11A, and MW-19 through MW-23 on June 7, 2018. The monitoring data package is presented in Appendix C.

2.1 Low Flow Purge and Sampling

Prior to monitoring, each monitoring well was opened and the cap removed to allow groundwater levels to stabilize and equilibrate. Depth to groundwater and total well depth were measured using a water level meter capable of 0.01 foot accuracy. A QED™ Sample Pro bladder pump with a self contained compressor and control unit was used to purge groundwater from the well. Clean, disposable Teflon™ lined tubing and a bladder was used to purge the well and collect samples to minimize the risk of volatile contaminant absorption by the sampling equipment. Drawdown of the water table was continuously monitored during purging with a water level meter and the flow rate of the pump was adjusted so that drawdown was limited to 0.1 meter, or 0.3 feet. The intake of the pump was set as close as possible to the soil/groundwater interface and caution was exercised to ensure that the water table was within the screened interval of the well. Water quality parameters were continuously monitored during purging using a multi parameter water quality meter equipped with a flow through cell and a turbidity meter. Water quality parameters were recorded every 3 to 5 minutes until a minimum of three (minimum of four if using temperature as an indicator) of the parameters listed below stabilized. A grab groundwater sample was collected upon stabilization. Water quality parameters are considered stable when three successive readings are within the following ADEC limits:

- temperature: ± 3% (minimum of ± 2°C).

- pH: ± 0.1
- conductivity: ± 3 percent
- oxidation/reduction potential: ± 10 millivolts
- dissolved oxygen: ± 10 percent
- turbidity: ± 10 percent

Groundwater samples, including a duplicate sample, were collected in clean sampling media and submitted under chain of custody to Eurofins Lancaster Laboratories of Lancaster, Pennsylvania.

2.2 Data Quality

All field instruments were calibrated prior to each mobilization according to the manufacturer's specifications and calibration was checked and documented onsite on a daily basis. Calibration forms are included in Appendix C. All field staff are trained in routine operation and maintenance of instruments. All reusable sampling equipment was decontaminated between wells with a stiff brush and laboratory-grade detergent and rinsed twice with clean water and once with distilled water.

Samples analyzed for VOCs were collected before samples for non-volatile compounds. Groundwater samples, including one duplicate per ten samples collected, were collected directly into clean containers supplied by the laboratory, placed on ice in an insulated cooler, chilled to approximately 4°C (+/-2°C). Coolers were sealed and shipped to Eurofins analytical laboratory under chain-of-custody. Laboratory data was qualified by a GHD chemist and an ADEC lab checklist was completed.

2.3 Purged Groundwater Disposal

Approximately 5.9 gallons of groundwater were filtered through a granular activated carbon (GAC) bucket in a permeable area near the center of the site.

3. Results and Findings

3.1 Groundwater Analytical Methods

Collected groundwater samples were analyzed for one or more of the following:

- DRO by Alaska Series Method AK 102
- GRO by Alaska Series Method AK 101
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by SW-846 Method 8260

3.2 Groundwater Sampling Results

No DRO, GRO or benzene was detected above ADEC Table C Groundwater Cleanup Levels in samples from MW-19, MW-21, MW-22, and MW-23. MW-20 contained the highest concentration of DRO (4.7 milligrams per liter (mg/L), GRO (46 mg/L), and benzene (0.18 mg/L). Current groundwater analytical data is presented in Table 1. Historical groundwater analytical data is

presented in Table 2 and groundwater PAH analytical data is presented in Table 3. The laboratory analytical report is presented in Appendix D. Petroleum hydrocarbon concentration graphs are presented in Appendix E.

Laboratory data was qualified by a senior GHD chemist. Based on the quality assurance/quality control review, the data submitted were judged to be acceptable for use with the qualifications noted. The ADEC Laboratory Data Review Checklist and Memorandum are presented as Appendix F.

4. Conclusions and Recommendations

No DRO, GRO or benzene was detected above regulatory cleanup levels in wells MW-19, and offsite wells MW-21, MW-22, and MW-23. Petroleum hydrocarbon concentrations are stable and localized near the former dispenser islands. GHD requests to suspend sampling wells MW-22 and MW-23 as no petroleum hydrocarbons have been detected above regulatory cleanup levels since 2013. MW-21 will continue to be sampled as the downgradient well. GHD will continue to conduct semiannual groundwater monitoring and sampling in 2018.

about GHD

GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. We provide engineering, environmental, and construction services to private and public sector clients.

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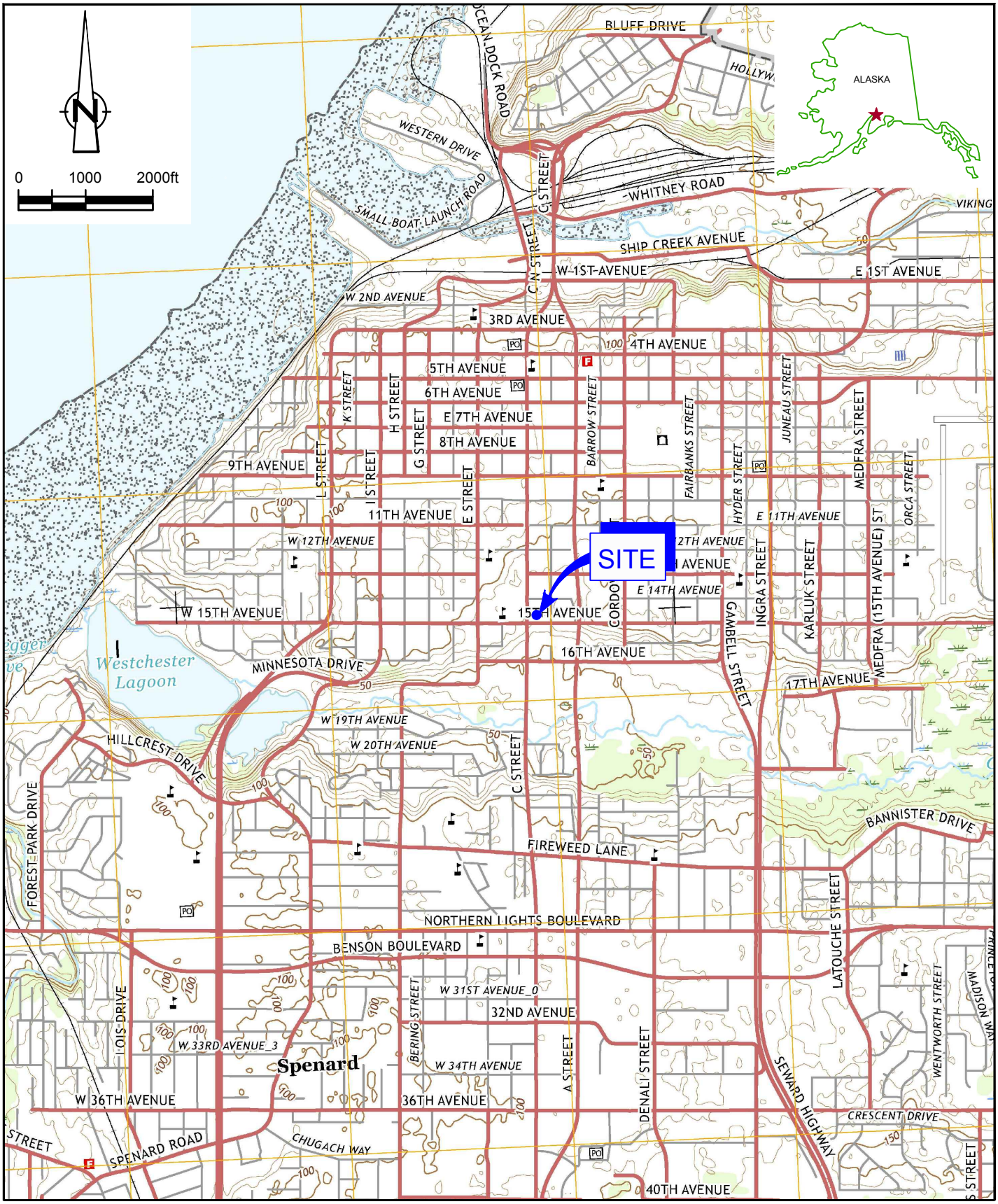
Figures



SOURCE: USGS QUAD MAP; ANCHORAGE A-8 NW, AK, 2015.

FORMER UNOCAL STATION 4652/CHEVRON SITE 306448
1441 C STREET
ANCHORAGE, ALASKA

621049-95

Jul 4, 2018

VICINITY MAP

FIGURE 1

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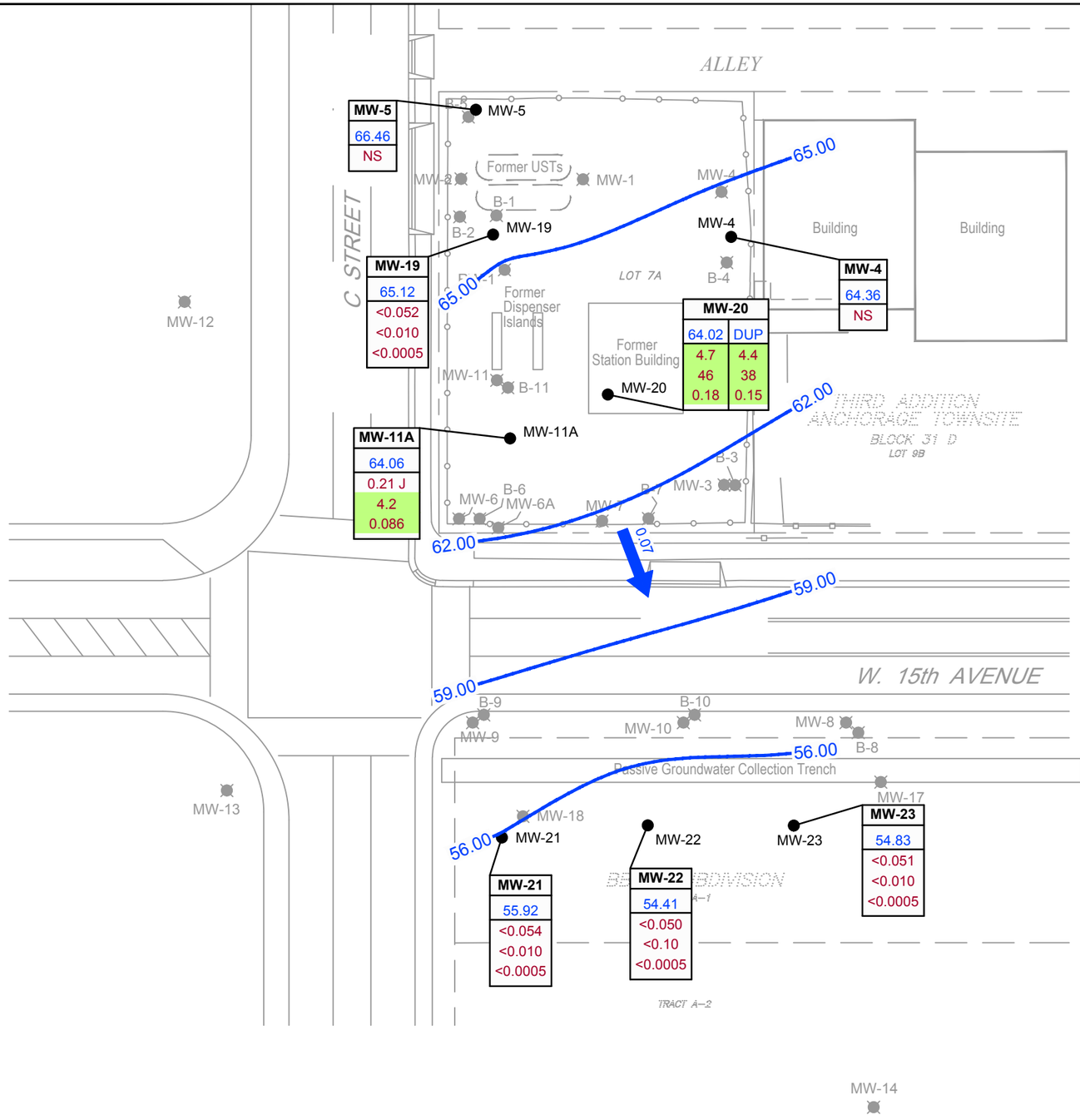


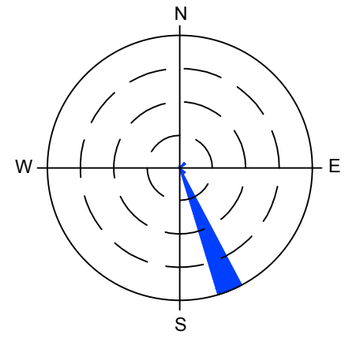
LEGEND

- MONITORING WELL LOCATION
- DESTROYED WELL LOCATION
- 65.00 — GROUNDWATER ELEVATION CONTOUR, IN FEET ABOVE MEAN SEA LEVEL (FT MSL)
- 0.07 — GROUNDWATER FLOW DIRECTION AND GRADIENT

MW-19	WELL DESIGNATION
65.12	GROUNDWATER ELEVATION
<.0.052	DRO CONCENTRATION (mg/L)
<0.010	GRO CONCENTRATION (mg/L)
<0.0005	BENZENE CONCENTRATION (mg/L)

- mg/L — MILLIGRAMS PER LITER
- J — ESTIMATED VALUE BETWEEN METHOD DETECTION LIMIT AND LABORATORY REPORTING LIMIT
- NS — NOT SAMPLED

RESULTS HIGHLIGHTED GREEN MEET OR EXCEED ADEC TABLE C GROUNDWATER CLEANUP LEVEL (18 AAC 75.345)



Historic Groundwater Flow Direction
2007 - 2018

0 20 40ft

FORMER UNOCAL STATION 4652/CHEVRON SITE 306448
1441 C STREET
ANCHORAGE, ALASKA

GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP - JUNE 7, 2018

621049-95
Jul 9, 2018

FIGURE 2

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Tables

Table 1

Current Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS		PRIMARY VOCS			
	Units	ft msl	ft btoc	ft msl	DRO mg/L	GRO mg/L	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**	**0.0046**	**1.1**	**0.015**	**0.19**
MW-4	06/07/2018 [1]	73.14	8.78	64.36	--	--	--	--	--	--
MW-5	06/07/2018 [1]	76.35	9.89	66.46	--	--	--	--	--	--
MW-11A	06/07/2018	73.45	9.39	64.06	0.21 J	**4.2**	**0.086**	0.0008 J	0.014	**0.76**
MW-19	06/07/2018	75.65	10.53	65.12	<0.052	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MW-20	06/07/2018	73.73	9.71	64.02	**4.7 / 4.4**	**46 / 38**	**0.18 / 0.15**	**1.3** / 0.95	**1.5 / 1.2**	**9.9 / 7.7**
MW-21	06/07/2018	62.87	6.95	55.92	<0.054	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
MW-22	06/07/2018	60.88	6.47	54.41	<0.050	<0.10	<0.0005	<0.0005	<0.0005	<0.0005
MW-23	06/07/2018	59.94	5.11	54.83	<0.051	<0.010	<0.0005	<0.0005	<0.0005	<0.0005
QA	06/07/2018	--	--	--	--	<0.010	<0.0005	<0.0005	<0.0005	<0.0005

Table 1

Current Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Notes and Abbreviations

TOC = top of casing
DTW = depth to water
GWE = groundwater elevation
TPH = total petroleum hydrocarbons
DRO = diesel range organics by Alaska Series Method AK102
GRO = gasoline range organics by Alaska Series Method AK101
Benzene, Toluene, Ethylbenzene, and Total Xylenes by Environmental Protection Agency (EPA) Method 8021B or 8260B or SW-E46 8021B
Total Xylenes = Sum of m-, o-, and p-xylenes
VOC = volatile organic compounds by EPA Method 524.2
ADEC = Alaska Department of Environmental Conservation
[a] = Levels established in ADEC Table C Groundwater Cleanup Levels (18 AAC 75.345)
BOLD = Indicates concentration above the ADEC Table C Groundwater Cleanup Level
ft msl = feet above mean sea level
ft btoc = feet below top of casing
mg/L = milligrams per liter
J = Estimated value
- = Not measured / not analyzed
<x = Constituent not detected above x milligrams per liter
x / y = Sample results / blind duplicate results
[1] = Monitor only

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-1	09/06/1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-1	03/19/1987	-	-	-	-	-	0.3	0.84	**7.39**	**3.19**	**0.054**	1.136	-	-	-
MW-1	10/09/1987	-	-	-	-	-	3.52	-	**22.6**	**1.1**	**0.046**	0.402	-	-	-
MW-1	01/16/1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	03/19/1987	-	-	-	-	-	6.8	13	**8.28**	**21.1**	**4.26**	**13.48**	-	-	-
MW-2	10/09/1987	-	-	-	-	-	7.69	-	**18.1**	**29.9**	**3.28**	**12.87**	-	-	-
MW-2	01/16/1988	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-3	08/02/1986	100.07	5.19	94.88	-	-	-	-	-	-	-	-	-	-	-
MW-3	09/06/1986	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-3	09/22/1986	100.07	5.29	94.78	-	-	-	-	-	-	-	-	-	-	-
MW-3	03/19/1987	100.07	6.79	93.28	-	-	0.7	1.7	**0.694**	0.012	**0.069**	**0.275**	-	-	-
MW-3	10/09/1987	100.07	5.33	94.74	-	-	0.26	-	**0.23**	0.028	**0.0175**	**0.275**	-	-	-
MW-3	01/16/1988	100.07	6.45	93.62	-	-	0.012	0.31	**0.653**	0.007	**0.06**	**0.215**	-	-	-
MW-3	05/03/1988	100.07	3.89	96.18	-	-	2.4	7.7	0.002	<0.0002	<0.0002	0.0019	-	-	-
MW-3	07/26/1988	100.07	5.21	94.86	-	-	1.1	-	**0.56**	<0.001	0.0098	<0.001	-	-	-
MW-3	11/17/1988	100.07	5.45	94.62	-	-	1.3	-	**1.1**	0.0075	**0.4**	**2.4**	-	-	-
MW-3	03/13/1989	100.07	6.89	93.18	-	-	1.5	-	**0.87**	0.0068	**0.034**	**0.29**	ND	-	-
MW-3	07/26/1989	100.07	4.85	95.22	-	-	0.8	-	**0.16**	0.023	0.0079	0.066	-	-	-
MW-3	10/09/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/02/1986	102.17	5.16	97.01	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/22/1986	102.17	4.77	97.40	-	-	-	-	-	-	-	-	-	-	-
MW-4	10/08/1987	102.17	5.34	96.83	-	-	0.15	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-4	01/15/1988	102.17	5.96	96.21	-	-	0.15	0.17	<0.001	0.0033	<0.001	<0.001	-	-	-
MW-4	05/03/1988	102.17	4.29	97.88	-	-	0.8	7.4	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-
MW-4	07/26/1988	102.17	5.10	97.07	-	-	<0.5	-	0.0002	<0.0002	<0.0002	<0.0002	-	-	-
MW-4	11/17/1988	102.17	5.38	96.79	-	-	<0.4	-	0.0002	0.0005	0.0003	0.0014	-	-	-
MW-4	03/13/1989	102.17	6.30	95.87	-	-	0.45	-	<0.0002	0.0003	<0.0002	0.0009	0.0045	-	-
MW-4	07/26/1989	102.17	4.10	98.07	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-
MW-4	09/27/1990	102.17	5.35	96.82	-	-	<0.4	-	0.003	<0.0002	<0.0002	<0.0002	-	-	-
MW-4	10/09/1990	102.17	5.10	97.07	-	-	2	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-4	03/28/1991	102.17	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	04/19/1991	102.17	5.67	96.50	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/15/1991	102.17	6.04	96.13	-	-	-	-	-	-	-	-	-	-	-
MW-4	07/12/1991	102.17	6.56	95.61	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/26/1991	105.29	9.01	96.28	<0.10	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-4	10/11/1991	105.29	9.32	95.97	-	-	-	-	-	-	-	-	-	-	-
MW-4	01/10/1992	105.29	9.10	96.19	-	-	-	-	-	-	-	-	-	-	-
MW-4	02/17/1992	105.29	10.06	95.23	<0.10	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-4	03/31/1992	105.29	8.91	96.38	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/19/1992	105.29	8.94	96.35	**14** / **16**	<0.1 / <0.1	<1 / <1	-	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	<0.001 / <0.001	-	-	-
MW-4	06/30/1992	105.29	8.90	96.39	-	-	-	-	-	-	-	-	-	-	-
MW-4	07/15/1992	105.29	9.15	96.14	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/28/1992	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-4	10/04/2007	72.25	7.79	64.46	-	-	-	-	-	-	-	-	-	-	-
MW-4	06/19/2008	72.25	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	08/28/2008	73.14	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/19/2011	73.14	8.64	64.50	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/28/2012	73.14	8.52	64.62	-	-	-	-	-	-	-	-	-	-	-
MW-4	07/31/2012	73.14	8.79	64.35	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/08/2013	73.14	7.55	65.59	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/17/2013	73.14	7.77	65.37	-	-	-	-	-	-	-	-	-	-	-
MW-4	06/07/2014	73.14	8.67	64.47	-	-	-	-	-	-	-	-	-	-	-
MW-4	11/04/2014	73.14	8.82	64.32	-	-	-	-	-	-	-	-	-	-	-
MW-4	04/27/2015	73.14	8.83	64.31	-	-	-	-	-	-	-	-	-	-	-
MW-4	10/23/2015	73.14	7.80	65.34	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/17/2016	73.14	8.68	64.46	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/15/2016	73.14	7.91	65.23	-	-	-	-	-	-	-	-	-	-	-
MW-4	05/09/2017	73.14	8.37	64.77	-	-	-	-	-	-	-	-	-	-	-
MW-4	09/01/2017	73.14	8.11	65.03	-	-	-	-	-	-	-	-	-	-	-
MW-4	06/07/2018	73.14	8.78	64.36	-	-	-	-	-	-	-	-	<	-	-
MW-5	08/02/1986	105.38	7.14	98.24	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/22/1986	105.38	7.98	97.40	-	-	-	-	-	-	-	-	-	-	-
MW-5	03/19/1987	105.38	8.04	97.34	-	-	0.06	0.19	0.0033	0.0074	0.0047	<0.0154	-	-	-
MW-5	10/09/1987	105.38	7.21	98.17	-	-	0.16	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	01/16/1988	105.38	7.78	97.60	-	-	0.6	2.7	<0.001	**13**	**0.025**	0.054	-	-	-
MW-5	05/03/1988	105.38	6.03	99.35	-	-	1.3	5.8	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-
MW-5	07/26/1988	105.38	6.99	98.39	-	-	<0.5	-	<0.0002	0.0004	<0.0002	<0.0002	-	-	-
MW-5	11/17/1988	105.38	7.13	98.25	-	-	<0.4	-	<0.0002	0.0008	0.0003	0.0015	-	-	-
MW-5	03/13/1989	105.38	8.25	97.13	-	-	<0.6	-	<0.0002	0.0003	<0.0002	0.0006	-	-	-
MW-5	07/26/1989	105.38	6.24	99.14	-	-	<0.4	-	<0.0002	<0.002	<0.0002	<0.0006	-	-	-
MW-5	05/19/1990	-	-	-	-	-	0.8	-	<0.0002	<0.002	<0.0002	<0.0006	-	-	-
MW-5	10/02/1990	105.38	6.52	98.86	-	-	2.4	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	03/28/1991	105.38	8.12	97.26	-	-	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	04/19/1991	105.38	6.72	98.66	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/15/1991	105.38	6.81	98.57	-	-	-	-	-	-	-	-	-	-	-
MW-5	07/12/1991	105.38	8.12	97.26	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/26/1991	105.38	10.47	94.91	<0.10	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	10/11/1991	105.38	10.71	94.67	-	-	-	-	-	-	-	-	-	-	-
MW-5	01/10/1992	108.59	11.38	97.21	-	-	-	-	-	-	-	-	-	-	-
MW-5	02/17/1992	108.59	11.66	96.93	<0.10	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	03/31/1992	108.59	11.11	97.48	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/19/1992	108.59	9.84	98.75	1.2	<0.1	1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-5	06/30/1992	108.59	10.22	98.37	-	-	-	-	-	-	-	-	-	-	-
MW-5	07/15/1992	108.59	10.45	98.14	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/28/1992	108.59	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	10/04/2007	74.94	9.40	65.54	-	-	-	-	-	-	-	-	-	-	-
MW-5	06/19/2008	74.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-5	08/28/2008	76.35	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-5	05/19/2011	76.35	9.84	66.51	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/28/2012	76.35	9.33	67.02	-	-	-	-	-	-	-	-	-	-	-
MW-5	07/31/2012	76.35	9.96	66.39	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/08/2013	76.35	9.65	66.70	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/17/2013	76.35	8.85	67.50	-	-	-	-	-	-	-	-	-	-	-
MW-5	06/07/2014	76.35	10.04	66.31	-	-	-	-	-	-	-	-	-	-	-
MW-5	11/04/2014	76.35	10.14	66.21	-	-	-	-	-	-	-	-	-	-	-
MW-5	04/27/2015	76.35	10.43	65.92	-	-	-	-	-	-	-	-	-	-	-
MW-5	10/23/2015	76.35	9.09	67.26	-	-	-	-	-	-	-	-	-	-	-
MW-5	05/17/2016	76.35	10.08	66.27	0.061 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-5	09/15/2016	76.35	9.83	66.52	**-**	**-**	-	-	**-**	**-**	**-**	**-**	**-**	**-**	**-**
MW-5	05/09/2017	76.35	9.53	66.82	-	-	-	-	-	-	-	-	-	-	-
MW-5	09/01/2017	76.35	9.31	67.04	-	-	-	-	-	-	-	-	-	-	-
MW-5	06/07/2018	76.35	9.89	66.46	-	-	-	-	-	-	-	-	<	-	-
MW-6	08/02/1986	101.56	5.54	96.02	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/06/1986	101.56	-	-	-	-	-	-	**14**	**17**	**2.1**	**14**	-	-	-
MW-6	09/22/1986	101.56	5.68	95.88	-	-	-	-	-	-	-	-	-	-	-
MW-6	03/19/1987	101.56	7.27	94.29	-	-	12	24	**14.3**	**19**	**2.39**	**14.5**	-	-	-
MW-6	10/09/1987	101.56	6.01	95.55	-	-	11.3	-	**18.7**	**31.2**	**2.77**	**18.74**	-	-	-
MW-6	01/16/1988	101.56	6.75	94.81	-	-	6.6	9.4	**23.9**	**28.4**	**1.85**	**17.9**	-	-	-
MW-6	05/03/1988	101.56	4.46	97.10	-	-	6.8	7.6	**1.4**	**3.6**	**0.59**	**5.8**	-	-	-
MW-6	07/26/1988	101.56	5.60	95.96	-	-	10.1	-	**15**	**27**	**1.4**	**13**	-	-	-
MW-6	11/17/1988	101.56	5.99	95.57	-	-	6.9	-	**16**	**24**	**2.8**	**16**	ND	-	-
MW-6	03/13/1989	101.56	6.46	95.10	-	-	12.8	-	**8.5 / 10**	**7.3 / 8.7**	**0.56 / 0.76**	**5.9 / 4.4**	-	-	-
MW-6	07/26/1989	101.56	4.98	96.58	-	-	10.7	-	**17**	**23**	**10**	**14**	-	-	-
MW-6	10/09/1989	101.56	4.78	96.78	-	-	-	-	-	-	-	-	-	-	-
MW-6	09/27/1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6A	10/09/1989	101.20	-	-	-	-	-	-	-	-	-	-	0.246	-	-
MW-6A	09/27/1990	101.20	9.74	91.46	-	-	-	-	-	-	-	-	-	-	-
MW-6A	10/02/1990	101.20	9.84	91.36	-	-	14.8	-	**0.706**	**1.13**	**0.11**	**0.975**	-	-	-
MW-6A	03/28/1991	101.20	9.89	91.31	-	-	-	-	-	-	-	-	-	-	-
MW-6A	05/15/1991	101.20	9.74	91.46	-	-	-	-	-	-	-	-	-	-	-
MW-6A	07/12/1991	101.20	10.38	90.82	-	-	-	-	-	-	-	-	-	-	-
MW-6A	09/26/1991	101.20	9.76	91.44	**2.7**	**30**	2.5	-	**8.7**	**8.4**	**0.9**	**0.975**	-	-	-
MW-6A	10/11/1991	101.20	9.75	91.45	-	-	-	-	-	-	-	-	-	-	-
MW-6A	01/10/1992	101.20	10.08	91.12	-	-	-	-	-	-	-	-	-	-	-
MW-6A	02/17/1992	101.20	11.14	90.06	0.36	**16**	1.4	-	**1.9**	0.24	<0.001	<0.001	-	-	-
MW-6A	03/31/1992	101.20	9.44	91.76	-	-	-	-	-	-	-	-	-	-	-
MW-6A	05/19/1992	101.20	7.82	93.38	**78**	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-6A	06/30/1992	101.20	9.58	91.62	-	-	-	-	-	-	-	-	-	-	-
MW-6A	07/15/1992	101.20	9.60	91.60	-	-	-	-	-	-	-	-	-	-	-
MW-6A	08/28/1992	101.20	9.64	91.56	-	-	-	-	**2.7**	**1.3**	**0.71**	**2.62**	-	-	-
MW-6A	10/13/1992	101.20	5.63	95.57	-	-	-	-	-	-	-	-	-	-	-
MW-6A	11/21/1992	101.20	9.23	91.97	-	-	-	-	**1.3** / **1.7**	0.30 / 0.31	**0.23 / 0.22**	**0.67 / 0.68**	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-6A	12/17/1992	101.20	9.50	91.70	-	-	-	-	**1.6**	0.39	**0.58**	**2.1**	-	-	-
MW-6A	01/25/1993	101.20	9.85	91.35	-	-	-	-	-	-	-	-	-	-	-
MW-6A	02/10/1993	101.20	9.91	91.29	-	-	-	-	**1.1**	0.003	**0.35**	**0.55**	-	-	-
MW-6A	03/08/1993	101.20	9.91	91.29	-	-	-	-	-	-	-	-	-	-	-
MW-6A	03/16/1993	101.20	9.83	91.37	-	-	-	-	-	-	-	-	-	-	-
MW-6A	04/14/1993	101.20	9.37	91.83	-	-	-	-	-	-	-	-	-	-	-
MW-6A	05/05/1993	101.20	9.16	92.04	-	-	-	-	**1.3**	0.29	**0.39**	**0.99**	-	-	-
MW-6A	06/15/1993	101.20	8.09	93.11	-	-	-	-	-	-	-	-	-	-	-
MW-6A	07/19/1993	101.20	8.58	92.62	-	-	-	-	-	-	-	-	-	-	-
MW-6A	08/20/1993	101.20	11.28	89.92	-	-	-	-	**1.8**	<0.05	**0.40**	**0.70**	-	-	-
MW-6A	03/20/1996	-	-	-	-	**5.100**	-	-	**1.100**	0.011	**0.091**	**0.350**	-	-	-
MW-6A	03/19/1997	-	-	-	-	0.960	-	-	**0.356**	<0.00250	<0.00250	<0.00500	-	-	-
MW-6A	12/10/1997	-	-	-	-	0.0988	-	-	**0.0450**	<0.000500	<0.000500	<0.00100	-	-	-
MW-6A	11/20/1998	-	-	-	-	0.115	-	-	**0.0397**	<0.000500	0.00338	0.0053	-	-	-
MW-6A	01/19/2000	68.76	7.49	61.27	-	**3.150**	-	-	**0.605**	0.00464	**0.104**	**0.400**	-	-	-
MW-7	08/02/1986	100.40	4.72	95.68	-	-	-	-	-	-	-	-	-	-	-
MW-7	09/06/1986	100.40	-	-	-	-	-	-	**2.4**	**4.9**	**0.39**	**5.6**	-	-	-
MW-7	09/22/1986	100.40	4.79	95.61	-	-	-	-	-	-	-	-	-	-	-
MW-7	03/19/1987	100.40	4.59	95.81	-	-	18	27	**6.03**	**12.3**	**2.66**	**13.9**	-	-	-
MW-7	10/09/1987	100.40	5.00	95.40	-	-	9.28	-	**8.4**	**19.8**	**2.07**	**18**	-	-	-
MW-7	01/16/1988	100.40	5.72	94.68	-	-	3.2	7.1	**8.2**	**3.9**	**2.4**	**17.5**	-	-	-
MW-7	05/03/1988	100.40	3.33	97.07	-	-	7.3	7.5	**6.3**	**17**	**1.1**	**9.9**	-	-	-
MW-7	07/26/1988	100.40	4.68	95.72	-	-	10.6	-	**6.4**	**15**	**1.5**	**11**	-	-	-
MW-7	11/17/1988	100.40	5.02	95.38	-	-	8	-	**7.8**	**12**	**2.7**	**14**	-	-	-
MW-7	03/13/1989	100.40	6.35	94.05	-	-	8.9	-	**8.1**	**8.5**	**0.63**	**4.2**	ND	-	-
MW-7	07/26/1989	100.40	3.38	97.02	-	-	10.8	-	**5**	**17**	**1.1**	**16**	0.123	-	-
MW-7	10/09/1989	100.40	3.76	96.64	-	-	-	-	-	-	-	-	-	-	-
MW-7	05/19/1990	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	09/06/1986	96.80	-	-	-	-	-	-	**0.2**	0.031	<0.001	**0.79**	-	-	-
MW-8	09/22/1986	96.80	6.31	90.49	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/19/1987	96.80	7.84	88.96	-	-	3.4	6.6	**1.34**	0.875	**1.04**	**4.64**	-	-	-
MW-8	10/09/1987	96.80	6.50	90.30	-	-	0.26	-	**0.116**	0.608	**0.0177**	**55.7**	-	-	-
MW-8	01/16/1988	96.80	7.28	89.52	-	-	0.57	4.5	**0.278**	0.394	**0.046**	**0.304**	-	-	-
MW-8	05/03/1988	96.80	5.40	91.40	-	-	1.5	6.8	<0.0002	<0.0002	<0.0002	0.0006	-	-	-
MW-8	07/26/1988	96.80	6.17	90.63	-	-	0.8	-	<0.0002	<0.0002	<0.0002	<0.0002	-	-	-
MW-8	11/17/1988	96.80	6.57	90.23	-	-	0.6	-	**0.097**	0.0047	**0.065**	**0.27**	-	-	-
MW-8	03/13/1989	96.80	8.43	88.37	-	-	3.8	-	**1.4**	0.061	**0.97**	**4.9**	ND	-	-
MW-8	07/26/1989	96.80	5.86	90.94	-	-	1.6	-	**0.91**	0.0022	**0.28**	**1.5**	-	-	-
MW-8	10/09/1989	96.80	5.58	91.22	-	-	-	-	-	-	-	-	-	-	-
MW-8	05/19/1990	96.80	-	-	-	-	2.1	-	<0.0002	<0.0002	<0.0002	<0.0002	0.024	-	-
MW-8	10/02/1990	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/28/1991	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	05/15/1991	96.80	10.45	86.35	-	-	-	-	-	-	-	-	-	-	-
MW-8	07/12/1991	96.80	10.20	86.60	-	-	-	-	-	-	-	-	-	-	-

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Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
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Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-8	09/26/1991	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/17/1992	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	05/18/1992	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	06/30/1992	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	08/28/1992	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	10/13/1992	96.80	8.20	88.60	-	-	-	-	-	-	-	-	-	-	-
MW-8	11/21/1992	96.80	8.74	88.06	-	-	-	-	**2.0**	0.01	**0.18**	**0.82**	-	-	-
MW-8	12/17/1992	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	01/25/1993	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	02/10/1993	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/08/1993	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/16/1993	96.80	10.18	86.62	-	-	-	-	-	-	-	-	-	-	-
MW-8	04/14/1993	96.80	8.45	88.35	-	-	-	-	-	-	-	-	-	-	-
MW-8	05/05/1993	96.80	8.45	88.35	-	-	-	-	**0.47**	<0.005	**0.016**	0.02	-	-	-
MW-8	06/15/1993	96.80	8.98	87.82	-	-	-	-	-	-	-	-	-	-	-
MW-8	07/19/1993	96.80	9.36	87.44	-	-	-	-	-	-	-	-	-	-	-
MW-8	08/20/1993	96.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-8	03/20/1996	-	-	-	-	**6.500**	-	-	**1.200**	0.013	**0.036**	**1.400**	-	-	-
MW-8	03/19/1997	-	-	-	-	**2.820**	-	-	**0.618**	0.00545	**0.0276**	**0.547**	-	-	-
MW-8	12/10/1997	-	-	-	-	<0.0500	-	-	**0.00506**	<0.000500	0.000568	0.00405	-	-	-
MW-8	11/20/1998	-	-	-	-	<0.0500	-	-	**0.0123**	<0.000500	0.00156	0.00397	-	-	-
MW-8	01/19/2000	64.35	8.57	55.78	-	**10.100**	-	-	**0.535**	0.197	**0.748**	**4.090**	-	-	-
MW-9	09/06/1986	100.00	-	-	-	-	-	-	**3.3**	0.034	**0.15**	**0.56**	-	-	-
MW-9	09/22/1986	100.00	9.05	90.95	-	-	-	-	-	-	-	-	-	-	-
MW-9	03/19/1987	100.00	10.03	89.97	-	-	3.1	5.1	**4.71**	0.071	**0.073**	**2.896**	-	-	-
MW-9	10/09/1987	100.00	9.54	90.46	-	-	2.24	-	**5.43**	0.607	**0.0985**	**3.189**	-	-	-
MW-9	01/16/1988	100.00	9.60	90.40	-	-	0.44	0.96	**4.8**	0.583	**0.492**	**1.894**	-	-	-
MW-9	05/03/1988	100.00	8.02	91.98	-	-	4.9	5.9	**5.3**	0.062	<0.04	**0.96**	-	-	-
MW-9	07/26/1988	100.00	6.30	93.70	-	-	2.7	-	**6.7**	0.85	**0.22**	**2.6**	-	-	-
MW-9	11/17/1988	100.00	9.20	90.80	-	-	1.7	-	**6.2 / 4.4**	0.2 / 0.042	**0.63 / 0.52**	**1.8 / 1.3**	-	-	-
MW-9	03/13/1989	100.00	10.86	89.14	-	-	3.1	-	**8.4**	0.06	**0.52**	**2**	ND	-	-
MW-9	07/26/1989	100.00	8.77	91.23	-	-	3.7	-	**8.2**	0.21	<0.1	**0.96**	-	-	-
MW-9	10/09/1989	100.00	7.96	92.04	-	-	-	-	-	-	-	-	0.079	-	-
MW-9	05/19/1990	100.00	-	-	-	-	1.7	-	**4.09**	0.019	**0.16**	**0.822**	-	-	-
MW-9	08/30/1990	100.00	-	-	-	-	-	-	**2**	0.059	<0.04	**0.4**	-	-	-
MW-9	10/02/1990	100.00	9.70	90.30	-	-	3.8	-	**2.8**	0.02	**0.224**	**1.3**	-	-	-
MW-9	03/28/1991	100.00	11.64	88.36	-	-	13	-	**1.93**	0.008	**0.077**	**0.353**	-	-	-
MW-9	05/15/1991	100.00	9.65	90.35	-	-	-	-	-	-	-	-	-	-	-
MW-9	07/12/1991	100.00	9.89	90.11	-	-	-	-	-	-	-	-	-	-	-
MW-9	09/26/1991	100.00	10.06	89.94	<0.1	0.7	<1	-	**1.8**	0.006	**0.1**	0.1	-	-	-
MW-9	10/11/1991	100.00	10.19	89.81	-	-	-	-	-	-	-	-	-	-	-
MW-9	01/10/1992	100.00	10.78	89.22	-	-	-	-	-	-	-	-	-	-	-
MW-9	02/17/1992	100.00	11.16	88.84	<0.1	0.5	<1	-	**0.13**	<0.001	<0.001	0.013	-	-	-
MW-9	03/31/1992	100.00	10.97	89.03	-	-	-	-	-	-	-	-	-	-	-
MW-9	05/19/1992	100.00	9.36	90.64	**3.6**	<1	<1	-	**0.24**	<0.05	<0.05	<0.05	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-9	06/30/1992	100.00	9.67	90.33	-	-	-	-	-	-	-	-	-	-	-
MW-9	07/15/1992	100.00	9.90	90.10	-	-	-	-	-	-	-	-	-	-	-
MW-9	08/28/1992	100.00	10.49	89.51	-	-	-	-	**0.91**	0.004	0.014	0.015	-	-	-
MW-9	10/13/1992	100.00	9.90	90.10	-	-	-	-	-	-	-	-	-	-	-
MW-9	11/21/1992	100.00	9.98	90.02	-	-	-	-	**1.1**	<0.001	**0.023**	0.022	-	-	-
MW-9	12/17/1992	100.00	10.08	89.92	-	-	-	-	**0.35**	<0.001	**0.02**	**0.68**	-	-	-
MW-9	01/25/1993	100.00	10.88	89.12	-	-	-	-	-	-	-	-	-	-	-
MW-9	02/10/1993	100.00	11.14	88.86	-	-	-	-	**0.59**	<0.001	0.013	0.012	-	-	-
MW-9	03/08/1993	100.00	11.53	88.47	-	-	-	-	-	-	-	-	-	-	-
MW-9	03/16/1993	100.00	11.52	88.48	-	-	-	-	-	-	-	-	-	-	-
MW-9	04/14/1993	100.00	10.57	89.43	-	-	-	-	-	-	-	-	-	-	-
MW-9	05/05/1993	100.00	9.80	90.20	-	-	-	-	**0.41**	<0.005	<0.005	<0.01	-	-	-
MW-9	06/15/1993	100.00	9.69	90.31	-	-	-	-	-	-	-	-	-	-	-
MW-9	07/19/1993	100.00	10.38	89.62	-	-	-	-	-	-	-	-	-	-	-
MW-9	08/20/1993	100.00	10.74	89.26	-	-	-	-	**0.78**	0.02	<0.01	0.03	-	-	-
MW-9	03/20/1996	-	-	-	-	0.900	-	-	**0.290**	<0.00050	0.0089	0.010	-	-	-
MW-9	03/19/1997	-	-	-	-	0.460	-	-	**0.165**	<0.00250	0.00332	<0.00500	-	-	-
MW-9	12/10/1997	-	-	-	-	<0.0500	-	-	**0.0176**	<0.000500	<0.000500	<0.00100	-	-	-
MW-9	11/20/1998	-	-	-	-	0.121	-	-	**0.0640**	<0.000500	0.00139	0.00207	-	-	-
MW-9	01/19/2000	67.52	10.44	57.08	-	<0.0500	-	-	**0.0154**	<0.000500	<0.000500	<0.00100	-	-	-
MW-10	09/06/1986	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	09/22/1986	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	01/16/1987	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	03/19/1987	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	10/09/1987	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	05/03/1988	96.81	4.72	92.09	-	-	-	-	<0.0004	<0.0004	<0.0004	<0.0012	-	-	-
MW-10	07/26/1988	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	11/17/1988	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	03/13/1989	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	07/26/1989	96.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-10	10/09/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/06/1986	103.04	-	-	-	-	-	-	**33**	**25**	**3.9**	**20**	-	-	-
MW-11	09/22/1986	103.04	6.04	97.00	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/19/1987	103.04	6.01	97.03	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/09/1987	103.04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	01/16/1988	103.04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	05/03/1988	103.04	6.23	96.81	-	-	-	-	-	-	-	-	-	-	-
MW-11	07/26/1988	103.04	5.96	97.08	-	-	-	-	-	-	-	-	-	-	-
MW-11	11/17/1988	103.04	5.93	97.11	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/13/1989	103.04	5.79	97.25	-	-	97	-	**92**	**83**	**4.5**	**36**	-	-	-
MW-11	07/26/1989	103.04	5.93	97.11	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/09/1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11A	09/27/1990	105.46	11.76	93.70	-	-	-	-	-	-	-	-	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-11A	10/01/1990	105.46	12.42	93.04	-	-	-	-	-	-	-	-	-	-	-
MW-11A	10/09/1990	105.46	-	-	-	-	3.8	-	**2.08**	0.188	<0.001	0.09	-	-	-
MW-11A	03/28/1991	105.46	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11A	04/19/1991	105.46	11.10	94.36	-	-	-	-	-	-	-	-	-	-	-
MW-11A	05/15/1991	105.46	11.54	93.92	-	-	-	-	-	-	-	-	-	-	-
MW-11A	07/12/1991	105.46	11.28	94.18	-	-	-	-	-	-	-	-	-	-	-
MW-11A	09/26/1991	105.46	11.45	94.01	0.17	**10**	1.5	-	**6.4**	0.91	<0.001	**0.9**	-	-	-
MW-11A	10/11/1991	105.46	11.69	93.77	-	-	-	-	-	-	-	-	-	-	-
MW-11A	01/10/1992	104.90	12.04	92.86	-	-	-	-	-	-	-	-	-	-	-
MW-11A	02/17/1992	104.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11A	03/31/1992	104.90	11.75	93.15	-	-	-	-	-	-	-	-	-	-	-
MW-11A	05/19/1992	104.90	10.64	94.26	**11**	**7.4**	2.5	-	**2**	<0.05	**0.09**	**0.84**	-	-	-
MW-11A	06/30/1992	104.90	11.41	93.49	-	-	-	-	-	-	-	-	-	-	-
MW-11A	07/15/1992	104.90	11.53	93.37	-	-	-	-	-	-	-	-	-	-	-
MW-11A	08/28/1992	104.90	11.49	93.41	-	-	-	-	**3.5**	0.099	**0.5**	**1.84**	-	-	-
MW-11A	10/13/1992	104.90	9.29	95.61	-	-	-	-	-	-	-	-	-	-	-
MW-11A	11/21/1992	104.90	11.42	93.48	-	-	-	-	**2.5**	0.0036	**0.19**	**0.59**	-	-	-
MW-11A	12/17/1992	104.90	11.52	93.38	-	-	-	-	**4.1**	<0.05	**0.33**	**3**	-	-	-
MW-11A	01/25/1993	104.90	11.89	93.01	-	-	-	-	-	-	-	-	-	-	-
MW-11A	02/10/1993	104.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11A	03/08/1993	104.90	11.95	92.95	-	-	-	-	-	-	-	-	-	-	-
MW-11A	03/16/1993	104.90	11.90	93.00	-	-	-	-	-	-	-	-	-	-	-
MW-11A	04/14/1993	104.90	11.60	93.30	-	-	-	-	-	-	-	-	-	-	-
MW-11A	05/05/1993	104.90	11.59	93.31	-	-	-	-	-	-	-	-	-	-	-
MW-11A	06/15/1993	104.90	11.04	93.86	-	-	-	-	-	-	-	-	-	-	-
MW-11A	07/19/1993	104.90	11.20	93.70	-	-	-	-	-	-	-	-	-	-	-
MW-11A	08/20/1993	104.90	9.41	95.49	-	-	-	-	**4.7**	<0.10	**1.1**	**3.9**	-	-	-
MW-11A	03/29/2005	71.09	-	-	<0.42	**3.21**	-	-	**0.254**	0.00201	0.0131	**0.834**	-	-	-
MW-11A	12/31/2005	71.09	-	-	0.567	**4.47**	-	-	**0.236**	<0.005	0.00985	**0.981**	-	-	-
MW-11A	06/30/2006	71.09	-	-	<0.39	**3.71**	-	-	**0.194**	<0.005	**0.015**	**0.906**	-	-	-
MW-11A	09/18/2006	71.09	-	-	0.79	**4.90**	-	-	**0.240**	0.0013	0.014	**1.1**	-	-	-
MW-11A	06/29/2007	71.09	-	-	**2.20**	**3.10**	-	-	**0.200**	0.0010	0.010	**0.60**	-	-	-
MW-11A	10/04/2007	71.09	8.54	62.55	0.28	-	-	-	**0.22**	0.002	**0.020**	**1.1**	-	<0.0000095	**0.006**
MW-11A	06/19/2008	71.09	9.63	61.46	0.28	**4.9**	-	-	**0.20**	0.002	**0.03**	**0.7**	-	-	-
MW-11A	08/28/2008	73.45	10.72	62.73	0.37	**4.2**	-	-	**0.20**	0.001	0.01	**0.7**	-	-	-
MW-11A	05/14/2009	73.45	9.24	64.21	0.44	**3.5**	-	-	**0.18**	0.0012	**0.018**	**0.68**	-	-	-
MW-11A	08/27/2009	73.45	9.02	64.43	0.45	**5.2**	-	-	**0.22**	0.0019 J	**0.021**	**1.2**	-	-	-
MW-11A	06/08/2010	73.45	9.64	63.81	0.36	**3.4**	-	-	**0.15**	0.0009 J	0.011	**0.62**	-	-	-
MW-11A	08/06/2010	73.45	8.55	64.90	0.37	2.1	-	-	**0.071**	<0.0025	0.0047 J	**0.59**	-	-	-
MW-11A	05/19/2011	73.45	9.17	64.28	0.51	**2.6**	-	-	**0.14**	0.0008 J	0.011	**0.53**	-	-	-
MW-11A	08/01/2011	73.45	9.99	63.46	0.42	**2.9**	-	-	**0.10**	0.0005 J	0.0089	**0.62**	-	-	-
MW-11A	05/28/2012	73.45	9.30	64.15	-	-	-	-	-	-	-	-	-	-	-
MW-11A	05/31/2012	-	-	-	0.51	**3.4**	-	-	**0.11**	0.0008 J	0.0094	**0.67**	-	-	-
MW-11A	07/31/2012	73.45	9.49	63.96	0.38	**3.6 J**	-	-	**0.12**	0.0007 J	0.0099	**0.74**	-	-	-
MW-11A	05/08/2013	73.45	8.43	65.02	0.54 J	**4.5**	-	-	**0.14 J**	0.0015 J	**0.019 J**	**0.95 J**	-	-	-
MW-11A[HS]	05/08/2013	73.45	8.43	65.02	0.43 J	2.2	-	-	**0.13**	0.00097 J	0.010	**0.47**	-	-	-

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Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-11A	09/17/2013	73.45	8.35	65.10	-	-	-	-	-	-	-	-	-	-	-
MW-11A	09/18/2013	-	-	-	-	-	-	-	**0.11 J** / 0.0039 J	0.00097 J / <0.00023	0.0053 J / 0.0016 J	**0.45 J /** 0.0018 J	-	-	-
MW-11A	06/07/2014	73.45	9.48	63.97	-	-	-	-	-	-	-	-	-	-	-
MW-11A	06/11/2014	-	-	-	0.46	**4.1**	-	-	**0.13**	0.00084 J	0.014	**1.0 J**	-	-	-
MW-11A[HS]	06/11/2014	-	-	-	0.51	**4.0**	-	-	**0.12**	0.0017 J	0.011	**0.90**	-	-	-
MW-11A	11/04/2014	73.45	9.48	63.97	0.50	**4.9 J**	-	-	**0.12**	0.00076 J	0.014	**1.3**	-	-	
MW-11A	04/27/2015	73.45	9.37	64.08	0.48	**3.1**	-	-	**0.086**	0.0006 J	0.0095	**0.55**	-	-	-
MW-11A	10/23/2015	73.45	8.40	65.05	0.43	**2.3**	-	-	**0.071**	<0.005	0.006 J	**0.58**	-	-	-
MW-11A	05/17/2016	73.45	9.26	64.19	0.29	**3.8**	-	-	**0.094**	0.0007 J	0.011	**0.81**	-	-	-
MW-11A	09/15/2016	73.45	8.56	64.89	0.42	2.2	-	-	**0.059**	<0.0005	0.005	**0.37**	-	-	-
MW-11A	05/09/2017	73.45	8.64	64.81	0.18 J	**2.8**	-	-	**0.071**	<0.0005	0.009	**0.49**	-	-	-
MW-11A	09/01/2017	73.45	8.54	64.91	0.24 J	**2.8**	-	-	**0.062**	<0.001	0.007	**0.55**	-	-	-
MW-11A	06/07/2018	73.45	9.39	64.06	0.21 J	**4.2**	-	-	**0.086**	0.0008 J	0.014	**0.76**	-	<0.0005	0.006
MW-12	11/17/1988	107.89	9.88	98.01	-	-	0.5	-	0.0019	0.0061	0.0023	0.012	-	-	-
MW-12	03/13/1989	107.89	10.53	97.36	-	-	0.6	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-12	07/26/1989	107.89	9.76	98.13	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-12	05/19/1990	107.89	-	-	-	-	0.5	-	0.0003	<0.0002	<0.0002	0.007	-	-	-
MW-12	10/02/1990	107.89	9.65	98.24	-	-	2.4	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-12	03/28/1991	107.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-12	05/15/1991	107.89	8.89	99.00	-	-	-	-	-	-	-	-	-	-	-
MW-12	07/12/1991	107.89	9.43	98.46	-	-	-	-	-	-	-	-	-	-	-
MW-12	09/26/1991	107.89	9.55	98.34	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-12	10/11/1991	107.89	10.36	97.53	-	-	-	-	-	-	-	-	-	-	-
MW-12	01/10/1992	107.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-12	02/17/1992	107.89	9.80	98.09	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-12	05/19/1992	107.89	9.00	98.89	**5.5**	<0.1	<1	-	0.002	<0.001	<0.001	<0.001	-	-	-
MW-12	06/30/1992	107.89	9.66	98.23	-	-	-	-	-	-	-	-	-	-	-
MW-12	07/15/1992	107.89	9.75	98.14	-	-	-	-	-	-	-	-	-	-	-
MW-12	08/28/1992	107.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-13	03/13/1988	101.86	10.33	91.53	-	-	1.1	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-13	07/26/1988	101.86	7.66	94.20	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-13	11/17/1988	101.86	8.68	93.18	-	-	<0.4	-	0.0003	0.0009	0.0013	0.0049	-	-	-
MW-13	05/19/1990	101.86	-	-	-	-	0.4	-	0.0009	<0.0002	<0.0002	0.007	-	-	-
MW-13	10/02/1990	101.86	7.66	94.20	-	-	2.6	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-13	01/10/1991	101.86	9.04	92.82	-	-	-	-	-	-	-	-	-	-	-
MW-13	03/29/1991	101.86	7.66	94.20	-	-	<1	-	0.001	<0.001	<0.001	<0.001	-	-	-
MW-13	05/15/1991	101.86	7.68	94.18	-	-	-	-	-	-	-	-	-	-	-
MW-13	07/12/1991	101.86	7.41	94.45	-	-	-	-	-	-	-	-	-	-	-
MW-13	09/26/1991	101.86	7.87	93.99	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-13	10/11/1991	101.86	8.17	93.69	-	-	-	-	-	-	-	-	-	-	-
MW-13	02/17/1992	101.86	9.30	92.56	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-13	03/31/1992	101.86	8.97	92.89	-	-	-	-	-	-	-	-	-	-	-
MW-13	05/19/1992	101.86	7.22	94.64	**2.2**	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-13	06/30/1992	101.86	7.81	94.05	-	-	-	-	-	-	-	-	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

					HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
Location	Date	TOC	DTW	GWE	DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-13	07/15/1992	101.86	7.95	93.91	-	-	-	-	-	-	-	-	-	-	-
MW-13	08/28/1992	101.86	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14	03/13/1988	88.32	7.78	80.54	-	-	0.77	-	<0.0002	<0.0002	<0.0002	<0.0006	ND	-	-
MW-14	07/26/1988	88.32	8.60	79.72	-	-	0.5	-	0.0003	<0.0002	<0.0002	<0.0006	-	-	-
MW-14	05/19/1990	88.32	-	-	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-14	10/02/1990	88.32	5.27	83.05	-	-	2.6	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-14	01/10/1991	88.32	7.47	80.85	-	-	-	-	-	-	-	-	-	-	-
MW-14	03/29/1991	88.32	8.24	80.08	-	-	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-14	05/15/1991	88.32	5.83	82.49	-	-	-	-	-	-	-	-	-	-	-
MW-14	07/12/1991	88.32	8.80	79.52	-	-	-	-	-	-	-	-	-	-	-
MW-14	09/26/1991	88.32	9.75	78.57	<0.1	<0.1	1.1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-14	10/11/1991	88.32	9.62	78.70	-	-	-	-	-	-	-	-	-	-	-
MW-14	02/17/1992	88.32	7.40	80.92	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-14	03/31/1992	88.32	6.94	81.38	-	-	-	-	-	-	-	-	-	-	-
MW-14	05/19/1992	88.32	6.20	82.12	**4.8**	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-14	06/30/1992	88.32	8.50	79.82	-	-	-	-	-	-	-	-	-	-	-
MW-14	07/15/1992	88.32	9.00	79.32	-	-	-	-	-	-	-	-	-	-	-
MW-14	08/28/1992	88.32	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-14	12/10/1997	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-14	11/20/1998	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-14	01/19/2000	53.79	7.70	46.09	-	<0.0500 / <0.0500	-	-	<0.000500 / <0.000500	0.00230 / 0.00176	<0.000500 / <0.000500	<0.00100 / <0.00100	-	-	-
MW-15	03/13/1988	84.65	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-15	07/26/1988	84.65	8.46	76.19	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-15	05/19/1990	84.65	-	-	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-15	10/02/1990	84.65	4.06	80.59	-	-	1.8	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-15	01/10/1991	84.65	7.77	76.88	-	-	-	-	-	-	-	-	-	-	-
MW-15	03/29/1991	84.65	7.80	76.85	-	-	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-15	05/15/1991	84.65	5.34	79.31	-	-	-	-	-	-	-	-	-	-	-
MW-15	07/12/1991	84.65	8.66	75.99	-	-	-	-	-	-	-	-	-	-	-
MW-15	09/26/1991	84.65	9.77	74.88	<0.1	<0.1	2	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-15	10/11/1991	84.65	10.64	74.01	-	-	-	-	-	-	-	-	-	-	-
MW-15	02/17/1992	84.65	7.46	77.19	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-15	03/31/1992	84.65	6.78	77.87	-	-	-	-	-	-	-	-	-	-	-
MW-15	05/19/1992	84.65	5.66	78.99	**2**	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-15	06/30/1992	84.65	7.97	76.68	-	-	-	-	-	-	-	-	-	-	-
MW-15	07/15/1992	84.65	8.50	76.15	-	-	-	-	-	-	-	-	-	-	-
MW-15	08/28/1992	84.65	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-15	12/10/1997	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-15	11/20/1998	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-15	01/19/2000	50.78	7.18	43.60	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-16	03/13/1988	90.13	13.88	76.25	-	-	0.8	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-16	07/26/1988	90.13	13.50	76.63	-	-	<0.4	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-
MW-16	05/19/1990	90.13	-	-	-	-	0.5	-	<0.0002	<0.0002	<0.0002	<0.0006	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-16	10/02/1990	90.13	12.82	77.31	-	-	2.4	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-16	01/10/1991	90.13	13.89	76.24	-	-	-	-	-	-	-	-	-	-	-
MW-16	03/29/1991	90.13	13.55	76.58	-	-	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-16	05/15/1991	90.13	13.32	76.81	-	-	-	-	-	-	-	-	-	-	-
MW-16	07/12/1991	90.13	13.36	76.77	-	-	-	-	-	-	-	-	-	-	-
MW-16	09/26/1991	90.13	13.64	76.49	<0.1	<0.1	1.7	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-16	10/11/1991	90.13	13.66	76.47	-	-	-	-	-	-	-	-	-	-	-
MW-16	02/17/1992	90.13	13.85	76.28	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-16	03/31/1992	90.13	13.15	76.98	-	-	-	-	-	-	-	-	-	-	-
MW-16	05/19/1992	90.13	13.26	76.87	**5.2**	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-16	06/30/1992	90.13	13.45	76.68	-	-	-	-	-	-	-	-	-	-	-
MW-16	07/15/1992	90.13	13.60	76.53	-	-	-	-	-	-	-	-	-	-	-
MW-16	08/28/1992	90.13	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-16	12/10/1997	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-16	11/20/1998	-	-	-	-	<0.0500	-	-	<0.000500	<0.000500	<0.000500	<0.00100	-	-	-
MW-16	01/19/2000	55.07	14.11	40.96	-	<0.0500	-	-	<0.000500	0.000601	<0.000500	<0.00100	-	-	-
MW-17	09/27/1990	96.67	11.21	85.46	-	-	-	-	-	-	-	-	-	-	-
MW-17	10/02/1990	96.67	11.20	85.47	-	-	1.8	-	<0.001	<0.001	<0.001	<0.001	ND	-	-
MW-17	03/28/1991	96.67	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-17	05/15/1991	96.67	10.95	85.72	-	-	-	-	-	-	-	-	-	-	-
MW-17	07/12/1991	96.67	11.72	84.95	-	-	-	-	-	-	-	-	-	-	-
MW-17	09/26/1991	96.67	9.71	86.96	<0.1	0.4	2	-	**0.15**	<0.001	0.006	0.014	-	-	-
MW-17	10/11/1991	96.67	10.07	86.60	-	-	-	-	-	-	-	-	-	-	-
MW-17	01/10/1992	96.67	9.48	87.19	-	-	-	-	-	-	-	-	-	-	-
MW-17	02/17/1992	96.67	9.56	87.11	<0.1	<0.1	<1	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-17	03/31/1992	96.67	9.08	87.59	-	-	-	-	-	-	-	-	-	-	-
MW-17	05/19/1992	96.67	9.00	87.67	**83**	<0.1	<1	-	**0.081**	<0.001	<0.001	<0.001	-	-	-
MW-17	06/30/1992	96.67	11.78	84.89	-	-	-	-	-	-	-	-	-	-	-
MW-17	07/15/1992	96.67	12.15	84.52	-	-	-	-	-	-	-	-	-	-	-
MW-17	08/28/1992	96.67	12.10	84.57	-	-	-	-	**0.066**	0.003	<0.001	<0.001	-	-	-
MW-17	10/13/1992	96.67	9.59	87.08	-	-	-	-	-	-	-	-	-	-	-
MW-17	11/21/1992	96.67	8.74	87.93	-	-	-	-	**0.027**	<0.001	<0.001	<0.001	-	-	-
MW-17	12/17/1992	96.67	10.35	86.32	-	-	-	-	<0.001	<0.001	<0.001	<0.001	-	-	-
MW-17	01/25/1993	96.67	11.99	84.68	-	-	-	-	-	-	-	-	-	-	-
MW-17	02/10/1993	96.67	9.95	86.72	-	-	-	-	**0.048**	<0.001	<0.001	<0.002	-	-	-
MW-17	03/08/1993	96.67	11.50	85.17	-	-	-	-	-	-	-	-	-	-	-
MW-17	03/16/1993	96.67	11.04	85.63	-	-	-	-	-	-	-	-	-	-	-
MW-17	04/14/1993	96.67	9.53	87.14	-	-	-	-	-	-	-	-	-	-	-
MW-17	05/05/1993	96.67	8.86	87.81	-	-	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-17	06/15/1993	96.67	9.81	86.86	-	-	-	-	-	-	-	-	-	-	-
MW-17	07/19/1993	96.67	10.30	86.37	-	-	-	-	-	-	-	-	-	-	-
MW-17	08/20/1993	96.67	12.28	84.39	-	-	-	-	-	-	-	-	-	-	-
MW-17	03/20/1996	-	-	-	-	0.440 / 0.460	-	-	**0.110** / **0.110**	<0.00050 / <0.00050	0.014 / 0.013	0.0035 / 0.0034	-	-	-
MW-17	03/19/1997	-	-	-	-	0.544 / 0.559	-	-	**0.144** / **0.154**	<0.00250 / <0.00250	**0.0250 / 0.0258**	<0.00500 / 0.0051	-	-	-
MW-17	12/10/1997	-	-	-	-	0.443	-	-	**0.0992**	0.000669	**0.0203**	0.00171	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-17	11/20/1998	-	-	-	-	0.485	-	-	**0.167**	0.00114	**0.0295**	0.00065	-	-	-
MW-17	01/19/2000	61.99	9.56	52.43	-	0.393	-	-	**0.132**	0.00112	0.0102	0.00273	-	-	-
MW-18	09/27/1990	97.12	8.79	88.33	-	-	-	-	-	-	-	-	-	-	-
MW-18	10/02/1990	97.12	8.78	88.34	-	-	3.8	-	**3.21**	0.004	0.003	0.005	-	-	-
MW-18	03/28/1991	97.12	10.22	86.90	-	-	-	-	-	-	-	-	-	-	-
MW-18	05/15/1991	97.12	7.77	89.35	-	-	-	-	-	-	-	-	-	-	-
MW-18	07/12/1991	97.12	9.41	87.71	-	-	-	-	-	-	-	-	-	-	-
MW-18	09/26/1991	97.12	9.83	87.29	<0.1	<0.1	1.7	-	**0.16**	<0.001	<0.001	0.0021	-	-	-
MW-18	10/11/1991	97.12	9.78	87.34	-	-	-	-	-	-	-	-	-	-	-
MW-18	01/10/1992	97.12	9.72	87.40	-	-	-	-	-	-	-	-	-	-	-
MW-18	02/17/1992	97.12	10.04	87.08	<0.1	**107**	<1	-	**4.1**	0.012	<0.001	<0.001	-	-	-
MW-18	03/31/1992	97.12	9.19	87.93	-	-	-	-	-	-	-	-	-	-	-
MW-18	05/19/1992	97.12	8.16	88.96	**5.1**	1.7	<1	-	**0.83**	<0.05	<0.05	<0.05	-	-	-
MW-18	06/30/1992	97.12	9.11	88.01	-	-	-	-	-	-	-	-	-	-	-
MW-18	07/15/1992	97.12	9.60	87.52	-	-	-	-	-	-	-	-	-	-	-
MW-18	08/28/1992	97.12	10.98	86.14	-	-	-	-	-	-	-	-	-	-	-
MW-18	10/13/1992	97.12	9.81	87.31	-	-	-	-	-	-	-	-	-	-	-
MW-18	11/21/1992	97.12	9.13	87.99	-	-	-	-	**3.7**	0.0038	0.0019	0.0016	-	-	-
MW-18	12/17/1992	97.12	8.70	88.42	-	-	-	-	**3.2** / **2.7**	<0.01 / 0.01	<0.01 / <0.01	<0.01 / <0.01	-	-	-
MW-18	01/25/1993	97.12	9.69	87.43	-	-	-	-	-	-	-	-	-	-	-
MW-18	02/10/1993	97.12	12.20	84.92	-	-	-	-	**2.6**	0.004	0.003	<0.002	-	-	-
MW-18	03/08/1993	97.12	10.36	86.76	-	-	-	-	-	-	-	-	-	-	-
MW-18	03/16/1993	97.12	10.38	86.74	-	-	-	-	-	-	-	-	-	-	-
MW-18	04/14/1993	97.12	7.45	89.67	-	-	-	-	-	-	-	-	-	-	-
MW-18	05/05/1993	97.12	7.69	89.43	-	-	-	-	**1.6**	<0.01	<0.01	<0.02	-	-	-
MW-18	06/15/1993	97.12	9.09	88.03	-	-	-	-	-	-	-	-	-	-	-
MW-18	07/19/1993	97.12	10.82	86.30	-	-	-	-	-	-	-	-	-	-	-
MW-18	08/20/1993	97.12	11.28	85.84	-	-	-	-	-	-	-	-	-	-	-
MW-18	03/19/1997	-	-	-	-	**2.370**	-	-	**0.892**	<0.00500	<0.00500	<0.0100	-	-	-
MW-18	12/10/1997	-	-	-	-	0.882 / 0.406	-	-	**0.356** / **0.162**	<0.000500 / <0.000500	<0.000500 / <0.000500	<0.00100 / <0.00100	-	-	-
MW-18	11/20/1998	-	-	-	-	0.601	-	-	**1.950**	<0.000500	<0.000500	<0.00100	-	-	-
MW-18	01/19/2000	62.51	9.38	53.13	-	**2.330**	-	-	**1.350**	<0.000500	<0.000500	<0.00100	-	-	-
MW-19	03/29/2005	73.64	-	-	<0.40	2.01	-	-	**0.0143**	0.0008	**0.135**	**0.286**	-	-	-
MW-19	12/31/2005	73.64	-	-	<0.39	<0.05	-	-	<0.005	<0.005	0.00059	<0.015	-	-	-
MW-19	06/30/2006	73.64	-	-	<0.40	0.266	-	-	0.00356	<0.005	**0.031**	0.0564	-	-	-
MW-19	09/18/2006	73.64	-	-	1.0	**4.6**	-	-	**0.027**	0.0009	**0.27**	**0.80**	-	-	-
MW-19	06/29/2007	73.64	-	-	0.35	0.20	-	-	0.002	<0.001	**0.02**	0.03	-	-	-
MW-19	10/04/2007	73.64	9.82	63.82	0.66 / 0.71	**2.6** / **2.6**	-	-	**0.02** / **0.02**	<0.001 / <0.001	**0.2** / **0.2**	**0.5** / <0.5	-	-	-
MW-19	06/19/2008	73.64	10.58	63.06	0.60	**3.3**	-	-	<0.002	0.001	**0.2**	**0.4**	-	-	-
MW-19	08/28/2008	75.65	10.68	64.97	0.69	2.0	-	-	**0.02**	<0.001	**0.1**	**0.3**	-	-	-
MW-19	05/14/2009	75.65	10.54	65.11	0.51	1.5	-	-	**0.020**	<0.0005	**0.11**	**0.25**	-	-	-
MW-19	08/27/2009	75.65	10.41	65.24	0.56	2.2	-	-	**0.024**	0.0005 J	**0.14**	**0.42**	-	-	-
MW-19	06/08/2010	75.65	10.60	65.05	0.11 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-19	08/06/2010	75.65	10.23	65.42	0.44	0.97	-	-	**0.013**	<0.0005	**0.060**	0.13	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-19	05/19/2011	75.65	10.44	65.21	0.19 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-19	08/01/2011	75.65	10.81	64.84	0.052 J	0.043 J	-	-	0.0015 J	<0.0005	<0.0005	0.0048 J	-	-	-
MW-19	05/28/2012	75.65	10.31	65.34	-	-	-	-	-	-	-	-	-	-	-
MW-19	05/31/2012	-	-	-	0.33	0.95	-	-	**0.012**	0.0007 J	**0.037**	0.12	-	-	-
MW-19	07/31/2012	75.65	10.55	65.10	0.30	0.52	-	-	**0.0094**	0.0005 J	**0.018**	0.058	-	-	-
MW-19	05/08/2013	75.65	10.22	65.43	0.37 J	0.88	-	-	**0.0093**	<0.000077	**0.025**	0.13	-	-	-
MW-19[HS]	05/08/2013	75.65	10.22	65.43	0.83	0.28 J	-	-	0.0027	<0.000077	0.0052	0.031	-	-	-
MW-19	09/17/2013	75.65	9.72	65.93	-	-	-	-	-	-	-	-	-	-	-
MW-19	09/18/2013	-	-	-	1.3	<0.050	-	-	<0.00024	<0.00023	<0.00024	<0.00072	-	-	-
MW-19	06/07/2014	75.65	10.51	65.14	-	-	-	-	-	-	-	-	-	-	-
MW-19	06/11/2014	-	-	-	0.18 J	0.13	-	-	0.0014	<0.00011	0.0013	0.014	-	-	-
MW-19[HS]	06/11/2014	-	-	-	0.50	<0.050	-	-	<0.00015	<0.00011	<0.00016	<0.00040	-	-	-
MW-19	11/04/2014	75.65	10.57	65.08	0.13 J	<0.050	-	-	0.00044 J	<0.00011	0.00019 J	<0.00040	-	-	
MW-19	04/27/2015	75.65	10.87	64.78	0.096 J	0.11	-	-	0.0017 J	<0.0005	<0.0005	<0.0015	-	-	-
MW-19	10/23/2015	75.65	9.84	65.81	0.077 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-19	05/17/2016	75.65	10.52	65.13	0.056 J	0.03 J	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-19	09/15/2016	75.65	10.32	65.33	0.081 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-19	05/09/2017	75.65	10.31	65.34	0.069 J	0.014 J	-	-	<0.0005	<0.0005	<0.0005	0.002	-	-	-
MW-19	09/01/2017	75.65	10.04	65.61	0.12 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-19	06/07/2018	75.65	10.53	65.12	<0.052	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0005	<0.0005
MW-20	03/29/2005	71.21	-	-	**8.90 / 8.63**	**46.2 / 45.9**	-	-	**0.657 / 0.665**	**3.67 / 3.72**	**1.78 / 1.77**	**11.4 / 11.5**	-	-	-
MW-20	12/31/2005	71.21	-	-	**10.1 / 11.0**	**60.1 / 58.6**	-	-	**0.844 / 0.821**	**5.73 / 5.88**	**1.78 / 1.81**	**12.6 / 12.9**	-	-	-
MW-20	06/30/2006	71.21	-	-	**10.9 / 10.7**	**57.9 / 58.5**	-	-	**0.800 / 0.788**	**6.08 / 6.04**	**2.09 / 2.08**	**14.1 / 14.1**	-	-	-
MW-20	09/18/2006	71.21	-	-	**5.6 / 5.3**	**23 / 23**	-	-	**0.35 / 0.35**	0.73 / 0.75	**0.94 / 0.92**	**6.0 / 5.9**	-	-	-
MW-20	06/29/2007	71.21	-	-	**8.0 / 7.5**	**41 / 43**	-	-	**0.50 / 0.50**	**3.5 / 3.7**	**1.4 / 1.4**	**9.7 / 9.4**	-	-	-
MW-20	10/04/2007	71.21	8.94	62.27	**5.30**	**29**	-	-	**0.3**	**1.2**	**1.2**	**7.0**	-	-	-
MW-20	06/19/2008	71.21	9.88	61.33	**4.6 / 4.3**	**21 / 19**	-	-	**0.3 / 0.2**	0.6 / 0.5	**0.7 / 0.7**	**3.9 / 4.2**	-	-	-
MW-20	08/28/2008	-	-	-	**4.2**	**24**	-	-	**0.3**	1.0	**0.9**	**5.3**	-	-	-
MW-20	08/29/2008	73.73	9.98	63.75	**4.5**	**26**	-	-	**0.3**	1.1	**0.9**	**4.7**	-	-	-
MW-20	05/14/2009	73.73	9.59	64.14	**5.4 J / 3.9 J**	**35 / 38**	-	-	**0.40 / 0.37**	**1.6 / 1.5**	**1.4 / 1.5**	**8.9 / 9.2**	-	-	-
MW-20	08/27/2009	73.73	9.30	64.43	**2.3 J / 2.6**	**17 / 18**	-	-	**0.19 / 0.19**	0.48 / 0.47	**0.79 / 0.83**	**5.3 / 5.6**	-	-	-
MW-20	06/08/2010	73.73	9.91	63.82	**6.2 / 6.1**	**29 / 28**	-	-	**0.24 / 0.24**	**1.7 / 1.7**	**1.0 / 1.0**	**6.4 / 6.2**	-	-	-
MW-20	08/06/2010	73.73	10.04	63.69	**6.6 / 5.9**	**39 / 32**	-	-	**0.28 / 0.24**	**2.9 / 2.3**	**1.5 / 1.2**	**9.5 / 8.0**	-	-	-
MW-20	05/19/2011	73.73	9.58	64.15	**6.0 / 5.9**	**34 / 31**	-	-	**0.41 / 0.39**	**2.6 / 2.6**	**1.4 / 1.3**	**8.1 / 8.0**	-	-	-
MW-20	08/01/2011	73.73	10.23	63.50	**4.5 / 5.3**	**40 / 35**	-	-	**0.42 / 0.35**	**2.9 / 2.4**	**1.6 / 1.4**	**9.1 / 8.1**	-	-	-
MW-20	05/28/2012	73.73	9.49	64.24	-	-	-	-	-	-	-	-	-	-	-
MW-20	05/31/2012	-	-	-	**2.8 J / 4.7 J**	**33 / 30**	-	-	**0.27 / 0.27**	**1.4 / 1.3**	**1.2 / 1.1**	**8.0 / 7.2**	-	-	-
MW-20	07/31/2012	73.73	9.80	63.93	**9.8 / 11**	**31 / 36**	-	-	**0.35 / 0.27**	**2.4 J / 1.3 J**	**1.6 / 1.1**	**11 J / 6.3 J**	-	-	-
MW-20	05/08/2013	73.73	8.92	64.81	-	-	-	-	-	-	-	-	-	-	-
MW-20	05/09/2013	-	-	-	**6.7 / 7.5**	**57.6 / 55.8 J**	-	-	**0.40 / 0.39**	**2.5 / 2.7**	**1.8 / 1.7**	**12.1 / 12.7**	-	-	-
MW-20[HS]	05/09/2013	-	-	-	**4.9 / 4.7**	**34.7 / 39.1**	-	-	**0.20 / 0.27**	**1.3 / 1.7**	**0.92 / 1.1**	**6.4 / 7.5**	-	-	-
MW-20	09/17/2013	73.73	8.83	64.90	-	-	-	-	-	-	-	-	-	-	-
MW-20	09/18/2013	-	-	-	**5.9**	**45.6**	-	-	**0.33 / 0.33**	**1.9 / 2.0**	**1.4 / 1.4**	**10 / 8.6**	-	-	-
MW-20	06/07/2014	73.73	9.78	63.95	-	-	-	-	-	-	-	-	-	-	-
MW-20	06/11/2014	-	-	-	**8.2 / 8.1**	**46.1 / 48.5**	-	-	**0.48 / 0.35**	**2.7 / 2.0**	**2.5 / 1.9**	**17.1 / 12.5 J**	-	-	-

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Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
					DRO	GRO	TPH	Oil and Grease	Benzene	Toluene	Ethylbenzene	Total Xylenes	HVOCs	EDB	1,2-DCA
	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-20[HS]	06/11/2014	-	-	-	**9.0 / 8.3**	**54.3 / 60.1**	-	-	**0.52 / 0.41**	**4.8 / 3.5 J**	**2.9 / 2.1**	**19.3 / 12.5 J**	-	-	-
MW-20	11/04/2014	73.73	9.77	63.96	**9.3 / 9.5**	**51.6 J / 62.9 J**	-	-	**0.31 / 0.30**	**2.1 / 2.1**	**2.0 / 2.0**	**15.6 / 15.4**	-	-	
MW-20	04/27/2015	73.73	10.18	63.55	**7.3 / 7.3**	**60 / 62**	-	-	**0.32 / 0.31**	**3.2 / 3.4**	**2.2 / 2.4**	**15 / 16**	-	-	-
MW-20	10/23/2015	73.73	8.85	64.88	**2.1 / 2.1**	**3.4 / 3.8**	-	-	**0.031 / 0.034**	0.020 / 0.021	**0.11 / 0.11**	**0.83 / 0.88**	-	-	-
MW-20	05/17/2016	73.73	9.62	64.11	**10 / 9.5**	**41 / 41**	-	-	**0.23 / 0.24**	**1.7 / 1.7**	**1.4 / 1.5**	**9.8 / 10**	-	-	-
MW-20	09/15/2016	73.73	8.98	64.75	**5.8 / 7.3**	**17 / 15**	-	-	**0.15 / 0.13**	0.41 / 0.35	**0.68 / 0.56**	**4.4 / 3.7**	-	-	-
MW-20	05/09/2017	73.73	9.11	64.62	**6.0 J / 6.6**	**32 / 29**	-	-	**0.17 J / 0.081 J**	**1.2 J** / <0.01 J	**1.3 J / 0.04 J**	**8.8 J / 4.9 J**	-	-	-
MW-20	09/01/2017	73.73	8.99	64.74	0.65 J / **2.9 J**	**13 / 9.6**	-	-	**0.10 / 0.11**	0.47 / 0.49	**0.55 / 0.54**	**3.1 / 3.3**	-	-	-
MW-20	06/07/2018	73.73	9.71	64.02	**4.7 / 4.4**	**46 / 38**	-	-	**0.18 / 0.15**	**1.3** / 0.95	**1.5 / 1.2**	**9.9 / 7.7**	-	<0.005	**0.011**
MW-21	03/29/2005	62.30	-	-	<0.40	<0.8	-	-	**0.00635**	<0.005	<0.005	<0.001	-	-	-
MW-21	12/31/2005	62.30	-	-	<0.39	<0.05	-	-	**0.00591**	<0.005	<0.005	<0.0015	-	-	-
MW-21	06/30/2006	62.30	-	-	<0.40	<0.05	-	-	**0.0155**	<0.005	<0.005	<0.0015	-	-	-
MW-21	09/18/2006	62.30	-	-	<0.24	0.051	-	-	**0.020**	<0.005	<0.005	<0.0005	-	-	-
MW-21	06/29/2007	62.30	-	-	0.032	<0.01	-	-	0.002	<0.001	<0.001	<0.001	-	-	-
MW-21	10/04/2007	62.30	7.15	55.15	0.043	0.09	-	-	**0.04**	<0.001	<0.001	<0.002	-	-	-
MW-21	06/19/2008	62.30	7.21	55.09	0.031	0.05	-	-	**0.02**	<0.001	<0.001	<0.002	-	-	-
MW-21	08/28/2008	62.87	7.49	55.38	0.009	0.04	-	-	**0.02**	<0.001	<0.001	<0.002	-	-	-
MW-21	05/14/2009	62.87	7.24	55.63	<0.50	0.018	-	-	**0.0077**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	08/27/2009	62.87	7.41	55.46	<0.052	0.028 J	-	-	**0.013**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	06/08/2010	62.87	7.33	55.54	0.17 J	<0.010	-	-	0.001 J	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	08/06/2010	62.87	7.36	55.51	<0.050	0.015 J	-	-	**0.0064**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	05/19/2011	62.87	7.32	55.55	0.24 J	0.024 J	-	-	0.0030	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	08/01/2011	62.87	7.64	55.23	<0.049	0.020 J	-	-	**0.0078**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	05/28/2012	62.87	7.21	55.66	-	-	-	-	-	-	-	-	-	-	-
MW-21	05/31/2012	-	-	-	0.55	0.014 J	-	-	**0.0055**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	07/31/2012	62.87	7.34	55.53	0.066 J	0.020 J	-	-	**0.0072**	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	05/08/2013	62.87	6.59	56.28	-	-	-	-	-	-	-	-	-	-	-
MW-21	05/09/2013	-	-	-	0.14 J	0.011 J	-	-	0.0030	<0.000077	<0.000081	<0.00022	-	-	-
MW-21[HS]	05/09/2013	-	-	-	0.73	<0.0070	-	-	0.00010 J	<0.000077	<0.000081	<0.00022	-	-	-
MW-21	09/17/2013	62.87	6.03	56.84	-	-	-	-	-	-	-	-	-	-	-
MW-21	09/18/2013	-	-	-	**2.4**	<0.050	-	-	0.0034	<0.00023	<0.00024	<0.00072	-	-	-
MW-21	06/07/2014	62.87	7.12	55.75	-	-	-	-	-	-	-	-	-	-	-
MW-21	06/11/2014	-	-	-	0.071 J	<0.050	-	-	0.0011	<0.00011	<0.00016	<0.00040	-	-	-
MW-21[HS]	06/11/2014	-	-	-	0.35 J	<0.050	-	-	<0.00015	<0.00011	<0.00016	<0.00040	-	-	-
MW-21	11/04/2014	62.87	7.25	55.62	0.066 J	<0.050	-	-	0.00023 J	<0.00011	<0.00016	<0.00040	-	-	
MW-21	04/27/2015	62.87	7.31	55.56	0.066 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-21	10/23/2015	62.87	6.22	56.65	0.16 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-21	05/17/2016	62.87	6.23	56.64	0.16 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-21	09/15/2016	62.87	7.13	55.74	0.53	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-21	05/09/2017	62.87	6.24	56.63	0.099 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-21	09/01/2017	62.87	6.59	56.28	0.19 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-21	06/07/2018	62.87	6.95	55.92	<0.054	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0005	<0.0005
MW-22	03/29/2005	60.59	-	-	<0.40	<0.08	-	-	<0.0005	<0.0005	<0.0005	<0.001	-	-	-
MW-22	12/31/2005	60.59	-	-	<0.39	<0.05	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-

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	Units	ft msl	ft btoc	ft msl	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-22	06/30/2006	60.59	-	-	<0.41	<0.05	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	09/18/2006	60.59	-	-	<0.048	<0.01	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	06/29/2007	60.59	-	-	0.066	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-22	10/04/2007	60.59	6.21	54.38	0.046	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0000096	<0.0005
MW-22	06/19/2008	60.59	7.22	53.37	0.053	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-22	08/28/2008	60.88	7.73	53.15	0.092	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-22	05/14/2009	60.88	6.41	54.47	<0.50	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	08/27/2009	60.88	7.75	53.13	<0.051	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	06/08/2010	60.88	7.32	53.56	0.36	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	08/06/2010	60.88	7.74	53.14	0.12 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	05/19/2011	60.88	7.38	53.50	0.23 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	08/01/2011	60.88	8.21	52.67	<0.048	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	05/28/2012	60.88	6.43	54.45	-	-	-	-	-	-	-	-	-	-	-
MW-22	05/31/2012	-	-	-	1.2	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	07/31/2012	60.88	7.84	53.04	0.055 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	05/08/2013	60.88	5.57	55.31	-	-	-	-	-	-	-	-	-	-	-
MW-22	05/09/2013	-	-	-	0.35 J	0.021 J	-	-	<0.000062	<0.000077	<0.000081	0.00025 J	-	-	-
MW-22[HS]	05/09/2013	-	-	-	0.31 J	<0.0070	-	-	<0.000062	<0.000077	<0.000081	<0.00022	-	-	-
MW-22	09/17/2013	60.88	5.43	55.45	-	-	-	-	-	-	-	-	-	-	-
MW-22	09/18/2013	-	-	-	**1.9**	<0.050	-	-	<0.00024	0.00025 J	<0.00024	<0.00072	-	-	-
MW-22	06/07/2014	60.88	7.35	53.53	-	-	-	-	-	-	-	-	-	-	-
MW-22	06/11/2014	-	-	-	0.094 J	<0.050 J	-	-	<0.00015 J	<0.00011 J	<0.00016 J	<0.00040 J	-	-	-
MW-22[HS]	06/11/2014	-	-	-	0.54	<0.050	-	-	<0.00015 J	<0.00011 J	<0.00016 J	<0.00040 J	-	-	-
MW-22	11/04/2014	60.88	7.66	53.22	0.26 J	<0.050	-	-	<0.00015	<0.00011	<0.00016	<0.00040	-	-	-
MW-22	04/27/2015	60.88	7.33	53.55	0.051 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-22	10/23/2015	60.88	5.55	55.33	0.060 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-22	05/17/2016	60.88	6.55	54.33	0.14 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-22	09/15/2016	60.88	7.19	53.69	0.43	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-22	05/09/2017	60.88	4.89	55.99	0.16 J	0.012 J	-	-	0.004	0.001	0.015	0.14	-	-	-
MW-22	09/01/2017	60.88	6.92	53.96	0.093 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-22	06/07/2018	60.88	6.47	54.41	<0.050	<0.10	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0005	<0.0005
MW-23	03/29/2005	59.51	-	-	<0.40	<0.08	-	-	<0.0005	<0.0005	<0.0005	<0.001	-	-	-
MW-23	12/31/2005	59.51	-	-	<0.39	<0.05	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	06/30/2006	59.51	-	-	<0.39	<0.05	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	09/18/2006	59.51	-	-	<0.24	<0.01	-	-	<0.0005	<0.0005	<0.0005	<0.001	-	-	-
MW-23	06/29/2007	59.51	-	-	0.061	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-23	10/04/2007	59.51	5.18	54.33	0.054	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-23	06/19/2008	59.51	6.50	53.01	0.059	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-23	08/28/2008	59.94	6.97	52.97	0.120	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
MW-23	05/14/2009	59.94	5.60	54.34	<0.50	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	08/27/2009	59.94	6.87	53.07	0.051 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	06/08/2010	59.94	6.21	53.73	<0.50	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	08/06/2010	59.94	6.73	53.21	0.12 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	05/19/2011	59.94	6.41	53.53	0.24 J	0.013 J	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	08/01/2011	59.94	7.29	52.65	0.050 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
	Units	ft msl	ft btoc	ft msl	DRO mg/L	GRO mg/L	TPH mg/L	Oil and Grease mg/L	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	HVOCs mg/L	EDB mg/L	1,2-DCA mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**
MW-23	05/28/2012	59.94	5.51	54.43	-	-	-	-	-	-	-	-	-	-	-
MW-23	05/31/2012	-	-	-	0.52	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	07/31/2012	59.94	6.82	53.12	0.073 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	05/08/2013	59.94	5.27	54.67	-	-	-	-	-	-	-	-	-	-	-
MW-23	05/09/2013	-	-	-	0.27 J	0.029 J	-	-	<0.000062	<0.000077	<0.000081	<0.00022	-	-	-
MW-23[HS]	05/09/2013	-	-	-	0.27 J	<0.0070	-	-	<0.000062	<0.000077	<0.000081	<0.00022	-	-	-
MW-23	09/17/2013	59.94	4.71	55.23	-	-	-	-	-	-	-	-	-	-	-
MW-23	09/18/2013	-	-	-	**1.8**	<0.050	-	-	<0.00024	<0.00023	<0.00024	<0.00072	-	-	-
MW-23	06/07/2014	59.94	6.23	53.71	-	-	-	-	-	-	-	-	-	-	-
MW-23	06/11/2014	-	-	-	0.13 J	<0.050	-	-	<0.00015 J	<0.00011 J	<0.00016 J	<0.00040 J	-	-	-
MW-23[HS]	06/11/2014	-	-	-	0.086 J	<0.050	-	-	<0.00015	<0.00011	<0.00016	<0.00040	-	-	-
MW-23	11/04/2014	59.94	6.69	53.25	0.14 J	<0.050	-	-	<0.00015	0.00015 J	0.00024 J	<0.00040	-	-	
MW-23	04/27/2015	59.94	5.98	53.96	0.12 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
MW-23	10/23/2015	59.94	4.53	55.41	0.080 J	0.030 J	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-23	05/17/2016	59.94	5.12	54.82	0.18 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-23	09/15/2016	59.94	5.60	54.34	0.42	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-23	05/09/2017	59.94	4.06	55.88	0.17 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-23	09/01/2017	59.94	5.44	54.50	0.31 J	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
MW-23	06/07/2018	59.94	5.11	54.83	<0.051	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0005	<0.0005
Trip Blank	10/04/2007	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.002	-	<0.0000096	<0.0005
Trip Blank	06/19/2008	-	-	-	-	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
Trip Blank	08/28/2008	-	-	-	-	<0.01	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
Trip Blank	02/16/2009	-	-	-	-	-	-	-	<0.001	<0.001	<0.001	<0.002	-	-	-
Trip Blank	04/29/2009	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	08/19/2009	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	06/08/2010	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	08/06/2010	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	05/19/2011	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	08/01/2011	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	05/31/2012	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	07/31/2012	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	05/09/2013	-	-	-	-	<0.0070	-	-	<0.000062	<0.000077	<0.000081	<0.00022	-	-	-
Trip Blank	09/18/2013	-	-	-	-	<0.050	-	-	<0.00024	<0.00023	<0.00024	<0.00072	-	-	-
Trip Blank	06/11/2014	-	-	-	-	<0.050	-	-	<0.00015 / <0.00015	<0.00011 / <0.00011	<0.00016 / <0.00016	<0.00040 / <0.00040	-	-	-
Trip Blank	11/04/2014	-	-	-	-	-	-	-	<0.00015 / <0.00015	<0.00011 / <0.00011	<0.00016 / <0.00016	<0.00040 / <0.00040	-	-	-
Trip Blank	04/27/2015	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0015	-	-	-
Trip Blank	10/23/2015	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
Trip Blank	05/17/2016	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
Trip Blank	05/09/2017	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
Trip Blank	09/01/2017	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	-	-
Trip Blank	06/07/2018	-	-	-	-	<0.010	-	-	<0.0005	<0.0005	<0.0005	<0.0005	-	<0.0005	<0.0005

Table 2

Historical Groundwater Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	TOC	DTW	GWE	HYDROCARBONS				PRIMARY VOCS				ADDITIONAL VOC'S		
	Units	ft msl	ft btoc	ft msl	DRO mg/L	GRO mg/L	TPH mg/L	Oil and Grease mg/L	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	HVOCs mg/L	EDB mg/L	1,2-DCA mg/L
ADEC Groundwater Cleanup Levels 2017[a]					**1.5**	**2.2**			**0.0046**	**1.1**	**0.015**	**0.19**		**0.000075**	**0.0017**

Notes and Abbreviations

TOC = top of casing

DTW = depth to water

GWE = groundwater elevation

TPH = total petroleum hydrocarbons

DRO = diesel range organics by Alaska Series Method AK102

GRO = gasoline range organics by Alaska Series Method AK101

Benzene, Toluene, Ethylbenzene, and Total Xylenes by Environmental Protection Agency (EPA) Method 8021B or 8260B or SW-E46 8021B

Total Xylenes = Sum of m-, o-, and p-xylenes

HVOC = volatile organic compounds by EPA Method 524.2

EDB = ethylene dibromide

1,2-DCA = 1,2-dichloroethane

ADEC = Alaska Department of Environmental Conservation

[a] = Levels established in ADEC Table C Groundwater Cleanup Levels (18 AAC 75.345)

BOLD = Indicates concentration above the ADEC Table C Groundwater Cleanup Level

ft msl = feet above mean sea level

ft btoc = feet below top of casing

mg/L = milligrams per liter

J = Estimated value

- = Not measured / not analyzed

<x = Constituent not detected above x milligrams per liter

x / y = Sample results / blind duplicate results

HS = collected via hydrasleeve

ND = Not detected

Table 3

Groundwater PAH Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	PAH							
		Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]		**0.53**	**0.26**	**0.043**	**0.00012**	**0.000034**	**0.00034**	**0.00026**	**0.0008**
MW-5	05/17/2016	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.0000096
MW-11A	06/08/2010	<0.000011	<0.000011	<0.000011	<0.000011	<0.000011	<0.000011	<0.000011	<0.000011
MW-11A	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
MW-20A	06/08/2010	0.000045 J / 0.000039 J	0.000033 J / 0.000048 J	<0.000011 / <0.000010	<0.000011 / <0.00001	<0.000011 / <0.00001	<0.000011 / <0.00001	<0.000011 / <0.00001	<0.000011 / <0.00001
MW-20	05/17/2016	0.000054 / 0.000053	0.000040 J / 0.000036 J	0.000023 J / 0.000021 J	<0.0000096 / <0.0000096	<0.0000096 / <0.0000096	<0.0000096 / <0.0000096	<0.0000096 / <0.0000096	<0.0000096 / <0.0000096
MW-20	06/07/2018	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001
MW-19	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
MW-21	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001 J	<0.00001
MW-22	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
MW-23	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001

Table 3

Groundwater PAH Analytical Results
Former Unocal Station 4652
Chevron Site 306448
1441 C Street
Anchorage, Alaska

Location	Date	PAH							
		Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
ADEC Groundwater Cleanup Levels 2017[a]		**0.002**	**0.000034**	**0.26**	**0.29**	**0.00019**	**0.0017**	**0.17**	**0.12**
MW-5	05/17/2016	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.0000096	<0.000029	<0.000029	<0.0000096
MW-11A	06/08/2010	<0.000011	<0.000011	<0.000011	<0.000011	<0.000011	**0.0020**	<0.000011	<0.000011
MW-11A	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0020**	<0.00003	<0.00002
MW-20A	06/08/2010	<0.000011 / <0.00001	<0.000011 / <0.00001	<0.000011 / <0.000010	0.000057 / 0.000055	<0.000011 / <0.00001	**0.13 / 0.13**	0.000049 J / 0.000044 J	<0.000011 / <0.000010
MW-20	05/17/2016	0.000024 J / 0.000023 J	<0.0000096 / <0.0000096	<0.0000096 / <0.0000096	0.000025 J / 0.000023 J	<0.0000096 / <0.0000096	**0.11 / 0.098**	0.000034 J / 0.000033 J	<0.0000096 / <0.0000096
MW-20	06/07/2018	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	<0.0001 / <0.0001	**0.16 / 0.14**	<0.0003 / <0.0003	<0.0002 / <0.0002
MW-19	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0001	<0.00003	<0.00002
MW-21	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	0.00001 J	0.0003	<0.00003	<0.00002
MW-22	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0001	<0.00003	<0.00002
MW-23	06/07/2018	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00004 J	<0.00003	<0.00002

Notes and Abbreviations

PAHs = poly aromatic hydrocarbons by Method SW8270

ADEC = Alaska Department of Environmental Conservation

[a] = Levels established in ADEC Table C Groundwater Cleanup Levels (18 AAC 75.345)

BOLD = Indicates concentration above the ADEC Table C Groundwater Cleanup Level

mg/L = milligrams per liter

J = Estimated value

- = Not measured / not analyzed

<x = Constituent not detected above x milligrams per liter

x / y = Sample results / blind duplicate results

Appendix A
Site Photographs

1. Site layout looking Northeast

2. Site layout looking Northwest

3. Site layout looking Southeast

4. Site layout looking Southwest

FORMER UNOCAL STATION 4652/CHEVRON SITE 306448
1441 C STREET
ANCHORAGE, ALASKA

621049-95

Sep 13, 2016

SITE PHOTOGRAPHS

CAD File: P:\drawings\621000s\621049\621049-REPORTS\621049-95(049)\621049-95(049)GN\621049-95(049)GN-WA004.dwg

Appendix B
Human Health Conceptual Site Model Scoping and Graphics Forms

Print Form

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

Site Name: Chevron 306448

File Number: 2100.26.117

Completed by: GHD Services, Inc.

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)*

- ☒ USTs
- ☐ ASTs
- ☒ Dispensers/fuel loading racks
- ☐ Drums
- ☐ Vehicles
- ☐ Landfills
- ☐ Transformers
- ☐ Other:

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

- ☐ Spills
- ☒ Leaks
- ☐ Direct discharge
- ☐ Burning
- ☐ Other:

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

- ☐ Surface soil (0-2 feet bgs*)
- ☒ Subsurface soil (>2 feet bgs)
- ☐ Air
- ☐ Sediment
- ☐ Groundwater
- ☐ Surface water
- ☐ Biota
- ☐ Other:

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

- ☒ Residents (adult or child)
- ☒ Commercial or industrial worker
- ☒ Construction worker
- ☐ Subsistence harvester (i.e. gathers wild foods)
- ☐ Subsistence consumer (i.e. eats wild foods)
- ☒ Site visitor
- ☒ Trespasser
- ☐ Recreational user
- ☐ Farmer
- ☐ Other:

* 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: 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: Incomplete

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 ground-water 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: 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: Incomplete

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: Incomplete

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: 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 contaminted 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: 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 - PM_{10}). 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.)*

HUMAN HEALTH CONCEPTUAL SITE MODEL GRAPHIC FORM

Site: Chevron 306448
ADEC File ID: 2100.260117

Completed By: Travis Weaver
Date Completed: 7/6/17

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

(1) *Check the media that could be directly affected by the release.*

(2) *For each medium identified in (1), follow the top arrow and check possible transport mechanisms. Check additional media under (1) if the media acts as a secondary source.*

Media	Transport Mechanisms
☐ Surface Soil (0-2 ft bgs)	☐ Direct release to surface soil — check soil ☐ Migration to subsurface — check soil ☐ Migration to groundwater — check groundwater ☐ Volatilization — check air ☐ Runoff or erosion — check surface water ☐ Uptake by plants or animals — check biota ☐ Other (list):
☑ Subsurface Soil (2-15 ft bgs)	☐ Direct release to subsurface soil — check soil ☑ Migration to groundwater — check groundwater ☑ Volatilization — check air ☐ Uptake by plants or animals — check biota ☐ Other (list):
☐ Groundwater	☐ Direct release to groundwater — check groundwater ☐ Volatilization — check air ☐ Flow to surface water body — check surface water ☐ Flow to sediment — check sediment ☐ Uptake by plants or animals — check biota ☐ Other (list):
☐ Surface Water	☐ Direct release to surface water — check surface water ☐ Volatilization — check air ☐ Sedimentation — check sediment ☐ Uptake by plants or animals — check biota ☐ Other (list):
☐ Sediment	☐ Direct release to sediment — check sediment ☐ Resuspension, runoff, or erosion — check surface water ☐ Uptake by plants or animals — check biota ☐ Other (list):

(3) *Check all exposure media identified in (2).*

(4) *Check all pathways that could be complete. The pathways identified in this column **must** agree with Sections 2 and 3 of the Human Health CSM Scoping Form.*

(5) *Identify the receptors potentially affected by each exposure pathway: Enter "C" for current receptors, "F" for future receptors, "C/F" for both current and future receptors, or "I" for insignificant exposure.*

Current & Future Receptors

Exposure Media	Exposure Pathway/Route	Residents (adults or children)	Commercial or industrial workers	Site visitors, trespassers, or recreational users	Construction workers	Farmers or subsistence harvesters	Subsistence consumers	Other
☑ soil	☑ Incidental Soil Ingestion	C/F	F	C/F	C/F			
	☐ Dermal Absorption of Contaminants from Soil							
	☐ Inhalation of Fugitive Dust							
☑ groundwater	☑ Ingestion of Groundwater	C/F	F	C/F	C/F			
	☐ Dermal Absorption of Contaminants in Groundwater							
	☐ Inhalation of Volatile Compounds in Tap Water							
☑ air	☑ Inhalation of Outdoor Air	C/F	F	C/F	C/F			
	☑ Inhalation of Indoor Air	C/F	F	C/F	C/F			
	☐ Inhalation of Fugitive Dust							
☐ surface water	☐ Ingestion of Surface Water							
	☐ Dermal Absorption of Contaminants in Surface Water							
	☐ Inhalation of Volatile Compounds in Tap Water							
☐ sediment	☐ Direct Contact with Sediment							
☐ biota	☐ Ingestion of Wild or Farmed Foods							

Revised, 10/01/2010

Appendix C
Monitoring Data Package

DAILY FIELD REPORT

Project Name: 306447	GHD Project Manager: S. PRITCHARD	Field Rep: T. WEAVER / O. YAN
Project Number: 621079	Date: 6/7/18	Site Address: 1991 C STREET ANCHORAGE, AK
Scope of Work: PERFORM GW MONITORING/SAMPLING + GAUGE WELLS; COLLECT GW		
Equipment: YSI-556 ; WATER LEVEL METER; TURBIDITY METER; MP-50 (09G101025)		Weather: SUNNY – 61°F

Time	Activity/Comments	SWA
1121	MOBILIZE TO SITE → LOADED EQUIPMENT	
1138	ARRIVE ONSITE → NOTIFY PM; CONDUCT TAILGATE SAFETY MEETN	
1150	SET UP FOR GAUGING WELLS → START W/ OFFSITE WELLS	
	↳ GAUGE MW-21 THROUGH MW-23, MW-22 TOP OF STICK UP BENT	
1157	MOB TO ONSITE LOCATION & GAUGE ALL ON SITE WELLS	
1217	MOB BACK OFFSITE TO SAMPLE WELLS	
1233	START LOW FLOW PURGE @ MW-21	
1245	T. WEAVER STEPS AWAY FOR SAFETY CALL	
1305	COLLECT SAMPLE MW-21-W-180607 FROM MW-21 & DECON EQUIP	
1340	START LOW FLOW PURGE PARAMETER MONITORING @ MW-22	
1417	COLLECT SAMPLE MW-22-W-180607 FROM MW-22 & DECON EQUIP	
1442	START LOW FLOW PURGE PARAMETER MONITORING @ MW-23	
1514	COLLECT SAMPLE MW-23-W-180607 FROM MW23 & DECON EQUIPMENT	
1538	LOAD TRUCK & MOB OFFSITE TO BATHROOM THEN TO ONSITE WELLS	
1609	START LOW FLOW PURGE PARAMETER MONITORING @ MW-19	
1640	COLLECT SAMPLE MW-19-W-180607 FROM MW-19 & DECON EQUIPMENT	
1709	LOW FLOW PURGE PARAMETER MONITORING @ MW-20	
1741	COLLECT SAMPLES MW-20-W-180607 & DUP-1-W-180607 FROM MW-20	
	& DECON EQUIPMENT	
1823	START LOW FLOW PURGE MONITORING @ MW-11A	
1855	COLLECT SAMPLE MW-11A-W-180607 FROM MW-11A, DECON EQUIPMENT	
	& LOAD TRUCK ; TOTAL DECON WATER PURGED THROUGH GAC – 2.2 GAL	
1915	MOB BACK TO OFFICE	
1924	BACK AT OFFICE; OFF-LOAD SAMPLES INTO SAMPLE FRIDGE; FINISHED @	
	TOTAL PURGED THROUGH GAC: 5.9 GAL	

SWA Key:	A: Person or People	B: Equipment	C: Environmental
	D: Procedures/Processes/JSA-review/revise	E: Visitors	

Operational Mileage: Start _____ End _____ Total _____

Site Photographs: ____ GAC Tracker: ____ Disposal Log: ____ Lab COC Review: ____

Groundwater Monitoring Field Sheet

Project Name: 306448 (ADEC File ID: 2100.26.117) Project Number: 621049

Field Staff: T. Weaver / O. Yan Date: 6/7/2018

Well ID	Time	DTW (ft - btoc)	DTB (ft-btoc)	DTP (ft-btoc)	Product Thickness (feet)	Amount of Product Removed (feet)	Casing Diameter (inches)	PID (ppm)	Comments
MW-4	12:12	5.78	16.54	--	--	—	2"	--	Gauge only
MW-5	12:07	9.49	13.56	--	--	—	2"	--	Gauge only
MW-11A	1215	9.39	12.24	--	--	—	2"	--	
MW-19	1210	10.53	17.35	--	--	—	4"	--	
MW-20	1214	9.71	16.38	--	--	—	4"	--	
MW-21	1147	6.95	19.32	--	--	—	2"	--	
MW-22	1155	6.47	16.96	--	--	—	2"	--	
MW-23	1151	5.11	16.68	--	--	—	2"	--	

GAC Filtered Water Volume: 5.90 gallons Volume logged on *Portable GAC Volume Tracking Log?* ☒

DTP - depth to product; DTW - depth to water; DTB - depth to bottom; ft-btoc - feet below top of casing ; ppm - parts per million

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-11A Date 6/7/18 Page 1 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Setting (ft-btoc) UNK Casing Diameter (in.) 2" Well Material x PVC SS Sampled by T. Weaver O. Yan

Static Water Level (ft-btoc) 9.39 Total Depth (ft-btoc) 12.24 Water Column / Gallons in Well 2.85 / 0.456 Sample ID MW-11A-W-180607 Dup ID

Sample Time 1855 Start End

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sampler

Weights Bottom ☐ Low-Flow Sampling Position Suspended ☐ Bottom set ☐

Was Teflon Baler used to collect non volatile samples Yes ☐ No ☐

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 10.00

Volumes Purged 0.85 Gal

Flow rate (ml/minute) 90 - 115 Purge Time: Start 1823

Did well Dewater? Yes ☐ No ☒ End 1853

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C)	Cond. (mS/cm) 3%	Dissolved Oxygen (mg/L) 10%	pH 0.1	Redox (mV) 10	Turbidity (NTU)	Additional notes
1828	5	115	9.63	0.10	11.45	0.862	4.25	6.54	-36.5	0.00	Clear
1833	10	90	9.67	0.30	10.61	0.864	2.86	5.80	-5.7	0.00	" "
1838	15	90	9.66	0.50	9.14	0.875	2.19	5.82	-6.1	0.00	" "
1843	20	90	9.67	0.65	8.50	0.879	1.55	5.95	-10.9	0.00	" "
1848	25	90	9.67	0.75	8.77	0.871	1.26	6.15	-19.5	0.00	" "

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3 ✓	HCl
Full Scan VOCs by 8260	■	1SA18 event only	Included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3 ✓	HCl
DRO by AK 102	■		250 mL amber	2 ✓	HCl
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2 ✓	None
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
			TOTAL:	10	

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.25" = 0.06 1.5" = 0.09 2" = 0.16 2.5" = 0.26 3" = 0.37 3.5" = 0.50 4" = 0.65 6" = 1.47

Field Test Results:

N/A Ferrous Iron mg/L Nitrate mg/L Other

Well Information

Well Location: ONSITE → SW CORNER

Condition of Well: GOOD ✓

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Additional Notes

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-19 Date 6/7/18 Page 2 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Setting (ft-btoc) UNK Casing Diameter (in.) 4" Well Material x PVC / SS Sampled by T. Weaver / O. Yan

Static Water Level (ft-btoc) 10.53 Total Depth (ft-btoc) 17.35 Water Column / Gallons in Well 6.82 / 4.433 Sample ID MW-19-N-180607 Dup ID — Sample Time 1640 Start — End

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sampler —

~~Weights~~ ~~Position~~ Suspended ☐ Bottom ☐ Bottom set ☐ Yes ☐ No ☐

Low-Flow Sampling

Teflon Baler used to collect non volatile samples

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 11.30

~~Flow rate (ml/minute)~~ 70 – 140 Volumes Purged 0.55 Gal

Did well Dewater? Yes ☐ No ☒ Purge Time: Start 1609 End 1639

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C)	Cond. (mS/cm) 3%	Dissolved Oxygen (mg/L) 10%	pH 0.1	Redox (mV) 10	Turbidity (NTU)	Additional notes
1614	5	140	10.59	0.10	10.43	0.731	7.47	6.72	111.3	0.00	CLEAR
1619	10	70	10.60	0.20	10.16	0.689	7.36	6.53	118.3	0.00	CLEAR
1624	15	70	10.63	0.25	9.71	0.666	7.74	6.51	118.4	0.00	CLEAR
1629	20	70	10.65	0.30	10.06	0.651	7.59	6.66	111.6	0.00	CLEAR
1634	25	70	10.69	0.35	10.11	0.651	7.66	6.78	107.6	0.00	CLEAR

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3	HCl ✓
Full Scan VOCs by 8260	■	1SA18 event only	Included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3	HCl ✓
DRO by AK 102	■		250 mL amber	2	HCl ✓
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2	None ✓
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
				TOTAL:	10

Well Casing Volumes

Gallons/Foot 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47

Field Test Results:

N/A Ferrous Iron mg/L Nitrate mg/L Other

Well Information

Well Location: ONSITE – NW CORNER OF SITE

Condition of Well: GOOD

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Additional Notes

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-20 Date 6/7/18 Page 3 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Casing Well Material x PVC Sampled by T. Weaver

Setting (ft-btoc) UNK Diameter (in.) 4" SS O. Yan

Static Water Level (ft-btoc) 9.71 Total Depth (ft-btoc) 16.38 Water Column / Gallons in Well 6.67 / 4.336 Sample ID MW-20-W-180607

Dup ID DUP-1-W-180607

Sample Time 1741 Start End

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sampler

Weights Low-Flow Sampling Position Supended ☐ Bottom ☐ Bottom set ☐

Was Teflon Baler used to collect non volatile samples Yes ☐ No ☐

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 10.35

Flow rate (ml/minute) 85-130 Volumes Purged 4SS GAL

Did well Dewater? Yes ☐ No ☒ Purge Time: Start 1707 End 1739

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C)	Cond. (mS/cm) 3%	Dissolved Oxygen (mg/L) 10%	pH 0.1	Redox (mV) 10	Turbidity (NTU)	Additional notes
1714	5	130	9.72	0.05	11.45	0.795	7.02	6.26	18.1	—	Clear
1719	10	105	9.82	0.15	11.80	0.794	2.54	6.21	3.6	0.00	CLEAR
1724	15	95	9.89	0.25	9.87	0.816	0.94	5.98	7.3	0.00	" "
1729	20	95	9.95	0.30	10.04	0.813	0.68	5.94	3.0	0.00	" "
1734	25	85	9.97	0.40	10.14	0.814	0.61	6.01	0.5	0.00	" "

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3/3	HCl
Full Scan VOCs by 8260	■	1SA18 event only	Included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3/3	HCl
DRO by AK 102	■		250 mL amber	2/3	HCl
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2/2	None
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
				TOTAL: 20	

Well Casing Volumes

Gallons/Foot 1" = 0.04 1.5" = 0.09 2.5" = 0.26 3.5" = 0.50 6" = 1.47

1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65

Field Test Results:

NA. Ferrous Iron mg/L Nitrate mg/L Other

Well Information

Well Location: ONSITE - SOUTH / CENTRAL PORTION

Condition of Well: GOOD - WELL PVC GOOD ; WELL VAULT HEAVED.

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Additional Notes

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-21 Date 6/7/18 Page 4 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Setting (ft-btoc) 6-16 Casing Diameter (in.) 2" Well Material x PVC ___ SS Sampled by T. Weaver, O. Yan

Static Water Level (ft-btoc) 6.95 Total Depth (ft-btoc) 19.32 Water Column / Gallons in Well 12.37 / 1.979

Sample ID MW-21-W-180607 Dup ID ___ Sample Time 1305 Start ___ End ___

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sampler ___

Weights ___ Bottom ☐ Low-Flow Sampling Position Supended ☐ Bottom set ☐

Was Teflon Baler used to collect non volatile samples Yes ☐ No ☐

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 7.80

Flow rate (ml/minute) 50 - 100 Volumes Purged 0.5 Gal

Did well Dewater? Yes ☒ No ☐ Purge Time: Start 1223 End 1303

Time	Minutes Elapsed	Rate (gpm), (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C),	Cond. (mS/cm), 3%	Dissolved Oxygen, (mg/L) 10%	pH 0.1	Redox (mV), 10	Turbidity (NTU),	Additional notes
1238	5	~~7.25~~ 100	7.25	0.10	11.04	0.614	3.77	7.62	134.8	—	Clear
1243	10	~~7.55~~ 80	7.55	0.15	12.36	0.601	2.26	7.49	150.2	19.25	Clear
1248	15	50	7.66	0.20	12.98	0.603	2.09	7.48	133.2	17.55	" "
1253	20	50	7.71	0.30	14.51	0.605	1.98	7.57	125.6	20.55	" "
1258	25	90	7.74	0.35	14.55	0.607	1.95	7.68	121.9	15.88	" "

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3	HCl
Full Scan VOCs by 8260	■	1SA18 event only	Included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3	HCl
DRO by AK 102	■		250 mL amber	2	HCl
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2	None
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
			TOTAL:	10	

Well Casing Volumes

Gallons/Foot 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47

Field Test Results:

N/A Ferrous Iron mg/L Nitrate mg/L Other

Well Information

Well Location: OFFSITE - PLANTER BOX → NW CORNER

Condition of Well: GOOD

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes No

Well Locked at Departure: Yes / No

Additional Notes

> 0.5 FEET DEWATERED

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-22 Date 6/7/18 Page 5 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Setting (ft-btoc) 4-14 Casing Diameter (in.) 2" Well Material x PVC ___ SS Sampled by T. Weaver, O. Yan

Static Water Level (ft-btoc) 6.47 Total Depth (ft-btoc) 16.96 Water Column / Gallons in Well 10.49 / 1.678

Sample ID MW-22-W-180607 Dup ID — Sample Time 1417 Start ___ End ___

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sam… ___

Weights … Bottom ☐ Low-Flow Sampling Position Suspended ☐ Bottom set ☐

W… Teflon Baler used to collect non volatile samples Yes ☐ No ☐

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 7.35

Flow rate (ml/minute) 60 -100 Volumes Purged 0.5 GAL

Did well Dewater? Yes ☐ No ☐ Purge Time: Start 1340 End 1410

Time	Minutes Elapsed	Rate (~~gpm~~) (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C)	Cond. (mS/cm) 3%	Dissolved Oxygen (mg/L) 10%	pH 0.1	Redox (mV) 10	Turbidity (NTU)	Additional notes
1345	5	60	6.70	0.05	14.81	2.054	7.47	7.02	125.2	—	Clear
1350	10	70	6.86	0.10	14.00	2.317	6.34	6.85	130.1	14.64	" "
1355	15	60	6.89	0.25	13.06	2.408	5.35	6.88	125.8	13.84	" "
1400	20	60	6.87	0.30	12.50	2.529	4.31	6.77	126.0	12.28	" "
1405	25	60	6.87	0.35	12.67	2.615	3.87	6.77	123.2	9.51	" "
1410	30	60	6.88	0.40	12.91	2.685	3.55	6.87	120.6	6.49	" "

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3	HCl
Full Scan VOCs by 8260	■	1SA18 event only	Included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3	HCl
DRO by AK 102	■		250 mL amber	2	HCl
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2	None
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
				TOTAL: 10	

Well Casing Volumes

Gallons/Foot 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; **2" = 0.16**; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Field Test Results:

N/A Ferrous Iron ___ mg/L Nitrate ___ mg/L Other ___

Well Information

Well Location: OFFSITE - BY PLANTER (LENDER) Well Locked at Arrival: (Yes) / No

Condition of Well: GOOD - BUT BENT STOVE PIPE DUE TO SNOW REMOVAL Well Locked at Departure: (Yes) / No

Well Completion: Flush Mount / **Stick Up**

Additional Notes

Groundwater Sampling Form

Project No. 621049 PM Siobhan Pritchard Well ID MW-23 Date 6/7/18 Page 6 of 6

Site ID / Location 306448 / 1441 C Street, Anchorage, Alaska (ADEC File ID: 2100.26.117)

Screen Setting (ft-btoc) 4-14 Casing Diameter (in.) 2" Well Material x PVC / SS Sampled by T. Weaver, O. Yan

Static Water Level (ft-btoc) 5.11 Total Depth (ft-btoc) 16.68 Water Column / Gallons in Well 11.57 / 1.851 Sample ID MW-23-W-180607 Dup ID — Sample Time 1514 Start ____ End ____

No-Purge Method

Sampler Length (in) 36 ☐ 30 ☐ Depth of Sampler ____

Weights ☐ Low-Flow Sampling Position Suspended ☐ Bottom ☐ Bottom set ☐

Teflon Baler used to collect non volatile samples Yes ☐ No ☐

Low Flow Method

Pump type Bladder ☒ Other ☐ Pump Intake (ft-btoc) 5.95

Volumes Purged 0.75 GAL

Flow rate (ml/minute) 60-80 Purge Time: Start 1442 End 1512

Did well Dewater? Yes ☐ No ☒

Time	Minutes Elapsed	Rate (gpm), (mL/min)	Depth to Water (ft)	Gallons Purged	Temp (°C)	Cond. (mS/cm), 3%	Dissolved Oxygen, (mg/L) 10%	pH 0.1	Redox (mV), 10	Turbidity (NTU),	Additional notes
1447	5	80	5.39	0.65	11.54	1.867	4.21	6.77	123.4	51.34	CLEAR
1452	10	60	5.47	0.15	9.60	1.291	2.29	6.09	154.0	—	CLEAR
1457	15	60	5.52	0.20	8.61	5.312	0.57	6.23	148.6	12.59	" "
1502	20	60	5.55	0.35	9.10	5.932	0.48	6.75	145.3	8.41	" "
1507	25	60	5.58	0.45	8.00	6.100	0.44	6.39	143.9	3.96	" "

Constituents Sampled			Container	Number	Preservative
BTEX by 8260	■		40 mL vial	3 ✓	HCl
Full Scan VOCs by 8260	■	1SA18 event only	included in above		
HVOCs by 8260	☐				
GRO by AK 101	■		40 mL vial	3 ✓	HCl
DRO by AK 102	■		250 mL amber	2 ✓	HCl
RRO by AK 103	☐				
Lead by 6010	☐				
PAHs by 8270	■	1SA18 event only	1L amber	2 ✓	None
Alkalinity by 2320B	☐				
Methane by RSK175	☐				
Sulfate by EPA 300	☐				
Nitrate/Nitrite by EPA 300	☐				
Ferrous Iron	☐				
				TOTAL = 10	

Well Casing Volumes

Gallons/Foot 1" = 0.04 | 1.25" = 0.06 | 1.5" = 0.09 | 2" = 0.16 | 2.5" = 0.26 | 3" = 0.37 | 3.5" = 0.50 | 4" = 0.65 | 6" = 1.47

Field Test Results: N/A Ferrous Iron mg/L Nitrate mg/L Other

Well Information

Well Location: OFFSITE - PLANTER AREA EAST SIDE

Condition of Well: GOOD

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes / No

Well Locked at Departure: Yes / No

Additional Notes

Field Data Record Form
Meter, Water Level
(QSF-251D)

Control number: OC 784
Date (mm/dd/yyyy): 6/7/18
User (print name): TRAVIS WEAVER

Project number: 620914 & 6Q1049
Project name: 95799 & 306448

Location: 2500 SEWARD HWY & 1441 C ST

Additional equipment control numbers and descriptions:

Field procedure before use:

	Check when completed
• Check for broken or missing parts.	✓
• Check battery	☑
• Check operation of buzzer.	☑
• Check operation of signal light.	☑
• Test probe in water to ensure unit operates, both visually and audibly.	☑
• Check cable.	☑

Filing: Field file

Signature: Travis Weaver

Field Data Record Form
Meter, PH/Cond./Temp./DO/ORP/ Salinity/Flow Cell, YSI 556 MPS
(QSF-483D)

Control number:	09610 1025	**Project number:**	620914 / 621049
Date (mm/dd/yyyy):	06/07/2018	**Project name:**	CEMC 95799 / CEMC 306448
User (print name):	YAN, OLIVER		
		Location:	2500 SEWARD HWY / 1441 C ST [illegible] ANCHORAGE, AK

Calibration solution(s):	pH 4.0	pH 7.0	240 mV ORP	COND. STAND.
Lot #(s):	VV34	VT1	0640	OAKTON
Supplier(s):	OAKTON	OAKTON	HANNA	VT2
Expiration date(s):	05/2019	07/2019	10/2021	07/2019

Additional information:

Field procedure before use:

	Check when completed
• Check kit contents.	☑
• Check pH 7 buffer reading. Calibrate if greater than ±0.2.	Reading 6.83 → 7.00
PH is a two point calibration but always start with the seven standard.	
• Fill calibration cup with pH 7.0 buffer and attach to probe with probes facing down.	Calibrated (Y) / N ✓
• Press Esc to enter into main menu and use down arrow key to highlight calibration menu. Press ↵ key to accept.	
• Use ↓ key to highlight pH symbol and press enter ↵.	
• Select 2 point calibration and use number pad to enter 7.0 and push ↵ to accept value. Push ↵ again to calibrate.	
• Repeat these steps to calibrate your pH value to (4.0) or 10.0.	Reading 4.05
• Press Esc to return to the calibration screen.	
Check conductivity standard near the expected range. Calibrate if greater than ±0.5%.	Standard 1.413 Reading 1.412
Conductivity is a one point calibration.	Calibrated (Y) / N ✓
• Fill calibration cup with 1.413 mS standard and attach to probe with probes facing up.	
• Press Esc to return to the calibration screen.	
• Use the ↑or ↓ to select SpC and press ↵	
• Use the number key pad to enter 1.413 and push ↵ to accept value. Push ↵ again to calibrate.	
Check ORP standard:	
• Press Esc to return to the calibration screen.	Standard 240 mV Reading 2 mV
• Use the ↑or ↓ to select ORPand press ↵	
• Use the number key pad to enter the value and push ↵ to accept. Push ↵ again to calibrate.	
To calibrate DO, see manual for instructions.	Calibrated (Y) / N

Filing: Field file

Signature: [signature]

This completed form is a quality record

Field Data Record Form
Meter, Turbidity (Portable), HF Scientific
(QSF-249D)

Control number: 20106169
Date (mm/dd/yyyy): 6/7/18
User (print name): TRAVIS WEAVER

Project number: 620914 / 621049
Project name: 45799 / 306448

Location: 2500 SEWARD HWY / 1491 C ST

Additional equipment control numbers and descriptions:

0.02 NTU	10 NTU	1000 NTU
LOT: 80301	LOT: 72262	LOT: 80303
EXP: MAR 2020	EXP: 3/2020	EXP: MAR/2020
PROCAL	HF SCIENTIFIC	PROCAL

Field procedure before use:

	Check when completed
• Turn the DRT-15CE to the 0-10 range.	✓
• Check outside of reference standard bottles for cleanliness, no condensation, surface scratches, or finger smudges.	☑
• Insert the reference standard and index.	☑
• Adjust the Reference Adjust in the appropriate direction to cause the display to read 0.02 NTU.	☑
• The unity is now ready to use on any range.	
Note: Condensation, surface scratches, finger smudges, and dirt on outside of sample bottles affects meter readings.	

Filing: Field file

Signature: [signature]

GHD Services, Inc.

Portable GAC Volume Tracking Log

Site ID	Project No.	Date	Volume Filtered through GAC (gallons)	Filter location description
95414	062327	03/27/18	5.45 GALLONS	PLANTER AREA FOR CEMC 95414 WELLS AND PLANTER AREA NORTH OF MW-10 FOR MW-8/MW-10.
91356	622232	04/18/18	5.80 GAL	PLANTER AREA BY STATION BUILDING AND CHEVRON SIGN
91252	622059	04/19/18	3.85 GAL	PLANTER ALONG OLD GLENN HWY (UP GRADIENT)
90430	065001	04/23/18	3.60 GAL	CENTER AREA OF PROPERTY
91518	062325	04/24/18	5.20 GAL	PLANTER AREA SOUTHERN PORTION OF SITE BY RESTAURANT SIGN
92555	062326	04/25/18	6.55 GAL	CENTER OF SITE; PLANTER AREA NORTH OF SIDEWALK WELL
92555	062326	04/26/18	7.60 GAL	PLANTER AREAS ~100' FT AWAY FROM PROPERTY BOUNDARY
97324	612061	04/27/18	5.25 GAL	CENTER OF THE SITE
211074	612064	05/14/18	6.40 GAL	PLANTER AREA BY CENTER OF WHOLE COMPLEX
211074	612064	05/15/18	~~10.6~~ 4.2 GAL	PLANTER AREA BY CENTER OF WHOLE PARKING COMPLEX
211074	612064	05/16/18	0.~~85~~ GAL	PLANTER AREA BY CENTER OF PARKING LOT
99014	062329	5/16/18	4.8 GAL	PLANTER AT THE CHEVRON STATION
99014	062329	5/17/18	7.15 GAL	PLANTER AREA AT JAMAS LOCATION → THRIFTY + CHEVRON STATION
99014	062329	5/18/18	10.8 GAL	PLANTER AT THRIFTY LOT
98557	060361	5/21/18	14.65 GAL	PLANTER ALONG HILLSIDE ON CHEVRON STATION
96489	620916	5/22/18	6.70 GAL	PLANTER AREA NEXT TO STATION BUILDING AND HOSPITAL PLANTER FOR OFFSITE WELLS.
96097	062328	5/24/18	6.70 GAL	CENTER PLANTER AT SCHOOL ADJACENT TO RING 3
96097	062328	5/25/18	5.50 GAL	CENTER PLANTER (PILEY SIDE) BETWEEN SCHOOL AND ALLEY.
95799	620914	6/6/18	4.35 GAL	PLANTER ON WEST SIDE OF SITE, NEXT TO DUMPSTER
95799	620914	6/7/18	4.90 GAL	PLANTER AREAS OFFSITE / PLANTER AREA WEST SIDE
306448	621047	6/7/18	5.90 GAL	PLANTER - CENTER OF OFFSITE AREA BY EDGE OF FENCE - EAST SIDE

Monitoring Well Condition Form

Site ID: 306498 Site Address: 1441 C Street Project No: ~~062~~ 621047 Date: 6/7/18

Well ID	Condition	Notes
MW-5	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	STICK UP GOOD ✓
MW-4	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	STICK UP → GOOD CONDITION
MW-14A	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	YES GOOD ✓
MW-19	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	GOOD ✓
MW-20	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [ ] Good [x] Damaged	WELL VAULT CEMENT HEAVED, BUT PVC IN GOOD CONDITION.
MW-21	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	STICK UP GOOD ✓
MW-22	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [ ] Good [x] Damaged	BENT STICK-UP → PRESSING AGAINST PVC, BUT STILL LOCKABLE.
MW-23	Well Lid: [x] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [x] No [ ] Stripped Well Vault: [x] Good [ ] Damaged	→ WELL LID OKAY → NEED TO BE LOCKABLE/BOLTED(?)
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	
	Well Lid: [ ] Good [ ] Broken [ ] Missing Missing Bolts: [ ] Yes [ ] No [ ] Stripped Well Vault: [ ] Good [ ] Damaged	

Appendix D
Laboratory Analytical Report

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ChevronTexaco
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

Report Date: June 21, 2018 12:36

Project: 306448

Account #: 10880
Group Number: 1953276
PO Number: 0015279745
Release Number: CARRIER
State of Sample Origin: AK

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	GHD	Attn: GHD EDF
Electronic Copy To	GHD	Attn: Siobhan Pritchard
Electronic Copy To	GHD	Attn: Sarah Gillette
Electronic Copy To	GHD	Attn: Jeffrey Cloud
Electronic Copy To	Chevron	Attn: GHD EDD

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
MW-21-W-180607 Grab Groundwater	06/07/2018 13:05	9651340
MW-22-W-180607 Grab Groundwater	06/07/2018 14:17	9651341
MW-23-W-180607 Grab Groundwater	06/07/2018 15:14	9651342
MW-19-W-180607 Grab Groundwater	06/07/2018 16:40	9651343
MW-20-W-180607 Grab Groundwater	06/07/2018 17:41	9651344
MW-11A-W-180607 Grab Groundwater	06/07/2018 18:55	9651345
DUP-1-WD-180607 Grab Groundwater	06/07/2018	9651346
QA-1-T-180607 Water	06/07/2018	9651347

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: 306448
ELLE Group #: 1953276

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260B, GC/MS Volatiles

Batch #: W181711AA (Sample number(s): 9651343, 9651347 UNSPK: P651107)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Cyclohexane, Methylcyclohexane, Tetrachloroethene

Batch #: W181712AA (Sample number(s): 9651344-9651346 UNSPK: P664084)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Cyclohexane, Methylcyclohexane, 1,1-Dichloroethene

SW-846 8270D SIM, GC/MS Semivolatiles

Sample #s: 9651344, 9651346

Reporting limits were raised due to interference from the sample matrix.

AK 101, GC Volatiles

Sample #s: 9651341

Reporting limits were raised due to sample foaming.

Sample Description: **MW-21-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 13:05

ChevronTexaco
ELLE Sample #: WW 9651340
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		mg/l	mg/l	mg/l	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	N.D.	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	N.D.	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	N.D.	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	N.D.	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	N.D.	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	N.D.	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-21-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 13:05

ChevronTexaco
ELLE Sample #: WW 9651340
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	N.D.	0.0005	0.001	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.00001	0.00005	1
12971	Acenaphthylene	208-96-8	N.D.	0.00001	0.00005	1
12971	Anthracene	120-12-7	N.D.	0.00001	0.00005	1
12971	Benzo(a)anthracene	56-55-3	N.D.	0.00001	0.00005	1
12971	Benzo(a)pyrene	50-32-8	N.D.	0.00001	0.00005	1
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.00001	0.00005	1
12971	Benzo(g,h,i)perylene	191-24-2	0.00001 J	0.00001	0.00005	1
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.00001	0.00005	1
12971	Chrysene	218-01-9	N.D.	0.00001	0.00005	1
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00001	0.00005	1
12971	Fluoranthene	206-44-0	N.D.	0.00001	0.00005	1
12971	Fluorene	86-73-7	N.D.	0.00001	0.00005	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	0.00001 J	0.00001	0.00005	1
12971	Naphthalene	91-20-3	0.0003	0.00003	0.00009	1
12971	Phenanthrene	85-01-8	N.D.	0.00003	0.00009	1
12971	Pyrene	129-00-0	N.D.	0.00002	0.00005	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	N.D.	0.054	0.27	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-21-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 13:05

ChevronTexaco
ELLE Sample #: WW 9651340
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	Y181704AA	06/20/2018 07:45	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y181704AA	06/20/2018 07:45	Patrick T Herres	1
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/18/2018 17:35	Edward C Monborne	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 05:24	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 05:24	Jeremy C Giffin	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/18/2018 22:00	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-22-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 14:17

ChevronTexaco
ELLE Sample #: WW 9651341
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		mg/l	mg/l	mg/l	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	N.D.	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	N.D.	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	N.D.	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	N.D.	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	N.D.	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	N.D.	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-22-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 14:17

ChevronTexaco
ELLE Sample #: WW 9651341
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	N.D.	0.0005	0.001	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.00001	0.00005	1
12971	Acenaphthylene	208-96-8	N.D.	0.00001	0.00005	1
12971	Anthracene	120-12-7	N.D.	0.00001	0.00005	1
12971	Benzo(a)anthracene	56-55-3	N.D.	0.00001	0.00005	1
12971	Benzo(a)pyrene	50-32-8	N.D.	0.00001	0.00005	1
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.00001	0.00005	1
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00001	0.00005	1
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.00001	0.00005	1
12971	Chrysene	218-01-9	N.D.	0.00001	0.00005	1
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00001	0.00005	1
12971	Fluoranthene	206-44-0	N.D.	0.00001	0.00005	1
12971	Fluorene	86-73-7	N.D.	0.00001	0.00005	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00001	0.00005	1
12971	Naphthalene	91-20-3	0.0001	0.00003	0.00008	1
12971	Phenanthrene	85-01-8	N.D.	0.00003	0.00008	1
12971	Pyrene	129-00-0	N.D.	0.00002	0.00005	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.10	1.0	10
	Reporting limits were raised due to sample foaming.					
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	N.D.	0.050	0.25	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Sample Description: **MW-22-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 14:17

ChevronTexaco
ELLE Sample #: WW 9651341
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	Y181704AA	06/20/2018 08:06	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y181704AA	06/20/2018 08:06	Patrick T Herres	1
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/18/2018 18:05	Edward C Monborne	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53B	06/13/2018 20:30	Jeremy C Giffin	10
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53B	06/13/2018 20:30	Jeremy C Giffin	10
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/18/2018 22:28	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-23-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 15:14

ChevronTexaco
ELLE Sample #: WW 9651342
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	N.D.	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	N.D.	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	0.005	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	N.D.	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	N.D.	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	N.D.	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	N.D.	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-23-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 15:14

ChevronTexaco
ELLE Sample #: WW 9651342
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	N.D.	0.0005	0.001	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.00001	0.00005	1
12971	Acenaphthylene	208-96-8	N.D.	0.00001	0.00005	1
12971	Anthracene	120-12-7	N.D.	0.00001	0.00005	1
12971	Benzo(a)anthracene	56-55-3	N.D.	0.00001	0.00005	1
12971	Benzo(a)pyrene	50-32-8	N.D.	0.00001	0.00005	1
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.00001	0.00005	1
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00001	0.00005	1
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.00001	0.00005	1
12971	Chrysene	218-01-9	N.D.	0.00001	0.00005	1
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00001	0.00005	1
12971	Fluoranthene	206-44-0	N.D.	0.00001	0.00005	1
12971	Fluorene	86-73-7	N.D.	0.00001	0.00005	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00001	0.00005	1
12971	Naphthalene	91-20-3	0.00004 J	0.00003	0.00008	1
12971	Phenanthrene	85-01-8	N.D.	0.00003	0.00008	1
12971	Pyrene	129-00-0	N.D.	0.00002	0.00005	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	N.D.	0.051	0.25	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-23-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 15:14

ChevronTexaco
ELLE Sample #: WW 9651342
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	Y181704AA	06/20/2018 08:29	Patrick T Herres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y181704AA	06/20/2018 08:29	Patrick T Herres	1
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/18/2018 18:34	Edward C Monborne	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 06:22	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 06:22	Jeremy C Giffin	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/18/2018 23:24	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-19-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 16:40

ChevronTexaco
ELLE Sample #: WW 9651343
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	N.D.	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	N.D.	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	0.002	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	N.D.	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	N.D.	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	N.D.	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	N.D.	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-19-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 16:40

ChevronTexaco
ELLE Sample #: WW 9651343
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	N.D.	0.0005	0.001	1
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.00001	0.00005	1
12971	Acenaphthylene	208-96-8	N.D.	0.00001	0.00005	1
12971	Anthracene	120-12-7	N.D.	0.00001	0.00005	1
12971	Benzo(a)anthracene	56-55-3	N.D.	0.00001	0.00005	1
12971	Benzo(a)pyrene	50-32-8	N.D.	0.00001	0.00005	1
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.00001	0.00005	1
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00001	0.00005	1
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.00001	0.00005	1
12971	Chrysene	218-01-9	N.D.	0.00001	0.00005	1
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00001	0.00005	1
12971	Fluoranthene	206-44-0	N.D.	0.00001	0.00005	1
12971	Fluorene	86-73-7	N.D.	0.00001	0.00005	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00001	0.00005	1
12971	Naphthalene	91-20-3	0.0001	0.00003	0.00008	1
12971	Phenanthrene	85-01-8	N.D.	0.00003	0.00008	1
12971	Pyrene	129-00-0	N.D.	0.00002	0.00005	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	0.10	1
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	N.D.	0.052	0.26	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-19-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 16:40

ChevronTexaco
ELLE Sample #: WW 9651343
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181711AA	06/20/2018 16:08	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W181711AA	06/20/2018 16:08	Linda C Pape	1
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/18/2018 19:04	Edward C Monborne	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 06:51	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 06:51	Jeremy C Giffin	1
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/18/2018 23:52	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-20-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 17:41

ChevronTexaco
ELLE Sample #: WW 9651344
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.060	0.20	10
10335	Benzene	71-43-2	0.18	0.005	0.010	10
10335	Bromodichloromethane	75-27-4	N.D.	0.005	0.010	10
10335	Bromoform	75-25-2	N.D.	0.005	0.040	10
10335	Bromomethane	74-83-9	N.D.	0.005	0.010	10
10335	2-Butanone	78-93-3	N.D.	0.030	0.10	10
10335	Carbon Disulfide	75-15-0	N.D.	0.010	0.050	10
10335	Carbon Tetrachloride	56-23-5	N.D.	0.005	0.010	10
10335	Chlorobenzene	108-90-7	N.D.	0.005	0.010	10
10335	Chloroethane	75-00-3	N.D.	0.005	0.010	10
10335	Chloroform	67-66-3	N.D.	0.005	0.010	10
10335	Chloromethane	74-87-3	N.D.	0.005	0.010	10
10335	Cyclohexane	110-82-7	0.34	0.020	0.050	10
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.020	0.050	10
10335	Dibromochloromethane	124-48-1	N.D.	0.005	0.010	10
10335	1,2-Dibromoethane	106-93-4	N.D.	0.005	0.010	10
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.010	0.050	10
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.010	0.050	10
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.010	0.050	10
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.005	0.010	10
10335	1,1-Dichloroethane	75-34-3	N.D.	0.005	0.010	10
10335	1,2-Dichloroethane	107-06-2	0.011	0.005	0.010	10
10335	1,1-Dichloroethene	75-35-4	N.D.	0.005	0.010	10
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.005	0.010	10
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.005	0.010	10
10335	1,2-Dichloropropane	78-87-5	N.D.	0.005	0.010	10
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.005	0.010	10
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.005	0.010	10
10335	Ethylbenzene	100-41-4	1.5	0.005	0.010	10
10335	Freon 113	76-13-1	N.D.	0.020	0.10	10
10335	2-Hexanone	591-78-6	N.D.	0.030	0.10	10
10335	Isopropylbenzene	98-82-8	0.088	0.010	0.050	10
10335	Methyl Acetate	79-20-9	N.D.	0.010	0.050	10
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.005	0.010	10
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.030	0.10	10
10335	Methylcyclohexane	108-87-2	0.21	0.010	0.050	10
10335	Methylene Chloride	75-09-2	N.D.	0.005	0.010	10
10335	Styrene	100-42-5	N.D.	0.010	0.050	10
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.005	0.010	10
10335	Tetrachloroethene	127-18-4	N.D.	0.005	0.010	10
10335	Toluene	108-88-3	1.3	0.005	0.010	10

*=This limit was used in the evaluation of the final result

Sample Description: **MW-20-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 17:41

ChevronTexaco
ELLE Sample #: WW 9651344
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.010	0.050	10
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.005	0.010	10
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.005	0.010	10
10335	Trichloroethene	79-01-6	N.D.	0.005	0.010	10
10335	Trichlorofluoromethane	75-69-4	N.D.	0.005	0.010	10
10335	Vinyl Chloride	75-01-4	N.D.	0.005	0.010	10
10335	Xylene (Total)	1330-20-7	9.9	0.050	0.10	100
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.0001	0.0005	10
12971	Acenaphthylene	208-96-8	N.D.	0.0001	0.0005	10
12971	Anthracene	120-12-7	N.D.	0.0001	0.0005	10
12971	Benzo(a)anthracene	56-55-3	N.D.	0.0001	0.0005	10
12971	Benzo(a)pyrene	50-32-8	N.D.	0.0001	0.0005	10
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.0001	0.0005	10
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0001	0.0005	10
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.0001	0.0005	10
12971	Chrysene	218-01-9	N.D.	0.0001	0.0005	10
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0001	0.0005	10
12971	Fluoranthene	206-44-0	N.D.	0.0001	0.0005	10
12971	Fluorene	86-73-7	N.D.	0.0001	0.0005	10
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0001	0.0005	10
12971	Naphthalene	91-20-3	0.16	0.003	0.008	100
12971	Phenanthrene	85-01-8	N.D.	0.0003	0.0008	10
12971	Pyrene	129-00-0	N.D.	0.0002	0.0005	10
	Reporting limits were raised due to interference from the sample matrix.					
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	46	0.20	2.0	20
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	4.7	0.051	0.26	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-20-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 17:41

ChevronTexaco
ELLE Sample #: WW 9651344
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/20/2018 22:36	Don V Viray	10
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/20/2018 23:00	Don V Viray	100
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W181712AA	06/20/2018 22:36	Don V Viray	10
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W181712AA	06/20/2018 23:00	Don V Viray	100
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/19/2018 12:32	Linda M Hartenstine	10
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/19/2018 13:31	Linda M Hartenstine	100
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 07:19	Jeremy C Giffin	20
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 07:19	Jeremy C Giffin	20
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/19/2018 00:20	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-11A-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 18:55

ChevronTexaco
ELLE Sample #: WW 9651345
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	0.086	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	0.24	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	0.006	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	0.014	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	0.033	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	0.075	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	0.0008 J	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **MW-11A-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 18:55

ChevronTexaco
ELLE Sample #: WW 9651345
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	0.76	0.005	0.010	10
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.00001	0.00005	1
12971	Acenaphthylene	208-96-8	N.D.	0.00001	0.00005	1
12971	Anthracene	120-12-7	N.D.	0.00001	0.00005	1
12971	Benzo(a)anthracene	56-55-3	N.D.	0.00001	0.00005	1
12971	Benzo(a)pyrene	50-32-8	N.D.	0.00001	0.00005	1
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.00001	0.00005	1
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00001	0.00005	1
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.00001	0.00005	1
12971	Chrysene	218-01-9	N.D.	0.00001	0.00005	1
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00001	0.00005	1
12971	Fluoranthene	206-44-0	N.D.	0.00001	0.00005	1
12971	Fluorene	86-73-7	N.D.	0.00001	0.00005	1
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00001	0.00005	1
12971	Naphthalene	91-20-3	0.002	0.00003	0.00008	1
12971	Phenanthrene	85-01-8	N.D.	0.00003	0.00008	1
12971	Pyrene	129-00-0	N.D.	0.00002	0.00005	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	4.2	0.050	0.50	5
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	0.21 J	0.051	0.25	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

Sample Description: **MW-11A-W-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018 18:55

ChevronTexaco
ELLE Sample #: WW 9651345
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/20/2018 23:24	Don V Viray	1
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/20/2018 23:48	Don V Viray	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W181712AA	06/20/2018 23:24	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W181712AA	06/20/2018 23:48	Don V Viray	10
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/18/2018 20:03	Edward C Monborne	1
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 07:46	Jeremy C Giffin	5
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 07:46	Jeremy C Giffin	5
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/19/2018 00:48	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **DUP-1-WD-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018

ChevronTexaco
ELLE Sample #: WW 9651346
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.012	0.040	2
10335	Benzene	71-43-2	0.15	0.001	0.002	2
10335	Bromodichloromethane	75-27-4	N.D.	0.001	0.002	2
10335	Bromoform	75-25-2	N.D.	0.001	0.008	2
10335	Bromomethane	74-83-9	N.D.	0.001	0.002	2
10335	2-Butanone	78-93-3	0.01 J	0.006	0.020	2
10335	Carbon Disulfide	75-15-0	N.D.	0.002	0.010	2
10335	Carbon Tetrachloride	56-23-5	N.D.	0.001	0.002	2
10335	Chlorobenzene	108-90-7	N.D.	0.001	0.002	2
10335	Chloroethane	75-00-3	N.D.	0.001	0.002	2
10335	Chloroform	67-66-3	N.D.	0.001	0.002	2
10335	Chloromethane	74-87-3	N.D.	0.001	0.002	2
10335	Cyclohexane	110-82-7	0.20	0.004	0.010	2
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.004	0.010	2
10335	Dibromochloromethane	124-48-1	N.D.	0.001	0.002	2
10335	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.002	2
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.002	0.010	2
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.002	0.010	2
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.002	0.010	2
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.001	0.002	2
10335	1,1-Dichloroethane	75-34-3	N.D.	0.001	0.002	2
10335	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.002	2
10335	1,1-Dichloroethene	75-35-4	N.D.	0.001	0.002	2
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.001	0.002	2
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.001	0.002	2
10335	1,2-Dichloropropane	78-87-5	N.D.	0.001	0.002	2
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.001	0.002	2
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.001	0.002	2
10335	Ethylbenzene	100-41-4	1.2	0.010	0.020	20
10335	Freon 113	76-13-1	N.D.	0.004	0.020	2
10335	2-Hexanone	591-78-6	N.D.	0.006	0.020	2
10335	Isopropylbenzene	98-82-8	0.079	0.002	0.010	2
10335	Methyl Acetate	79-20-9	N.D.	0.002	0.010	2
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.001	0.002	2
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.006	0.020	2
10335	Methylcyclohexane	108-87-2	0.16	0.002	0.010	2
10335	Methylene Chloride	75-09-2	N.D.	0.001	0.002	2
10335	Styrene	100-42-5	N.D.	0.002	0.010	2
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.001	0.002	2
10335	Tetrachloroethene	127-18-4	N.D.	0.001	0.002	2
10335	Toluene	108-88-3	0.95	0.010	0.020	20

*=This limit was used in the evaluation of the final result

Sample Description: **DUP-1-WD-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018

ChevronTexaco
ELLE Sample #: WW 9651346
ELLE Group #: 1953276
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.002	0.010	2
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.001	0.002	2
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.001	0.002	2
10335	Trichloroethene	79-01-6	N.D.	0.001	0.002	2
10335	Trichlorofluoromethane	75-69-4	N.D.	0.001	0.002	2
10335	Vinyl Chloride	75-01-4	N.D.	0.001	0.002	2
10335	Xylene (Total)	1330-20-7	7.7	0.010	0.020	20
GC/MS Semivolatiles	**SW-846 8270D SIM**		**mg/l**	**mg/l**	**mg/l**	
12971	Acenaphthene	83-32-9	N.D.	0.0001	0.0005	10
12971	Acenaphthylene	208-96-8	N.D.	0.0001	0.0005	10
12971	Anthracene	120-12-7	N.D.	0.0001	0.0005	10
12971	Benzo(a)anthracene	56-55-3	N.D.	0.0001	0.0005	10
12971	Benzo(a)pyrene	50-32-8	N.D.	0.0001	0.0005	10
12971	Benzo(b)fluoranthene	205-99-2	N.D.	0.0001	0.0005	10
12971	Benzo(g,h,i)perylene	191-24-2	N.D.	0.0001	0.0005	10
12971	Benzo(k)fluoranthene	207-08-9	N.D.	0.0001	0.0005	10
12971	Chrysene	218-01-9	N.D.	0.0001	0.0005	10
12971	Dibenz(a,h)anthracene	53-70-3	N.D.	0.0001	0.0005	10
12971	Fluoranthene	206-44-0	N.D.	0.0001	0.0005	10
12971	Fluorene	86-73-7	N.D.	0.0001	0.0005	10
12971	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.0001	0.0005	10
12971	Naphthalene	91-20-3	0.14	0.003	0.008	100
12971	Phenanthrene	85-01-8	N.D.	0.0003	0.0008	10
12971	Pyrene	129-00-0	N.D.	0.0002	0.0005	10

Reporting limits were raised due to interference from the sample matrix.

GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	38	0.10	1.0	10
GC Petroleum Hydrocarbons	**AK 102-SV 4/8/02**		**mg/l**	**mg/l**	**mg/l**	
13025	DRO C10-C25	n.a.	4.4	0.051	0.25	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Sample Description: **DUP-1-WD-180607 Grab Groundwater**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018

ChevronTexaco
ELLE Sample #: WW 9651346
ELLE Group #: 1953276
Matrix: Groundwater

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/21/2018 00:12	Don V Viray	2
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181712AA	06/21/2018 00:36	Don V Viray	20
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W181712AA	06/21/2018 00:12	Don V Viray	2
01163	GC/MS VOA Water Prep	SW-846 5030B	2	W181712AA	06/21/2018 00:36	Don V Viray	20
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/19/2018 13:01	Linda M Hartenstine	10
12971	SIM SVOAs 8270D, water	SW-846 8270D SIM	1	18164WAD026	06/19/2018 14:01	Linda M Hartenstine	100
10466	BNA Water Extraction SIM	SW-846 3510C	1	18164WAD026	06/13/2018 16:12	Kate E Lutte	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 08:14	Jeremy C Giffin	10
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 08:14	Jeremy C Giffin	10
13025	AK 102-SV DRO	AK 102-SV 4/8/02	1	181660049A	06/19/2018 01:16	Heather E Williams	1
13027	Mini-Ext. AK 102-SV DRO	AK 102/AK 103 04/08/02	2	181660049A	06/18/2018 08:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **QA-1-T-180607 Water**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018

ChevronTexaco
ELLE Sample #: WW 9651347
ELLE Group #: 1953276
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	Acetone	67-64-1	N.D.	0.006	0.020	1
10335	Benzene	71-43-2	N.D.	0.0005	0.001	1
10335	Bromodichloromethane	75-27-4	N.D.	0.0005	0.001	1
10335	Bromoform	75-25-2	N.D.	0.0005	0.004	1
10335	Bromomethane	74-83-9	N.D.	0.0005	0.001	1
10335	2-Butanone	78-93-3	N.D.	0.003	0.010	1
10335	Carbon Disulfide	75-15-0	N.D.	0.001	0.005	1
10335	Carbon Tetrachloride	56-23-5	N.D.	0.0005	0.001	1
10335	Chlorobenzene	108-90-7	N.D.	0.0005	0.001	1
10335	Chloroethane	75-00-3	N.D.	0.0005	0.001	1
10335	Chloroform	67-66-3	N.D.	0.0005	0.001	1
10335	Chloromethane	74-87-3	N.D.	0.0005	0.001	1
10335	Cyclohexane	110-82-7	N.D.	0.002	0.005	1
10335	1,2-Dibromo-3-chloropropane	96-12-8	N.D.	0.002	0.005	1
10335	Dibromochloromethane	124-48-1	N.D.	0.0005	0.001	1
10335	1,2-Dibromoethane	106-93-4	N.D.	0.0005	0.001	1
10335	1,2-Dichlorobenzene	95-50-1	N.D.	0.001	0.005	1
10335	1,3-Dichlorobenzene	541-73-1	N.D.	0.001	0.005	1
10335	1,4-Dichlorobenzene	106-46-7	N.D.	0.001	0.005	1
10335	Dichlorodifluoromethane	75-71-8	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethane	75-34-3	N.D.	0.0005	0.001	1
10335	1,2-Dichloroethane	107-06-2	N.D.	0.0005	0.001	1
10335	1,1-Dichloroethene	75-35-4	N.D.	0.0005	0.001	1
10335	cis-1,2-Dichloroethene	156-59-2	N.D.	0.0005	0.001	1
10335	trans-1,2-Dichloroethene	156-60-5	N.D.	0.0005	0.001	1
10335	1,2-Dichloropropane	78-87-5	N.D.	0.0005	0.001	1
10335	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.0005	0.001	1
10335	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.0005	0.001	1
10335	Ethylbenzene	100-41-4	N.D.	0.0005	0.001	1
10335	Freon 113	76-13-1	N.D.	0.002	0.010	1
10335	2-Hexanone	591-78-6	N.D.	0.003	0.010	1
10335	Isopropylbenzene	98-82-8	N.D.	0.001	0.005	1
10335	Methyl Acetate	79-20-9	N.D.	0.001	0.005	1
10335	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.001	1
10335	4-Methyl-2-pentanone	108-10-1	N.D.	0.003	0.010	1
10335	Methylcyclohexane	108-87-2	N.D.	0.001	0.005	1
10335	Methylene Chloride	75-09-2	N.D.	0.0005	0.001	1
10335	Styrene	100-42-5	N.D.	0.001	0.005	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.0005	0.001	1
10335	Tetrachloroethene	127-18-4	N.D.	0.0005	0.001	1
10335	Toluene	108-88-3	N.D.	0.0005	0.001	1

*=This limit was used in the evaluation of the final result

Sample Description: **QA-1-T-180607 Water**
Facility# 306448
1441 C Street - Anchorage, AK

Project Name: **306448**

Submittal Date/Time: 06/09/2018 10:10
Collection Date/Time: 06/07/2018

ChevronTexaco
ELLE Sample #: WW 9651347
ELLE Group #: 1953276
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/l**	**mg/l**	**mg/l**	
10335	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.001	0.005	1
10335	1,1,1-Trichloroethane	71-55-6	N.D.	0.0005	0.001	1
10335	1,1,2-Trichloroethane	79-00-5	N.D.	0.0005	0.001	1
10335	Trichloroethene	79-01-6	N.D.	0.0005	0.001	1
10335	Trichlorofluoromethane	75-69-4	N.D.	0.0005	0.001	1
10335	Vinyl Chloride	75-01-4	N.D.	0.0005	0.001	1
10335	Xylene (Total)	1330-20-7	N.D.	0.0005	0.001	1
GC Volatiles	**AK 101**		**mg/l**	**mg/l**	**mg/l**	
01438	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	0.10	1

Sample Comments

State of Alaska Lab Certification No. UST-061

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL 4.3 VOCs	SW-846 8260B	1	W181711AA	06/20/2018 16:33	Linda C Pape	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W181711AA	06/20/2018 16:33	Linda C Pape	1
01438	TPH-GRO AK water C6-C10	AK 101	1	18163B53A	06/13/2018 04:56	Jeremy C Giffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	18163B53A	06/13/2018 04:56	Jeremy C Giffin	1

*=This limit was used in the evaluation of the final result

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	mg/l	mg/l	mg/l
Batch number: W181711AA	Sample number(s): 9651343,9651347		
Acetone	N.D.	0.006	0.020
Benzene	N.D.	0.0005	0.001
Bromodichloromethane	N.D.	0.0005	0.001
Bromoform	N.D.	0.0005	0.004
Bromomethane	N.D.	0.0005	0.001
2-Butanone	N.D.	0.003	0.010
Carbon Disulfide	N.D.	0.001	0.005
Carbon Tetrachloride	N.D.	0.0005	0.001
Chlorobenzene	N.D.	0.0005	0.001
Chloroethane	N.D.	0.0005	0.001
Chloroform	N.D.	0.0005	0.001
Chloromethane	N.D.	0.0005	0.001
Cyclohexane	N.D.	0.002	0.005
1,2-Dibromo-3-chloropropane	N.D.	0.002	0.005
Dibromochloromethane	N.D.	0.0005	0.001
1,2-Dibromoethane	N.D.	0.0005	0.001
1,2-Dichlorobenzene	N.D.	0.001	0.005
1,3-Dichlorobenzene	N.D.	0.001	0.005
1,4-Dichlorobenzene	N.D.	0.001	0.005
Dichlorodifluoromethane	N.D.	0.0005	0.001
1,1-Dichloroethane	N.D.	0.0005	0.001
1,2-Dichloroethane	N.D.	0.0005	0.001
1,1-Dichloroethene	N.D.	0.0005	0.001
cis-1,2-Dichloroethene	N.D.	0.0005	0.001
trans-1,2-Dichloroethene	N.D.	0.0005	0.001
1,2-Dichloropropane	N.D.	0.0005	0.001
cis-1,3-Dichloropropene	N.D.	0.0005	0.001
trans-1,3-Dichloropropene	N.D.	0.0005	0.001
Ethylbenzene	N.D.	0.0005	0.001
Freon 113	N.D.	0.002	0.010
2-Hexanone	N.D.	0.003	0.010
Isopropylbenzene	N.D.	0.001	0.005
Methyl Acetate	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.001
4-Methyl-2-pentanone	N.D.	0.003	0.010
Methylcyclohexane	N.D.	0.001	0.005
Methylene Chloride	N.D.	0.0005	0.001
Styrene	N.D.	0.001	0.005
1,1,2,2-Tetrachloroethane	N.D.	0.0005	0.001

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/l	mg/l	mg/l
Tetrachloroethene	N.D.	0.0005	0.001
Toluene	N.D.	0.0005	0.001
1,2,4-Trichlorobenzene	N.D.	0.001	0.005
1,1,1-Trichloroethane	N.D.	0.0005	0.001
1,1,2-Trichloroethane	N.D.	0.0005	0.001
Trichloroethene	N.D.	0.0005	0.001
Trichlorofluoromethane	N.D.	0.0005	0.001
Vinyl Chloride	N.D.	0.0005	0.001
Xylene (Total)	N.D.	0.0005	0.001
Batch number: W181712AA	Sample number(s): 9651344-9651346		
Acetone	N.D.	0.006	0.020
Benzene	N.D.	0.0005	0.001
Bromodichloromethane	N.D.	0.0005	0.001
Bromoform	N.D.	0.0005	0.004
Bromomethane	N.D.	0.0005	0.001
2-Butanone	N.D.	0.003	0.010
Carbon Disulfide	N.D.	0.001	0.005
Carbon Tetrachloride	N.D.	0.0005	0.001
Chlorobenzene	N.D.	0.0005	0.001
Chloroethane	N.D.	0.0005	0.001
Chloroform	N.D.	0.0005	0.001
Chloromethane	N.D.	0.0005	0.001
Cyclohexane	N.D.	0.002	0.005
1,2-Dibromo-3-chloropropane	N.D.	0.002	0.005
Dibromochloromethane	N.D.	0.0005	0.001
1,2-Dibromoethane	N.D.	0.0005	0.001
1,2-Dichlorobenzene	N.D.	0.001	0.005
1,3-Dichlorobenzene	N.D.	0.001	0.005
1,4-Dichlorobenzene	N.D.	0.001	0.005
Dichlorodifluoromethane	N.D.	0.0005	0.001
1,1-Dichloroethane	N.D.	0.0005	0.001
1,2-Dichloroethane	N.D.	0.0005	0.001
1,1-Dichloroethene	N.D.	0.0005	0.001
cis-1,2-Dichloroethene	N.D.	0.0005	0.001
trans-1,2-Dichloroethene	N.D.	0.0005	0.001
1,2-Dichloropropane	N.D.	0.0005	0.001
cis-1,3-Dichloropropene	N.D.	0.0005	0.001
trans-1,3-Dichloropropene	N.D.	0.0005	0.001
Ethylbenzene	N.D.	0.0005	0.001
Freon 113	N.D.	0.002	0.010
2-Hexanone	N.D.	0.003	0.010
Isopropylbenzene	N.D.	0.001	0.005
Methyl Acetate	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.001

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/l	mg/l	mg/l
4-Methyl-2-pentanone	N.D.	0.003	0.010
Methylcyclohexane	N.D.	0.001	0.005
Methylene Chloride	N.D.	0.0005	0.001
Styrene	N.D.	0.001	0.005
1,1,2,2-Tetrachloroethane	N.D.	0.0005	0.001
Tetrachloroethene	N.D.	0.0005	0.001
Toluene	N.D.	0.0005	0.001
1,2,4-Trichlorobenzene	N.D.	0.001	0.005
1,1,1-Trichloroethane	N.D.	0.0005	0.001
1,1,2-Trichloroethane	N.D.	0.0005	0.001
Trichloroethene	N.D.	0.0005	0.001
Trichlorofluoromethane	N.D.	0.0005	0.001
Vinyl Chloride	N.D.	0.0005	0.001
Xylene (Total)	N.D.	0.0005	0.001
Batch number: Y181704AA	Sample number(s): 9651340-9651342		
Acetone	N.D.	0.006	0.020
Benzene	N.D.	0.0005	0.001
Bromodichloromethane	N.D.	0.0005	0.001
Bromoform	N.D.	0.0005	0.004
Bromomethane	N.D.	0.0005	0.001
2-Butanone	N.D.	0.003	0.010
Carbon Disulfide	N.D.	0.001	0.005
Carbon Tetrachloride	N.D.	0.0005	0.001
Chlorobenzene	N.D.	0.0005	0.001
Chloroethane	N.D.	0.0005	0.001
Chloroform	N.D.	0.0005	0.001
Chloromethane	N.D.	0.0005	0.001
Cyclohexane	N.D.	0.002	0.005
1,2-Dibromo-3-chloropropane	N.D.	0.002	0.005
Dibromochloromethane	N.D.	0.0005	0.001
1,2-Dibromoethane	N.D.	0.0005	0.001
1,2-Dichlorobenzene	N.D.	0.001	0.005
1,3-Dichlorobenzene	N.D.	0.001	0.005
1,4-Dichlorobenzene	N.D.	0.001	0.005
Dichlorodifluoromethane	N.D.	0.0005	0.001
1,1-Dichloroethane	N.D.	0.0005	0.001
1,2-Dichloroethane	N.D.	0.0005	0.001
1,1-Dichloroethene	N.D.	0.0005	0.001
cis-1,2-Dichloroethene	N.D.	0.0005	0.001
trans-1,2-Dichloroethene	N.D.	0.0005	0.001
1,2-Dichloropropane	N.D.	0.0005	0.001
cis-1,3-Dichloropropene	N.D.	0.0005	0.001
trans-1,3-Dichloropropene	N.D.	0.0005	0.001
Ethylbenzene	N.D.	0.0005	0.001

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/l	mg/l	mg/l
Freon 113	N.D.	0.002	0.010
2-Hexanone	N.D.	0.003	0.010
Isopropylbenzene	N.D.	0.001	0.005
Methyl Acetate	N.D.	0.001	0.005
Methyl Tertiary Butyl Ether	N.D.	0.0005	0.001
4-Methyl-2-pentanone	N.D.	0.003	0.010
Methylcyclohexane	N.D.	0.001	0.005
Methylene Chloride	N.D.	0.0005	0.001
Styrene	N.D.	0.001	0.005
1,1,2,2-Tetrachloroethane	N.D.	0.0005	0.001
Tetrachloroethene	N.D.	0.0005	0.001
Toluene	N.D.	0.0005	0.001
1,2,4-Trichlorobenzene	N.D.	0.001	0.005
1,1,1-Trichloroethane	N.D.	0.0005	0.001
1,1,2-Trichloroethane	N.D.	0.0005	0.001
Trichloroethene	N.D.	0.0005	0.001
Trichlorofluoromethane	N.D.	0.0005	0.001
Vinyl Chloride	N.D.	0.0005	0.001
Xylene (Total)	N.D.	0.0005	0.001
Batch number: 18164WAD026	Sample number(s): 9651340-9651346		
Acenaphthene	N.D.	0.00001	0.00005
Acenaphthylene	N.D.	0.00001	0.00005
Anthracene	N.D.	0.00001	0.00005
Benzo(a)anthracene	N.D.	0.00001	0.00005
Benzo(a)pyrene	N.D.	0.00001	0.00005
Benzo(b)fluoranthene	N.D.	0.00001	0.00005
Benzo(g,h,i)perylene	N.D.	0.00001	0.00005
Benzo(k)fluoranthene	N.D.	0.00001	0.00005
Chrysene	N.D.	0.00001	0.00005
Dibenz(a,h)anthracene	N.D.	0.00001	0.00005
Fluoranthene	N.D.	0.00001	0.00005
Fluorene	N.D.	0.00001	0.00005
Indeno(1,2,3-cd)pyrene	N.D.	0.00001	0.00005
Naphthalene	N.D.	0.00003	0.00008
Phenanthrene	N.D.	0.00003	0.00008
Pyrene	N.D.	0.00002	0.00005
Batch number: 18163B53A	Sample number(s): 9651340,9651342-9651347		
TPH-GRO AK water C6-C10	N.D.	0.010	0.10
Batch number: 18163B53B	Sample number(s): 9651341		
TPH-GRO AK water C6-C10	N.D.	0.010	0.10
Batch number: 181660049A	Sample number(s): 9651340-9651346		
DRO C10-C25	N.D.	0.050	0.25

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

LCS/LCSD

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: W181711AA	Sample number(s): 9651343,9651347								
Acetone	0.150	0.105			70		54-157		
Benzene	0.0200	0.0212			106		80-120		
Bromodichloromethane	0.0200	0.0197			99		71-120		
Bromoform	0.0200	0.0176			88		59-120		
Bromomethane	0.0200	0.0165			82		58-130		
2-Butanone	0.150	0.148			99		59-135		
Carbon Disulfide	0.0200	0.0201			101		65-128		
Carbon Tetrachloride	0.0200	0.0226			113		64-134		
Chlorobenzene	0.0200	0.0200			100		80-120		
Chloroethane	0.0200	0.0158			79		61-123		
Chloroform	0.0200	0.0207			103		80-120		
Chloromethane	0.0200	0.0161			81		63-120		
Cyclohexane	0.0200	0.0233			117		67-121		
1,2-Dibromo-3-chloropropane	0.0200	0.0186			93		53-128		
Dibromochloromethane	0.0200	0.0196			98		71-120		
1,2-Dibromoethane	0.0200	0.0195			97		75-120		
1,2-Dichlorobenzene	0.0200	0.0193			97		80-120		
1,3-Dichlorobenzene	0.0200	0.0197			99		80-120		
1,4-Dichlorobenzene	0.0200	0.0197			98		80-120		
Dichlorodifluoromethane	0.0200	0.0168			84		47-124		
1,1-Dichloroethane	0.0200	0.0211			106		80-120		
1,2-Dichloroethane	0.0200	0.0200			100		73-124		
1,1-Dichloroethene	0.0200	0.0245			122		80-131		
cis-1,2-Dichloroethene	0.0200	0.0212			106		80-120		
trans-1,2-Dichloroethene	0.0200	0.0218			109		80-120		
1,2-Dichloropropane	0.0200	0.0217			109		80-120		
cis-1,3-Dichloropropene	0.0200	0.0208			104		75-120		
trans-1,3-Dichloropropene	0.0200	0.0200			100		76-120		
Ethylbenzene	0.0200	0.0205			102		80-120		
Freon 113	0.0200	0.0222			111		68-137		
2-Hexanone	0.100	0.101			101		50-141		
Isopropylbenzene	0.0200	0.0209			104		80-120		
Methyl Acetate	0.0200	0.0205			102		64-130		
Methyl Tertiary Butyl Ether	0.0200	0.0183			91		75-120		
4-Methyl-2-pentanone	0.100	0.106			106		62-133		
Methylcyclohexane	0.0200	0.0240			120		67-121		
Methylene Chloride	0.0200	0.0227			114		80-120		
Styrene	0.0200	0.0199			100		80-120		
1,1,2,2-Tetrachloroethane	0.0200	0.0191			96		72-120		
Tetrachloroethene	0.0200	0.0211			105		80-120		
Toluene	0.0200	0.0204			102		80-120		

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2,4-Trichlorobenzene	0.0200	0.0189			95		70-120		
1,1,1-Trichloroethane	0.0200	0.0210			105		67-126		
1,1,2-Trichloroethane	0.0200	0.0202			101		80-120		
Trichloroethene	0.0200	0.0204			102		80-120		
Trichlorofluoromethane	0.0200	0.0190			95		60-136		
Vinyl Chloride	0.0200	0.0159			80		68-120		
Xylene (Total)	0.0600	0.0601			100		80-120		
Batch number: W181712AA	Sample number(s): 9651344-9651346								
Acetone	0.150	0.106	0.150	0.105	71	70	54-157	2	30
Benzene	0.0200	0.0205	0.0200	0.0206	102	103	80-120	1	30
Bromodichloromethane	0.0200	0.0194	0.0200	0.0196	97	98	71-120	1	30
Bromoform	0.0200	0.0171	0.0200	0.0170	86	85	59-120	1	30
Bromomethane	0.0200	0.0176	0.0200	0.0175	88	87	58-130	1	30
2-Butanone	0.150	0.153	0.150	0.150	102	100	59-135	2	30
Carbon Disulfide	0.0200	0.0200	0.0200	0.0201	100	100	65-128	0	30
Carbon Tetrachloride	0.0200	0.0223	0.0200	0.0219	111	110	64-134	2	30
Chlorobenzene	0.0200	0.0195	0.0200	0.0194	97	97	80-120	0	30
Chloroethane	0.0200	0.0166	0.0200	0.0165	83	83	61-123	1	30
Chloroform	0.0200	0.0202	0.0200	0.0202	101	101	80-120	0	30
Chloromethane	0.0200	0.0176	0.0200	0.0174	88	87	63-120	1	30
Cyclohexane	0.0200	0.0210	0.0200	0.0212	105	106	67-121	1	30
1,2-Dibromo-3-chloropropane	0.0200	0.0188	0.0200	0.0187	94	94	53-128	1	30
Dibromochloromethane	0.0200	0.0194	0.0200	0.0188	97	94	71-120	3	30
1,2-Dibromoethane	0.0200	0.0197	0.0200	0.0195	98	97	75-120	1	30
1,2-Dichlorobenzene	0.0200	0.0187	0.0200	0.0189	93	94	80-120	1	30
1,3-Dichlorobenzene	0.0200	0.0190	0.0200	0.0189	95	94	80-120	0	30
1,4-Dichlorobenzene	0.0200	0.0192	0.0200	0.0191	96	95	80-120	1	30
Dichlorodifluoromethane	0.0200	0.0178	0.0200	0.0176	89	88	47-124	1	30
1,1-Dichloroethane	0.0200	0.0205	0.0200	0.0207	103	104	80-120	1	30
1,2-Dichloroethane	0.0200	0.0196	0.0200	0.0197	98	98	73-124	0	30
1,1-Dichloroethene	0.0200	0.0240	0.0200	0.0233	120	116	80-131	3	30
cis-1,2-Dichloroethene	0.0200	0.0205	0.0200	0.0208	102	104	80-120	2	30
trans-1,2-Dichloroethene	0.0200	0.0212	0.0200	0.0215	106	108	80-120	2	30
1,2-Dichloropropane	0.0200	0.0210	0.0200	0.0209	105	105	80-120	1	30
cis-1,3-Dichloropropene	0.0200	0.0202	0.0200	0.0201	101	100	75-120	1	30
trans-1,3-Dichloropropene	0.0200	0.0192	0.0200	0.0197	96	99	76-120	2	30
Ethylbenzene	0.0200	0.0198	0.0200	0.0200	99	100	80-120	1	30
Freon 113	0.0200	0.0203	0.0200	0.0206	101	103	68-137	2	30
2-Hexanone	0.100	0.101	0.100	0.101	101	101	50-141	0	30
Isopropylbenzene	0.0200	0.0203	0.0200	0.0199	101	100	80-120	2	30
Methyl Acetate	0.0200	0.0196	0.0200	0.0200	98	100	64-130	2	30
Methyl Tertiary Butyl Ether	0.0200	0.0189	0.0200	0.0184	94	92	75-120	3	30
4-Methyl-2-pentanone	0.100	0.105	0.100	0.102	105	102	62-133	3	30

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Methylcyclohexane	0.0200	0.0215	0.0200	0.0212	108	106	67-121	1	30
Methylene Chloride	0.0200	0.0226	0.0200	0.0220	113	110	80-120	3	30
Styrene	0.0200	0.0193	0.0200	0.0194	97	97	80-120	0	30
1,1,2,2-Tetrachloroethane	0.0200	0.0192	0.0200	0.0193	96	97	72-120	1	30
Tetrachloroethene	0.0200	0.0199	0.0200	0.0199	100	100	80-120	0	30
Toluene	0.0200	0.0199	0.0200	0.0199	99	99	80-120	0	30
1,2,4-Trichlorobenzene	0.0200	0.0193	0.0200	0.0186	96	93	70-120	3	30
1,1,1-Trichloroethane	0.0200	0.0208	0.0200	0.0205	104	103	67-126	1	30
1,1,2-Trichloroethane	0.0200	0.0201	0.0200	0.0203	101	102	80-120	1	30
Trichloroethene	0.0200	0.0201	0.0200	0.0200	100	100	80-120	0	30
Trichlorofluoromethane	0.0200	0.0182	0.0200	0.0183	91	91	60-136	0	30
Vinyl Chloride	0.0200	0.0168	0.0200	0.0167	84	83	68-120	0	30
Xylene (Total)	0.0600	0.0587	0.0600	0.0586	98	98	80-120	0	30
Batch number: Y181704AA	Sample number(s): 9651340-9651342								
Acetone	0.150	0.139	0.150	0.143	93	95	54-157	3	30
Benzene	0.0200	0.0205	0.0200	0.0207	102	103	80-120	1	30
Bromodichloromethane	0.0200	0.0189	0.0200	0.0189	94	94	71-120	0	30
Bromoform	0.0200	0.0170	0.0200	0.0172	85	86	59-120	1	30
Bromomethane	0.0200	0.0219	0.0200	0.0224	109	112	58-130	2	30
2-Butanone	0.150	0.148	0.150	0.146	99	97	59-135	2	30
Carbon Disulfide	0.0200	0.0185	0.0200	0.0183	92	92	65-128	1	30
Carbon Tetrachloride	0.0200	0.0203	0.0200	0.0202	102	101	64-134	1	30
Chlorobenzene	0.0200	0.0206	0.0200	0.0207	103	104	80-120	1	30
Chloroethane	0.0200	0.0211	0.0200	0.0217	105	108	61-123	3	30
Chloroform	0.0200	0.0199	0.0200	0.0197	100	98	80-120	1	30
Chloromethane	0.0200	0.0204	0.0200	0.0206	102	103	63-120	1	30
Cyclohexane	0.0200	0.0214	0.0200	0.0219	107	109	67-121	2	30
1,2-Dibromo-3-chloropropane	0.0200	0.0178	0.0200	0.0183	89	91	53-128	3	30
Dibromochloromethane	0.0200	0.0190	0.0200	0.0194	95	97	71-120	2	30
1,2-Dibromoethane	0.0200	0.0201	0.0200	0.0202	100	101	75-120	1	30
1,2-Dichlorobenzene	0.0200	0.0200	0.0200	0.0202	100	101	80-120	1	30
1,3-Dichlorobenzene	0.0200	0.0199	0.0200	0.0201	100	101	80-120	1	30
1,4-Dichlorobenzene	0.0200	0.0201	0.0200	0.0204	101	102	80-120	2	30
Dichlorodifluoromethane	0.0200	0.0196	0.0200	0.0197	98	98	47-124	0	30
1,1-Dichloroethane	0.0200	0.0204	0.0200	0.0202	102	101	80-120	1	30
1,2-Dichloroethane	0.0200	0.0189	0.0200	0.0183	95	91	73-124	4	30
1,1-Dichloroethene	0.0200	0.0226	0.0200	0.0223	113	112	80-131	1	30
cis-1,2-Dichloroethene	0.0200	0.0222	0.0200	0.0212	111	106	80-120	4	30
trans-1,2-Dichloroethene	0.0200	0.0221	0.0200	0.0215	110	108	80-120	3	30
1,2-Dichloropropane	0.0200	0.0208	0.0200	0.0206	104	103	80-120	1	30
cis-1,3-Dichloropropene	0.0200	0.0195	0.0200	0.0194	97	97	75-120	1	30
trans-1,3-Dichloropropene	0.0200	0.0191	0.0200	0.0195	95	98	76-120	3	30
Ethylbenzene	0.0200	0.0208	0.0200	0.0210	104	105	80-120	1	30

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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Freon 113	0.0200	0.0229	0.0200	0.0226	115	113	68-137	1	30
2-Hexanone	0.100	0.0981	0.100	0.102	98	102	50-141	4	30
Isopropylbenzene	0.0200	0.0211	0.0200	0.0214	106	107	80-120	1	30
Methyl Acetate	0.0200	0.0176	0.0200	0.0173	88	87	64-130	2	30
Methyl Tertiary Butyl Ether	0.0200	0.0185	0.0200	0.0186	93	93	75-120	0	30
4-Methyl-2-pentanone	0.100	0.0993	0.100	0.101	99	101	62-133	2	30
Methylcyclohexane	0.0200	0.0210	0.0200	0.0209	105	104	67-121	1	30
Methylene Chloride	0.0200	0.0217	0.0200	0.0214	108	107	80-120	1	30
Styrene	0.0200	0.0214	0.0200	0.0215	107	108	80-120	0	30
1,1,2,2-Tetrachloroethane	0.0200	0.0196	0.0200	0.0200	98	100	72-120	2	30
Tetrachloroethene	0.0200	0.0202	0.0200	0.0205	101	103	80-120	2	30
Toluene	0.0200	0.0209	0.0200	0.0211	105	106	80-120	1	30
1,2,4-Trichlorobenzene	0.0200	0.0182	0.0200	0.0179	91	89	70-120	2	30
1,1,1-Trichloroethane	0.0200	0.0205	0.0200	0.0201	102	101	67-126	2	30
1,1,2-Trichloroethane	0.0200	0.0205	0.0200	0.0211	102	105	80-120	3	30
Trichloroethene	0.0200	0.0206	0.0200	0.0201	103	101	80-120	2	30
Trichlorofluoromethane	0.0200	0.0196	0.0200	0.0193	98	97	60-136	1	30
Vinyl Chloride	0.0200	0.0207	0.0200	0.0209	103	104	68-120	1	30
Xylene (Total)	0.0600	0.0628	0.0600	0.0637	105	106	80-120	1	30
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 18164WAD026	Sample number(s): 9651340-9651346								
Acenaphthene	0.00100	0.000916	0.00100	0.000943	92	94	69-121	3	30
Acenaphthylene	0.00100	0.000751	0.00100	0.000759	75	76	39-103	1	30
Anthracene	0.00100	0.000875	0.00100	0.000853	87	85	55-106	2	30
Benzo(a)anthracene	0.00100	0.000867	0.00100	0.000882	87	88	65-116	2	30
Benzo(a)pyrene	0.00100	0.000934	0.00100	0.000932	93	93	60-114	0	30
Benzo(b)fluoranthene	0.00100	0.000934	0.00100	0.000933	93	93	71-117	0	30
Benzo(g,h,i)perylene	0.00100	0.000869	0.00100	0.000865	87	86	60-109	0	30
Benzo(k)fluoranthene	0.00100	0.000886	0.00100	0.000883	89	88	63-117	0	30
Chrysene	0.00100	0.000893	0.00100	0.000885	89	89	66-107	1	30
Dibenz(a,h)anthracene	0.00100	0.000941	0.00100	0.000937	94	94	66-114	0	30
Fluoranthene	0.00100	0.000892	0.00100	0.000898	89	90	60-115	1	30
Fluorene	0.00100	0.000872	0.00100	0.000883	87	88	57-113	1	30
Indeno(1,2,3-cd)pyrene	0.00100	0.000890	0.00100	0.000890	89	89	63-110	0	30
Naphthalene	0.00100	0.000774	0.00100	0.000805	77	81	56-102	4	30
Phenanthrene	0.00100	0.000826	0.00100	0.000837	83	84	64-105	1	30
Pyrene	0.00100	0.000840	0.00100	0.000852	84	85	57-112	1	30
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 18163B53A	Sample number(s): 9651340,9651342-9651347								
TPH-GRO AK water C6-C10	1.10	1.14	1.10	1.20	104	109	60-120	5	20
Batch number: 18163B53B	Sample number(s): 9651341								

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
TPH-GRO AK water C6-C10	1.10	1.14	1.10	1.20	104	109	60-120	5	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 181660049A	Sample number(s): 9651340-9651346								
DRO C10-C25	4.00	3.67	4.00	3.40	92	85	75-125	7	20

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: W181711AA	Sample number(s): 9651343,9651347 UNSPK: P651107									
Acetone	N.D.	0.150	0.115	0.150	0.113	77	75	54-157	2	30
Benzene	N.D.	0.0200	0.0219	0.0200	0.0224	110	112	80-120	2	30
Bromodichloromethane	N.D.	0.0200	0.0202	0.0200	0.0207	101	104	71-120	2	30
Bromoform	N.D.	0.0200	0.0172	0.0200	0.0182	86	91	59-120	6	30
Bromomethane	N.D.	0.0200	0.0186	0.0200	0.0183	93	92	58-130	2	30
2-Butanone	N.D.	0.150	0.151	0.150	0.160	100	106	59-135	6	30
Carbon Disulfide	N.D.	0.0200	0.0216	0.0200	0.0216	108	108	65-128	0	30
Carbon Tetrachloride	N.D.	0.0200	0.0248	0.0200	0.0254	124	127	64-134	2	30
Chlorobenzene	N.D.	0.0200	0.0203	0.0200	0.0210	102	105	80-120	3	30
Chloroethane	N.D.	0.0200	0.0179	0.0200	0.0174	90	87	61-123	3	30
Chloroform	N.D.	0.0200	0.0215	0.0200	0.0219	107	109	80-120	2	30
Chloromethane	N.D.	0.0200	0.0182	0.0200	0.0182	91	91	63-120	0	30
Cyclohexane	N.D.	0.0200	0.0257	0.0200	0.0247	129*	123*	67-121	4	30
1,2-Dibromo-3-chloropropane	N.D.	0.0200	0.0181	0.0200	0.0193	91	97	53-128	7	30
Dibromochloromethane	N.D.	0.0200	0.0195	0.0200	0.0200	98	100	71-120	2	30
1,2-Dibromoethane	N.D.	0.0200	0.0197	0.0200	0.0197	99	99	75-120	0	30
1,2-Dichlorobenzene	N.D.	0.0200	0.0196	0.0200	0.0200	98	100	80-120	2	30
1,3-Dichlorobenzene	N.D.	0.0200	0.0203	0.0200	0.0204	101	102	80-120	1	30
1,4-Dichlorobenzene	N.D.	0.0200	0.0200	0.0200	0.0201	100	101	80-120	1	30
Dichlorodifluoromethane	N.D.	0.0200	0.0206	0.0200	0.0193	103	97	47-124	6	30
1,1-Dichloroethane	0.000676	0.0200	0.0226	0.0200	0.0232	109	113	80-120	3	30
1,2-Dichloroethane	N.D.	0.0200	0.0199	0.0200	0.0207	99	104	73-124	4	30
1,1-Dichloroethene	N.D.	0.0200	0.0257	0.0200	0.0258	128	129	80-131	1	30
cis-1,2-Dichloroethene	0.00335	0.0200	0.0254	0.0200	0.0259	110	113	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.0200	0.0227	0.0200	0.0232	113	116	80-120	2	30
1,2-Dichloropropane	N.D.	0.0200	0.0221	0.0200	0.0224	110	112	80-120	2	30
cis-1,3-Dichloropropene	N.D.	0.0200	0.0208	0.0200	0.0209	104	105	75-120	1	30
trans-1,3-Dichloropropene	N.D.	0.0200	0.0200	0.0200	0.0210	100	105	76-120	5	30

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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Ethylbenzene	N.D.	0.0200	0.0216	0.0200	0.0219	108	109	80-120	1	30
Freon 113	N.D.	0.0200	0.0251	0.0200	0.0238	125	119	68-137	5	30
2-Hexanone	N.D.	0.100	0.0999	0.100	0.105	100	105	50-141	5	30
Isopropylbenzene	N.D.	0.0200	0.0219	0.0200	0.0222	110	111	80-120	1	30
Methyl Acetate	N.D.	0.0200	0.0198	0.0200	0.0207	99	104	64-130	5	30
Methyl Tertiary Butyl Ether	N.D.	0.0200	0.0177	0.0200	0.0188	89	94	75-120	6	30
4-Methyl-2-pentanone	N.D.	0.100	0.102	0.100	0.109	102	109	62-133	6	30
Methylcyclohexane	N.D.	0.0200	0.0248	0.0200	0.0247	124*	123*	67-121	1	30
Methylene Chloride	N.D.	0.0200	0.0226	0.0200	0.0230	113	115	80-120	2	30
Styrene	N.D.	0.0200	0.0206	0.0200	0.0210	103	105	80-120	2	30
1,1,2,2-Tetrachloroethane	N.D.	0.0200	0.0191	0.0200	0.0192	95	96	72-120	1	30
Tetrachloroethene	0.0378	0.0200	0.0626	0.0200	0.0595	124*	109	80-120	5	30
Toluene	N.D.	0.0200	0.0211	0.0200	0.0216	105	108	80-120	2	30
1,2,4-Trichlorobenzene	N.D.	0.0200	0.0195	0.0200	0.0203	98	101	70-120	4	30
1,1,1-Trichloroethane	0.00226	0.0200	0.0248	0.0200	0.0248	113	113	67-126	0	30
1,1,2-Trichloroethane	N.D.	0.0200	0.0207	0.0200	0.0210	104	105	80-120	1	30
Trichloroethene	0.00460	0.0200	0.0262	0.0200	0.0261	108	108	80-120	0	30
Trichlorofluoromethane	N.D.	0.0200	0.0228	0.0200	0.0216	114	108	60-136	5	30
Vinyl Chloride	N.D.	0.0200	0.0184	0.0200	0.0176	92	88	68-120	5	30
Xylene (Total)	N.D.	0.0600	0.0629	0.0600	0.0636	105	106	80-120	1	30
Batch number: W181712AA	Sample number(s): 9651344-9651346 UNSPK: P664084									
Acetone	N.D.	3.00	2.36	3.00	2.40	79	80	54-157	2	30
Benzene	N.D.	0.400	0.442	0.400	0.441	111	110	80-120	0	30
Bromodichloromethane	N.D.	0.400	0.403	0.400	0.410	101	103	71-120	2	30
Bromoform	N.D.	0.400	0.347	0.400	0.341	87	85	59-120	2	30
Bromomethane	N.D.	0.400	0.395	0.400	0.376	99	94	58-130	5	30
2-Butanone	N.D.	3.00	3.07	3.00	3.03	102	101	59-135	1	30
Carbon Disulfide	N.D.	0.400	0.442	0.400	0.437	110	109	65-128	1	30
Carbon Tetrachloride	N.D.	0.400	0.506	0.400	0.503	127	126	64-134	1	30
Chlorobenzene	N.D.	0.400	0.411	0.400	0.404	103	101	80-120	2	30
Chloroethane	N.D.	0.400	0.379	0.400	0.355	95	89	61-123	7	30
Chloroform	N.D.	0.400	0.428	0.400	0.430	107	107	80-120	0	30
Chloromethane	N.D.	0.400	0.391	0.400	0.367	98	92	63-120	6	30
Cyclohexane	N.D.	0.400	0.523	0.400	0.507	131*	127*	67-121	3	30
1,2-Dibromo-3-chloropropane	N.D.	0.400	0.366	0.400	0.371	91	93	53-128	1	30
Dibromochloromethane	N.D.	0.400	0.385	0.400	0.383	96	96	71-120	1	30
1,2-Dibromoethane	N.D.	0.400	0.394	0.400	0.388	98	97	75-120	1	30
1,2-Dichlorobenzene	N.D.	0.400	0.390	0.400	0.392	97	98	80-120	1	30
1,3-Dichlorobenzene	N.D.	0.400	0.399	0.400	0.397	100	99	80-120	1	30
1,4-Dichlorobenzene	N.D.	0.400	0.400	0.400	0.395	100	99	80-120	1	30
Dichlorodifluoromethane	N.D.	0.400	0.450	0.400	0.413	113	103	47-124	9	30
1,1-Dichloroethane	N.D.	0.400	0.442	0.400	0.443	110	111	80-120	0	30

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(1) The result for one or both determinations was less than five times the LOQ.
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Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2-Dichloroethane	N.D.	0.400	0.406	0.400	0.409	102	102	73-124	1	30
1,1-Dichloroethene	N.D.	0.400	0.530	0.400	0.521	132*	130	80-131	2	30
cis-1,2-Dichloroethene	N.D.	0.400	0.448	0.400	0.439	112	110	80-120	2	30
trans-1,2-Dichloroethene	N.D.	0.400	0.467	0.400	0.455	117	114	80-120	3	30
1,2-Dichloropropane	N.D.	0.400	0.439	0.400	0.439	110	110	80-120	0	30
cis-1,3-Dichloropropene	N.D.	0.400	0.412	0.400	0.409	103	102	75-120	1	30
trans-1,3-Dichloropropene	N.D.	0.400	0.397	0.400	0.395	99	99	76-120	1	30
Ethylbenzene	N.D.	0.400	0.430	0.400	0.426	107	106	80-120	1	30
Freon 113	N.D.	0.400	0.504	0.400	0.487	126	122	68-137	4	30
2-Hexanone	N.D.	2.00	2.00	2.00	1.99	100	100	50-141	0	30
Isopropylbenzene	N.D.	0.400	0.438	0.400	0.431	109	108	80-120	2	30
Methyl Acetate	N.D.	0.400	0.404	0.400	0.397	101	99	64-130	2	30
Methyl Tertiary Butyl Ether	N.D.	0.400	0.374	0.400	0.358	94	90	75-120	4	30
4-Methyl-2-pentanone	N.D.	2.00	2.04	2.00	2.04	102	102	62-133	0	30
Methylcyclohexane	N.D.	0.400	0.534	0.400	0.528	133*	132*	67-121	1	30
Methylene Chloride	N.D.	0.400	0.469	0.400	0.454	117	114	80-120	3	30
Styrene	N.D.	0.400	0.406	0.400	0.408	101	102	80-120	0	30
1,1,2,2-Tetrachloroethane	N.D.	0.400	0.382	0.400	0.378	96	95	72-120	1	30
Tetrachloroethene	N.D.	0.400	0.453	0.400	0.448	113	112	80-120	1	30
Toluene	N.D.	0.400	0.423	0.400	0.423	106	106	80-120	0	30
1,2,4-Trichlorobenzene	N.D.	0.400	0.393	0.400	0.391	98	98	70-120	0	30
1,1,1-Trichloroethane	N.D.	0.400	0.458	0.400	0.456	115	114	67-126	0	30
1,1,2-Trichloroethane	N.D.	0.400	0.404	0.400	0.406	101	101	80-120	0	30
Trichloroethene	N.D.	0.400	0.433	0.400	0.431	108	108	80-120	0	30
Trichlorofluoromethane	N.D.	0.400	0.479	0.400	0.441	120	110	60-136	8	30
Vinyl Chloride	N.D.	0.400	0.391	0.400	0.372	98	93	68-120	5	30
Xylene (Total)	N.D.	1.20	1.25	1.20	1.24	105	103	80-120	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCL 4.3 VOCs
Batch number: W181711AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9651343	99	100	97	97
9651347	99	101	97	96
Blank	99	101	98	98
LCS	100	103	98	100
MS	100	98	99	100

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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCL 4.3 VOCs
Batch number: W181711AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
MSD	99	103	99	101
Limits:	80-120	80-120	80-120	80-120

Analysis Name: TCL 4.3 VOCs
Batch number: W181712AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9651344	100	102	98	101
9651345	97	100	98	100
9651346	99	104	98	105
Blank	99	101	98	97
LCS	99	99	99	100
LCSD	100	99	99	100
MS	100	103	99	102
MSD	100	100	99	100
Limits:	80-120	80-120	80-120	80-120

Analysis Name: TCL 4.3 VOCs
Batch number: Y181704AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9651340	98	102	102	92
9651341	98	103	98	92
9651342	99	102	98	91
Blank	97	100	98	92
LCS	97	99	99	97
LCSD	96	100	100	98
Limits:	80-120	80-120	80-120	80-120

Analysis Name: SIM SVOAs 8270D, water
Batch number: 18164WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
9651340	89	76	86
9651341	91	80	87
9651342	89	81	87
9651343	92	85	87
9651344	115	93	103
9651345	89	77	83
9651346	110	94	96
Blank	89	89	83
LCS	92	93	83

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 06/21/2018 12:36

Group Number: 1953276

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: SIM SVOAs 8270D, water
Batch number: 18164WAD026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
LCSD	92	91	82
Limits:	51-120	57-122	54-120

Analysis Name: TPH-GRO AK water C6-C10
Batch number: 18163B53A

	Trifluorotoluene-F
9651340	90
9651342	88
9651343	89
9651344	99
9651345	83
9651346	102
9651347	91
Blank	91
LCS	104
LCSD	104
Limits:	60-120

Analysis Name: TPH-GRO AK water C6-C10
Batch number: 18163B53B

	Trifluorotoluene-F
9651341	90
Blank	107
LCS	104
LCSD	104
Limits:	60-120

Analysis Name: AK 102-SV DRO
Batch number: 181660049A

	Orthoterphenyl
9651340	88
9651341	84
9651342	67
9651343	85
9651344	74
9651345	91
9651346	75
Limits:	50-150

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-6766 • www.EurofinsUS.com/LancLabsEnv

Quality Control Summary

Client Name: ChevronTexaco
Group Number: 1953276
Reported: 06/21/2018 12:36

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: AK 102-SV DRO
Batch number: 181660049A

	Orthoterphenyl
Blank	92
LCS	91
LCSD	84
Limits:	60-120

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Chevron Generic Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories

Acct. # 10880 Group # 1953276 Sample # 9605134O-47

For Lancaster Laboratories use only

Instructions on reverse side correspond with circled numbers.

1 Client Information

Facility # CHEVRON	WBS 08.02
Site Address 1441 C STREET, ANCHORAGE, AK	
Chevron PM DAN CARRIER	Lead Consultant GHD
Consultant/Office 5610 SILVERADO WAY, STE A2, ANCHORAGE, AK	
Consultant Project Mgr. SIOBHAN PRITCHARD	
Consultant Phone # 720 407 974-0963	
Sampler OLIVER YAN & TRAVIS WEAVER	

4 Matrix

Soil: ☐ Sediment ☐ Soil

Water: ☒ Ground ☐ Potable ☐ NPDES ☐ Surface

Oil: ☐ Air ☐ Oil

3 Grab / Composite

2 Sample Identification / Collected

5 Analyses Requested

2 Sample Identification	Collected Date	Collected Time	3 Grab	3 Composite	Total Number of Containers	BTEX + MTBE 8021 ☐ 8260 ☐ Naphth ☐	8260 full scan	Oxygenates ____	TPHG GRO ____ AK-101	TPHD DRO ____ AK-102	Silica Gel Cleanup ☐	Lead Total ☐ Diss. ☐ Method ____	VPH/EPH Method ____	PAHs BY 8270 SIM
MW-21-W-180607	6/7/18	1305	X		10		X		X	X				X
MW-22-W-180607	6/7/18	1417	X		10		X		X	X				X
MW-23-W-180607	6/7/18	1514	X		10		X		X	X				X
MW-19-W-180607	6/7/18	1640	X		10		X		X	X				X
MW-20-W-180607	6/7/18	1741	X		10		X		X	X				X
MW-11A-W-180607	6/7/18	1855	X		10		X		X	X				X
DUP-1-W-180607	6/7/18	—	X		10		X		X	X				X
QA-1-W-180607	—	—			4		X		X					

SCR #: _____

- ☐ Results in Dry Weight
- ☐ J value reporting needed
- ☐ Must meet lowest detection limits possible for 8260 compounds
- ☐ 8021 MTBE Confirmation
- ☐ Confirm MTBE + Naphthalene
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run _____ oxy's on highest hit
- ☐ Run _____ oxy's on all hits

6 Remarks

EMAIL RESULTS TO:
SIOBHAN.PRITCHARD@GHD.COM

7 Turnaround Time Requested (TAT) (please circle)

Standard | 5 day | 4 day | 72 hour | 48 hour | 24 hour

8 Data Package Options (please circle if required)

Type I - Full | Type VI (Raw Data) | Alaska/Type III

Relinquished by	Date	Time	Received by	Date	Time
	06/08/18	0730			

Relinquished by Commerical Carrier: UPS ____ FedEx ✓ Other ____

Received by: | Date: 6-9-18 | Time: 1010

Temperature Upon Receipt 1.9-3.6 °C

Custody Seals Intact? (Yes) No

9

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Sample Administration Receipt Documentation Log

Doc Log ID: 218759

Group Number(s): 1953276

Client: GHD

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	06/09/2018 10:10
Number of Packages:	3	Number of Projects:	1
State/Province of Origin:	AK		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	No
Samples Chilled:	Yes	Total Trip Blank Qty:	4
Paperwork Enclosed:	Yes	Trip Blank Type:	HCl
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez (8943) at 14:18 on 06/09/2018

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	3.6	DT	Wet	Y	Bagged	N
2	DT131	2.3	DT	Wet	Y	Bagged	N
3	DT131	1.9	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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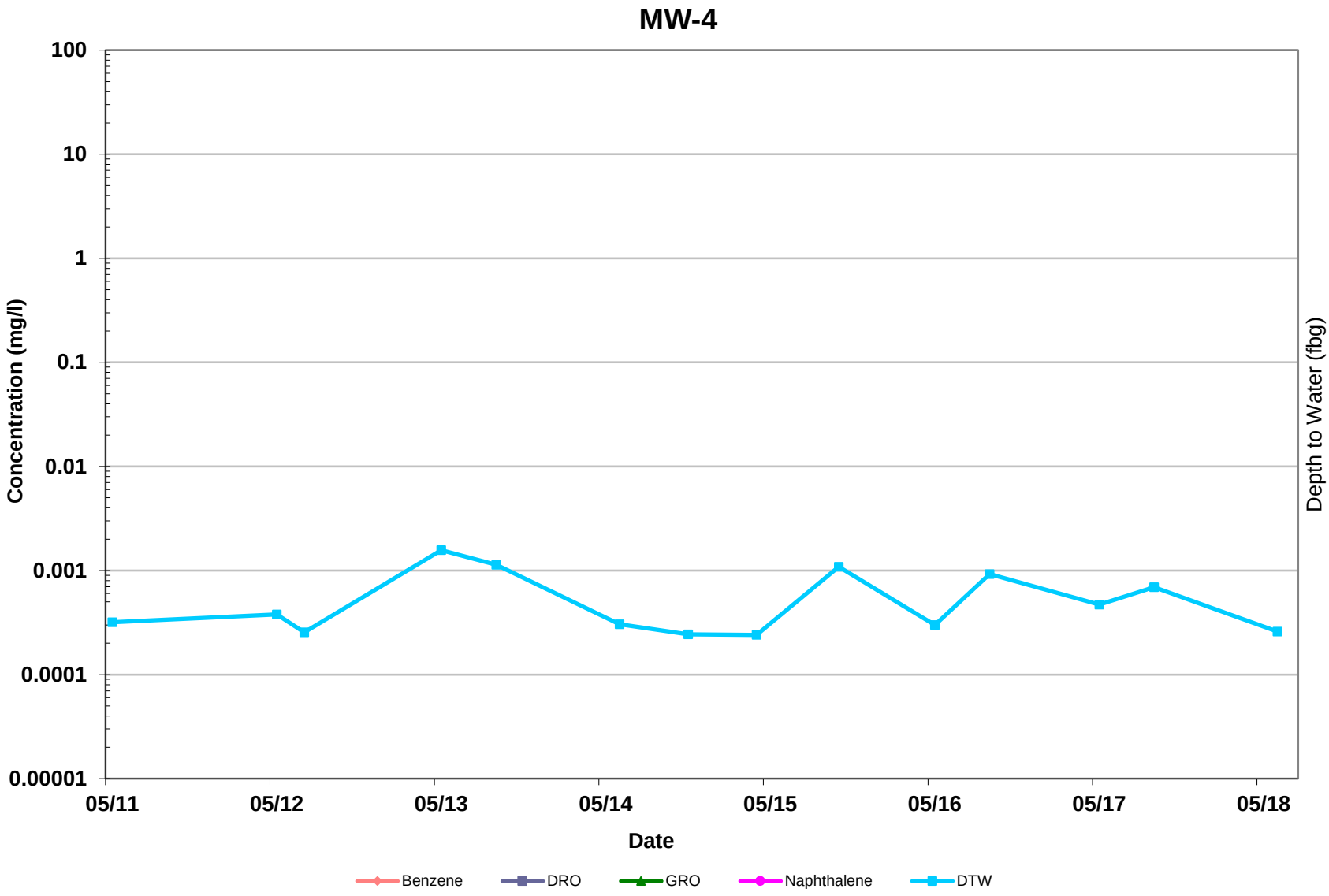
Data Qualifiers

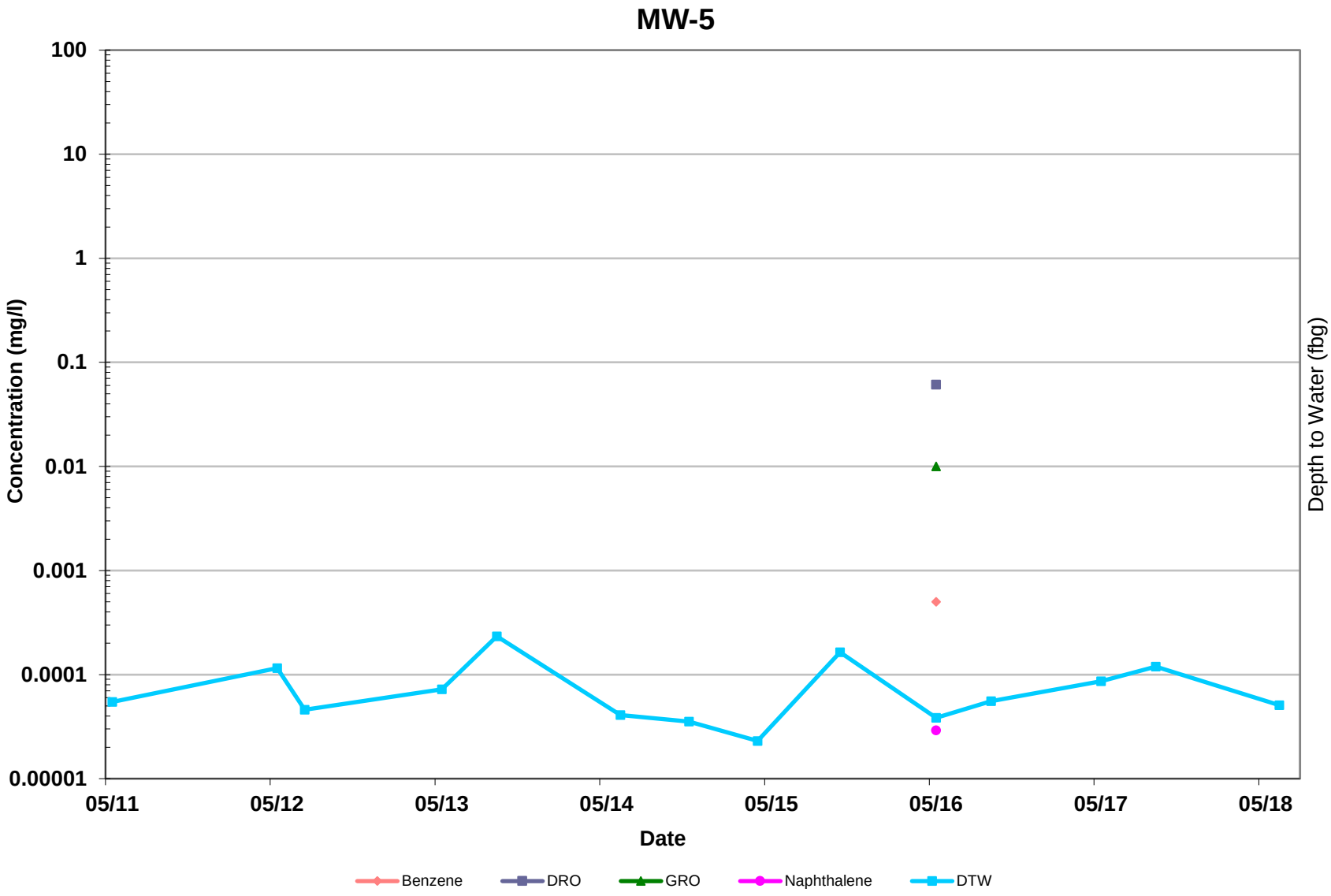
Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Appendix E
Petroleum Hydrocarbon Concentration Graphs

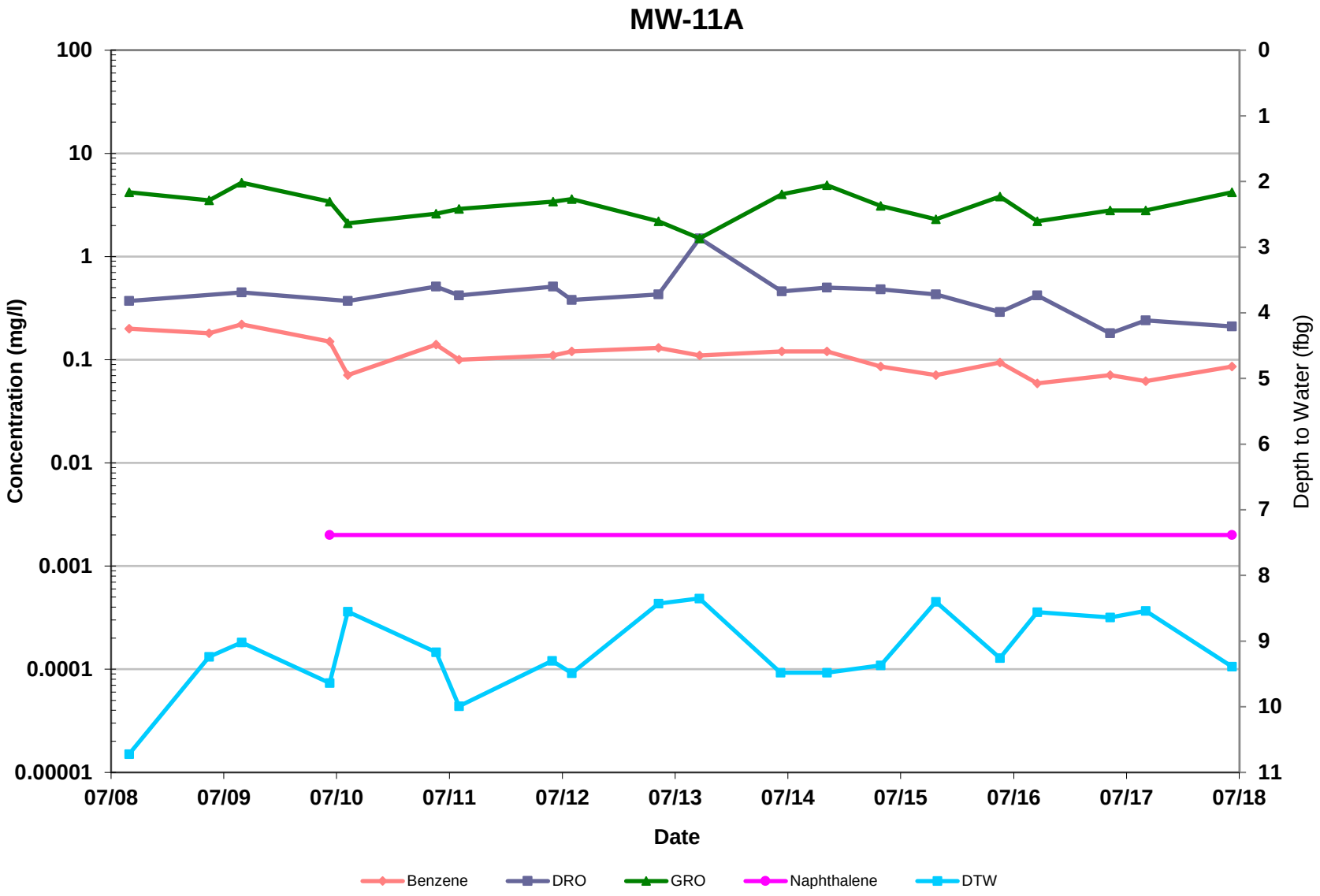


Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska

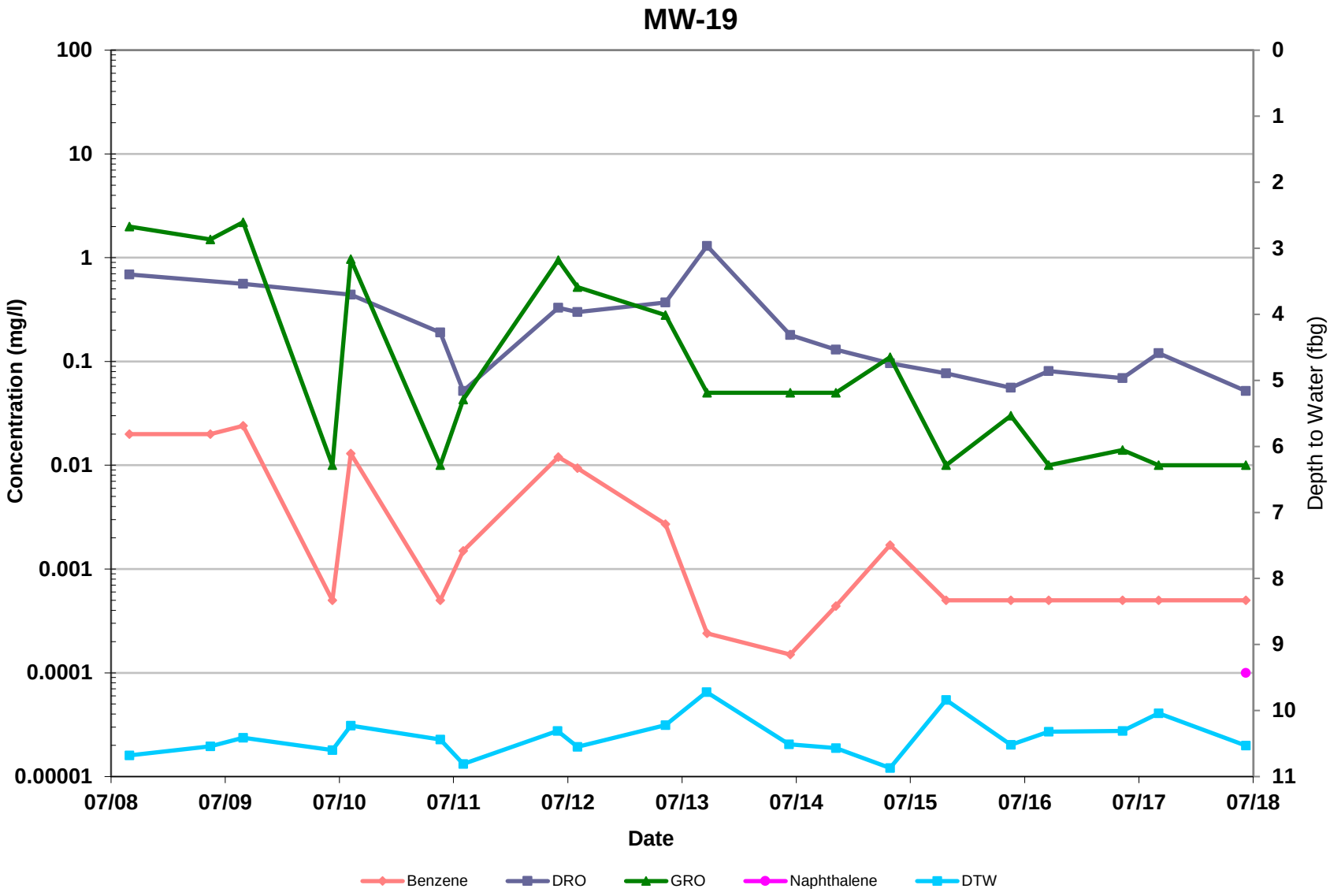


GHD

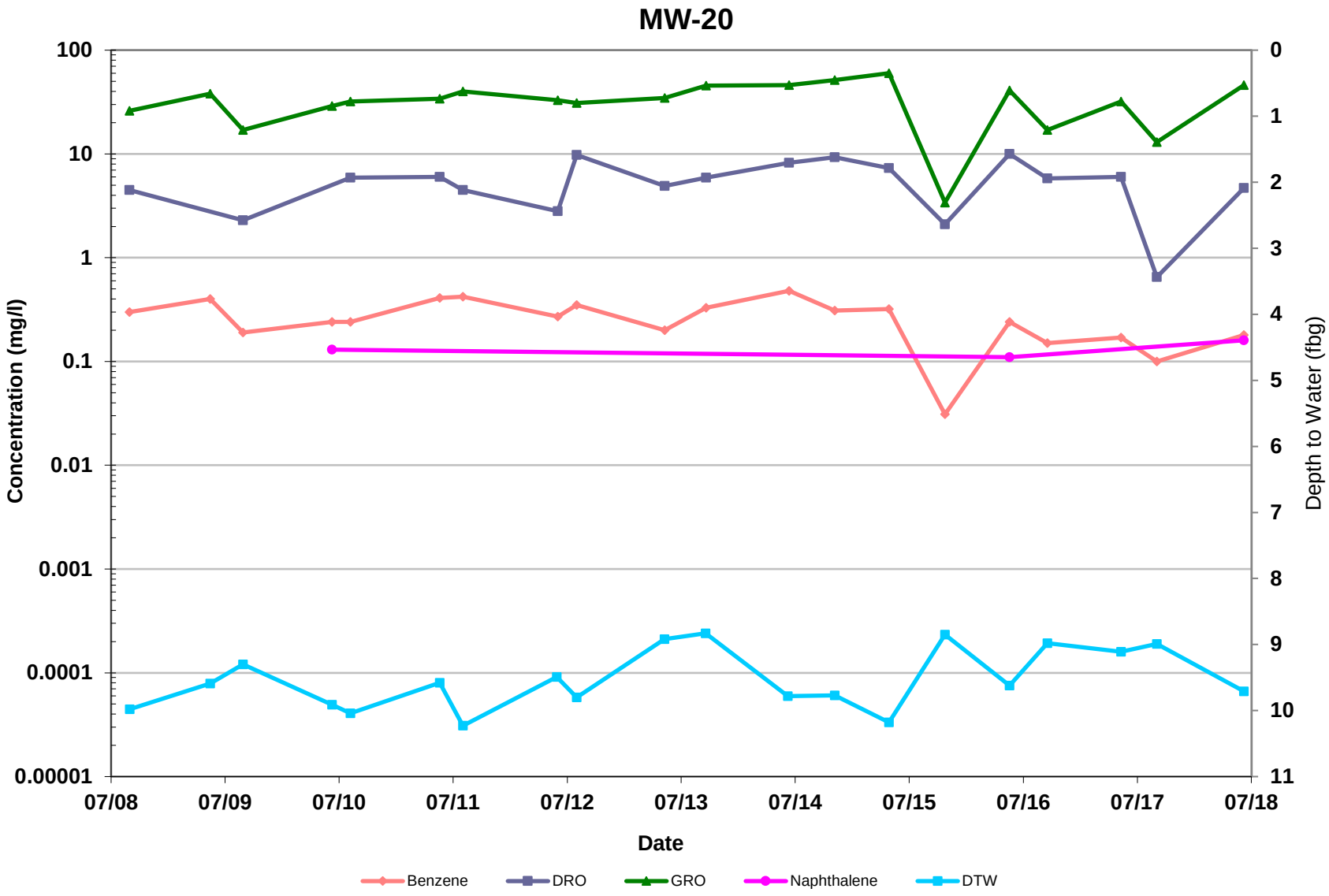
Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



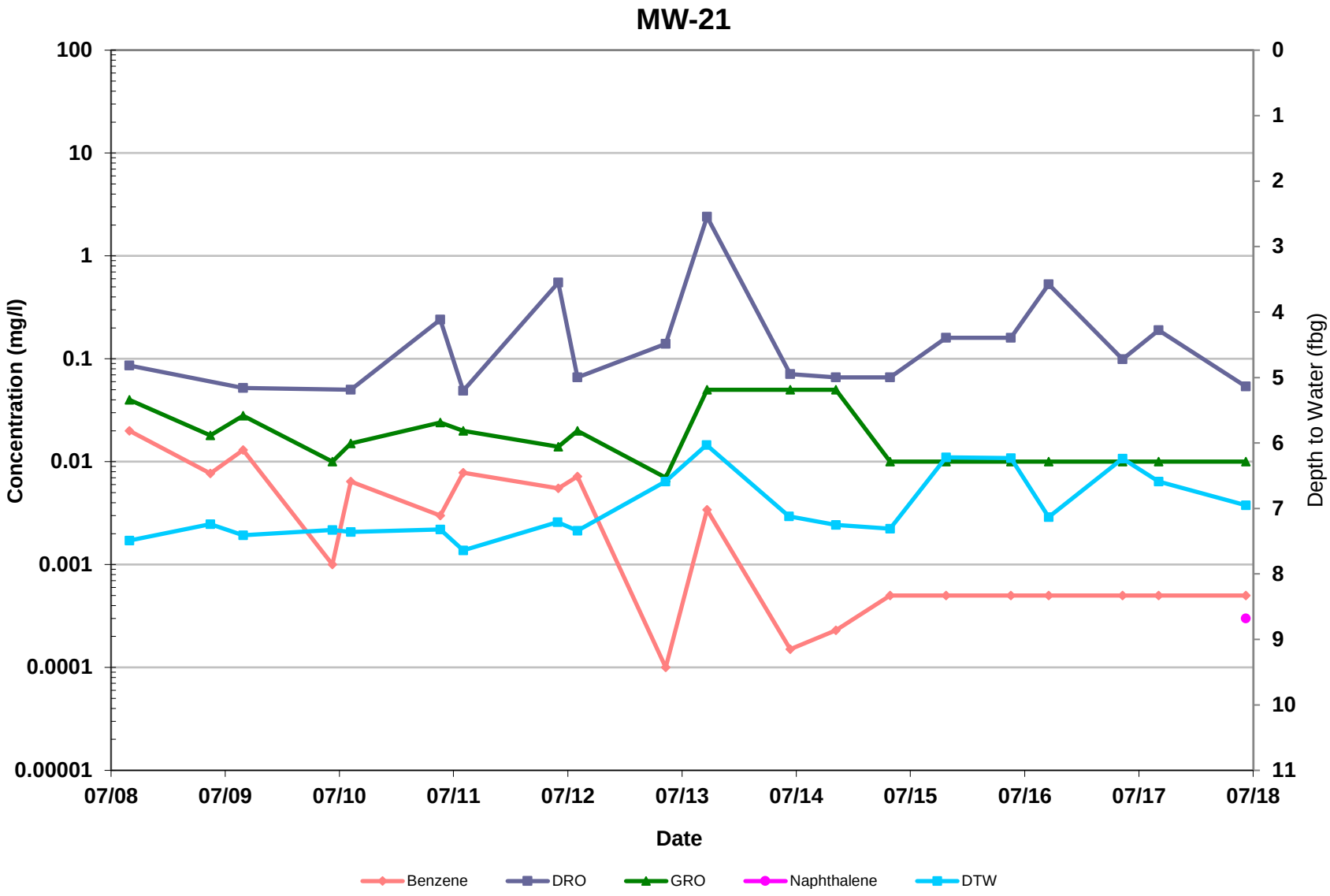
Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



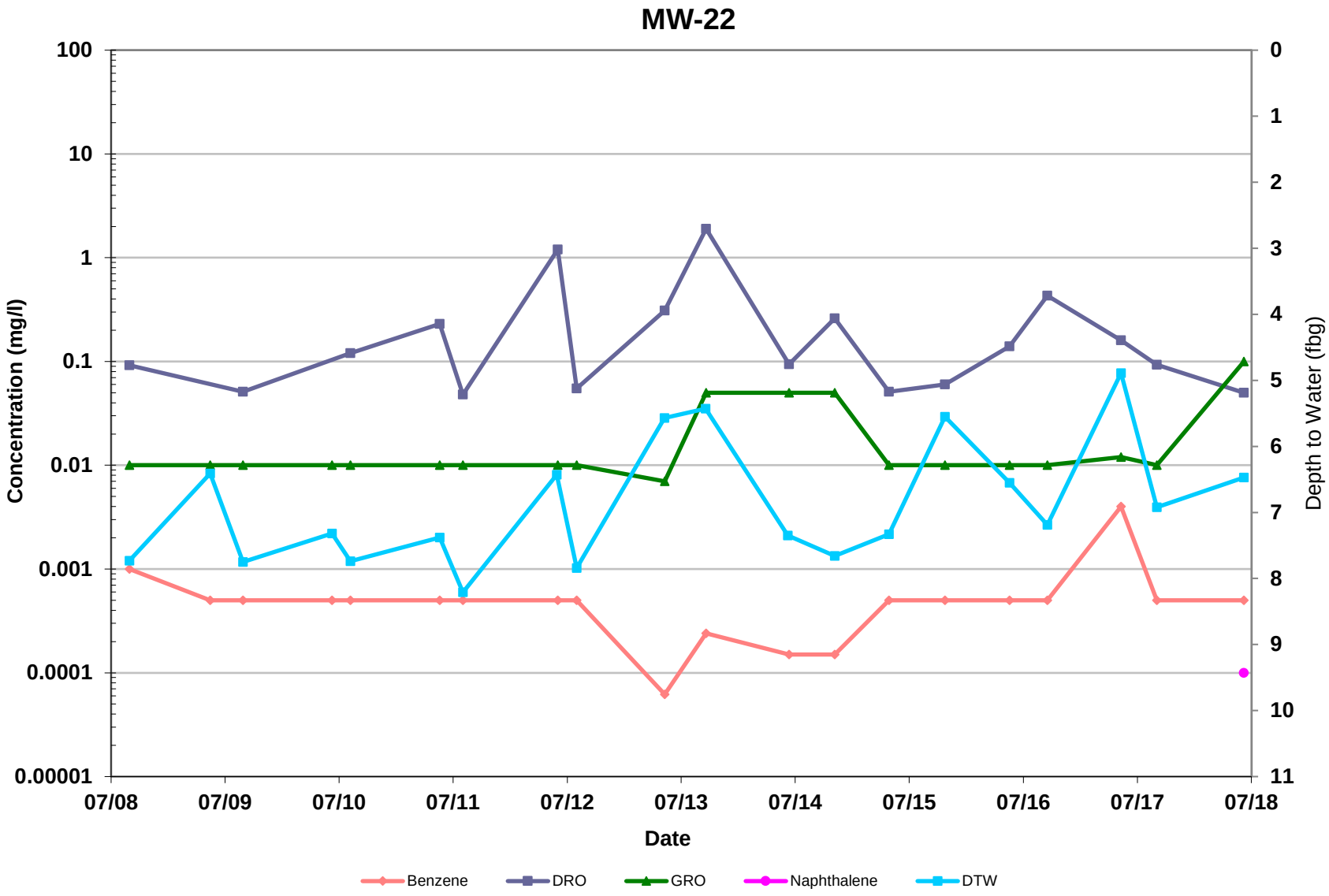
Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



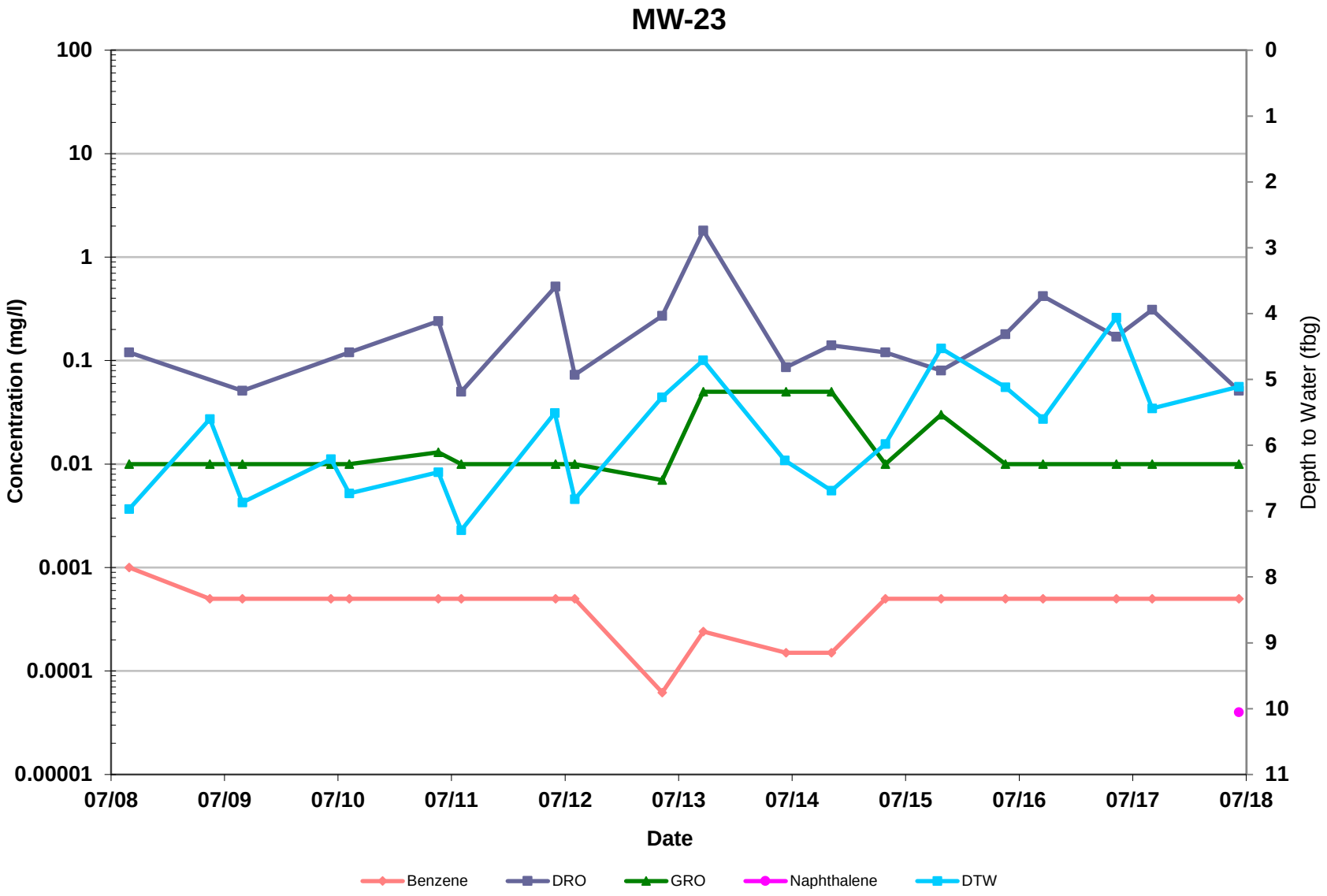
Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska



Former Unocal Station 4652/Chevron Site 306448
1441 C Street
Anchorage, Alaska

Appendix F
ADEC Laboratory Data Review Checklist and Memorandum

Laboratory Data Review Checklist

Completed by:

J Cloud

Title:

Project Chemist

Date:

June 29, 2018

CS Report Name:

First Semiannual 2018 Groundwater Monitoring Report

Report Date:

June 21, 2018

Consultant Firm:

GHD Services Inc.

Laboratory Name:

Eurofins Lancaster Laboratories Environmental

Laboratory Report Number:

1953276

ADEC File Number:

2100.26.117

Hazard Identification Number:

23360

1. Laboratory

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

      (•) Yes ( ) No Comments:

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

      ( ) Yes (•) No Comments:

      Samples not transferred

2. Chain of Custody (COC)

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

      (•) Yes ( ) No Comments:

   b. Correct analyses requested?

      (•) Yes ( ) No Comments:

3. Laboratory Sample Receipt Documentation

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

      (•) Yes ( ) No Comments:

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

      (•) Yes ( ) No Comments:

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

      (•) Yes ( ) No Comments:

   d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

      ( ) Yes (•) No Comments:

      No discrepancies

e. Data quality or usability affected?

Comments:

None

4. Case Narrative

a. Present and understandable?

(•) Yes ( ) No Comments:

b. Discrepancies, errors or QC failures identified by the lab?

(•) Yes ( ) No Comments:

c. Were all corrective actions documented?

( ) Yes (•) No Comments:

No corrective actions

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

Comments:

None

5. Samples Results

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

(•) Yes ( ) No Comments:

b. All applicable holding times met?

(•) Yes ( ) No Comments:

c. All soils reported on a dry weight basis?

( ) Yes (•) No Comments:

No soils

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

(•) Yes ( ) No Comments:

e. Data quality or usability affected?

Comments:

NOne

6. QC Samples

a. Method Blank

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

(•) Yes ( ) No Comments:

ii. All method blank results less than limit of quantitation (LOQ)?

(•) Yes ( ) No Comments:

iii. If above LOQ, what samples are affected?

Comments:

No affected samples

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

( ) Yes (•) No Comments:

No affected samples

v. Data quality or usability affected?

Comments:

None

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

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

(•) Yes ( ) No Comments:

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

( ) Yes (•) No Comments:

No metals/inorganics

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

(•) Yes ( ) No Comments:

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

(•) Yes ( ) No Comments:

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

Comments:

No affected samples

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

( ) Yes (•) No Comments:

No affected samples

vii. Data quality or usability affected?

Comments:

None

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

(•) Yes ( ) No Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

(•) Yes ( ) No Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

( ) Yes (•) No Comments:

No failed surrogates

iv. Data quality or usability affected?

Comments:

None

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and cooler?

(•) Yes ( ) No Comments:

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

( ) Yes ( ) No Comments:

iii. All results less than LOQ?

(•) Yes ( ) No Comments:

iv. If above LOQ, what samples are affected?

Comments:

No affected samples

v. Data quality or usability affected?

Comments:

None

e. Field Duplicate

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

(•) Yes ( ) No Comments:

ii. Submitted blind to lab?

(•) Yes ( ) No Comments:

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

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

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

○ Yes ◉ No Comments:

Cyclohexane had a high RPD

iv. Data quality or usability affected?

Comments:

The cyclohexane results for samples MW-20 and DUP-1 were qualified as estimated due to variability

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

○ Yes ○ No ◉ Not Applicable

i. All results less than LOQ?

○ Yes ◉ No Comments:

Not collected

ii. If above LOQ, what samples are affected?

Comments:

Not collected

iii. Data quality or usability affected?

Comments:

Not collected

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

a. Defined and appropriate?

◉ Yes ○ No Comments:

Memorandum

July 5, 2018

To:	ADEC	Ref. No.:	621049
From:	Jeffrey Cloud	Tel:	206-914-3141
cc:	Siobhan Pritchard		

Subject: **QA/QC Review**
ChevronTexaco Site 306448
Job # 1953276
June 2018

1. Introduction

This document details a reduced validation of analytical results for groundwater samples collected in Anchorage, Alaska during June 2018. Samples were submitted to Eurofins Lancaster Laboratories Environmental, located in Lancaster, Pennsylvania.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody form, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods and applicable guidance from the document entitled "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review", USEPA 540-R-08-01, June 2008 subsequently referred to as the "Guidelines" in this Memorandum.

2. Sample Holding Time and Preservation

The sample holding time criteria and sample preservation requirements for the analyses are summarized in the methods. The sample chain of custody document and analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding times.

All samples were properly preserved, delivered on ice and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC), semivolatile organic compound (SVOC), gasoline range organics (GRO) and diesel range organics (DRO) analysis were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the associated control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against the control limits. All surrogate recoveries met the associated criteria.

5. Laboratory Control Sample Analyses

Laboratory control samples (LCS)/laboratory control sample duplicates (LCSD) are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects. The relative percent difference (RPD) of the LCS/LCSD recoveries is used to evaluate analytical precision.

For this study, LCS or LCS/LCSD were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS and LCS/LCSD contained all analytes of interest. All LCS and LCS/LCSD recoveries and RPDs were within associated control limits, demonstrating acceptable analytical accuracy and precision (where applicable).

6. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, one trip blank was submitted to the laboratory for analysis. All results were non-detect for the analytes of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample was collected and submitted "blind" to the laboratory. The RPDs associated with the duplicate sample must be less than 50 percent. If the reported concentration in both the investigative sample and its duplicate is less than five times the reporting limit (RL), the evaluation criterion is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision with the exception of a high cyclohexane RPD. The cyclohexane results for samples MW-20 and DUP-1 were qualified as estimated due to variability.

7. Analyte Reporting

Non-detect data were reported down to the laboratory's method detections limit (MDL) for each analyte. Positive analyte detections less than the reporting limit (RL) but greater than the MDL were reported as estimated (J).

8. Conclusion

Based on the assessment detailed in the foregoing, the summarized data are acceptable with the specific qualifications noted herein.