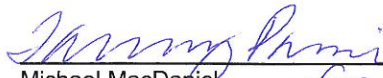


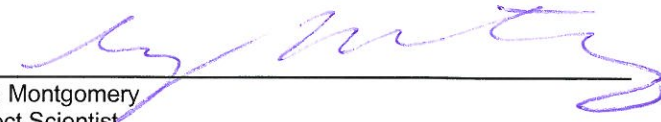
**Chevron Environmental  
Management Company**

**Annual 2012 Groundwater  
Monitoring Report**

Former Chevron Bulk Plant 1001430  
Former Texaco Bulk Plant 211815  
Former Unocal Bulk Plant 306456  
418 Illinois Street, 410 Driveway Street, and  
328 ½ Illinois Street  
Fairbanks, Alaska

April 3, 2013

  
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Michael MacDaniel  
Field Technician

  
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Greg Montgomery  
Project Scientist

**Annual 2012 Groundwater  
Monitoring Report**

Former Chevron Bulk Plant 1001430  
Former Texaco Bulk Plant 211815  
Former Unocal Bulk Plant 306456  
418 Illinois Street, 410 Driveway  
Street, and 328 ½ Illinois Street  
Fairbanks, Alaska

Prepared for:  
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Our Ref.:  
B0045512, B0045505, and B0045506

Date:  
April 3, 2013

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Former Chevron Bulk Plant  
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**1. Introduction**

On behalf of Chevron Environmental Management Company (Chevron), ARCADIS US, Inc. (ARCADIS), has prepared this report to document the annual 2012 groundwater sampling event results for former Chevron Bulk Plant 1001430, former Texaco Bulk Plant 211815, and former Unocal Bulk Plant 306456 located at 418 Illinois Street, 410 Driveway Street, and 328 ½ Illinois Street, respectively, in Fairbanks, Alaska. The site location map and site map are shown on **Figure 1** and **Figure 2**, respectively. This report summarizes the groundwater sampling event conducted by ARCADIS from July 23 through July 28, 2012. Work was conducted under the direction of a “qualified person” as defined in Alaska Department of Environmental Conservation (ADEC) documentation 18 Alaska Administrative Code (AAC) 75.990 (100), and 18 AAC 78.995 (118) (ADEC 2006a and 2006b).

**2. Groundwater Monitoring**

**2.1. Groundwater Gauging Methods**

The annual 2012 groundwater gauging event was conducted July 23-28, 2012. Site monitoring wells were gauged with an oil/water interface probe to determine depth-to-water and to ascertain if light-non-aqueous phase liquid (LNAPL) was present. Monitoring wells which are a part of the annual gauging program include:

**Former Chevron 1001430:**

TH-1, TH-2, TH-5, TH-7, TH-10, MW-23, and MW-25

**Former Unocal 306456:**

GEI-1 through GEI-10, GEI-12, MW-1 through MW-6, MW-14, MW-15, K-5, and K-7

**Former Texaco 211815:**

MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, AR-81, and AR-85

In order to prevent the possibility of cross-contamination, wells were gauged in the order of lowest to highest historical petroleum hydrocarbon concentrations in groundwater. In addition, non-disposable groundwater gauging equipment was

decontaminated prior to and after each use with a detergent solution and rinsed in potable water.

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## 2.2. Groundwater Elevation and Flow Direction

Groundwater elevations ranged between 428.06 feet above mean sea level (msl) in monitoring well MW-9 (Texaco) and 428.91 feet above msl in monitoring well TH-10 (Chevron). The groundwater elevation data obtained from the annual 2012 event were used to create a groundwater elevation contour map shown on **Figure 3**. These data indicate groundwater flow direction is to the west towards the Chena River. The groundwater elevations and flow directions are consistent with historical groundwater monitoring events.

The following groundwater monitoring wells were unable to be gauged and/or sampled during the 2012 annual groundwater monitoring event:

### Former Chevron 1001430:

Monitoring wells TH-13, TH-17, and TH-18 were not accessible due to permit stipulations with Alaska Railroad Company (ARRC). The access issues are currently being negotiated between ARRC and Chevron. Access to these wells will require a permit. Monitoring well MW-23 could not be sampled due to an obstruction. Monitoring well MW-25 could not be sampled due to the presence of LNAPL.

### Former Unocal 306456:

Monitoring wells GEI-1, GEI-3, GEI-4, GEI-7, GEI-8, GEI-12, and MW-15 could not be sampled due to trace amounts (globules) of LNAPL present. Monitoring wells GEI-11 and MW-13 were not accessible due to permit stipulations with ARRC. Monitoring wells GEI-2, K-5, K-7 could not be sampled do to obstructions.

Current and historical groundwater elevation data are included in **Table 1a, 1b, and 1c**. The groundwater monitoring event field notes are presented in **Appendix A**. Historical groundwater elevation plotted against LNAPL thickness and analytical results are depicted in **Figures A and B** as hydrographs.

Former Chevron Bulk Plant  
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**2.3. Groundwater Sampling Methods**

Annual 2012 groundwater monitoring was conducted July 23-28, 2012. Groundwater samples were collected from monitoring wells TH-1, TH-2, TH-5, TH-7, and TH-10 located at Former Chevron 1001430; monitoring wells MW-1, MW-3, MW-4, MW-5, MW-7, MW-8, MW-9, AR-81 and AR-85 located at Former Texaco 211815; monitoring wells GEI-5, GEI-6, GEI-9, GEI-10, MW-1 through MW-6, and MW-14 at Former Unocal 306456, using no-purge sampling procedures in accordance with the ADEC Draft Field Sampling Guidance (2011) and ARCADIS *Bailer-Grab Groundwater Sampling* (ARCADIS, 2009). A disposable Teflon® bailer was used to collect the samples. The bailer will be lowered slowly into the water column within the monitoring well to a depth of approximately three to four feet below the groundwater surface. The bailer will then be slowly retrieved to limit the amount of possible aeration of the water column. The groundwater sample will be collected from the bottom of the bailer using a disposable sampling tip. This technique will minimize the disturbance and aeration of the groundwater within the bailer. Groundwater samples were labeled, stored in a cooler packed with ice and submitted to Eurofins Lancaster Laboratories (Eurofins) in Lancaster, Pennsylvania under proper chain-of-custody procedures. Samples were submitted for one or more of the following analyses:

**Former Chevron 1001430:**

- Gasoline range organics (GRO) by Alaska Method AK101
- Diesel range organics (DRO) by Alaska Method AK102
- Diesel range organics with Silica Gel Cleanup (DRO SG) by Alaska Method AK102
- Residual range organics (RRO) by Alaska Method AK103
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8021B
- Total Alkalinity by EPA Method 310.1
- Sulfate and Nitrate/Nitrite Nitrogen by EPA Method 300.0
- Methane by EPA RSK Method 175

**Former Texaco 211815:**

- GRO by Alaska Method AK101
- DRO by Alaska Method AK102
- DRO SG by Alaska Method AK102
- RRO by Alaska Method AK103

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- BTEX and methyl-tert butyl ether (MTBE) by EPA method 8021B
- Select VOCs by EPA Method 8260B
- Ethylene dibromide (EDB) by EPA Method 8011
- Total Alkalinity by EPA Method 310.1
- Sulfate and Nitrate/Nitrite Nitrogen by EPA Method 300.0
- Methane by EPA RSK Method 175

**Former Unocal 306456:**

- GRO by Alaska Method AK101
- DRO by Alaska Method AK102
- DRO SG by Alaska Method AK102
- RRO by Alaska Method AK103
- BTEX and MTBE by EPA method 8021B
- Select VOCs by EPA Method 8260B
- Total Alkalinity by EPA Method 310.1
- Sulfate and Nitrate/Nitrite Nitrogen by EPA Method 300.0
- Methane by EPA RSK Method 175

**2.4 Groundwater Analytical Results**

2.4.1 Former Chevron 1001430

A concentration of GRO greater than the ADEC Groundwater Cleanup Level (GCL) (2,200 micrograms per liter [ $\mu\text{g/L}$ ]) was detected in the sample from monitoring well TH-2 at 22,000  $\mu\text{g/L}$ .

Concentrations of DRO greater than the ADEC GCL (1,500  $\mu\text{g/L}$ ) were detected in monitoring well samples TH-1, BD-1, TH-2, and TH-5 with concentrations ranging between 9,700  $\mu\text{g/L}$  (BD-1) and 38,000  $\mu\text{g/L}$  (TH-2).

A concentration of RRO greater than the ADEC GCL (1,100  $\mu\text{g/L}$ ) was detected in monitoring well samples TH-2 and TH-5 at 22,000  $\mu\text{g/L}$  and 6,700  $\mu\text{g/L}$ , respectively. The laboratory minimum detection limit (MDL) exceeded the RRO GCL in the sample analyzed from monitoring well TH-1 at a concentration of 1,400  $\mu\text{g/L}$ .

A concentrations of benzene greater than the ADEC GCL (5  $\mu\text{g/L}$ ) was detected in the monitoring well sample TH-2 at 260  $\mu\text{g/L}$ . The laboratory minimum detection limit



(MDL) exceeded the benzene GCL in the sample analyzed from monitoring well TH-5 at a concentration of 6 µg/L.

Concentrations of ethylbenzene greater than the ADEC GCL (700 µg/L) were detected in the sample collected from monitoring well TH-2 at 870 µg/L.

Groundwater analytical results for the Former Chevron 1001430 are presented in **Table 2a** and are shown on **Figure 4**. Total alkalinity, sulfate, methane, nitrate nitrogen, and nitrite nitrogen were collected to measure natural attenuation. The geochemical parameters observed indicate that the plume is undergoing natural attenuation. Analytical results for these geochemical parameters are presented in **Table 5**.

#### 2.4.2 Former Texaco 211815

Concentrations of GRO greater than the ADEC GCL (2,200 µg/L) were detected in monitoring well samples MW-4, BD-1 (duplicate of MW-4), MW-5, MW-7, and MW-8 ranging between 3,400 µg/L (MW-5) and 44,000 µg/L (MW-4).

Concentrations of DRO greater than the ADEC GCL (1,500 µg/L) were detected in monitoring well samples MW-4, BD-1, MW-5, MW-7, and MW-8 ranging between 1,700 µg/L (MW-8) and 620,000 µg/L (MW-4).

Concentrations of RRO greater than the ADEC GCL (1,100 µg/L) were detected in monitoring well samples MW-1 and MW-3 at 1,300 µg/L and 1,600 µg/L, respectively. The laboratory MDL exceeded the RRO GCL in the sample analyzed from well MW-4 at a concentration of 33,000 µg/L.

Concentrations of benzene greater than the ADEC GCL (5 µg/L) were detected in monitoring well samples MW-3, MW-4, BD-1, MW-5, MW-7, and MW-8 ranging between 14 µg/L (MW-3) and 2,100 µg/L (MW-4).

Concentrations of toluene greater than the ADEC GCL (1,000 µg/L) were detected in monitoring well samples MW-4 and BD-1 at 4,900 µg/L and 4,700 µg/L, respectively.

Concentrations of ethylbenzene greater than the ADEC GCL (700 µg/L) were detected in monitoring well samples MW-4 and BD-1 at 1,200 µg/L and 1,100 µg/L, respectively.

Concentrations of 1,2-Dichloroethane greater than than ADEC GCL (5 µg/L) were detected in monitoring wells samples MW-4, MW-7, and MW-8 ranging between 11 µg/L (MW-8) and 59 µg/L (MW-4).

Analytical results for the former Texaco 211815 are presented in **Table 2b** and **Table 3** and are shown on **Figure 4** and **Figure 5**. Total alkalinity, sulfate, methane, nitrate nitrogen, and nitrite nitrogen were collected to measure natural attenuation. The geochemical parameters observed indicate that the plume is undergoing natural attenuation. Analytical results for these geochemical parameters are presented in **Table 6**.

#### 2.4.3 Former Unocal 306456

Groundwater samples collected during the annual 2012 monitoring event contained concentrations of GRO greater than the ADEC GCL (2,200 µg/L) in monitoring well samples GEI-9, MW-3, and MW-5 ranging from between 3,200 µg/L (GEI-9) and 8,000 µg/L (MW-5).

Concentrations of DRO greater than the ADEC GCL (1,500 µg/L) were detected in monitoring well samples GEI-5, GEI-6, GEI-9, GEI-10 MW-3, and MW-5 ranging between 3,000 µg/L (GEI-6) and 450,000 µg/L (MW-5).

Concentrations of RRO greater than the ADEC GCL (1,100 µg/L) were detected in monitoring well samples GEI-5, GEI-6, and MW-3 ranging between 1,700 µg/L (MW-3) and 28,000 µg/L (GEI-5). The laboratory MDL exceeded the GCL in monitoring well samples GEI-9, GEI-10, and MW-5 at concentrations ranging between 1,400 µg/L (GEI-9) and 18,000 µg/L (MW-5).

Concentrations of benzene greater than the ADEC GCL (5 µg/L) were detected in monitoring well samples GEI-5, MW-3, MW-5, and MW-14 ranging between 14 µg/L (MW-14) and 630 µg/L (MW-3).

Concentrations of VOCs were not detected above the respective ADEC GCLs on any of the monitoring wells sampled.

Analytical results for the Former Unocal 306456 are presented in **Tables 2c** and **Table 3** and are shown on **Figure 4** and **Figure 5**. Total alkalinity, sulfate, methane, nitrate nitrogen, and nitrite nitrogen were collected to measure natural attenuation. The geochemical parameters observed indicate that the plume is undergoing natural

attenuation. Analytical results for these geochemical parameters are presented in **Table 7**.

### 3. Laboratory Data Quality Assurance Summary

As required by ADEC (Technical Memorandum, dated March, 2009), ARCADIS completed a laboratory data review checklist for each of the Eurofins reports during the annual 2012 event. The laboratory reports are included as **Appendix B** and data review checklists are included as **Appendix C**. The following quality assurance (QA) summary describes six parameters, related to the quality and usability of the data presented in this report.

#### 3.1. Precision

The data meets precision objectives for laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) relative percent differences (RPDs).

#### 3.2. Accuracy

The data meets accuracy objectives as indicated by the laboratory quality control samples, which were within method/laboratory limits. Analytes were not detected in the trip blanks submitted with the groundwater samples. The LCS recoveries were within respective limits.

#### 3.3. Representativeness

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

#### 3.4. Comparability

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

#### 3.5. Completeness

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

### 3.6. Sensitivity

The sensitivity of the analyses was adequate for the samples as the detection limits were less than the ADEC GCLs for compounds which were not detected with the following exceptions:

The PQL for RRO exceeded the applicable GCL in the analysis of TH-1, (Chevron), MW-4 (Texaco), GEI-9, GEI-10, and MW-5 (Unocal).

## 4. Conclusions and Recommendations

The groundwater elevation data collected during the annual 2012 groundwater monitoring activities indicate groundwater flow directions and gradients are generally consistent with historical data. In addition, the analytical results of the annual 2012 groundwater sampling events are generally consistent with previous events.

ARCADIS will continue to sample the site on an annual basis. The 2013 annual groundwater sampling event will be conducted in July/August 2013. If you have any questions or would like to discuss this further, please contact Greg Montgomery at 206.726.4742.

## 5. References

ADEC, 2006a. *Oil and Other Hazardous Substances Pollutions Control 18.ACC 75.990 (100)* December 30, 2006.

ADEC Technical Memorandum, March, 2009. *Environmental Laboratory Data and Quality Assurance Requirements*. ADEC, Division of Spill Prevention and Response Contaminated Sites Program.

ADEC. 2006b. *Underground Storage Tanks 18.AAC 78.995 (118)* October, 2006. Alaska Department of Environmental Conservation.

ARCADIS. *Bailer-Grab Groundwater Sampling*. March 10. 2009.

ADEC, May, 2011. *Draft Field Sampling Guidance*. Division of Spill Prevention and Response Contaminated Sites Program.

ARCADIS

**Tables**

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
TH-1	06/24/02	440.41	17.80	--	422.61
	09/25/02		15.46	--	424.95
	04/29/03		17.95	--	422.46
	09/03/03		14.99	--	425.42
	03/10/04		18.06	--	422.35
	09/15/04		17.67	--	422.74
	04/19/05		18.55	--	421.86
	09/08/05		16.77	--	423.64
	04/20/06		18.58	--	421.83
	09/14/06		16.46	--	423.95
	02/06/07		NM	NA	NA
	03/14/07		18.57	--	421.84
	09/12/07		445.69	16.79	--
	10/15/07	NM		NA	NA
	01/29/08	NM		NA	NA
	02/13/08	NM		NA	NA
	04/04/08	18.78		--	426.91
	05/23/08	NM		NA	NA
	06/25/08	NM		NA	NA
	07/14/08	NM		NA	NA
	08/06/08	NM		NA	NA
	09/16/08	15.92		--	429.77
	10/27/08	NM		NA	NA
	11/24/08	NM		NA	NA
	12/19/08	NM		NA	NA
	01/30/09	NM		NA	NA
	02/19/09	NM		NA	NA
	03/25/09	NM		NA	NA
	04/20/09	NM		NA	NA
	05/26/09	NM	NA	NA	
	06/24/09	NM	NA	NA	
	07/27/09	17.60	--	428.09	
	08/26/09	NM	NA	NA	
	09/17/09	NM	NA	NA	
10/22/09	NM	NA	NA		
11/03/09	NM	NA	NA		
12/14/09	NM	NA	NA		
01/12/10	NM	NA	NA		
02/09/10	NM	NA	NA		

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
TH-1 Cont.	03/18/10	445.67	NM	NA	NA	
	04/21/10		NM	NA	NA	
	05/26/10		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/19/10		NM	NA	NA	
	08/16/10		NM	NA	NA	
	09/22/10		NM	NA	NA	
	10/27/10		NM	NA	NA	
	11/15/10		NM	NA	NA	
	12/13/10		NM	NA	NA	
	01/04/11		NM	NA	NA	
	02/07/11		NM	NA	NA	
	09/21/11		15.91	NA	429.76	
	<b>07/23/12</b>		<b>16.85</b>	<b>NA</b>	<b>428.82</b>	
TH-2	06/24/02	438.68	Well not sampled - frozen shut			
	09/25/02	438.68	13.77	--	424.91	
	04/29/03		16.24	present	422.44	
	09/03/03		13.22	--	425.46	
	03/10/04		16.31	0.02	422.39	
	09/15/04		15.92	0.04	422.79	
	04/19/05		16.87	0.10	421.89	
	09/08/05		15.03	0.03	423.67	
	04/20/06		16.79	0.11	421.98	
	09/14/06		14.70	--	423.98	
	02/06/07		Well not sampled - monument cover frozen shut			
	03/14/07		Well not sampled - monument cover frozen shut			
	04/30/07		443.88	16.25	--	422.43
	05/18/07			16.00	--	422.68
	09/13/07	14.99		--	428.89	
	10/15/07	15.51		--	428.37	
	01/29/08	16.58		0.03	427.32	
	02/13/08	16.68		0.04	427.23	
	04/04/08	16.92		--	426.96	
	05/23/08	Absorbent sock frozen in well				
	06/25/08	15.57		--	428.31	
	07/14/08	16.20		--	427.68	
	08/06/08	12.86	--	431.02		
09/16/08	14.12	0.01	429.77			
10/27/08	15.38	--	428.50			
11/24/08	15.43	--	428.45			

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>		
TH-2 Cont.	12/19/08	443.75	15.91	0.06	428.02		
	01/30/09		16.52	0.09	427.43		
	02/19/09		16.73	0.09	427.22		
	03/25/09		16.91	0.10	427.05		
	04/20/09		17.05	0.14	426.94		
	05/26/09		NM	NA	NA		
	06/24/09		15.65	0.06	428.28		
	07/27/09		15.85	0.11	428.12		
	08/26/09		15.69	--	428.19		
	09/17/09		14.02	--	429.86		
	10/22/09			Obstructed			
	11/03/09			Obstructed			
	12/14/09			Obstructed			
	01/12/10			NM	NA	NA	
	02/09/10			16.93	0.12	427.05	
	03/18/10			17.19	0.15	426.81	
	04/21/10			17.22	--	426.66	
	05/26/10			16.21	--		
	06/15/10			15.53	--		
	07/19/10			15.30	--	428.58	
	08/16/10			15.64	0.04	428.27	
	09/22/10			15.55	--	428.20	
	10/27/10			16.50	0.20	427.41	
	11/15/10			16.22	0.02	427.55	
	12/13/10			15.54	0.13	428.31	
	01/04/11			16.72	0.02	427.05	
	02/07/11			17.09	0.14	426.77	
	03/22/11			17.06	0.13	426.79	
	04/14/11			17.08	0.9	427.39	
	09/21/11			13.95	--	429.80	
	<b>07/23/12</b>				<b>14.91</b>	<b>--</b>	<b>428.84</b>
	TH-4		06/24/02	436.92	13.67	--	423.25
09/25/02			12.20	--	424.72		
04/29/03			14.70	--	422.22		
09/03/03			11.67	--	425.25		
03/10/04			14.86	--	422.06		
Well decommissioned for railroad construction on 8/19/2004							



**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
TH-5	06/24/02	437.62	13.64	--	423.98	
	09/25/02		12.79	present	424.83	
	04/29/03		15.14	present	422.48	
	09/03/03		12.17	present	425.45	
	03/10/04		NM	0.03	NM	
	09/15/04		14.84	--	422.78	
	04/19/05		15.72	--	421.9	
	09/08/05		13.95	0.02	423.69	
	04/20/06		15.74	--	421.88	
	09/14/06		13.63	--	423.99	
	12/01/06		14.89	--	422.73	
	12/22/06		15.12	--	422.5	
	02/06/07		15.41	--	422.21	
	03/14/07		15.68	--	421.94	
	04/30/07		15.16	--	422.46	
	05/18/07		14.95	--	422.67	
	09/13/07		442.80	13.91	--	428.89
	10/15/07			14.41	--	428.39
	11/19/07	14.45		--	428.35	
	01/29/08	16.49		--	426.31	
	02/13/08	15.58		--	427.22	
	04/04/08	15.90		--	426.90	
	05/23/08	Absorbent sock frozen in well				
	06/25/08	Absorbent sock frozen in well				
	07/14/08	14.69		--	428.11	
	08/06/08	11.82		--	430.98	
	09/16/08	13.06		0.01	429.75	
	10/27/08	14.28		--	428.52	
	11/24/08	14.35		--	428.45	
	12/19/08	14.78		--	428.02	
	01/30/09	15.35		--	427.45	
	02/19/09	15.57		--	427.23	
	03/25/09	15.79		--	427.01	
	04/20/09	Ice encountered at a depth of 1.65' BTOC				
	05/26/09	NM	NA	NA		
	06/24/09	14.50	--	428.30		
07/27/09	14.71	--	428.09			
08/26/09	16.81	--	425.99			
09/17/09	13.94	--	428.86			

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
TH-5 Cont.	10/22/09	442.75	14.70	--	428.10
	11/03/09		14.91	--	427.89
	12/14/09		15.19		427.61
	01/12/10		NM	NA	NA
	02/09/10		15.75	--	427.05
	03/18/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10			Well Frozen	
	06/15/10		14.50	--	428.30
	07/19/10		14.76	--	428.04
	08/16/10		14.81	--	427.99
	09/22/10		14.56	--	428.19
	10/27/10		15.32	--	427.43
	11/15/10		15.21	--	427.54
	12/13/10			Unable to open/Frozen	
	01/04/11		15.65	--	427.10
	02/07/11			Obstructed/Unable to access	
	03/22/11		15.98	--	426.77
	04/14/11			Obstructed/Unable to access	
	09/21/11		12.98	--	429.77
<b>07/23/12</b>	<b>13.91</b>	--	<b>428.84</b>		
TH-7	06/25/02	440.18	16.31	--	423.87
	09/25/02		15.31	--	424.87
	04/29/03		17.79	--	422.39
	09/03/03		14.81	--	425.37
	03/10/04		17.92	--	422.26
	09/15/04		17.47	--	422.71
	04/19/05		18.37	--	421.81
	09/08/05		16.55	--	423.63
	04/20/06		18.35	--	421.83
	09/14/06		16.23	--	423.95
	02/06/07				
	03/14/07		18.33	--	421.85
	04/30/07		NM	NA	NA
	05/18/07		NM	NA	NA
	09/12/07	445.34	16.53	--	428.81
	10/05/07		NM	NA	NA
	01/29/08		NM	NA	NA
	02/13/08		NM	NA	NA
	04/04/08		18.57	--	426.77
	05/23/08		NM	NA	NA
06/25/08		NM	NA	NA	
07/14/08		NM	NA	NA	

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
TH-7 Cont.	08/06/08		NM	NA	NA	
	09/16/08		15.66	--	429.68	
	10/27/08		NM	NA	NA	
	11/24/08		NM	NA	NA	
	12/19/08		NM	NA	NA	
	01/30/09		NM	NA	NA	
	02/19/09		NM	NA	NA	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09			17.38	--	427.96
	08/26/09			NM	NA	NA
	09/17/09			NM	NA	NA
	10/22/09			NM	NA	NA
	11/03/09			NM	NA	NA
	12/14/09			NM	NA	NA
	01/12/10			NM	NA	NA
	02/09/10			16.93	0.12	428.51
	03/18/10			NM	NA	NA
	04/21/10			NM	NA	NA
	07/19/10			17.45	--	427.89
	08/16/10			NM	NA	NA
	09/22/10		445.30	NM	NA	NA
	10/27/10			NM	NA	NA
	11/15/10			NM	NA	NA
	12/13/10			NM	NA	NA
	01/04/11			NM	NA	NA
	02/07/11			NM	NA	NA
	09/21/11			15.63	--	429.67
<b>07/23/12</b>			<b>16.56</b>	<b>--</b>	<b>428.74</b>	
TH-10	06/24/02	438.62	14.58	--	424.04	
	09/25/02		13.62	--	425.00	
	04/29/03		16.03	--	422.59	
	09/03/03		13.13	--	425.49	
	03/10/04		16.18	--	422.44	
	09/15/04		15.80	--	422.82	
	04/19/05		16.65	--	421.97	
	09/08/05		14.88	--	423.74	
	04/20/06		16.66	--	421.96	
	09/13/06		14.53	--	424.09	
	02/06/07		NM	NA	NA	

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>TH-10 Cont.</b>	03/14/07	443.81	16.61	--	422.01	
	04/30/07		NM	NA	NA	
	05/18/07		NM	NA	NA	
	09/12/07		14.84	--	428.97	
	10/15/07		NM	NA	NA	
	01/29/08		NM	NA	NA	
	02/13/08		NM	NA	NA	
	04/04/08		16.82	--	426.99	
	09/16/08		13.97	--	429.84	
	07/27/09		15.61	--	428.20	
	08/26/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
	02/09/10	NM	NA	NA		
	03/18/10	NM	NA	NA		
	04/21/10	NM	NA	NA		
	07/19/10	16.65	--	427.16		
	08/16/10	NM	NA	NA		
	09/22/10	443.75	NM	NA	NA	
	10/27/10	NM	NA	NA		
	11/15/10	NM	NA	NA		
	12/13/10	NM	NA	NA		
	01/04/11	NM	NA	NA		
	02/07/11	NM	NA	NA		
	09/21/11	13.89	--	429.86		
	<b>07/23/12</b>	<b>14.84</b>	--	<b>428.91</b>		
	<b>TH-13</b>	06/24/02	436.74	13.09	--	423.65
		09/25/02		12.02	--	424.72
04/29/03			14.50	--	422.24	
09/03/03			11.45	--	425.29	
03/10/04			14.66	--	422.08	
09/23/04			NM	NA	N/A	
04/19/05			15.10	--	421.64	
09/08/05			13.37	--	423.37	
04/20/06		Well not sampled - buried under ice, monument filled				
09/14/06			12.99	--	423.75	
02/06/07						
03/14/07			15.09	--	421.65	
04/30/07			NM	NA	N/A	
05/18/07			NM	NA	N/A	

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>TH-13 Cont.</b>	09/13/07	441.94	13.30	--	428.64	
	10/15/07		NM	NA	N/A	
	01/29/08		NM	NA	N/A	
	02/13/08		NM	NA	N/A	
	04/04/08		15.30	--	426.64	
	05/23/08		NM	NA	N/A	
	06/25/08		NM	NA	N/A	
	07/14/08		NM	NA	N/A	
	08/06/08		NM	NA	N/A	
	09/16/08		12.43	--	429.51	
	10/27/08		NM	NA	N/A	
	11/24/08		NM	NA	N/A	
	12/19/08		NM	NA	N/A	
	01/30/09		NM	NA	N/A	
	02/19/09		NM	NA	N/A	
	03/25/09		NM	NA	N/A	
	04/20/09		NM	NA	N/A	
	05/26/09		NM	NA	N/A	
	06/24/09		NM	NA	N/A	
	07/27/09		No current access to well - under permit stipulation			
	08/26/09		No current access to well - under permit stipulation			
	09/17/09		No current access to well - under permit stipulation			
	10/22/09		No current access to well - under permit stipulation			
	11/03/09		No current access to well - under permit stipulation			
	12/14/09		No current access to well - under permit stipulation			
	02/09/10		No current access to well - under permit stipulation			
	03/18/10		No current access to well - under permit stipulation			
	04/21/10		No current access to well - under permit stipulation			
	07/19/10		No current access to well - under permit stipulation			
	08/16/10		No current access to well - under permit stipulation			
	09/22/10		No current access to well - under permit stipulation			
	10/27/10		No current access to well - under permit stipulation			
11/15/10		No current access to well - under permit stipulation				
12/13/10		No current access to well - under permit stipulation				
01/04/11		No current access to well - under permit stipulation				
02/07/11		No current access to well - under permit stipulation				
09/21/11		No current access to well - under permit stipulation				
<b>07/23/12</b>		<b>No current access to well - under permit stipulation</b>				

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
TH-17	06/24/02	435.38	11.60	--	423.78	
	09/25/02		10.59	--	424.79	
	04/29/03		11.20	--	424.18	
	09/03/03		10.08	--	425.3	
	03/10/04		13.20	--	422.18	
	09/15/04		12.77	--	422.61	
	04/19/05	Well not sampled - buried under ice, monument filled				
	09/08/05		11.87	--	423.51	
	04/20/06	Well not sampled - buried under ice, monument filled				
	09/14/06		11.93	--	423.45	
	02/06/07		NM	NA	NA	
	03/14/07		13.65	--	421.73	
	04/30/07		NM	NA	NA	
	05/18/07		NM	NA	NA	
	09/13/07	440.57	11.77	--	428.80	
	10/15/07		NM	NA	NA	
	01/29/08		NM	NA	NA	
	02/13/08		NM	NA	NA	
	04/04/08	Well not sampled - monument underwater				
	05/23/08		NM	NA	NA	
	06/25/08		NM	NA	NA	
	07/14/08		NM	NA	NA	
	08/06/08		NM	NA	NA	
	09/16/08		10.96	--	429.61	
	07/27/09	No current access to well - under permit stipulation				
	08/26/09	No current access to well - under permit stipulation				
	09/17/09	No current access to well - under permit stipulation				
	10/22/09	No current access to well - under permit stipulation				
	11/03/09	No current access to well - under permit stipulation				
	12/22/09	No current access to well - under permit stipulation				
	02/09/10	No current access to well - under permit stipulation				
	03/18/10	No current access to well - under permit stipulation				
	04/21/10	No current access to well - under permit stipulation				
07/19/10	No current access to well - under permit stipulation					
08/16/10	No current access to well - under permit stipulation					
09/22/10	No current access to well - under permit stipulation					
10/27/10	No current access to well - under permit stipulation					
11/15/10	No current access to well - under permit stipulation					
12/13/10	No current access to well - under permit stipulation					
01/04/11	No current access to well - under permit stipulation					
02/07/11	No current access to well - under permit stipulation					
09/21/11	No current access to well - under permit stipulation					
07/23/12	<b>No current access to well - under permit stipulation</b>					

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
TH-18	06/24/02	435.77	Well not sampled - frozen shut		
	09/25/02		11.01	--	424.76
	04/29/03		Well not sampled - frozen shut		
	09/03/03		10.48	--	425.29
	03/10/04		13.61	--	422.16
	09/23/04		N/A	--	N/A
	04/19/05		Well not sampled - buried under ice, monument filled		
	09/08/05		12.28	--	423.49
	04/20/06		Well not sampled - buried under ice, monument filled		
	09/14/06		11.53	--	424.24
	02/06/07	NM	NA	NA	
	03/15/07	14.05	--	421.72	
	04/30/07	NM	NA	NA	
	05/18/07	NM	NA	NA	
	09/18/07	440.95	12.40	--	428.55
	10/15/07		NM	NA	NA
	02/13/08		NM	NA	NA
	04/04/08		Well not sampled - monument underwater		
	05/23/08		NM	NA	NA
	06/25/08		NM	NA	NA
	07/14/08		NM	NA	NA
	08/06/08		NM	NA	NA
	09/16/08		11.37	--	429.58
	10/27/08		NM	NA	NA
	10/27/08	NM	NA	NA	
	11/24/08	NM	NA	NA	
	12/19/08	NM	NA	NA	
	01/30/09	NM	NA	NA	
	02/19/09	NM	NA	NA	
	03/25/09	NM	NA	NA	
	04/20/09	NM	NA	NA	
	05/26/09	NM	NA	NA	
	06/24/09	NM	NA	NA	
	07/27/09	No current access to well - under permit stipulation			
	08/26/09	No current access to well - under permit stipulation			
	09/17/09	No current access to well - under permit stipulation			
10/22/09	No current access to well - under permit stipulation				
11/03/09	No current access to well - under permit stipulation				
12/22/09	No current access to well - under permit stipulation				
02/09/10	No current access to well - under permit stipulation				
03/18/10	No current access to well - under permit stipulation				
04/21/10	No current access to well - under permit stipulation				

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
<b>TH-18 Cont.</b>	07/19/10	No current access to well - under permit stipulation			
	08/16/10	No current access to well - under permit stipulation			
	09/22/10	No current access to well - under permit stipulation			
	10/27/10	No current access to well - under permit stipulation			
	11/15/10	No current access to well - under permit stipulation			
	12/13/10	No current access to well - under permit stipulation			
	01/04/11	No current access to well - under permit stipulation			
	02/07/11	No current access to well - under permit stipulation			
	09/21/11	No current access to well - under permit stipulation			
	<b>07/23/12</b>	<b>No current access to well - under permit stipulation</b>			
<b>MW-23</b>	06/25/02	436.67	14.32	--	422.35
	09/25/02	436.67	11.80	--	422.29
	04/29/03	436.67	14.21	--	422.46
	09/03/03	436.67	11.30	--	425.37
	03/10/04	436.67	14.38	--	422.29
	09/15/04	436.67	13.97	--	422.70
	04/19/05	436.67	14.86	--	421.81
	09/08/05	436.67	13.06	--	423.61
	04/20/06	436.67	14.88	--	421.79
	09/13/06	436.67	12.73	--	423.94
	02/06/07	436.67	NM	NA	NA
	03/14/07	Well not sampled - under a large pile of lumber			
	04/30/07		NM	NA	NA
	05/18/07		NM	NA	NA
	09/12/07	441.84	13.03	--	428.81
	10/15/07		NM	NA	NA
	01/29/08		NM	NA	NA
	02/13/08		NM	NA	NA
	04/04/08		15.03	--	426.81
	05/23/08		NM	NA	NA
	06/25/08		NM	NA	NA
	07/14/08		NM	NA	NA
	08/06/08		NM	NA	NA
	09/16/08	PVC cap stuck/frozen			
	10/27/08		NM	NA	NA
	11/24/08		NM	NA	NA
	12/19/08		NM	NA	NA
01/30/09		NM	NA	NA	



**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>MW-23 Cont.</b>	02/19/09		NM	NA	NA	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09		NM	NA	NA	
	08/26/09		17.51	--	424.33	
	08/26/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
	01/12/10		NM	NA	NA	
	02/09/10		NM	NA	NA	
	03/18/10		NM	NA	NA	
	04/21/10		NM	NA	NA	
	07/19/10			17.3	--	424.54
	08/16/10			NM	NA	NA
	09/22/10		445.32	NM	NA	NA
	10/27/10			NM	NA	NA
	11/15/10			NM	NA	NA
	12/13/10			NM	NA	NA
	01/04/11			NM	NA	NA
02/07/11			NM	NA	NA	
09/21/11			15.67	--	429.65	
<b>07/23/12</b>			<b>16.61</b>	<b>--</b>	<b>428.71</b>	
<b>MW-25</b>	06/25/02	440.77	16.89	present	423.88	
	09/25/02		15.94	present	424.83	
	04/29/03		18.40	present	422.37	
	09/03/03		15.40	present	425.37	
	03/10/04		18.46	0.05	422.35	
	09/15/04		18.03	0.15	422.86	
	04/19/05		19.05	0.16	421.85	
	09/08/05		17.23	0.13	423.64	
	04/20/06		18.93	0.15	421.96	
	09/13/06		17.16	0.13	423.71	
	12/01/06		18.16	--	422.61	
	12/22/06		18.34	--	422.43	
	02/06/07		18.63	0.03	422.16	
	03/14/07		18.88	0.01	421.90	
	04/30/07		18.40	--	422.37	
	05/18/07		18.15	--	422.62	
	09/13/07	445.85	17.08	--	428.77	

**Table 1a  
Groundwater Elevation Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>MW-25 Cont.</b>	10/15/07		17.60	--	428.25	
	01/29/08		17.82	--	428.03	
	02/13/08		15.58	--	430.27	
	04/04/08		19.08	--	426.77	
	05/23/08		17.82	--	428.03	
	06/25/08		17.66	--	428.19	
	07/14/08		17.64	--	428.21	
	08/06/08		15.00	--	430.85	
	09/16/08		14.22	--	431.63	
	10/27/08		17.47	--	428.38	
	11/24/08		17.56	--	428.29	
	12/19/08		17.99	--	427.86	
	01/30/09		18.56	sheen	427.29	
	02/19/09		18.82	0.03	427.05	
	03/25/09		19.01	0.02	426.86	
	04/20/09		19.06	0.05	426.83	
	06/24/09		17.70	0.02	428.17	
	07/27/09		19.91	0.04	425.97	
	08/26/09		17.79	0.01	428.07	
	09/17/09		17.20	0.02	428.67	
	10/22/09		17.93	0.04	427.95	
	11/03/09		18.13	0.05	427.76	
	12/14/09		18.42	0.02	427.45	
	01/01/00					
	02/09/10			19.04	0.08	426.87
	04/21/10			19.56	--	426.29
	05/26/10			18.90	--	426.95
	06/15/10			17.68	--	428.17
	07/19/10			19.74	--	426.11
	08/16/10			17.9	--	427.95
	09/22/10		445.90	17.75	--	428.15
	10/27/10			18.51	0.01	427.40
	11/15/10			18.57	0.10	427.41
12/13/10				Unable to open/Frozen		
01/04/11			18.99	0.19	427.06	
02/07/11			19.34	0.19	426.71	
03/22/11			19.34	0.21	426.73	
04/14/11			19.38	0.22	426.70	
09/21/11			16.15	Trace	429.75	
<b>07/23/12</b>			<b>17.15</b>	<b>0.07</b>	<b>428.75</b>	

**Notes:**

ft BTOC = below top of casing

ft amsl = feet above mean sea level

LNAPL = Light non-aqueous phase liquid

Bold Type = Results of events covered in this report

<sup>1</sup>Where LNAPL was present, groundwater elevations were adjusted using an average specific gravity of 0.80.

NA = Not Available

NM = Not Measured

-- = Not encountered

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
AR-81	06/25/02	436.99	13.28	--	423.71	
	09/24/02		12.34	--	424.65	
	04/29/03		14.82	--	422.17	
	09/03/03		11.83	--	425.16	
	03/10/04			Well Frozen		
	09/16/04			14.53	--	422.46
	04/19/05			15.43	--	421.56
	09/07/05			13.60	--	423.39
	04/20/06			15.46	--	421.53
	09/12/06			13.30	--	423.69
	03/15/07			15.40	--	421.59
	09/10/07		444.44	13.61	--	430.83
	04/04/08	15.62		--	428.82	
	09/16/08	12.73		--	431.71	
	03/25/09	NM		NA	NA	
	04/20/09	NM		NA	NA	
	05/26/09	NM		NA	NA	
	06/24/09	NM		NA	NA	
	07/27/09	14.48		--	429.96	
	08/01/09	NM		NA	NA	
	09/17/09	NM		NA	NA	
	10/22/09	NM		NA	NA	
	11/03/09	NM		NA	NA	
	12/14/09	NM	NA	NA		
	01/12/10	NM	NA	NA		
	02/09/10	NM	NA	NA		
	03/18/10	NM	NA	NA		
	04/21/10	NM	NA	NA		
	05/26/10	NM	NA	NA		
	06/15/10	NM	NA	NA		
	07/20/10		14.54	--	429.90	
	08/16/10		NM	NA	NA	
	09/22/10	442.16	NM	NA	NA	
	10/27/10		NM	NA	NA	
	11/15/10		NM	NA	NA	
	12/13/10		NM	NA	NA	
01/04/11	NM		NA	NA		
02/07/11	NM		NA	NA		
09/21/11	12.64		--	429.52		
<b>07/23/12</b>	<b>13.63</b>			<b>428.53</b>		
AR-82	06/25/02		437.47	13.64	--	423.83
	09/24/02			12.69	--	424.78
	04/29/03			15.13	--	422.34
	09/03/03			12.17	--	425.30
		Well Removed from Sampling Program in September 2003				

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
AR-85	06/25/02	437.23	13.45	--	423.78	
	09/24/02		12.49	--	424.74	
	04/29/03		15.00	--	422.23	
	09/03/03		12.00	--	425.23	
	03/10/04		Well Beneath Snow bank			
	09/16/04		14.68	--	422.55	
	04/19/05		Well buried and surrounded by equipment			
	09/07/05		13.79	--	423.44	
	04/20/06		15.61	--	421.62	
	09/12/06		13.45	--	423.78	
	03/14/07		Well buried under snow bank			
	09/10/07		444.65	13.74	--	430.91
	04/04/08			15.79	--	428.86
	09/16/08	12.89		--	431.76	
	03/25/09	NM		NA	NA	
	04/20/09	NM		NA	NA	
	05/26/09	NM		NA	NA	
	06/24/09	NM		NA	NA	
	07/27/09	14.58		--	430.07	
	08/01/09	NM		NA	NA	
	09/17/09	NM		NA	NA	
	10/22/09	NM	NA	NA		
	11/03/09	NM	NA	NA		
	12/14/09	NM	NA	NA		
	01/12/10	NM	NA	NA		
	02/09/10	NM	NA	NA		
	03/18/10	NM	NA	NA		
	04/21/10	NM	NA	NA		
	05/26/10	NM	NA	NA		
	06/15/10	NM	NA	NA		
	07/20/10	15.54	--	429.11		
	08/16/10	NM	NA	NA		
	09/22/10	442.32	NM	NA	NA	
10/27/10	NM		NA	NA		
11/15/10	NM		NA	NA		
12/13/10	NM		NA	NA		
01/04/11	NM		NA	NA		
02/07/11	NM		NA	NA		
09/21/11	12.82		--	429.50		
<b>07/23/12</b>	<b>13.79</b>		--	<b>428.53</b>		

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
MW-1	10/23/03	436.36	12.28	--	424.08	
	03/10/04		14.14	--	422.22	
	09/16/04		13.72	--	422.64	
	04/19/05		Well Beneath Snow bank			
	09/07/05		12.77	--	423.59	
	04/20/06		Well buried and surrounded by equipment			
	09/12/06		12.47	--	423.89	
	03/15/07		14.57	--	421.79	
	09/10/07	441.46	12.76	--	428.70	
	04/04/08		Well not sampled - monument underwater			
	09/16/08		11.91	--	429.55	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09		Well buried by gravel regrade			
	08/01/09		NM	NA	NA	
	09/17/09		Well buried by gravel regrade			
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
	01/12/10		NM	NA	NA	
	02/09/10		NM	NA	NA	
	03/18/10		NM	NA	NA	
	04/21/10		NM	NA	NA	
	05/26/20		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/20/10		Unable to Locate			
	08/16/10		NM	NA	NA	
	09/22/10	441.47	NM	NA	NA	
	10/27/10		NM	NA	NA	
	11/15/10		NM	NA	NA	
	12/13/10		NM	NA	NA	
01/04/11		NM	NA	NA		
02/07/11		NM	NA	NA		
09/21/11			11.84	--	429.63	
<b>07/23/12</b>			<b>12.79</b>	--	<b>428.68</b>	

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
MW-2	10/23/03	437.06	13.35	--	423.71	
	03/10/04		14.89	0.04	422.20	
	09/16/04		14.51	0.03	422.57	
	04/19/05		15.47	0.10	421.67	
	09/07/05		13.58	0.01	423.49	
	04/20/06		well not sampled - covered with snow and gravel			
	08/11/06		13.85	0.01	423.22	
	09/12/06		13.26	--	423.80	
	12/01/06		14.56	--	422.50	
	12/22/06		14.80	--	422.26	
	02/06/07		15.08	--	421.98	
	03/16/07		15.31	--	421.75	
	04/30/07		Well not sampled due to ice in well			
	05/18/07		Well not sampled due to ice in well			
	09/10/07		442.23	13.56	--	428.67
	10/15/07			14.04	--	428.19
	11/19/07			14.10	--	428.13
	01/29/08	15.18		--	427.05	
	02/13/08	15.24		--	426.99	
	04/04/08	Well not sampled - absorbent sock frozen				
	05/23/08	Well not sampled - absorbent sock frozen				
	06/25/08	14.12		--	428.11	
	07/14/08	14.63		--	427.60	
	08/06/08	11.38		--	430.85	
	09/16/08	12.68		--	429.55	
	10/27/08	13.97		--	428.26	
	11/24/08	14.03		--	428.20	
	12/19/08	14.45		--	427.78	
	01/30/09	15.03		--	427.20	
	02/19/09	15.27		0.02	426.98	
	03/25/09	Well recessed in vault by gravel regrade				
	04/20/09	Well recessed in vault by gravel regrade				
	05/26/09	Well recessed in vault by gravel regrade				
06/24/09	Well recessed in vault by gravel regrade					
07/27/09	Well recessed and buried in vault by gravel regrade					
08/26/09	Well abandoned in place					

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
MW-3	10/23/03	437.49	13.60	--	423.89	
	03/10/04		15.39	--	422.10	
	09/16/04		14.99	--	422.50	
	04/19/05		15.88	--	421.61	
	09/07/05		14.10	--	423.39	
	04/20/06		15.87	--	421.62	
	09/12/06		13.78	--	423.71	
	03/16/07		15.84	--	421.65	
	09/10/07		442.67	14.07	--	428.60
	04/04/08			16.06	--	426.61
	09/16/08			13.18	--	429.49
	03/25/09			NM	NA	NA
	04/20/09			NM	NA	NA
	05/26/09			NM	NA	NA
	06/24/09			NM	NA	NA
	07/27/09	Well buried by gravel regrade				
	08/01/09	Well buried by gravel regrade				
	09/17/09	Well buried by gravel regrade				
	10/22/09	Well buried by gravel regrade				
	11/03/09	Well buried by gravel regrade				
	12/14/09	Well buried by gravel regrade				
	01/12/10	Well buried by gravel regrade				
	02/09/10	Well buried by gravel regrade				
	03/18/10	Well buried by gravel regrade				
	04/21/10	Well buried by gravel regrade				
	05/26/10	Well buried by gravel regrade				
	06/15/10	Well buried by gravel regrade				
	07/20/10	Well buried by gravel regrade				
	08/16/10	Well buried by gravel regrade				
	09/22/10	442.74	Well buried by gravel regrade			
	10/27/10		Well buried by gravel regrade			
	11/15/10		Well buried by gravel regrade			
12/13/10	Well buried by gravel regrade					
01/04/11	Well buried by gravel regrade					
02/07/11	Well buried by gravel regrade					
09/21/11			13.21	--	429.53	
<b>07/23/12</b>			<b>14.20</b>	--	<b>428.54</b>	

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
MW-4	10/22/03	437.33	13.70	Present	423.63	
	03/10/04		15.25	0.23	422.26	
	09/16/04		14.85	0.03	422.50	
	04/19/05				and water	
	09/07/05		13.92	--		423.41
	04/20/06		15.74	0.32		421.85
	08/11/06		14.19	--		423.14
	09/12/06		13.63	--		423.70
	12/01/06		14.93	--		422.40
	12/22/06		15.11	--		422.22
	02/06/07		15.43	--		421.90
	03/16/07		16.06	0.46		421.64
	04/30/07		15.15	--		422.18
	05/18/07		14.91	--		422.42
	09/10/07		13.91	442.52	Present	428.61
	10/15/07		14.45		--	428.07
	11/19/07				Well not gauged - inaccessible	
	01/29/08		Well not gauged - inaccessible			
	02/13/08		Well not gauged - unable to locate			
	04/04/08	15.81	0.01			426.72
	05/23/08		Well not sampled - absorbent sock frozen			
	06/25/08	14.47	--			428.05
	07/14/08	14.56	--			427.96
	08/06/08	11.73	--			430.79
	09/16/08	13.01	0.01			429.52
	10/27/08	14.34	--			428.18
	11/24/08	14.39	--			428.13
	12/19/08	14.82	--			427.70
	01/30/09	15.41	--			427.11
	02/19/09	15.61	--			426.91
	03/25/09	15.80	0.09		426.79	
	04/20/09	16.36	0.62		426.66	
	05/26/09	NM	NA		NA	
06/24/09		Well submerged under water				
07/27/09	14.76	0.01		427.77		
08/26/09	14.60	--		427.92		
09/17/09	13.95	--		428.57		
10/22/09	14.72	--		427.80		
11/03/09	14.93	--		427.59		



**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
<b>MW-4 Cont.</b>	12/14/09	442.44	15.19	--	427.33
	01/12/10		NM	NA	NA
	02/09/10		16.11	0.41	426.74
	03/18/10		16.90	0.01	425.63
	04/21/10		16.89	0.90	426.35
	05/26/10		15.09	--	427.43
	06/15/10		14.38	--	428.14
	07/20/10		14.68	--	427.84
	08/16/10		14.80	--	427.72
	09/22/10		14.50	--	427.94
	10/27/10		15.40	--	427.04
	11/15/10		15.25	0.07	427.25
	12/13/10		Unable to locate well		
	01/04/11		Unable to locate well		
	02/07/11		Unable to locate well		
	03/22/11		Unable to locate		
	04/13/11		Unable to locate		
	09/21/11		12.92	--	429.52
	<b>07/23/12</b>		<b>13.90</b>	<b>--</b>	<b>428.54</b>
	<b>MW-5</b>		10/23/03	436.37	12.58
03/10/04			14.34	--	422.03
09/16/04			13.92	--	422.45
04/19/05			well not sampled - covered with ice and ponded water		
09/07/05			13.01	--	423.36
04/20/06			well not sampled - covered with ice and ponded water		
09/12/06			12.70	--	423.67
03/15/07			15.78	--	420.59
09/10/07		441.54	13.00	--	428.54
04/04/08			Well not sampled - monument underwater		
09/16/08			Well not sampled - unable to locate		
03/25/09			NM	NA	NA
04/20/09			NM	NA	NA
05/26/09			NM	NA	NA
06/24/09			NM	NA	NA
07/27/09			13.98	--	427.56
08/01/09			NM	NA	NA
09/17/09			NM	NA	NA
10/22/09			NM	NA	NA
11/03/09			NM	NA	NA
12/14/09			NM	NA	NA
01/12/10			NM	NA	NA
02/09/10		NM	NA	NA	

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
<b>MW-5 Cont.</b>	04/21/10	441.51	NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/20/10		13.78	--	427.76
	08/16/10		NM	NA	NA
	09/22/10		NM	NA	NA
	10/27/10		NM	NA	NA
	11/15/10		NM	NA	NA
	12/13/10		NM	NA	NA
	01/04/11		NM	NA	NA
	02/07/11		NM	NA	NA
	09/21/11		12.03	--	429.48
	<b>07/23/12</b>		<b>13.02</b>	--	<b>428.49</b>
	<b>MW-7</b>		10/03/05	438.12	13.96
04/20/06		443.32	16.84	--	421.28
09/11/06			14.74	--	423.38
03/16/07			16.78	--	421.34
09/09/07			15.05	--	428.27
04/04/08			17.08	--	426.24
09/16/08			14.16	--	429.16
03/25/09			NM	NA	NA
04/20/09			NM	NA	NA
05/26/09			NM	NA	NA
06/24/09			NM	NA	NA
07/27/09			15.97	--	427.35
08/01/09			NM	NA	NA
09/17/09			NM	NA	NA
10/22/09			NM	NA	NA
11/03/09			NM	NA	NA
12/14/09			NM	NA	NA
01/12/10			NM	NA	NA
02/09/10			NM	NA	NA
03/18/10			NM	NA	NA
04/21/10			NM	NA	NA
05/26/10			NM	NA	NA
06/15/10			NM	NA	NA
07/20/10			15.64	--	427.68
08/16/10			NM	NA	NA
09/22/10			NM	NA	NA
10/27/10			NM	NA	NA
			443.20	NM	NA

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>MW-7 Cont.</b>	11/15/10		NM	NA	NA	
	12/13/10		NM	NA	NA	
	01/04/11		NM	NA	NA	
	02/07/11		NM	NA	NA	
	09/21/11		13.99	--	<b>429.21</b>	
	<b>07/23/12</b>		<b>14.99</b>	--	<b>428.21</b>	
<b>MW-8</b>	10/03/05	436.51	12.32	--	424.19	
	04/20/06		15.23	--	421.28	
	09/11/06		13.12	--	423.39	
	03/16/07		15.18	--	421.33	
	09/09/07	441.69	13.41	--	428.28	
	04/04/08		15.42	--	426.27	
	09/16/08		12.49	--	429.20	
	07/27/09		14.40	--	427.29	
	08/26/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
	02/09/10		NM	NA	NA	
	04/21/10		NM	NA	NA	
	05/26/10		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/20/10			14.05	--	427.64
	08/16/10			NM	NA	NA
	09/22/10	441.61		NM	NA	NA
	10/27/10			NM	NA	NA
	11/15/10			NM	NA	NA
	12/13/10			NM	NA	NA
	01/04/11			NM	NA	NA
	02/07/11			NM	NA	NA
	09/21/11			12.36	--	429.25
<b>07/23/12</b>			<b>13.21</b>	--	<b>428.40</b>	

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>	
<b>MW-9</b>	10/03/05	436.39	12.18	--	424.21	
	04/20/06		15.06	--	421.33	
	09/11/06		12.90	--	423.49	
	03/16/07		14.99	--	421.40	
	09/09/07	441.56	13.21	--	428.35	
	04/04/08		15.28	--	426.28	
	09/16/08		12.31	--	429.25	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09			14.05	--	427.51
	08/26/09			NM	NA	NA
	09/17/09			NM	NA	NA
	10/22/09			NM	NA	NA
	11/03/09			NM	NA	NA
	12/14/09			NM	NA	NA
	01/12/10			NM	NA	NA
	02/09/10			NM	NA	NA
	03/18/10			NM	NA	NA
	04/21/10			NM	NA	NA
	05/26/10			NM	NA	NA
	06/15/10			NM	NA	NA
	07/20/10			13.91	--	427.65
	08/16/10			NM	NA	NA
	09/22/10		441.45	NM	NA	NA
	10/27/10			NM	NA	NA
	11/15/10			NM	NA	NA
	12/13/10			NM	NA	NA
	01/04/11			NM	NA	NA
02/07/11			NM	NA	NA	
09/21/11			12.19	--	429.26	
	<b>07/23/12</b>		<b>13.39</b>	<b>--</b>	<b>428.06</b>	
<b>MW-10</b>	10/03/05	437.32	12.98	--	424.34	
	04/20/06		15.82	--	421.50	
	09/11/06		13.66	--	423.66	
	03/14/07			Well buried under snow bank		
	09/09/07	442.52	13.98	--	428.54	
	04/04/08		16.00	--	426.52	
	09/16/08		13.07	--	429.45	

**Table 1b  
Groundwater Elevation Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft above msl)	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>1</sup>
<b>MW-10 Cont.</b>	07/27/09		Well buried by recent construction		
	08/26/09		Well buried		
	09/17/09		Well buried		
	10/22/09		Well buried		
	11/03/09		Well buried		
	12/14/09		Well buried		
	01/12/10		Well buried		
	02/09/10		Well buried		
	03/18/10		Well buried		
	04/21/10		Well buried		
	05/26/10		Well buried		
	06/15/10		Well buried		
	07/20/10		Well buried		
	08/16/10		Well buried		
	09/22/10		Well buried		
	10/27/10		Well buried		
	11/15/10		Well buried		
	12/13/10		Well buried		
	01/04/11		Well buried		
	02/07/11		Well buried		
09/21/11		Well buried			
<b>07/23/12</b>		<b>Well Destroyed</b>			

**Notes:**

BTOC = below top of casing

ft amsl = feet above mean sea level

LNAPL = Light non-aqueous phase liquid

<sup>1</sup>Where LNAPL was present, groundwater elevation were adjusted using an average specific gravity of 0.80.

Bold Type = Results of events covered in this report

NA = Not Available

NM = Not Measured

-- = Not encountered

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
GEI-1	10/07/02	443.88	15.20	--	428.68	
	09/03/03		13.83	0.01	430.06	
	04/23/04		17.41	--	426.47	
	09/16/04		17.22	0.01	426.67	
	04/20/05		18.13	--	425.75	
	10/01/05		14.08	--	429.80	
	04/18/06	Well not sampled				
	09/17/06			14.98	--	428.90
	03/16/07			17.06	0.05	426.86
	09/12/07		443.91	15.28	--	428.63
	04/04/08	Well not sampled - ice in well				
	09/16/08			14.96	0.67	429.49
	03/25/09			NM	NA	NA
	04/20/09			NM	NA	NA
	05/26/09			NM	NA	NA
	06/24/09			NM	NA	NA
	07/27/09			16.55	0.43	427.70
	08/26/09			NM	NA	NA
	09/17/09	Unable to locate well				
	10/22/09			16.36	0.31	427.80
	11/03/09	Unable to locate well				
	12/14/09	Unable to locate well				
	01/12/10			NM	NA	NA
	02/29/10	Unable to locate well				
	03/18/10	Unable to locate well				
	04/21/10	Well frozen				
	05/26/10			16.80	0.41	427.11
	06/15/10			18.54	--	425.37
	07/21/10			16.29	0.27	427.84
	08/16/10			NM	NA	NA
	09/22/10		443.90	16.03	0.13	427.97
	10/27/10			17.10	0.46	427.17
	11/15/10			16.62	0.12	427.38
	12/13/10			17.11	0.34	427.06
	01/04/11			17.34	0.38	426.86
	02/07/11			17.32	--	426.58
03/22/11			17.61	0.32	426.55	
04/13/11	Well not gauged - obstructed with ice at ~2 ft btoc					
06/15/11			16.02	0.21	428.05	
09/20/11			14.24	Trace	429.66	
07/23/12			15.29	Trace	428.61	

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
GEI-2	10/07/02	444.93	15.25	--	429.68	
	09/03/03		13.94	--	430.99	
	04/23/04		17.44	--	427.49	
	09/16/04		17.22	--	427.71	
	04/20/05		18.05	--	426.88	
	10/01/05		15.1	--	429.83	
	04/18/06	Well not sampled				
	09/17/06		15.92	--	429.01	
	03/16/07	Well not sampled-covered with equipment				
	09/12/07	444.84	16.21		428.63	
	04/04/08		18.18	0.02	426.68	
	09/16/08		15.32	--	429.52	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09		17.07	--	427.77	
	08/01/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
	01/12/10		NM	NA	NA	
	02/09/10		NM	NA	NA	
	03/18/10		NM	NA	NA	
	04/21/10		NM	NA	NA	
	05/26/10		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/21/10	16.95	--	427.89		
	08/16/10	NM	NA	NA		
	09/22/10	444.78	NM	NA	NA	
	10/27/10		NM	NA	NA	
11/15/10	NM		NA	NA		
12/13/10	NM		NA	NA		
01/04/11	NM		NA	NA		
02/07/11	NM		NA	NA		
09/21/11	15.15		Trace	429.63		
07/23/12	Obstructed					

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
GEI-3	10/07/02	444.29	14.7	--	429.59	
	09/03/03		13.42	--	430.87	
	04/23/04		16.78	--	427.51	
	09/16/04		16.65	--	427.64	
	04/20/05	Well not sampled				
	10/01/05		14.55	--	429.74	
	04/18/06		17.45	--	426.84	
	09/16/06		15.35	--	428.94	
	03/17/07		17.43	--	426.86	
	09/11/07	444.29	15.65	--	428.64	
	04/04/08		17.63	--	426.66	
	09/16/08		14.81	--	429.48	
	03/25/09		NM	NA	NA	
	04/20/09		NM	NA	NA	
	05/26/09		NM	NA	NA	
	06/24/09		NM	NA	NA	
	07/27/09		16.60	--	427.69	
	08/01/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		16.7	--	427.59	
	12/14/09		NM	NA	NA	
	01/12/10		NM	NA	NA	
	02/09/10		NM	NA	NA	
	04/21/10		NM	NA	NA	
	05/26/10		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/21/10		16.4	--	427.89	
	08/16/10		NM	NA	NA	
	09/22/10	444.24	NM	NA	NA	
	10/27/10		NM	NA	NA	
	11/15/10		NM	NA	NA	
12/13/10		NM	NA	NA		
01/04/11		NM	NA	NA		
02/07/11		NM	NA	NA		
09/20/11		15.13	Trace	429.11		
<b>07/23/12</b>			<b>15.64</b>	<b>Trace</b>	<b>428.60</b>	



**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
GEI-4	10/07/02	444.56	15.68	0.67	429.42	
	09/03/03		13.64	0.01	430.93	
	04/23/04		17.2	--	427.36	
	09/16/04		17.01	0.01	427.56	
	04/20/05		17.8	--	426.76	
	10/01/05		14.77	--	429.79	
	04/18/06		17.72	--	426.84	
	09/16/06		15.61	--	428.95	
	11/30/06		16.88	0.02	427.70	
	12/22/06		17.13	--	427.43	
	02/06/07		17.39	--	427.17	
	03/17/07		17.65	--	426.91	
	04/30/07		17.07	--	427.49	
	05/18/07		16.87	--	427.69	
	09/11/07	444.56	15.98	--	428.58	
	10/15/07		16.48	--	428.08	
	11/19/07		16.18	--	428.38	
	01/29/08		17.10	--	427.46	
	02/13/08		17.33	--	427.23	
	04/04/08		17.90	--	426.66	
	05/23/08	Absorbent sock frozen in well				
	06/25/08			16.53	--	428.03
	07/14/08			16.30	0.02	428.28
	08/06/08			13.59	Sheen	430.97
	09/16/08			15.03	0.01	429.54
	10/27/08			16.39	0.03	428.19
	11/24/08			16.42	0.05	428.18
	12/19/08			16.92	0.14	427.75
	01/30/09			17.57	0.23	427.17
	02/19/09			17.79	0.26	426.98
	03/25/09	Unable to locate				
	04/20/09			18.08	0.33	426.74
	05/26/09			NM	NA	NA
	06/24/09			16.81	--	427.75
	07/27/09			16.80	--	427.76
	08/01/09			16.32	--	428.24
	09/17/09			15.68	--	428.88
	10/22/09			16.49	--	428.07
	11/03/09			16.85	--	427.71

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>		
<b>GEI-4 Cont.</b>	12/14/09		17.20	--	427.36		
	01/12/10		NM	NA	NA		
	02/09/10		18.72	--	425.84		
	03/18/10		18.10	0.16	426.33		
	04/21/10	Well Frozen					
	05/26/10	Well Frozen					
	06/15/10	444.49	15.99	--	428.57		
	07/21/10		16.40	--	428.16		
	08/16/10		16.57	--	427.99		
	09/22/10		16.25	--	428.24		
	10/27/10		17.5	--	426.99		
	11/15/10		16.88	--	427.61		
	12/13/10		17.15	--	427.34		
	01/04/11		17.35	--	427.14		
	02/07/11		17.72	--	426.77		
	03/22/11		Well obstructed by parked bus				
	04/13/11		Well obstructed by parked bus				
	06/15/11		16.43	--	428.06		
	09/20/11		14.82	Trace	429.67		
	<b>07/23/12</b>		<b>15.83</b>	<b>Trace</b>	<b>428.66</b>		
	<b>GEI-5</b>	10/07/02	441.93	12.35	--	429.58	
09/03/03			11.11	--	430.82		
04/23/04		Well not sampled					
09/16/04			14.26	--	427.67		
04/20/05			15.24	--	426.69		
10/01/05			12.23	--	429.70		
04/18/06		Well not sampled					
09/16/06			12.98	--	428.95		
03/16/07		Well not sampled due to damage					
09/11/07		Well not sampled due to damage					
04/04/08		Well not sampled - well underwater					
09/16/08			12.49	0.01	429.45		
03/25/09			NM	NA	NA		
04/20/09			NM	NA	NA		
05/26/09			NM	NA	NA		
06/24/09			NM	NA	NA		
07/27/09			14.20	--	427.73		
08/26/09			NM	NA	NA		
09/17/09			NM	NA	NA		
10/22/09			NM	NA	NA		
11/03/09			NM	NA	NA		
12/14/09		NM	NA	NA			
01/12/10		NM	NA	NA			

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
<b>GEI-5 Cont.</b>	02/09/10	442.15	NM	NA	NA
	03/18/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		13.73	--	428.2
	08/16/10		NM	NA	NA
	09/22/10		NM	NA	NA
	10/27/10		NM	NA	NA
	11/15/10		NM	NA	NA
	12/13/10		NM	NA	NA
	01/04/11		NM	NA	NA
	02/07/11		NM	NA	NA
	09/21/11		12.42	--	429.51
	<b>07/23/12</b>		<b>13.42</b>	--	<b>428.51</b>
<b>GEI-6</b>	10/07/02	441.83	12.2	--	429.63
	09/03/03		10.94	--	430.89
	04/23/04	Well not sampled			
	09/16/04		14.15	--	427.68
	04/20/05	Well not sampled			
	10/01/05		12.09	--	429.74
	04/18/06	Well not sampled			
	09/16/06		12.82	--	429.01
	03/17/07		14.87	--	426.96
	09/11/07	441.97	13.11	--	428.86
	04/04/08	Well not sampled - well underwater			
	09/16/08	Unable to locate well			
	03/25/09		NM	NA	NA
	04/20/09		NM	NA	NA
	05/26/09		NM	NA	NA
	06/24/09		NM	NA	NA
	07/27/09		14.02	0.02	427.97
	08/01/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	01/12/10		NM	NA	NA
02/09/10		NM	NA	NA	
03/18/10		NM	NA	NA	

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
<b>GEI-6 Cont.</b>	04/21/10		NM	NA	NA	
	05/26/10		NM	NA	NA	
	06/15/10		NM	NA	NA	
	07/21/10	Not Sampled Well Underwater				
	08/16/10		NM	NA	NA	
	09/22/10		NM	NA	NA	
	10/27/10		NM	NA	NA	
	11/15/10		NM	NA	NA	
	12/13/10		NM	NA	NA	
	01/04/11		NM	NA	NA	
	02/07/11		NM	NA	NA	
	09/21/11		12.10	--	429.87	
	<b>07/23/12</b>		<b>13.09</b>	<b>--</b>	<b>428.88</b>	
	<b>GEI-7</b>	09/03/03	444.26	13.24	0.01	431.03
		04/23/04		17.07	0.41	427.52
09/16/04			16.55	0.09	427.78	
04/20/05			18.11	0.93	426.89	
10/01/05			14.44	0.01	429.83	
04/18/06		Well not sampled				
09/17/06			15.27	--	428.99	
02/06/07		Well not sampled - Unable to locate				
03/16/07		Well not sampled-covered with forklifts				
04/30/07			16.69	--	427.57	
05/18/07			16.48	--	427.78	
09/12/07		444.22	15.56	--	428.66	
10/15/07			16.14		428.08	
11/19/07			16.01	--	428.21	
01/29/08			17.19	0.09	427.10	
02/13/08			17.37	0.21	427.02	
04/04/08		Well not sampled - ice at 4.4 feet btoc				
05/23/08			15.83	--	428.39	
06/25/08			16.10	--	428.12	
07/14/08			16.18	--	428.04	
08/06/08			13.14	--	431.08	
09/16/08			14.68	--	429.54	
10/27/08			16.03	--	428.19	
11/24/08			16.04	--	428.18	
12/19/08			16.45	--	427.77	
01/30/09			17.04	0.02	427.20	
02/19/09		17.25	0.03	426.99		

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
GEI-7 Cont.	03/25/09	Unable to locate			
	04/20/09		17.53	0.08	426.75
	06/24/09		16.15	--	428.07
	07/27/09		16.44	--	427.78
	08/26/09		16.20	--	428.02
	09/17/09		15.56	--	428.66
	10/22/09		16.41	--	427.81
	11/03/09		16.57	--	427.65
	12/14/09		16.85	--	427.37
	02/09/10		18.11	0.85	426.79
	04/21/10	Well frozen			
	05/26/10		16.76	--	427.46
	06/15/10		15.84	--	428.38
	07/21/10		13.3	--	430.92
	08/16/10		16.46	--	427.76
	09/22/10	444.18	16.15	--	428.03
	10/27/10		17.4	0.47	427.16
	11/15/10		16.91	0.2	427.43
	12/13/10		17.56	0.62	427.12
	01/04/11		17.91	0.8	426.91
	02/07/11		18.42	0.97	426.54
	03/22/11		18.38	1.0	426.60
	04/13/11		18.34	0.92	426.58
06/15/11		16.26	0.21	428.09	
09/20/11		14.47	Trace	429.71	
07/23/12		15.54	0.06	428.69	
GEI-8	09/03/03	444.55	13.64	--	430.91
	04/23/04		17.15	--	427.4
	09/16/04		16.95	--	427.6
	04/20/05		17.77	0.14	426.89
	10/01/05		14.73	--	429.82
	04/18/06		17.71	--	426.84
	09/16/06		15.92	--	428.63
	11/30/06		16.85	0.01	427.71
	12/22/06		17.07	--	427.48
	02/06/07		17.35	--	427.2
	03/16/07		17.60	--	426.95
	04/30/07	Well not sampled due to ice			
	05/08/07	Well not sampled due to ice			
	09/11/07	444.54	15.87	--	428.67
	10/15/07		16.47	--	428.07
	01/29/08		17.48	0.04	427.09
	02/13/08		17.57	0.04	427.00
	04/04/08	Well not sampled - inaccessible			
	05/23/08	Well not sampled - inaccessible			
	06/25/08	Well not sampled - inaccessible			
07/14/08	Well not sampled - inaccessible				
08/06/08	Well not sampled - inaccessible				
09/16/08	Well not sampled - inaccessible				

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
GEI-8 Cont.	10/27/08		16.37	--	428.17	
	11/24/08		16.35	--	428.19	
	12/19/08		16.77	--	427.77	
	01/30/09		17.42	0.10	427.20	
	02/19/09		17.67	0.16	427.00	
	03/25/09	Unable to locate				
	04/20/09	Flooded, ice at 1.41' BTOC				
	06/24/09		16.49	--	428.05	
	07/27/09		16.71	--	427.83	
	08/26/09		16.50	--	428.04	
	09/17/09		15.89	--	428.65	
	10/22/09		16.71	--	427.83	
	11/03/09		16.84	--	427.7	
	12/14/09		17.18	--	427.36	
	02/09/10		17.74	--	426.8	
	04/21/10	Well Frozen				
	05/26/10	Well Frozen				
	06/15/10		21.1	--	423.44	
	07/21/10		16.6	--	427.94	
	08/16/10		16.79	0.01	427.76	
	09/22/10	444.51	16.46	--	428.05	
	10/27/10		17.30	--	427.21	
	11/15/10		17.10	--	427.41	
	12/13/10		17.38	--	427.13	
	01/04/11		17.62	0.04	426.92	
	02/07/11		17.89	0.36	426.91	
	03/22/11		18.35	0.57	426.62	
	04/13/11	Well was not gauged - submerged in large puddle				
	06/15/11		16.42	--	428.12	
	09/20/11		14.81	Trace	429.73	
	07/23/12		15.83	Trace	428.71	
GEI-9	09/03/03	444.32	13.43	0.01	430.90	
	04/23/04		16.87	--	427.45	
	09/16/04		16.67	--	427.65	
	04/20/05		17.47	0.01	426.86	
	10/01/05		14.53	--	429.79	
	04/18/06		17.39	--	426.93	
	09/16/06		15.37	--	428.95	
	03/17/07		17.41	--	426.91	
	09/11/07	444.32	15.63	--	428.69	
	04/04/08		17.62	--	426.70	
	09/16/08		14.78	--	429.54	
	07/27/09		16.61	--	427.71	
	08/26/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	10/22/09		NM	NA	NA	
	11/03/09		NM	NA	NA	
	12/14/09		NM	NA	NA	
02/09/10		NM	NA	NA		

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
GEI-9 Cont.	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10	Unable to Locate			
	08/16/10	444.27	NM	NA	NA
	09/22/10		NM	NA	NA
	09/20/11		14.59	Trace	429.68
	<b>07/23/12</b>		<b>15.61</b>	--	<b>428.66</b>
GEI-10	10/01/05	443.48	13.74	--	429.74
	04/18/06		16.73	--	426.75
	09/16/06		14.29	--	429.19
	03/16/07	Well not sampled-unable to locate			
	09/09/07	443.31	14.58	--	428.73
	04/04/08		16.51	--	426.80
	09/16/08		13.70	--	429.61
	07/27/09		15.45	--	427.86
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		15.3	--	428.01
	08/16/10	443.22	NM	NA	NA
	09/20/11		13.43	--	429.79
	<b>07/23/12</b>		<b>14.48</b>	--	<b>428.74</b>
	GEI-11	10/01/05	443.81	14.10	--
04/18/06			17.58	--	426.23
09/17/06			14.91	--	428.90
11/30/06			16.30	0.14	427.62
12/24/06			16.44	--	427.37
02/06/07			16.69	--	427.12
03/16/07			16.96	0.02	426.87
04/30/07			16.73	0.47	427.46
05/18/07			16.30	0.20	427.67
09/12/07		443.78	15.22	--	428.56
10/15/07			15.81	--	427.97
11/19/07			15.71	--	428.07
01/29/08			16.83	0.03	426.97

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>	
<b>GEI-11 Cont.</b>	02/13/08		16.91	0.03	426.89	
	04/04/08		17.55	0.44	426.58	
	05/23/08		15.48	--	428.30	
	06/25/08		15.83	0.05	427.99	
	07/14/08		16.19	--	427.59	
	08/06/08		12.78	Sheen	431.00	
	09/16/08		14.31	--	429.47	
	10/27/08		15.69	--	428.09	
	11/24/08		15.69	--	428.09	
	12/19/08		16.15	0.05	427.67	
	01/30/09		16.83	0.19	427.10	
	02/19/09		17.04	0.20	426.90	
	03/25/09	Unable to locate				
	04/20/09		17.32	0.32	426.72	
	06/24/09		15.76	--	428.02	
	07/27/09	No current access to well - under permit stipulation				
	08/26/09	No current access to well - under permit stipulation				
	09/17/09	No current access to well - under permit stipulation				
	10/22/09	No current access to well - under permit stipulation				
	11/03/09	No current access to well - under permit stipulation				
	12/14/09	No current access to well - under permit stipulation				
	02/09/10	No current access to well - under permit stipulation				
	04/21/10	No current access to well - under permit stipulation				
	05/26/10	No current access to well - under permit stipulation				
	06/15/10	No current access to well - under permit stipulation				
	07/21/10	No current access to well - under permit stipulation				
	08/16/10	No current access to well - under permit stipulation				
09/21/11		14.1	--	429.68		
<b>07/23/12</b>	<b>No current access to well - under permit stipulation</b>					
<b>GEI-12</b>	10/01/05	443.55	13.72	--	429.83	
	04/18/06		16.71	--	426.84	
	09/16/06		14.61	--	428.94	
	03/16/07		16.65	0.04	426.93	
	09/09/07	443.52	14.89	--	428.63	
	04/04/08		16.98	0.13	426.64	
	09/16/08		14.00	--	429.52	
	07/27/09		15.80	--	427.72	
	08/26/09		NM	NA	NA	
	09/17/09		NM	NA	NA	
	11/03/09		NM	NA	NA	



**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
<b>GEI-12 Cont.</b>	12/14/09	443.45	NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		15.61	--	427.91
	08/16/10		NM	NA	NA
	09/20/11		13.8	Trace	429.65
	<b>07/23/12</b>		<b>14.79</b>	<b>Trace</b>	<b>428.66</b>
<b>MW-1</b>	09/20/12	443.97	14.5	--	429.47
	<b>07/23/12</b>		<b>15.54</b>	<b>--</b>	<b>428.43</b>
<b>MW-2</b>	10/01/05	444.07	14.43	--	429.64
	04/18/06		17.47	--	426.60
	09/15/06		15.31	--	428.76
	03/17/07		17.36	--	426.71
	09/09/07	444.03	15.60	--	428.43
	04/04/08		17.60	--	426.43
	09/16/08		14.71	--	429.32
	07/27/09		16.78	--	427.25
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		16.45	--	427.58
	08/16/10	443.94	NM	NA	NA
	09/21/11		14.51	--	429.43
<b>07/23/12</b>		<b>15.55</b>	<b>--</b>	<b>428.39</b>	
<b>MW-3</b>	07/21/10	NM	16.2	--	NA
	08/16/10	444.24	NM	NA	NA
	09/21/11		14.87	--	429.37
	<b>07/23/12</b>		<b>15.94</b>	<b>--</b>	<b>428.30</b>
<b>MW-4</b>	10/01/05	Well not sampled			
	04/18/06		20.63	--	--
	09/15/06		18.48	--	--
	03/16/07		20.60	--	--
	09/09/07	447.09	18.82	--	428.27
	04/04/08		20.82	--	426.27
	09/16/08		17.90	--	429.19
	07/27/09		19.78	--	427.31

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
<b>MW-4 Cont.</b>	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		19.39	--	427.70
	08/16/10		NM	NA	NA
	09/21/11		17.7	--	-17.70
	<b>07/23/12</b>			<b>18.72</b>	<b>--</b>
<b>MW-5</b>	10/01/05	444.05	14.3	--	429.75
	04/1806		17.33	--	426.72
	09/15/06		15.11	--	428.94
	03/16/07		17.31	--	426.74
	09/12/07	444.01	15.42	--	428.59
	04/04/08		17.44	--	426.57
	09/16/08		14.56	--	429.45
	07/27/09		16.44	--	427.57
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		16.05	--	427.96
	08/16/10	444	NM	NA	NA
	09/21/11		14.43	--	429.57
<b>07/23/12</b>			<b>15.43</b>	<b>--</b>	<b>428.57</b>
<b>MW-6</b>	10/01/05	Well not sampled			
	04/1806		20.26	--	--
	09/15/06		18.11	--	--
	03/16/07		20.23	--	--
	09/11/07	446.92	18.53	--	428.39
	04/04/08		20.48	--	426.44
	09/16/08		17.54	--	429.38

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
<b>MW-6 Cont.</b>	07/27/09		19.40	--	427.52
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		NM	NA	NA
	08/16/10	446.92	NM	NA	NA
	09/21/11		17.46	--	429.46
	<b>07/23/12</b>		<b>18.56</b>	--	<b>428.36</b>
<b>MW-13</b>	09/09/07	443.29	14.76	--	428.53
	04/04/08	Well not sampled - ice at 4.5 feet btoc			
	09/16/08		13.87	--	429.42
	07/27/09	No current access to well - under permit stipulation			
	08/26/09	No current access to well - under permit stipulation			
	09/17/09	No current access to well - under permit stipulation			
	10/22/09	No current access to well - under permit stipulation			
	11/03/09	No current access to well - under permit stipulation			
	12/14/09	No current access to well - under permit stipulation			
	02/09/10	No current access to well - under permit stipulation			
	04/21/10	No current access to well - under permit stipulation			
	05/26/10	No current access to well - under permit stipulation			
	06/15/10		NM	NA	NA
	07/21/10		NM	NA	NA
	08/16/10		NM	NA	NA
	09/21/11		13.64	--	429.65
	<b>07/23/12</b>	<b>No current access to well - under permit stipulation</b>			
	<b>MW-14</b>	09/22/11	443.42	15.57	--
10/27/10			16.41	--	427.01
11/15/11			16.26	--	427.16
12/13/10			16.51	--	426.91
01/04/11			16.72	--	426.7
02/07/11			17.13	--	426.29
03/22/11			17.06	--	426.36
04/13/11			17.1	--	426.32
09/21/11			13.98	--	429.44
<b>07/23/12</b>			<b>15.02</b>	--	<b>428.40</b>
<b>MW-15</b>	09/22/11	443.22	15.42	--	427.8
	10/27/10		17.5	--	425.72
	11/15/11		16.1	--	427.12
	12/13/10		16.36	--	426.86
	01/04/11		16.56	0.01	426.67
	02/07/11		16.96	--	426.26
	03/22/11		16.95	0.06	426.32
	04/13/11		16.99	0.06	426.28
	06/15/11		15.38	--	427.84
	09/21/11		13.84	--	429.38
<b>07/23/12</b>		<b>14.88</b>	--	<b>428.34</b>	
<b>K-5</b>	10/01/05	443.55	13.82	--	429.73
	04/18/06	Well not sampled			
	09/17/06		15.14	--	428.41
	03/16/07	Well not sampled-unable to open Robco cover			
	09/09/07	443.75	15.02	--	428.73
	04/04/08		17.00	--	426.75
	09/16/08		14.15	--	429.60
	07/27/09		15.94	--	427.81
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA

**Table 1c  
Groundwater Elevation Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	Well Elevation (ft amsl) <sup>1</sup>	Depth to Water (ft BTOC)	LNAPL Thickness (feet)	Groundwater Elevation (ft amsl) <sup>2</sup>
<b>K-5 Cont.</b>	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09	No current access to well - under permit stipulation			
	02/09/10	No current access to well - under permit stipulation			
	04/21/10	No current access to well - under permit stipulation			
	05/26/10	No current access to well - under permit stipulation			
	06/15/10	No current access to well - under permit stipulation			
	07/21/10		15.6	--	428.15
	08/16/10	443.76	NM	NA	NA
	09/21/11		13.97	--	429.79
	<b>07/23/12</b>	<b>Obstructed</b>			
<b>K-7</b>	10/01/05	442.49	12.72	--	429.77
	04/18/06		16.92	--	425.57
	09/16/06		13.49	--	429.00
	03/16/07	Well not sampled-unable to locate			
	09/09/07	442.55	13.78	--	428.77
	04/04/08	Well not sampled - ice in well			
	09/16/08		12.91	--	429.64
	07/27/09		14.63	--	427.92
	08/26/09		NM	NA	NA
	09/17/09		NM	NA	NA
	10/22/09		NM	NA	NA
	11/03/09		NM	NA	NA
	12/14/09		NM	NA	NA
	02/09/10		NM	NA	NA
	04/21/10		NM	NA	NA
	05/26/10		NM	NA	NA
	06/15/10		NM	NA	NA
	07/21/10		14.4	--	428.15
	08/16/10	442.49	NM	NA	NA
	09/20/11		12.72	--	429.77
<b>07/23/12</b>	<b>Obstructed</b>				

**Notes:**

ft BTOC = below top of casing

ft amsl = feet above mean sea level

LNAPL = Light non-aqueous phase liquid

Bold Type = Results of events covered in this report

btc = below top of casing

NA = Not Available

NM = Not Measured

-- = Not encountered

<sup>1</sup> Elevations are relative to an on-site Temporary Benchmark, based on vertical control point Fire Hydrant 08-05.

<sup>2</sup> Where LNAPL was present, groundwater elevation were adjusted using an average specific gravity of 0.80.

**Table 2a  
Groundwater Analytical Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	
<b>TH-1</b>	06/24/02	3,160	103,000	--	--	1.61	<2.50	56.1	317	
	09/25/02	1,510	7,400	--	--	2.73	3.52	48.4	325	
	04/29/03	1,500	33,000	--	2,900	<2.0	<0.5	27	120	
	09/03/03	1,500	47,000	--	7,700	<2.0	<0.5	27	160	
	03/10/04	2,300	31,000	--	3,800	<2.0	<0.5	30	160	
	09/15/04	1,700	62,000	--	7,600	1.7	<0.5	21	120	
	04/19/05	1,200	64,000	--	<3,900	<2.0	<0.5	15	68	
	09/08/05	1,100	25,000	--	1,100	1.3	<0.5	16	95	
	04/20/06	740	12,000	--	710	0.7	<0.5	11	45	
	09/14/06	860	13,000	--	<490	1.1	<0.5	12	69	
	03/14/07	600	4,400	--	<210	<2	<1	8	30	
	03/14/07 <sup>D</sup>	600	5,100	--	<200	<2	<1	8	30	
	09/12/07	600	8,600	--	<200	1	<1	7	30	
	09/12/07 <sup>D</sup>	500	7,800	--	<200	1	<1	6	20	
	04/08/08	455	5,570	--	<750	0.813	<0.500	7.30	26.2	
	09/17/08	804	-- <sup>1</sup>	--	-- <sup>1</sup>	1.26	<0.500	10.3	39.6	
	07/27/09	877	3,510	--	389	0.540	<1.00	11.5	42.8	
	07/20/10	1,300	88,800	--	<6,800	1.0	1	9.1	34	
	Duplicate	07/20/10	1,400	36,000	--	<3,400	6.8	1	9.8	39
	Duplicate	09/22/11	390	--	--	--	0.8	<0.5	5	<20
Duplicate	09/22/11	340	18,000	--	<3,300	0.9	<0.5	4.8	<20	
Duplicate	07/28/12	400	16,000	12,000	<1,400	1	<2	3.9	<12	
Duplicate	07/28/12	420	9,700	--	--	0.9	<2	3.9	8.4	
<b>TH-2</b>	06/24/02	Well not sampled-frozen shut								
	09/25/02	38,900	15,300	--	--	1,540	5,220	1,030	6,600	
	04/29/03	LNAPL present - well not sampled								
	09/03/03	37,000	190,000	--	150,000	730	3,800	860	6,600	
	03/10/04	LNAPL present - 0.02' - well not sampled								
	09/15/04	LNAPL present - 0.04' - well not sampled								
	04/19/05	LNAPL present - 0.1' - well not sampled								
	09/08/05	LNAPL present - 0.03' - well not sampled								
	04/20/06	LNAPL present - 0.11' - well not sampled								
	09/14/06	25,000	38,000	--	44,000	560	630	1,000	5,800	
	03/14/07	Well not sampled-buried under ice								
	09/13/07	30,000	98,000	--	62,000	600	2,300	800	5,600	
	04/08/08	47,100	58,700	--	30,200	652	1,650	1,280	8,580	
	09/17/08	LNAPL present - 0.01' - well not sampled								
07/27/09	LNAPL present - 0.11' - well not sampled									
07/19/10	28,000	74,000	--	57,000	560	2,700	790	6,400		
09/22/11	20,000	7,300	--	6,000	270	1,500	850	4,900		
Duplicate	07/28/12	22,000	38,000	32,000	22,000	260	590	870	4,400	
<b>TH-4</b>	06/24/02	178	3,490	--	--	5.49	1.21	1.45	19.1	
	09/25/02	8,020	9,350	--	--	903	542	90.7	965	
	04/29/03	11,000	41,000	--	3,500	970	1,200	73	1,200	
	09/03/03	7,100	120,000	--	8,100	420	680	35	880	
	03/10/04	14,000	150,000	--	10,000	1,600	940	82	1,300	
Well decommissioned for railroad construction on 8/19/2004										

**Table 2a  
Groundwater Analytical Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>
<b>TH-5</b>	06/24/02	1,100	34,500	--	--	6.05	1.45	18.3	98.1
	09/25/02	LNAPL present - well not sampled							
	04/29/03	LNAPL present - well not sampled							
	09/03/03	LNAPL present - well not sampled							
	03/10/04	LNAPL present - 0.03' - well not sampled							
	09/15/04	1,300	77,000	--	24,000	6.6	1.5	24	140
	04/19/05	1,100	180,000	--	<10,000	3.2	1.1	19	100
	09/08/05	LNAPL present - 0.02' - well not sampled							
	04/20/06	1,300	250,000	--	100,000	2.5	0.9	17	130
	09/14/06	700	7,700	--	<500	2.0	0.6	9.0	56
	03/14/07	900	70,000	--	38,000	<10	<1	10	60
	09/13/07	900	13,000	--	6,100	4	<1	7	40
	04/08/08	Well not sampled - ice in well							
	09/17/08	LNAPL present - 0.01' - well not sampled							
	07/31/09	515	2,560	--	534	0.690	<1.00	3.54	20.2
	07/31/09 <sup>D</sup>	551	3,940	--	640	0.560	<1.00	3.67	20.6
	07/19/10	1,200	16,000	--	<1,300	1.3	<0.5	3.6	30
09/22/11	690	1,100	--	140	1.6	0.6	5.5	59	
<b>07/28/12</b>	<b>840</b>	<b>20,000</b>	<b>23,000</b>	<b>6,700</b>	<b>&lt;6</b>	<b>0.6</b>	<b>5.5</b>	<b>37</b>	
<b>TH-7</b>	06/25/02	163	5,160	--	--	1.35	<0.500	1.00	4.67
	09/25/02	153	4,630	--	--	0.881	<0.500	<0.500	1.48
	04/29/03	260	12,000	--	2,800	1.0	<0.5	0.9	2.3
	09/03/03	140	8,000	--	3,300	1.6	<0.5	3.6	3.5
	03/10/04	250	8,900	--	2,300	<2.0	<0.5	0.7	<1.5
	09/15/04	210	14,000	--	2,800	0.6	<0.5	<0.5	<1.5
	04/19/05	210	15,000	--	560	0.7	<0.5	<0.5	<1.5
	09/08/05	120	1,800	--	1,300	<0.5	<0.5	<0.5	1.6
	04/20/06	91	3,700	--	2,300	<0.5	<0.5	<0.5	<1.5
	09/14/06	100	790	--	430	0.6	<0.5	<0.5	<1.5
	03/14/07	50	1,200	--	480	<1	<1	<1	<2
	09/12/07	100	1,100	--	540	<1	<1	<1	<2
	04/08/08	82.2	932	--	<750	<0.500	<0.500	<0.500	1.50
	09/17/08	124	-- <sup>1</sup>	--	-- <sup>1</sup>	0.426	<0.500	<0.500	2.55
	07/27/09	66.2	570	--	<391	<0.500	<1.00	<1.00	<3.00
	07/19/10	17	2,100	--	520	<0.500	<0.5	<0.5	<1.5
	09/22/11	41	500	--	300	<0.5	<0.5	<0.5	<1.5
<b>07/28/12</b>	<b>73</b>	<b>1,500</b>	<b>510</b>	<b>760</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	

**Table 2a  
Groundwater Analytical Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	
ADEC	GCL	2,200	1,500		1,100	5.0	1,000	700	10,000	
TH-10	06/24/02	<50.0	236	--	--	<0.200	<0.500	<0.500	<1.00	
	09/25/02	<80.0	144	--	--	<0.500	<0.500	<0.500	<1.00	
	04/29/03	<10	320	--	1,800	<0.5	<0.5	<0.5	<1.5	
	04/29/03 <sup>D</sup>	<10	320	--	1,800	<0.5	<0.5	<0.5	<1.5	
	09/03/03	<10	230	--	1,600	<0.5	<0.5	<0.5	<1.5	
	09/3/03 <sup>D</sup>	<10	300	--	2,000	<0.5	<0.5	<0.5	<1.5	
	03/10/04	<10	300	--	1,600	<0.5	<0.5	<0.5	<1.5	
	03/10/04 <sup>D</sup>	<10	290	--	1,700	<0.5	<0.5	<0.5	<1.5	
	09/15/04	10	210	--	990	<0.5	<0.5	<0.5	<1.5	
	09/15/04 <sup>D</sup>	<10	220	--	1,100	<0.5	<0.5	<0.5	<1.5	
	04/19/05	<10	530	--	2,600	<0.5	<0.5	<0.5	<1.5	
	04/19/05 <sup>D</sup>	<10	490	--	2,500	<0.5	<0.5	<0.5	<1.5	
	09/08/05	<10	230	--	1,500	<0.5	<0.5	<0.5	<1.5	
	9/8/2005 <sup>D</sup>	<10	220	--	1,400	<0.5	<0.5	<0.5	<1.5	
	04/20/06	<10	1,100	--	5,500	<0.5	<0.5	<0.5	<1.5	
	04/20/06 <sup>D</sup>	<10	620	--	2,900	<0.5	<0.5	<0.5	<1.5	
	09/13/06	<10	110	--	600	<0.5	<0.5	<0.5	<1.5	
	09/13/06 <sup>D</sup>	<10	140	--	790	<0.5	<0.5	<0.5	<1.5	
	03/14/07	<10	350	--	1,200	<1	<1	<1	<2	
	09/12/07	<10	200	--	1,000	<1	<1	<1	<2	
	04/08/08	<50.0	214	--	<743	<0.500	<0.500	<0.500	<1.00	
	04/08/08 <sup>D</sup>	<50.0	182	--	<735	<0.500	<0.500	<0.500	<1.00	
	09/17/08	<50.0	-- <sup>1</sup>	--	-- <sup>1</sup>	<0.200	<0.500	<0.500	<1.00	
07/30/09	<50.0	<385 <sup>2</sup>	--	<385 <sup>2</sup>	<0.500	<1.00	<1.00	<3.00		
07/19/10	<10	61	--	170	<0.5	<0.5	<0.5	<1.5		
09/22/11	<10	56	--	110	<0.5	<0.5	<0.5	<1.5		
<b>07/28/12</b>	<b>&lt;10</b>	<b>130</b>	<b>70</b>	<b>600</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>		
TH-13	06/24/02	264	9,400	--	--	2.92	0.955	2.82	22.2	
	09/25/02	87.0	2,180	--	--	2.28	<0.500	0.953	5.23	
	04/29/03	1,100	16,000	--	2,100	84	1.3	5.8	30	
	09/03/03	360	8,800	--	1,400	8.3	<0.5	2	14	
	03/10/04	1,600	30,000	--	2,200	120	10	16	75	
	09/23/04	3,200	21,000	--	<400	200	36	43	190	
	04/19/05	1,700	110,000	--	<3,900	14	34	25	210	
	09/08/05	1,700	5,100	--	2,400	83	100	42	170	
	04/20/06	Well not sampled - buried under ice, monument filled								
	09/14/06	440	2,500	--	110	59	0.6	4.4	12	
	03/15/07	300	2,000	--	480	60	<1	1	2	
	09/13/07	500	3,000	--	<200	100	<1	4	7	
	04/10/08	548	5,360	--	<735	89.0	1.26	4.56	22.3	
	09/17/08	1,350	9,590	--	998	184	8.68	32.1	92.9	
	07/27/09	No current access to well - under permit stipulation								
	07/19/10	No current access to well - under permit stipulation								
	09/22/11	No current access to well - under permit stipulation								
<b>07/28/12</b>	<b>No current access to well - under permit stipulation</b>									

**Table 2a  
Groundwater Analytical Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	
<b>TH-17</b>	06/24/02	1,820	10,500	--	--	175	<2.50	104	234	
	09/25/02	2,860	8,900	--	--	198	6.32	105	269	
	04/29/03	5,000	23,000	--	6,900	57	9.5	270	860	
	09/03/03	1,800	36,000	--	25,000	170	2.5	120	220	
	03/10/04	1,200	44,000	--	10,000	17	3.5	79	150	
	09/15/04	780	81,000	--	24,000	5.2	3.4	44	97	
	04/19/05	Well not sampled - buried under ice, monument filled								
	09/08/05	990	8,900	--	4,100	13	2.0	49	140	
	04/20/06	Well not sampled - buried under ice, monument filled								
	09/14/06	1,400	3,400	--	1,500	16	2.1	70	150	
	03/15/07	1,500	4,100	--	580	4	2	50	100	
	09/13/07	1,300	9,100	--	2,500	10	2	70		
	04/04/08	Well not sampled - monument underwater								
	09/17/08	835	11,300	--	3,070	22.6	<2.50	65.6	83.2	
	09/17/08 <sup>D</sup>	966	10,600	--	2,650	22.9	<5.00	70.2	94.8	
	07/27/09	No current access to well - under permit stipulation								
	07/19/10	No current access to well - under permit stipulation								
	09/22/11	No current access to well - under permit stipulation								
	07/28/12	<b>No current access to well - under permit stipulation</b>								
	<b>TH-18</b>	06/24/02	Well not sampled - frozen shut							
09/25/02		1,930	4,730	--	--	277	<5.00	70.5	139	
04/29/03		Well Frozen - well not sampled								
09/03/03		2,600	3,300	--	860	290	5.4	120	210	
03/10/04		2,600	2,700	--	1,400	87	3.8	140	240	
09/23/04		1,100	1,300	--	470	17	0.7	64	72	
04/19/05		Well not sampled - buried under ice, monument filled								
09/08/05		1,300	1,400	--	510	56	2	71	140	
04/20/06		Well not sampled - buried under ice, monument filled								
09/14/06		2,200	1,300	--	<98	86	2.4	130	230	
03/15/07		2,100	1,800	--	130	40	1	100	100	
09/13/07		1,200	2,000	--	390	60	2	100	100	
04/04/08		Well not sampled - monument underwater								
09/17/08		1,030	2,460	--	<743	46.7	1.14	62.7	71.7	
07/27/09		No current access to well - under permit stipulation								
07/19/10		No current access to well - under permit stipulation								
09/22/11		No current access to well - under permit stipulation								
07/28/12	<b>No current access to well - under permit stipulation</b>									
<b>MW-23</b>	06/25/02	<50.0	1,370	--		0.230	<0.500	<0.500	<1.00	
	09/25/02	<80.0	2,800	--		<0.500	<0.500	0.522	1.05	
	04/29/03	48	2,800	--	800	0.6	<0.5	<0.5	<1.5	
	09/03/03	77	1,100	--	660	<0.5	<0.5	3.2	2.3	
	03/10/04	26	22,000	--	5,800	<0.5	<0.5	<0.5	<1.5	
	09/15/04	31	9,300	--	2,600	<0.5	<0.5	<0.5	<1.5	
	04/19/05	34	9,900	--	580	<0.5	<0.5	<0.5	<1.5	
	09/08/05	31	1,000	--	580	<0.5	<0.5	<0.5	<1.5	
	04/20/06	Well not sampled - monument flooded								
	09/13/06	38	1,000	--	440	<0.5	<0.5	<0.5	<1.5	
	03/04/07	Well not sampled-under equipment								
	09/12/07	30	1,400	--	440	<1	<1	<1	<2	
	04/08/08	<50.0	1,540	--	<758	<0.500	<0.500	<0.500	<1.00	
	09/17/08	PVC cap was stuck/frozen								
	08/01/09	<50.0	<397	--	<397	<0.500	<1.00	<1.00	<3.00	
	07/19/10	Well not sampled - Obstructed								
	09/22/11	Well not sampled - Obstructed								
07/28/12	<b>Well not sampled - Obstructed</b>									



**Table 2a  
Groundwater Analytical Data**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>
<b>MW-25</b>	06/25/02								
	09/25/02								
	04/29/03								
	09/03/03								
	03/10/04								
	09/15/04								
	04/19/05								
	09/08/05								
	04/20/06								
	09/13/06								
	03/14/07								
	09/13/07	1,300	1,700	--	210	10	2	30	100
	04/10/08	1,840	3,620	--	<721	11.3	3.50	36.8	142
	09/17/08	2,660	4,550	--	<743	10.4	26.5	27.9	549
07/27/09									
07/19/10	1,800	3,900	--	620	9	4	30	120	
09/22/11									
<b>07/28/12</b>									
LNAPL present - well not sampled									
LNAPL present - well not sampled									
LNAPL present - well not sampled									
LNAPL present - well not sampled									
LNAPL present - 0.05' - well not sampled									
LNAPL present - 0.15' - well not sampled									
LNAPL present - 0.16' - well not sampled									
LNAPL present - 0.13' - well not sampled									
LNAPL present - 0.15' - well not sampled									
LNAPL present - 0.13' - well not sampled									
LNAPL present - 0.01' - well not sampled									
LNAPL Globules present - well not sampled									
LNAPL Globules present - well not sampled									
<b>Trip Blank</b>	04/29/03	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/03/03	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	03/10/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/15/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	04/19/05	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/08/05	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	04/19/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/13/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	03/14/07	<10	--	--	--	<1	<1	<1	<2
	09/12/07	<10	--	--	--	<1	<1	<1	<2
	04/08/08	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00
	09/17/08	<50.0	--	--	--	<0.200	<0.500	<0.500	<1.00
	08/01/09	<50.0	--	--	--	<0.500	<1.00	<1.00	<3.00
	07/19/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
09/22/11	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	
<b>07/28/12</b>	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	

**Notes:**

All results are reported in micrograms per liter (µg/L)

GRO = Gasoline range organics, analyzed by GRO AK101

DRO = Diesel range organics, analyzed by DRO AK102

DRO SG = Diesel range organics, analyzed by DRO AK102

RRO = Residual range organics, analyzed by RRO AK103

Benzene, Toluene, Ethylbenzene, Total Xylenes by EPA Method 8021B

GCL = ADEC 18 AA 75 Groundwater Cleanup Level

LNAPL = Light non-aqueous phase liquid

Bold Type = Results of most recent sampling event

Highlighted concentrations are greater than the applicable ADEC GCL.

<sup>D</sup> = Duplicate sample

"--" = Analyte not included in sampling event

<sup>1</sup> = Preserved ambers were collected for the DRO/RRO analyses; however, the cooler containing these sample containers was lost in shipment.

<sup>2</sup> = Sample analysis performed past method-specified holding time.

<sup>3</sup> = TH-1 DRO/RRO results are not available for original sample. Sample bottles broke during transport.

< = Less than reporting limit

**Table 2b  
Groundwater Analytical Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>	
<b>AR-81</b>	08/25/99	474	3,230	--	--	9.24	0.522	8.8	14.2	--	
	08/15/00	247	3,600	--	--	3.62	<0.500	3.83	8.95	--	
	06/25/02	<50.0	1,130	--	--	0.920	<0.500	0.520	<1.00	--	
	09/24/02	212	4,550	--	--	7.56	2.11	5.14	8.95	--	
	04/29/03	150	2,300	--	1,000	2.5	<0.5	1	1.8	--	
	09/03/03	140	2,000	--	2,400	3.1	<0.5	1.6	2.8	--	
	03/10/04	Well Frozen									
	09/16/04	69	2,200	--	3,200	1	<0.5	<0.5	<1.5	--	
	04/19/05	110	2,000	--	3,700	0.8	<0.5	0.6	1.6	--	
	09/07/05	68	1,400	--	1,200	0.5	<0.5	<0.5	<1.5	--	
	04/20/06	95	3,100	--	160	0.6	<0.5	<0.5	<1.5	--	
	09/12/06	100	900	--	310	0.7	<0.5	<0.5	<1.5	--	
	03/15/07	100	1,800	--	250	<1	<1	<1	<2	--	
	09/10/07	100	1,100	--	110	<1	<1	<1	<2	--	
	04/10/08	121	4,290	--	<714	0.623	<0.500	<0.500	1.18	--	
	09/16/08	91.8	2,270	--	<750	0.423	<0.500	<0.500	1.72	--	
	07/31/09	126	1,630	--	496	<0.500	<1.00	<1.00	<3.00	--	
	07/20/10	67	1,700	--	760	<0.5	<0.5	<0.5	<1.5	--	
	09/22/11	<10	280	--	330	<0.5	<0.5	<0.5	<1.5	--	
	<b>07/27/12</b>	<b>50</b>	<b>1,300</b>	<b>86</b>	<b>250</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	<b>--</b>	
<b>AR-82</b>	06/25/02	219	72,800	--	--	0.200	<0.500	0.525	6.33	--	
	09/24/02	90.3	1,620	--	--	0.269	<0.500	<0.500	1.25	--	
	04/29/03	3,500	390,000	--	<20,000	<2.5	<2.5	2.5	<25	--	
	09/03/03	83	24,000	--	1,800	<0.5	1.1	2.9	8.6	--	
	Well Removed from Sampling Program in September 2003										
<b>AR-85</b>	08/25/99	<50.0	606	--	--	<0.500	<0.500	<0.500	<1.00	--	
	08/15/00	<50.0	634	--	--	<0.500	<0.500	<0.500	<1.00	--	
	06/25/02	<50.0	964	--	--	<0.200	<0.500	<0.500	<1.00	--	
	09/24/02	<50.0	958	--	--	0.268	<0.500	<0.500	<1.00	--	
	04/29/03	<10	620	--	530	1	<0.5	<0.5	<1.5	--	
	09/03/03	<10	640	--	510	0.5	<0.5	<0.5	<1.5	--	
	09/03/03 <sup>D</sup>	<10	640	--	570	<0.5	<0.5	<0.5	<1.5	--	
	03/10/04	Well Beneath Snow bank									
	09/16/04	12	880	--	1,300	2.2	<0.5	<0.5	<1.5	--	
	09/16/04 <sup>D</sup>	13	900	--	1,300	2.2	<0.5	<0.5	<1.5	--	
	04/19/05	Well buried and surrounded by equipment									
	09/07/05	<10	450	--	350	<0.5	<0.5	<0.5	<1.5	--	
	9/7/2005 <sup>D</sup>	<10	630	--	910	<0.5	<0.5	<0.5	<1.5	--	
	04/20/06	<10	850	--	1,200	<0.5	<0.5	<0.5	<1.5	--	
	09/12/06	<10	480	--	200	<0.5	<0.5	<0.5	<1.5	--	
	03/15/07	Well not sampled-buried under snow bank									
	09/10/07	<10	450	--	220	<1	<1	<1	<2	--	
	04/10/08	<50.0	951	--	<735	<0.500	<0.500	<0.500	<1.00	--	
	04/10/08 <sup>D</sup>	<50.0	522	--	<708	<0.500	<0.500	<0.500	<1.00	--	
	09/16/08	<50.0	636	--	<750	0.275	<0.500	<0.500	<1.00	--	
07/31/09	<50.0	604	--	<391	<0.500	<1.00	<1.00	<3.00	--		
07/20/10	<10	360	--	170	<0.5	<0.5	<0.5	<1.5	--		
09/22/11	<10	280	--	260	<0.5	<0.5	<0.5	<1.5	--		
<b>07/27/12</b>	<b>&lt;10</b>	<b>450</b>	<b>&lt;49</b>	<b>150</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	<b>--</b>		

**Table 2b  
Groundwater Analytical Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>	
<b>MW-1</b>	10/23/03	97	8,200	--	--	<0.5	<0.5	<0.5	<1.5	--	
	03/10/04	33	4,100	--	1,400	<0.5	<0.5	<0.5	<1.5	--	
	03/10/04 <sup>D</sup>	35	6,000	--	1,500	<0.5	<0.5	<0.5	<1.5	--	
	09/16/04	29	5,100	--	1,600	<0.5	<0.5	<0.5	<1.5	--	
	04/19/05	well not sampled - buried snow/ice (no access)									
	09/07/05	32	870	--	410	<0.5	<0.5	<0.5	<1.5	--	
	04/20/06	well not sampled - covered with ice and ponded water									
	09/12/06	23	470	--	210	<0.5	<0.5	<0.5	<1.5	--	
	03/15/07	<10	830	--	360	<1	<1	<1	<2	--	
	09/10/07	20	520	--	160	<1	<1	<1	<2	--	
	04/04/08	Well not sampled - monument underwater									
	09/17/08	<50.0	938	--	<750	0.369	<0.500	<0.500	1.46	--	
	07/27/09	Well buried by gravel regrade									
	07/20/10	Well buried by gravel regrade									
	09/22/11	55	460	--	420	<0.5	<0.5	<0.5	<1.5	--	
07/27/12	17	1,000	500	1,300	<0.5	<0.5	<0.5	<1.5	--		
<b>MW-2</b>	10/23/03	48,000	40,000	--	--	2,000	6,000	960	6,000	--	
	03/10/04	LNAPL - 0.04' - well not sampled									
	09/16/04	LNAPL - 0.03' - well not sampled									
	04/19/05	LNAPL - 0.1' - well not sampled									
	09/07/05	LNAPL - 0.01' - well not sampled									
	04/20/06	well not sampled - covered with snow and gravel									
	09/12/06	8,000	22,000	--	<500	710	350	280	1,300	--	
	03/15/07	6,600	7,100	--	170	500	100	200	900	--	
	09/10/07	7,600	14,000	--	<200	700	600	200	1,400	--	
	04/04/08	Well not sampled - absorbent sock frozen in well									
	09/16/08	21,900	29,300	--	<3,750	967	1,570	337	2,770	--	
07/27/09	Well recessed and buried in vault by gravel regrade										
07/20/10	Well buried by gravel regrade										
<b>MW-3</b>	10/23/03	36,000	11,000	--	--	1,600	2,500	570	6,300	--	
	03/10/04	56,000	44,000	--	3,000	2,100	4,800	1,100	9,800	--	
	09/16/04	38,000	59,000	--	<2,000	1,900	3,100	810	6,600	--	
	04/19/05	13,000	40,000	--	<2,000	630	600	340	2,100	--	
	09/07/05	17,000	24,000	--	2,900	1,400	1,200	330	2,400	--	
	04/20/06	19,000	15,000	--	<500	1,100	960	500	3,100	--	
	09/12/06	19,000	15,000	--	<490	1,400	1,000	520	3,200	--	
	03/16/07	22,000	7,900	--	490	1,300	900	600	3,700	--	
	09/10/07	11,000	17,000	--	<490	900	500	400	2,100	--	
	04/10/08	33,300	11,000	--	942	1,540	2,080	923	6,000	--	
	09/17/08	19,100	31,100	--	<7,500	1,360	791	411	2,390	--	
	09/17/08 <sup>D</sup>	18,600	22,100	--	<3,750	1,370	777	406	2,350	--	
	07/27/09	Well buried by gravel regrade									
	07/20/10	Well buried by gravel regrade									
	09/22/11	57	1,800	--	1,300	1.9	<0.5	<0.5	2.6	--	
07/27/12	360	1,200	240	1,600	14	1.2	13	47	--		

**Table 2b  
Groundwater Analytical Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>
MW-4	10/22/03									
	03/10/04									
	09/16/04									
	04/19/05									
	09/07/05	68,000	98,000	--	<2,000	3,200	7,700	1,300	10,000	--
	04/20/06									
	09/12/06	64,000	26,000	--	<980	3,300	8,200	1,400	9,600	--
	03/16/07									
	09/10/07	60,000	27,000	--	<490	3,000	7,900	1,400	9,800	--
	04/10/08									
	09/17/08									
	07/27/09									
	07/20/10	40,000	80,000	--	<6800	2,200	5,300	990	7,200	26.1
	Duplicate 07/20/10	33,000	42,000	--	<3,400	1,800	3,800	770	6,000	--
09/22/11	38,000	24,000	--	3,900	2,400	4,400	1,200	7,600	--	
Duplicate 09/22/11	36,000	21,000	--	4,600	2,300	4,000	1,100	6,800	--	
<b>07/27/12</b>	<b>44,000</b>	<b>620,000</b>	<b>390,000</b>	<b>&lt;33,000</b>	<b>2,100</b>	<b>4,900</b>	<b>1,200</b>	<b>8,400</b>	<b>--</b>	
Duplicate <b>07/27/12</b>	<b>42,000</b>	<b>190,000</b>	--	--	<b>2,000</b>	<b>4,700</b>	<b>1,100</b>	<b>8,100</b>	<b>--</b>	
MW-5	10/23/03	10,000	36,000	--		1,000	420	100	1,000	--
	03/10/04	22,000	9,800	--	2,000	1,200	1,800	320	3,000	--
	09/16/04	22,000	7,100	--	<200	970	2,000	370	3,500	--
	04/19/05									
	09/07/05	10,000	5,200	--	220	870	590	200	1,600	--
	04/20/06									
	09/12/06	9,700	2,900	--	<100	980	230	220	1,700	--
	09/12/06 <sup>D</sup>	9,500	3,000	--	<200	980	220	210	1,600	--
	03/15/07	16,000	6,900	--	<510	800	900	300	2,700	--
	03/15/07 <sup>D</sup>	16,000	7,900	--	<510	800	900	300	2,700	--
	09/10/07	6,500	5,200	--	<200	700	100	100	1,100	--
	09/10/07 <sup>D</sup>	6,000	5,000	--	<200	700	100	100	1,100	--
	04/04/08									
	09/16/08									
07/31/09	9,780 <sup>1</sup>	6,080	--	707	649	212	166	1,410	--	
07/31/09 <sup>D</sup>	11,900 <sup>1</sup>	8,240	--	1,430	801 <sup>1</sup>	304 <sup>1</sup>	160 <sup>1</sup>	1,860 <sup>1</sup>	--	
07/20/10	4,100	6,500	--	530	570	6.7	81	300	12.1	
09/22/11	5,000	4,200	--	<670	530	35	150	660	--	
<b>07/27/12</b>	<b>3,400</b>	<b>3,800</b>	<b>620</b>	<b>&lt;660</b>	<b>410</b>	<b>49</b>	<b>54</b>	<b>420</b>	<b>--</b>	
MW-7	10/03/05	7,100	2,200	--	<97	1,700	<5.0	240	300	--
	04/20/06	4,600	2,300	--	200	450	6.9	170	480	--
	09/11/06	8,100	2,000	--	<98	1,800	9.4	280	450	--
	03/16/07	7,600	2,500	--	<100	1,400	9	200	300	--
	09/09/07	8,100	3,500	--	<200	1,800	10	300	700	--
	04/10/08	8,650	4,730	--	<750	1,700	3.08	234	452	--
	09/16/08	10,900	5,640	--	<750	1,830	<25.0	277	676	--
	07/31/09	8,570 <sup>1</sup>	3,960	--	606	1,760	<25.0	255	481	--
	07/22/10	6,400	4,000	--	290	1,400	3.4	270	460	<0.05
	09/22/11	5,100	4,300	--	<670	1,200	2.6	210	350	--
	<b>07/27/12</b>	<b>4,800</b>	<b>2,500</b>	<b>410</b>	<b>&lt;340</b>	<b>1,000</b>	<b>7.4</b>	<b>190</b>	<b>260</b>	<b>--</b>
MW-8	10/03/05	2,900	1,500	--	720	390	39	96	290	--
	04/20/06	4,500	1,800	--	120	430	7.9	190	530	--
	09/11/06	3,300	1,400	--	300	410	16	120	330	--
	03/16/07	4,400	1,800	--	110	400	10	200	600	--
	09/09/07	2,200	2,000	--	210	300	20	100	300	--
	04/10/08	5,700	2,950	--	<750	458	6.92	191	525	--
	09/16/08	3,020	1,930	--	<750	269	6.58	95.1	186	--
	07/30/09	2,230 <sup>1</sup>	1,370	--	<391	180 <sup>1</sup>	<10.0 <sup>1</sup>	81.4 <sup>1</sup>	163 <sup>1</sup>	--
	07/21/10	4,400	2,300	--	250	290	7.3	140.0	340	9.9
	09/22/11	620	1,900	--	270	5.1	<0.5	0.9	4.0	--
	<b>07/27/12</b>	<b>3,600</b>	<b>1,700</b>	<b>250</b>	<b>340</b>	<b>330</b>	<b>6.2</b>	<b>100</b>	<b>230</b>	<b>--</b>

**Table 2b  
Groundwater Analytical Data**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>		<b>1,100</b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>	
<b>MW-9</b>	10/03/05	26	240	--	390	0.7	<0.5	<0.5	<1.5	--	
	04/20/06	91	500	--	310	2.5	<0.5	<0.5	<1.5	--	
	09/11/06	31	63	--	40	<0.5	<0.5	<0.5	--	--	
	03/16/07	700	580	--	340	2.0	<1	<1	<2	--	
	09/09/07	<10	110	--	93	<1	<1	<1	<2	--	
	04/10/08	92.7	538	--	<750	1.61	<0.500	<0.500	<1.00	--	
	09/16/08	<50.0	193	--	<750	1.86	<0.500	<0.500	<1.00	--	
	07/30/09	58.8	484	--	<394	3.02	<1.00	<1.00	<3.00	--	
	07/21/10	110	840	--	220	5.6	<0.5	<0.5	<1.5	3	
	09/22/11	440	780	--	220	43	0.7	<0.5	10	--	
<b>07/27/12</b>	<b>&lt;10</b>	<b>100</b>	<b>&lt;47</b>	<b>120</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	<b>--</b>		
<b>MW-10</b>	10/03/05	760	1,200	--	520	64	2	5	21	--	
	04/20/06	450	1,400	--	390	25	<0.5	<0.5	1.7	--	
	04/20/06 <sup>D</sup>	470	1,500	--	330	25	<0.5	<0.5	1.8	--	
	09/11/06	670	1,300	--	250	64	0.8	0.5	2.7	--	
	09/11/06 <sup>D</sup>	660	1,200	--	240	63	0.8	0.5	2.7	--	
	03/15/07	Well not sampled-buried under snow bank									
	09/09/07	700	1,500	--	240	70	<1	3	7	--	
	04/10/08	498	1,150	--	<765	24.1	<0.500	<0.500	3.60	--	
	09/16/08	706	2,220	--	<750	52.5	0.637	2.58	10.0	--	
	07/27/09	Well buried by recent construction									
	07/21/10	Well buried by recent construction									
	<b>Trip Blank</b>	10/23/03	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--
03/10/04		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
09/16/04		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
04/19/05		Trip Blank submitted under COC for 1001430									
10/03/05		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
04/20/06		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
09/11/06		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
03/15/07		<10	--	--	--	<1	<1	<1	<2	--	
09/09/07		<10	--	--	--	<1	<1	<1	<2	--	
04/10/08		<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00	--	
09/17/08		<50.0	--	--	--	<0.200	<0.500	<0.500	<1.00	--	
07/31/09		<50.0	--	--	--	<0.500	<1.00	<1.00	<3.00	--	
07/21/10		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
09/22/11		<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
<b>07/27/12</b>		<b>Trip Blank submitted under COC for 1001430</b>									

**Notes:**

All results are reported in micrograms per liter (µg/L)  
 GRO = Gasoline range organics, analyzed by GRO AK101  
 DRO = Diesel range organics, analyzed by DRO AK102  
 DRO SG = Diesel range organics, analyzed by DRO AK102  
 RRO = Residual range organics, analyzed by RRO AK103  
 Benzene, Toluene, Ethylbenzene, Total Xylenes by EPA Method 8021B  
 LNAPL = Light non-aqueous phase liquid  
 MTBE = Methyl tert-Butyl ether by EPA Method 8021B  
 GCL = ADEC 18 AA 75 Groundwater Cleanup Level  
 Highlighted concentrations are greater than the applicable ADEC GCL.  
<sup>D</sup> = Duplicate sample  
 Bold Type = Results of most recent sampling event  
 "--" = Indicates analyte not included in sampling event  
<sup>1</sup> = Sample required dilution due to high concentrations of target analyte.  
 < = Less than reporting limit

**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>
GEI-1	10/07/02	31,700	218,000	--	--	5,630	6,770	704	3,860	--
	09/03/03					LNAPL present - 0.01' - well not sampled				
	04/23/04	26,600	11,200	--	--	2,910	5,300	582	2,990	--
	09/16/04					LNAPL present - 0.01' - well not sampled				
	04/20/05	35,300	307,000	--	--	4,300	6,300	649	3,620	--
	10/01/05	39,700	18,800	--	617	3,050	5,350	662	3,820	--
	04/18/06					Well not sampled - not accessible				
	09/17/06	31,000	29,000	--	<970	3,200	4,500	540	3,100	--
	03/17/07					LNAPL present - 0.05' - well not sampled				
	09/12/07	27,000	44,000	--	<2,200	2,600	3,600	400	2,600	--
	04/04/08					Well not sampled - ice in well				
	09/18/08					LNAPL present - 0.67' - well not sampled				
	07/27/09					LNAPL present - 0.43' - well not sampled				
	07/21/10					LNAPL present - 0.27' - well not sampled				
	09/23/11					LNAPL Globules present - well not sampled				
	<b>07/25/12</b>					<b>LNAPL Globules present - well not sampled</b>				
GEI-2	10/07/02	170,000	86,500	--	--	15,100	56,200	3,810	22,000	--
	09/03/03	265,000	28,700	--	--	7,250	42,400	3,430	21,300	--
	04/23/04	150,000	17,900	--	--	7,500	39,700	3,140	17,900	--
	09/16/04	214,000	109,000	--	--	8,490	48,700	3,310	24,400	--
	04/20/05	196,000	88,700	--	--	7,520	49,800	3,490	23,100	--
	10/01/05	201,000	--	--	--	5,900	47,200	3,480	22,500	--
	04/18/06	219,000	33,100	--	904	5,510	46,200	3,380	24,100	--
	09/17/06	190,000	25,000	--	<970	6,000	42,000	3,300	22,000	--
	03/17/07					Well not sampled - buried under equipment				
	09/12/07	170,000	75,000	--	<1,100	4,900	37,000	3,100	20,000	--
	04/11/08	184,000	45,700	--	<3,750	4,530	49,300	3,520	22,200	--
	09/18/08	216,000	189,000	--	<16,700	5,530	45,300	3,950	28,300	--
	09/18/08 <sup>D</sup>	151,000	207,000	--	<16,700	4,360	32,800	2,580	18,500	--
	07/30/09	220,000 <sup>1</sup>	70,600 <sup>1</sup>	--	6,910 <sup>1</sup>	5,430 <sup>1,3</sup>	96,200 <sup>1,2</sup>	3,980 <sup>1</sup>	24,170 <sup>1,3</sup>	--
	07/30/09 <sup>D</sup>	200,000 <sup>1</sup>	71,400	--	5,280 <sup>3</sup>	4,990 <sup>1</sup>	45,700 <sup>1</sup>	3,610 <sup>1</sup>	24,380 <sup>1,3</sup>	--
07/21/10	160,000	22,000	--	<1,300	2,900	41,000	3,500	23,000	10.4	
Duplicate	07/21/10	160,000	52,000	--	<6,800	2,800	36,000	3,300	22,000	--
	09/23/11					LNAPL Globules present - well not sampled				
	<b>07/25/12</b>					<b>LNAPL Globules present - well not sampled</b>				
GEI-3	10/07/02	36,600	101,000	--	--	178	3,070	339	12,000	--
	09/03/03	35,800	82,700	--	--	86.0	1,070	122	7,840	--
	04/23/04	16,600	25,200	--	--	66.0	758	63.1	5,920	--
	09/16/04	23,000	52,300	--	--	44.0	903	138	9,640	--
	09/16/04	--	--	--	--	35.2	835	77.7	6,610	--
	04/20/05					Well not sampled - not accessible				
	10/01/05	18,200	58,300	--	1,500	30.1	485	67.8	5,940	--
	10/01/05	19,100	--	--	--	<50.0	468	<50.0	6,280	--
	04/18/06	21,700	70,300	--	1,220	28.3	1,290	173	6,970	--
	09/16/06	16,000	62,000	--	<2,000	20.0	280	61	5,100	--
	03/17/07	32,000	42,000	--	<2,000	30	1,200	200	6,700	--
	09/11/07	17,000	70,000	--	<2,000	20	800	200	5,500	--
	04/11/08	30,500	40,800	--	<3,540	<100	1,460	359	8,440	--
	09/18/08	20,300	97,400	--	<7,500	16.8	484	131	6,380	--
	07/28/09	16,900 <sup>1</sup>	37,200	--	2,720	6.10 <sup>1</sup>	202 <sup>1</sup>	89.2 <sup>1</sup>	4,770 <sup>1</sup>	--
07/21/10	23,000	92,000	--	<14,000	16	870	200	6,400	--	
	09/23/11					LNAPL Globules present - well not sampled				
	<b>07/25/12</b>					<b>LNAPL Globules present - well not sampled</b>				

**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>
GEI-4	10/07/02									
	09/03/03									
	04/23/04	3,720	30,200	--	--	30.7	76.7	55.5	76.7	--
	09/16/04									
	04/20/05	807	195,000	--	--	15.1	3.83	48.2	3.83	--
	10/01/05	2,560	44,000	--	601	13.4	<1.00	52.3	<1.00	--
	04/18/06	1,180	95,700	--	<8,060	15.2	2.18	66.4	2.18	--
	04/18/06	1,010	--	--	--	14.4	<0.500	53.6	<0.500	--
	09/16/06	1,400	39,000	--	<960	16	1.8	40	190	--
	03/17/07	1,400	54,000	--	<1,900	20	2	40	200	--
	09/11/07	2,700	100,000	--	<2,100	10	<10	70	300	--
	04/11/08	1,780	192,000	--	<4,120	15.0	<2.50	56.8	229	--
	04/11/08 <sup>D</sup>	2,140	215,000	--	<3,680	13.4	<10.0	60	268	--
	09/18/08									
	07/29/09	1,190 <sup>1</sup>	1,620,000 <sup>1</sup>	--	<39,100 <sup>1</sup>	5.10 <sup>1</sup>	<10.0 <sup>1</sup>	25.0 <sup>1</sup>	147 <sup>1</sup>	--
	07/21/10	440	24,000	--	<3,300	0.9	<0.5	8.9	35	--
	09/23/11									
<b>07/25/12</b>										
GEI-5	10/07/02	12,400	47,600	--	--	2,310	813	119	1,660	--
	10/07/02	10,800	--	--	--	2,360	841	127	1,660	--
	09/03/03	10,100	68,000	--	--	1,420	205	32.9	650	--
	04/23/04									
	09/16/04	12,000	18,000	--	--	2,330	549	66.3	1,200	--
	04/20/05	7,050	71,500	--	--	1,240	444	44.0	1,040	--
	10/01/05	10,700	67,400	--	2,020	1,430	239	37.8	922	--
	04/18/06	--	--	--	--	--	--	--	--	--
	09/16/06	6,200	22,000	--	<500	910	290	45	850	--
	03/17/07									
	09/11/07									
	04/04/08									
	09/18/08									
	07/29/09									
	07/22/10	270	3,500	--	2,500	13	4.9	<0.5	9.7	--
	09/24/11	1,400	6,200	--	950	290	14	1.5	35	--
	<b>07/25/12</b>	<b>1,600</b>	<b>100,000</b>	<b>99,000</b>	<b>28,000</b>	<b>270</b>	<b>24</b>	<b>4</b>	<b>74</b>	--
GEI-6	10/07/02	58,800	5,790	--	--	1.26	1.95	<0.500	2.99	--
	09/03/03	<80	3,520	--	--	0.717	<0.500	<0.500	<1.00	--
	04/23/04									
	09/16/04	58.8	7,580	--	--	0.758	<0.500	<0.500	1.72	--
	04/20/05									
	10/01/05	<50	2,180	--	1,140	0.768	<0.500	<0.500	<1.50	--
	04/18/06									
	09/16/06	51	3,400	--	2,300	1.0	<0.5	<0.5	<1.5	--
	03/17/07	<10	800	--	770	<1	<1	<1	<2	--
	09/11/07	20	2,200	--	1,000	<1	<1	<1	<2	--
	04/04/08									
	09/18/08									
	07/30/09	<50.0	5,260	--	2,120	<0.500	<1.00	<1.00	<3.00	--
	07/22/10									
	09/24/11	<10	2,700	--	2,200	<0.5	<0.5	<0.5	<1.5	--
	<b>07/25/12</b>	<b>&lt;10</b>	<b>3,000</b>	<b>81</b>	<b>1,800</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	--
	Duplicate	<b>07/25/12</b>	<b>&lt;10</b>	--	--	--	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>

**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>
GEI-7	09/03/03	LNAPL present - 0.01' - well not sampled								
	04/23/04	LNAPL present - 0.41' - well not sampled								
	09/16/04	LNAPL present - 0.09' - well not sampled								
	04/20/05	LNAPL present - 0.93' - well not sampled								
	10/01/05	15,400	98,700	--	<4,240	299	2,180	246	2,560	--
	04/18/06	Well not sampled - not accessible.								
	09/17/06	15,000	110,000	--	<2,000	360	2,000	250	2,400	--
	03/17/07	Well not sampled - buried under equipment								
	09/12/07	13,000	79,000	--	<2,200	300	1,800	300	2,100	--
	04/04/08	Well not sampled - ice in well								
	09/18/08	16,600	295,000	--	<15,000	459	2,710	257	4,450	--
	07/30/09	19,900 <sup>1</sup>	110,000 <sup>1</sup>	--	<4,030 <sup>1</sup>	395 <sup>1,3</sup>	2,260 <sup>1,3</sup>	267 <sup>1,3</sup>	2,830 <sup>1,3</sup>	--
	07/30/09 <sup>D</sup>	19,800 <sup>1</sup>	100,000 <sup>1</sup>	--	<4,000 <sup>1</sup>	371 <sup>1,3</sup>	2,110 <sup>1,3</sup>	244 <sup>1</sup>	2,800 <sup>1</sup>	--
	07/22/10	14,000	120,000	--	<14,000	280	1,900	230	2,500	6.7
	Duplicate 07/22/10	14,000	140,000	--	<14,000	290	2,000	240	2,500	--
09/23/11	LNAPL Globules present - well not sampled									
07/25/12	LNAPL Globules present - well not sampled									
GEI-8	09/03/03	11,000	83,900	--	--	38.4	342	229	2,350	--
	04/23/04	8,850	107,000	--	--	152	834	161	1,930	--
	09/16/04	10,700	515,000	--	--	22.7	172	210	3,500	--
	04/20/05	6,920	571,000	--	--	14.9	189	136	1,740	--
	10/01/05	7,520	59,100	--	983	15.6	91.0	105	1,710	--
	04/18/06	4,870	43,600	--	1,110	14.8	131	148	1,620	--
	09/16/06	4,200	27,000	--	<960	14	93	89	1,200	--
	03/17/07	4,900	11,000	--	290	20	100	100	1,400	--
	09/11/07	4,000	48,000	--	<1000	20	100	100	1,300	--
	04/04/08	Well not sampled - inaccessible								
	09/18/08	Well not sampled - inaccessible								
	07/29/09	6,760	42,800	--	1,930	8.60	39.6	112	1,090	--
	07/22/10	4,900	280,000	--	<13,000	9.4	53	96	1,400	--
	09/24/11	LNAPL Globules present - well not sampled								
	07/25/12	LNAPL Globules present - well not sampled								
GEI-9	09/03/03	LNAPL present - 0.01' - well not sampled								
	04/23/04	1,030	51,600	--	--	5.01	29.0	12.2	161	--
	09/16/04	1,490	276,000	--	--	1.58	2.63	6.73	59.3	--
	04/20/05	1,480	517,000	--	--	1.70	<0.500	7.31	41.9	--
	10/01/05	1,090	93,900	--	<4,030	1.44	<0.500	5.68	43.3	--
	04/18/06	881	97,800	--	<7,940	2.02	<0.500	8.10	57.0	--
	09/16/06	410	56,000	--	<2,000	2.1	<0.5	6.6	36	--
	03/17/07	600	17,000	--	290	3	<1	10	70	--
	09/11/07	400	80,000	--	<1,900	<10	<10	<10	60	--
	04/11/08	397	34,100	--	<3,610	<2.50	<2.50	9.61	42.7	--
	09/18/08	491	113,000	--	<7,430	1.40	<2.50	5.94	35.1	--
	07/28/09	464	58,400	--	3,180	0.850	<1.00	7.31	26.5	--
	07/22/10	Well not sampled - Unable to locate								
	09/24/11	LNAPL Globules present - well not sampled								
	07/25/12	3,200	30,000	34,000	<1,400	0.9	<0.5	11	66	--



**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>
GEI-10	10/01/05	551	45,800	--	412	<0.500	<0.500	7.71	42.9	--
	04/18/06	689	43,400	--	510	<0.500	<0.500	40.0	135	--
	09/16/06	500	23,000	--	<500	<0.5	<0.5	13.0	53	--
	09/16/06 <sup>D</sup>	510	22,000	--	<500	<0.5	<0.5	13.0		--
	03/17/07	Well not sampled - unable to locate								
	09/09/07	700	19,000	--	<200	<1	<1	10	40	--
	09/09/07 <sup>D</sup>	400	32,000	--	<410	<10	<10	10	50	--
	04/12/08	640	18,700	--	<3,570	<2.50	<2.50	16.4	66.9	--
	09/18/08	256	19,300	--	<4,170	<1.00	<2.50	<2.50	8.48	--
	07/30/09	608	3,320	--	<394	<0.500	<1.00	7.64	31.9	--
	07/22/10	520	74,000	--	<6,800	<0.5	<2.0	6.5	27	--
	09/24/11	110	17,000	--	<3,400	<0.5	<0.5	0.7	3.8	--
	Duplicate 09/24/11	290	3,900	--	<660	<0.5	<0.5	1.1	4.6	--
	<b>07/25/12</b>	<b>330</b>	<b>40,000</b>	<b>19,000</b>	<b>&lt;3,400</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>3.5</b>	<b>13</b>	<b>--</b>
	Duplicate <b>07/25/12</b>	<b>370</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>4.1</b>	<b>16</b>	<b>--</b>
GEI-11	10/01/05	161,000	61,900	--	2,810	8,060	21,500	1,340	8,570	--
	04/18/06	--	--	--	--	--	--	--	--	--
	09/17/06	92,000	55,000	--	<3,900	6,300	19,000	1,500	9,100	--
	03/17/07	LNAPL present - 0.02' - well not sampled								
	09/12/07	100,000	93,000	--	<1,900	5,100	18,000	1,900	11,000	--
	04/12/08	101,000	439,000	--	<3,640	5,630	21,300	1,930	11,100	--
	09/18/08	103,000	71,100	--	<7,080	5,530	20,800	1,560	10,200	--
	07/27/09	No current access to well - under permit stipulation								
	07/21/10	No current access to well - under permit stipulation								
	09/24/11	No current access to well - under permit stipulation								
	<b>07/25/12</b>	<b>No current access to well - under permit stipulation</b>								
GEI-12	10/01/05	9,920	43,900	--	<410	233	478	290	2,040	--
	04/18/06	5,480	68,100	--	466	136	250	158	1,110	--
	09/16/06	6,200	56,000	--	<1,000	130	300	150	1,100	--
	03/17/07	LNAPL present - 0.04' - well not sampled								
	09/09/07	5,000	63,000	--	<2,000	100	300	100	1,100	--
	04/12/08	4,900	126,000	--	<3,610	86.3	102	145	979	--
	09/18/08	8,850	85,300	--	<7,080	334	598	214	1,740	--
	07/29/09	8,540 <sup>1</sup>	42,800	--	471	72.4 <sup>1</sup>	256 <sup>1</sup>	166 <sup>1</sup>	1,190 <sup>1</sup>	--
	07/22/10	6,800	77,000	--	<6,700	99	480	170	1,300	--
	09/24/11	LNAPL Globules present - well not sampled								
	<b>07/25/12</b>	<b>LNAPL Globules present - well not sampled</b>								
MW-1	09/23/11	37	110	--	<67	<0.5	<0.5	<0.5	<1.5	--
	<b>07/25/12</b>	<b>35</b>	<b>190</b>	<b>&lt;49</b>	<b>100</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	<b>--</b>
MW-2	10/01/05	94.4	<403	--	<403	<0.500	<0.500	<0.500	<1.50	--
	04/18/06	<500	918	--	<391	<0.500	<0.500	<0.500	<1.50	--
	09/15/06	14	260	--	490	<0.5	<0.5	<0.5	<1.5	--
	03/17/07	20	470	--	310	<1	<1	<1	<2	--
	09/09/07	<10	160	--	87	<1	<1	<1	<2	--
	09/09/07 <sup>D</sup>	<10	210	--	160	<1	<1	<1	<2	--
	04/12/08	<50.0	1,130	--	<708	<0.500	<0.500	<0.500	<1.00	--
	09/18/08	<50.0	613	--	<743	0.210	<0.500	<0.500	<1.00	--
	07/30/09	12,100 <sup>1</sup>	8,470 <sup>1</sup>	--	1,100 <sup>1</sup>	1,220 <sup>1</sup>	61.0 <sup>1</sup>	263 <sup>1</sup>	1,680 <sup>1</sup>	--
	07/22/10	13	300	--	140	<0.5	<0.5	<0.5	<1.5	--
	09/23/11	25	710	--	360	<0.5	<0.5	<0.5	<1.5	--
	<b>07/25/12</b>	<b>33</b>	<b>200</b>	<b>&lt;48</b>	<b>79</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;1.5</b>	<b>--</b>
MW-3	07/22/10	16	330	--	1,900	<0.5	<0.5	<0.5	<1.5	--
	09/23/11	400	7,500	--	<1,300	22	9.3	6.9	63	--
	<b>07/25/12</b>	<b>6,100</b>	<b>7,200</b>	<b>1,800</b>	<b>1,700</b>	<b>630</b>	<b>24</b>	<b>180</b>	<b>1,200</b>	<b>--</b>

**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>	
MW-4	10/01/05	--	--	--	--	--	--	--	--	--	
	04/18/06	<500	<407	--	<407	<0.500	<0.500	<0.500	<1.50	--	
	09/15/06	<10	98	--	200	<0.5	<0.5	<0.5	<1.5	--	
	03/16/07	60	85	--	110	30	<1	<1	<2	--	
	09/09/07	<10	65	--	140	<1	<1	<1	<2	--	
	04/11/08	<50.0	<106	--	<798	<0.500	<0.500	<0.500	<1.00	--	
	09/18/08	<50.0	164	--	<743	<0.200	<0.500	<0.500	<1.00	--	
	07/30/09	<50.0	<391	--	803	<0.500	<1.00	<1.00	<3.00	--	
	07/22/10	<10	62	--	93	<0.5	<0.5	<0.5	<1.5	--	
	09/23/11	<10	68	--	69	<0.5	<0.5	<0.5	<1.5	--	
	07/25/12	<10	<50	<50	<70	<0.5	<0.5	<0.5	<1.5	--	
MW-5	10/01/05	16,200	51,500	--	668	245	1,620	270	3,070	--	
	04/18/06	21,500	114,000	--	<7,810	287	3,220	498	3,910	--	
	09/15/06	18,000	42,000	--	<1,000	220	1,700	370	2,800	--	
	09/15/06 <sup>D</sup>	18,000	77,000	--	<1,900	230	1,900	410	3,400	--	
	03/17/07	Well not sampled - Sheen present									
	09/12/07	14,000	53,000	--	<990	200	1,900	400	2,700	--	
	04/12/08	29,700	165,000	--	<3,540	152	2,530	627	6,030	--	
	09/18/08	29,900	58,600	--	<7,430	163	1,080	464	4,900	--	
	07/30/09	16,500 <sup>1</sup>	10,000 <sup>1</sup>	--	492 <sup>1</sup>	84.7 <sup>1</sup>	977 <sup>1</sup>	367 <sup>1</sup>	2,130 <sup>1</sup>	--	
	07/22/10	22,000	380,000	--	<17,000	140	1,600	360	4,000	--	
	09/23/11	LNAPL Globules present - well not sampled									
	07/25/12	8,000	450,000	480,000	<18,000	56	640	310	2,300	--	
	MW-6	10/01/05	Well not sampled - not accessible.								
04/18/06		624	1,120	--	<391	138	<0.500	10.0	7.50	--	
09/15/06		39	210	--	260	8.1	<0.5	1.0	<1.5	--	
03/16/07		200	280	--	170	30	<1	1	<2	--	
03/16/07 <sup>D</sup>		100	250	--	180	30	<1	1	<2	--	
09/11/07		40	300	--	280	7	<1	<1	<2	--	
04/11/08		77.1	1,100	--	<750	17.4	<0.500	<0.500	<1.00	--	
09/18/08		<50.0	398	--	<743	0.525	<0.500	<0.500	<1.00	--	
07/30/09		<50.0	<403	--	<403	2.44	<1.00	<1.00	<3.00	--	
07/22/10		160	390	--	150	15	2.1	1.6	12	--	
09/23/11		<10	100	--	150	<0.5	<0.5	<0.5	<1.5	--	
07/25/12		<10	180	<50	140	1	<0.5	<0.5	<1.5	--	
MW-13		08/03/07	40	44	--	51	1	<1	<1	<2	--
	09/09/07	70	70	--	63	2	<1	<1	<2	--	
	04/04/08	Well not sampled - ice in well									
	09/18/08	62.7	151	--	<708	0.814	<0.500	<0.500	<1.00	--	
	07/27/09	No current access to well - under permit stipulation									
	07/22/10	No current access to well - under permit stipulation									
	09/24/11	No current access to well - under permit stipulation									
07/25/12	No current access to well - under permit stipulation										
MW-14	09/22/10	200	900	--	260	14	<0.5	<0.5	2	--	
	09/23/11	300	820	--	400	12	<0.5	2.8	8.9	--	
	07/25/12	360	540	60	150	14	<0.5	<0.5	3.9	--	
MW-15	09/22/10	38,000	40,000	--	<3,900	1,300	5,700	920	6,700	--	
	09/23/11	LNAPL Globules present - well not sampled									
	07/25/12	LNAPL Globules present - well not sampled									
K-5	08/25/99	LNAPL present - 0.29' - well not sampled									
	08/16/00	4,140	133,000	--	<4,030	<12.5	<12.5	<19.2	<54.0	--	
	10/01/05	18,100	86,600	--	<4,030	<0.500	<0.500	2.26	7.56	--	
	04/18/06	--	--	--	--	--	--	--	--	--	
	09/27/06	610	17,000	--	<480	<0.5	<0.5	0.5	<1.5	--	
	03/17/07	Well not sampled - unable to remove cover									
	09/09/07	1,800	110,000	--	<1,900	<1	<1	2	10	--	
	04/12/08	195	24,000	--	<3,680	<0.500	<0.500	0.758	2.80	--	
	09/18/08	484	69,700	--	<7,500	<0.200	<0.500	0.749	4.38	--	
	07/29/09	493	9,160	--	397	<0.500	<1.00	<1.00	4.16	--	
	07/22/10	360	78,000	--	<6,900	<0.5	<0.5	1	6	--	
09/24/11	86	11,000	--	<680	<0.5	<0.5	<0.5	<1.5	--		
07/25/12	Well not sampled - inaccessible										

**Table 2c  
Groundwater Analytical Data**

Former Unocal Bulk Plant 306456  
328 1/2 Illinois Street  
Fairbanks, Alaska

Monitoring Well ID	Date	GRO	DRO	DRO SG	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Dissolved Lead	
<b>ADEC GCL</b>		<b>2,200</b>	<b>1,500</b>	<b>NE</b>	<b>1,100</b>	<b>5.0</b>	<b>1,000</b>	<b>700</b>	<b>10,000</b>	<b>15</b>	
<b>K-7</b>	10/01/05	<50	421	--	<417	<0.500	<0.500	<0.500	<1.50	--	
	04/18/06	429	--	--	--	<0.500	<0.500	1.71	5.28	--	
	09/16/06	<10	72	--	250	<0.5	<0.5	<0.5	<1.5	--	
	03/17/07	Well not sampled - unable to locate									
	09/09/07	<100	71	--	240	<10	<10	<10	<20	--	
	04/04/08	Well not sampled - ice in well									
	09/18/08	<50.0	<100	--	<750	<0.200	<0.500	<0.500	<1.00	--	
	07/29/09	<50.0	416	--	504	<0.500	<1.00	<1.00	<3.00	--	
	07/22/10	<10	62	--	100	<0.5	<0.5	<0.5	<1.5	--	
	09/24/11	<10	71	--	140	<0.5	<0.5	<0.5	<1.5	--	
	07/25/12	Well not sampled - inaccessible									
<b>Trip Blank</b>	04/18/06	<50	421	--	<417	<0.500	<0.500	<0.500	<1.50	--	
	09/14/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
	09/14/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
	03/17/07	<10	--	--	--	<1	<1	<1	<2	--	
	09/09/07	<10	--	--	--	<1	<1	<1	<2	--	
	04/11/08	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00	--	
	07/30/09	<50.0	--	--	--	<0.200	<0.500	<0.500	<1.00	--	
	07/22/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
	09/23/11	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	
	07/25/12	<10	--	--	--	<0.5	<0.5	<0.5	<1.5	--	

**Notes:**

All results are reported in micrograms per liter (µg/L)  
 GRO = Gasoline range organics, analyzed by GRO AK101  
 DRO = Diesel range organics, analyzed by DRO AK102  
 DRO SG = Diesel range organics, analyzed by DRO AK102  
 RRO = Residual range organics, analyzed by RRO AK103  
 Benzene, Toluene, Ethylbenzene, Total Xylenes by EPA Method 8021B  
 Dissolved lead by EPA Method 200.8  
 EDB = 1,2-Dibromoethane by EPA Method 8260B  
 MTBE = Methyl tert-Butyl ether by EPA Method 8021B  
 LNAPL = Light non-aqueous phase liquid  
 GCL = ADEC 18 AAC 75 Groundwater Cleanup Level  
 Bold Type = Results of most recent sampling event  
 Highlighted concentrations are greater than the applicable ADEC GCL.  
 NE = Not Established  
<sup>D</sup> = Duplicate sample  
 \*-- = Analyte not included in sampling event  
<sup>1</sup> = Sample required dilution due to high concentrations of target analyte.  
<sup>2</sup> = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.  
<sup>3</sup> = Concentration reported by the EPA 8260B method was greater than concentration reported by the AK 101 method. The listed concentrations are results from the 8260B analysis.

Table 3  
Groundwater Volatile Organic Compounds (VOCs) Analytical Data

Former Chevron 1001430, 418 Illinois Street  
Former Texaco 211815, 401 Driveway Street  
Former Unocal 306456, 328 1/2 Illinois Street  
Fairbanks, Alaska

EPA Method:		8011														8260B										8021B
Well	Sample Date	1,2-Dibromoethane	1,2-Dibromoethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1,1-Trichloroethane	Carbon Tetrachloride	1,2-Dichloroethane	cis-1,2-Dichloroethene	Trans-1,2-Dichloroethene	Naphthalene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Trichlorofluoromethane	Trichloroethene	Tetrachloroethene	Isopropylbenzene	Trichloroethene (Trichloroethylene)	Trichlorofluoromethane (Freon 11)	m+p-Xylene	n-Propylbenzene	o-Xylene	Mmethyl Tertiary Butyl Ether (MTBE)			
ADEC GCL		0.05	0.05	7,300	7	200	5	5	70	100	730	1,800	1,800	11,000	5	5	3,700	5	11,000	NE	370	NE	470			
Former Chevron 1001430																										
TH-13	10/03/05	<0.0094	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	△ 2.5		
	09/14/06	<0.0095	<0.5	<0.5	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	03/15/07	<0.0097	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	09/13/07	<0.0098	..	<1	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	1	<0.8	..	..	..	..	..	..	..	..		
	04/10/08	<0.010	<1.00	<1.00	..	<1.00	<1.00	<1.00	..	..	..	..	..	..	<1.00	<1.00	..	..	..	..	..	..	..	..	..	
	09/17/08	<0.010	..	<1.00	..	<1.00	<1.00	<1.00	..	..	..	..	..	..	<1.00	<1.00	..	..	..	..	..	..	..	..	..	
TH-17	10/03/05	<0.0088	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	09/14/06	<0.0096	<0.5	<0.5	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	△ 10		
	03/15/07	<0.0097	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	1	<0.8	..	..	..	..	..	..	..	..		
	09/13/07	<0.0097	..	<1	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	1	<0.8	..	..	..	..	..	..	..	..		
	04/04/08																									
	09/17/08	<0.010	..	<1.00	..	<1.00	<1.00	<1.00	..	..	..	..	..	..	<1.00	<1.00	..	..	..	..	..	..	..	..	..	
09/17/08 <sup>b</sup>	<0.010	..	<1.00	..	<1.00	<1.00	<1.00	..	..	..	..	..	..	<1.00	<1.00	..	..	..	..	..	..	..	..	..		
Well not sampled - monument underwater																										
Trip Blank	10/03/05	<0.0094	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	04/20/06	<0.0096	<0.5	<1	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	△ 2.5		
	09/13/06	<0.0098	<0.5	<1	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	03/14/07	<0.0099	<1	<1	..	<0.8	△ 1	<1	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..		
	09/12/07	<0.0099	..	<1	..	<0.8	△ 1	<0.5	..	..	..	..	..	..	<1	<0.8	..	..	..	..	..	..	..	..	..	

Table 3  
Groundwater Volatile Organic Compounds (VOCs) Analytical Data

Former Chevron 1001430, 418 Illinois Street  
Former Texaco 211815, 401 Driveway Street  
Former Unocal 306456, 328 1/2 Illinois Street  
Fairbanks, Alaska

EPA Method:		8011														8260B										8021B
Well	Sample Date	1,2-Dibromoethane	1,2-Dibromoethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1,1-Trichloroethane	Carbon Tetrachloride	1,2-Dichloroethane	cis-1,2-Dichloroethane	Trans-1,2-Dichloroethane	Naphthalene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Trichlorofluoromethane	Trichloroethene	Tetrachloroethene	Isopropylbenzene	Trichloroethene (Trichloroethylene)	Trichlorofluoromethane (Freon 11)	m+p-Xylene	n-Propylbenzene	o-Xylene	Mmethyl Tertiary Butyl Ether (MTBE)			
ADEC GCL		0.05	0.05	7,300	7	200	5	5	70	100	730	1,800	1,800	11,000	5	5	3,700	5	11,000	NE	370	NE	470			
Former Texaco 211815																										
AR-81	04/20/06 07/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.5 <2.5		
AR-85	04/20/06 07/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.5 <2.5		
MW-2	03/16/07 09/10/07	<0.0099 <0.0099	<0.5 <1	<1 <1	-- --	<0.8 <0.8	<1 <1	<0.5 <0.5	-- --	-- --	-- --	-- --	-- --	<1 <1	<0.8 <0.8	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --	-- --		
MW-3	10/03/05 04/20/06 09/12/06 03/16/07 09/10/07 04/10/08 09/17/08 09/17/08 <sup>g</sup> 09/22/11 07/27/12	<0.0094 <0.0097 <0.0096 <0.0097 <0.0099 0.01 0.014 0.015 -- -- <b>&lt;0.0095</b>	<5 <1 <3 <1 <2 <1.00 -- -- -- --	<5 <2 <5 <2 <2 <1.00 -- -- -- --	-- -- -- -- -- -- -- -- -- --	<4 <2 <4 <2 <2 <1.00 -- -- -- --	<5 <2 <5 <2 <2 <1.00 -- -- -- --	<5 <1 <3 <1 <1 <b>10.2</b> -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	<5 <2 <b>7</b> <2 <2 2.33 1.44 1.00 <1 <b>&lt;1</b>	<0.8 <0.8 -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	-- -- -- -- -- -- -- -- -- --	
MW-4	10/03/05 04/20/06 09/12/06 07/20/10 09/22/11 07/27/12	0.025 -- 0.039 -- -- <b>&lt;0.0095</b>	<10 -- -- -- -- --	<10 -- -- -- -- --	-- -- -- -- -- --	<8 -- -- -- -- --	<10 -- -- -- -- --	<10 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	<10 -- -- -- -- --	<8 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --		
LNAPL present - 0.32' - well not sampled																										
MW-5	07/20/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	220 74 <200 12	
MW-7	10/03/05 04/20/06 07/31/09 07/20/10 09/22/11 07/27/12	<0.0094 -- -- -- -- <b>&lt;0.0095</b>	<3 -- -- -- -- --	<3 -- -- -- -- --	-- -- -- -- -- --	<2 -- -- -- -- --	<3 -- -- -- -- --	<3 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	<3 -- -- -- -- --	<2 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --		
MW-8	10/03/05 04/20/06 07/30/09 07/21/10 09/22/11 07/27/12	0.026 -- -- -- -- <b>&lt;0.0095</b>	<1 -- -- -- -- --	<1 -- -- -- -- --	-- -- -- -- -- --	<0.8 -- -- -- -- --	<1 -- -- -- -- --	<1 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	<1 -- -- -- -- --	<0.8 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --		
MW-9	10/03/05 04/20/06 07/30/09 07/21/10 09/22/11 07/27/12	<0.0094 -- -- -- -- <b>&lt;0.0095</b>	<1 -- -- -- -- --	<1 -- -- -- -- --	-- -- -- -- -- --	<0.8 -- -- -- -- --	<1 -- -- -- -- --	<1 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	<1 -- -- -- -- --	<0.8 -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	-- -- -- -- -- --	
MW-10	10/03/05 04/20/06 04/20/06 <sup>g</sup>	<0.0094 -- --	<1 -- --	<1 -- --	-- -- --	<0.8 -- --	<1 -- --	<1 -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	<1 -- --	<0.8 -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Trip Blank	09/11/06 03/15/07 09/09/07	<0.0098 -- <0.0099	<0.5 -- <1	<1 -- <1	-- -- --	<0.8 -- <0.8	<1 -- <1	<0.5 -- <0.5	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	<1 -- <1	<0.8 -- <0.8	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	

Table 3  
Groundwater Volatile Organic Compounds (VOCs) Analytical Data

Former Chevron 1001430, 418 Illinois Street  
Former Texaco 211815, 401 Driveway Street  
Former Unocal 306456, 328 1/2 Illinois Street  
Fairbanks, Alaska

EPA Method:		8011														8260B										8021B
Well	Sample Date	1,2-Dibromoethane	1,2-Dibromoethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1,1-Trichloroethane	Carbon Tetrachloride	1,2-Dichloroethane	cis-1,2-Dichloroethane	Trans-1,2-Dichloroethane	Naphthalene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Trichlorofluoromethane	Trichloroethene	Tetrachloroethene	Isopropylbenzene	Trichloroethene (Trichloroethylene)	Trichlorofluoromethane (Freon 11)	m+p-Xylene	n-Propylbenzene	o-Xylene	Mmethyl Tertiary Butyl Ether (MTBE)			
ADEC GCL		0.05	0.05	7,300	7	200	5	5	70	100	730	1,800	1,800	11,000	5	5	3,700	5	11,000	NE	370	NE	470			
<b>Former Unocal Bulk Plant 306456</b>																										
GEI-2	09/17/06	120	140	<1.0	--	<0.8	<1.0	<0.5	--	--	--	--	--	--	<1.0	<0.8	--	<1	--	--	--	--	--	<500		
	09/12/07	96	--	<2	--	<2	<2	<1	--	--	--	--	--	--	<2	<2	--	<2	--	--	--	--	--	--		
	04/11/08	73.3	--	<1.00	--	<1.00	<1.00	<1.00	--	--	--	--	--	--	<1.00	<1.00	--	<1.00	--	--	--	--	--	--		
	09/18/08	152	--	<1.00	--	<1.00	<1.00	<1.00	--	--	--	--	--	--	<1.00	<1.00	--	<1.00	--	--	--	--	--	--		
	09/18/08 <sup>6</sup>	146	--	<1.00	--	<1.00	<1.00	<1.00	--	--	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--	--	--		
	07/30/09	120 <sup>3</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<1,000 <sup>2</sup>	2,120 <sup>2</sup>	510 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	--	--	--	--	--	--	--	<500 <sup>2</sup>		
	07/30/09 <sup>6</sup>	131 <sup>3</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<1,000 <sup>2</sup>	2,360 <sup>2</sup>	565 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	<500 <sup>2</sup>	--	--	--	--	--	--	--	<500 <sup>2</sup>		
	07/22/10	49	--	--	--	<40	<40	<40	--	--	--	--	--	<40	<40	--	--	--	--	--	--	--	--	--		
GEI-7	09/12/07	3.1	--	2	--	<0.8	<1	<0.5	--	--	--	--	--	--	3	11	--	3	--	--	--	--	--	--		
	09/18/08	13.8	--	1.88	--	<1.00	<1.00	9.27	--	--	--	--	--	--	3.84	16.5	--	3.84	--	--	--	--	--	--		
	07/30/09	4.75 <sup>3</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	407 <sup>2</sup>	681 <sup>2</sup>	231 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	--	<100 <sup>2</sup>	--	--	--	--	--	<100 <sup>2</sup>		
	07/30/09 <sup>6</sup>	4.51 <sup>3</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	659 <sup>2</sup>	792 <sup>2</sup>	254 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	<100 <sup>2</sup>	--	<100 <sup>2</sup>	--	--	--	--	--	<100 <sup>2</sup>		
	07/22/10	3.3	--	--	--	14	14	14	--	--	--	--	--	<10	<10	15	--	15	--	--	--	--	--	--		
GEI-9	03/16/07	0.014	<0.5	<1	--	<0.8	<1	<0.5	--	--	--	--	--	--	<1	<0.8	--	<1	--	--	--	--	--	--		
GEI-11	09/17/06	1.9	2	<1.0	--	<0.8	<1.0	<0.5	--	--	--	--	--	--	<1.0	<0.8	--	<1	--	--	--	--	--	<250		
	04/12/08	2.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
GEI-12	04/12/08	<0.010	--	--	--	<1.00	<1.00	<1.00	--	--	--	--	--	<1.00	<1.00	--	--	<1.00	--	--	--	--	--	--		
MW-1	07/25/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.5		
MW-2	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5		
MW-3	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	<1	<0.8	--	--	--	--	--	--	--	<0.5		
	07/25/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-4	07/30/09	--	--	--	<1.00	--	--	--	<1.00	<1.00	--	--	--	--	<1.00	<1.00	--	--	--	--	--	--	--	<1.00		
	07/22/10	--	--	--	--	--	--	--	<0.8	<0.8	--	--	--	--	<0.8	<0.8	--	--	--	--	--	--	--	<0.5		
	09/23/11	--	<0.5	<1	--	--	--	<0.5	--	--	<1	<1	<1	--	<0.8	<0.8	<1	<1	<2	<0.5	<1	<0.5	<0.5	<2.5		
MW-5	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3		
MW-6	07/30/09	--	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	<4.00 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	71.2 <sup>1</sup>	<2.00 <sup>1</sup>	<2.00 <sup>1</sup>	--	--	--	--	--	--	--	<2.00 <sup>1</sup>		
	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.6		
	07/25/12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<2.5		
MW-13	09/09/07	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
	09/18/08	<0.010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
MW-14	9/22/2010	--	--	--	--	--	--	<0.5	--	--	--	--	--	--	--	2	<1	12	2	2	<0.5	<0.5	--	--		
	09/23/11	--	<0.5	<1	--	--	--	<0.5	--	--	2	3	1	--	<0.8	1	<1	8	3	<1	3	<0.5	<0.5			
	07/25/12	--	--	--	--	--	--	--	--	--	--	--	--	<1	<0.8	--	--	--	--	--	--	--	--	4.9		
MW-15	9/22/2010	--	--	--	--	--	--	<5	--	--	--	--	--	--	--	68	<10	<20	5,600	130	2,800	--	--			
K-5	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5		
K-7	07/22/10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.5		
Trip Blank	03/17/07	<0.0098	<0.5	<1	--	<0.8	<1	<0.5	--	--	--	--	--	<1	<0.8	<0.8	--	--	--	--	--	--	--	--		
	09/09/07	<0.0099	--	<1	--	<0.8	<1	<0.5	--	--	--	--	--	<1	<0.8	<0.8	--	--	--	--	--	--	--	--		

Notes:

- All results are reported in micrograms per liter (µg/L)
- RCRA = Resource Conservation and Recovery Act; samples analyzed using EPA Methods 7470 (mercury only) and 6010B
- GCL = ADEC 18 AAC 75 Groundwater Cleanup Level
- Bold Type = Results of most recent sampling event
- Highlighted concentrations are greater than the applicable ADEC GCL.
- = sample was not analyzed for this compound
- <25 = result did not exceed indicated method reporting limit; an elevated reporting limit indicates sample was diluted
- <sup>1</sup> = Reporting limit raised due to high concentrations of non-target analytes.
- <sup>2</sup> = Sample required dilution due to high concentrations of target analyte.
- <sup>3</sup> = Sample analyzed via EPA Method 504.1
- <sup>4</sup> = Reporting limit raised due to insufficient sample volume.
- <sup>5</sup> = Sample analyzed via EPA Method 8011
- <sup>6</sup> = Sample analyzed via EPA Method 8260B
- <sup>6</sup> = Duplicate
- NE = Not Established

**Table 4**  
**Groundwater Polycyclic Aromatic Hydrocarbons Analytical Data**

Former Chevron 1001430, 418 Illinois Street  
Former Texaco 211815, 401 Driveway Street  
Former Unocal 306456, 328 1/2 Illinois Street  
Fairbanks, Alaska

Well	Sample Date	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	1-Methylnaphthalene	2-Methylnaphthalene		
		730	2,200	2,200	1,500	11,000	11,000	1,500	1,100	1.2	120	1.2	12	0.2	0.12	0.12	1,100	150	150		
<b>Former Chevron 1001430</b>																					
TH-1	07/20/10	17	<0.95	<0.95	2.7	<0.95	1.7	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	<0.95	--	--	
TH-2	07/19/10	0.11	<0.010	0.15	0.32	<0.010	<0.010	<0.010	0.015	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	--	
TH-5	07/19/10	11	0.22	0.83	3.5	3.4	0.62	0.50	0.44	0.041	0.094	0.044	0.016	0.012	<0.0095	<0.0095	0.011	--	--		
TH-7	07/19/10	340	1.4	2.7	8.2	6.5	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	<0.97	--	--	
TH-10	07/19/10	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	--	--	
TH-13	10/03/05	18	<0.02	6	8	16	4	8	7	1	1	0.4	0.1	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	
	4/20/06	Well not sampled - buried under ice, monument filled																			
	09/14/06	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	03/15/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	09/13/07	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	04/10/08	<0.0971	0.466	0.505	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971
09/17/08	12.7	0.356	0.822	0.834	0.282	<0.100	0.318	0.562	0.192	0.240	0.126	0.138	0.104	0.106	0.124	<0.100	<0.100	6.58	1.91		
TH-17	10/03/05	15	<0.02	0.6	1	0.4	0.02	0.06	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	
	4/20/06	Well not sampled - buried under ice, monument filled																			
	09/14/06	19	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	03/15/07	26	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	09/13/07	26	<1	<1	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	04/04/08	Well not sampled - monument under water																			
09/17/08	14.2	0.800	0.718	1.43	0.274	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	17.5	4.23	
09/17/08 <sup>a</sup>	9.05	0.666	0.416	1.25	0.200	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	11.8	2.43	
<b>Former Texaco 211815</b>																					
AR-81	07/20/10	0.24	<0.0098	0.11	0.37	0.041	<0.0098	0.011	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	--	--	
AR-85	07/20/10	0.018	<0.0096	<0.0096	0.010	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	--	--
MW-2	03/16/07	130	<1	3	6	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	09/10/07	140	1	2	7	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
MW-3	10/03/05	140	<0.2	4	6	9	3	0.1	0.3	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	
	4/20/06	100	<1	<1	2	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	09/12/06	120	<1	2	3	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	03/16/07	41	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	09/10/07	72	<1	<1	2	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	04/10/08	112	<0.0990	<0.0990	1.19	1.25	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	<0.0990	40.2
	09/17/08	53.8	<0.100	0.550	1.21	1.15	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	18.7	17.2
	09/17/08 <sup>a</sup>	47.5	<0.100	0.522	1.14	1.13	0.268	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	17.3	14.9
	09/22/11	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-4	10/03/05	390	<0.2	6	14	25	3	0.9	0.6	<0.2	<0.2	<0.2	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	--	--	
	4/20/06	LNAPL present - 0.32' - well not sampled																			
	09/12/06	400	3	4	12	16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
	03/16/07	LNAPL present - 0.46' - well not sampled																			
	07/20/10	430	2.0	3.4	16	26	2.9	0.66	0.51	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--	--
09/22/11	260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	07/20/10	21	<0.096	0.099	0.29	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	<0.096	--	--
MW-7	10/03/05	31	<0.02	0.3	<0.01	0.04	0.04	0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	--
	07/20/10	51	<0.0097	0.094	0.065	0.029	0.045	0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	--	--
	09/22/11	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	10/03/05	24	<0.02	0.2	0.1	0.03	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	--
	07/21/10	28	<0.0097	0.021	0.031	0.015	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	--	--
	09/22/11	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4  
Groundwater Polycyclic Aromatic Hydrocarbons Analytical Data

Former Chevron 1001430, 418 Illinois Street  
Former Texaco 211815, 401 Driveway Street  
Former Unocal 306456, 328 1/2 Illinois Street  
Fairbanks, Alaska

Well	Sample Date	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	1-Methylnaphthalene	2-Methylnaphthalene	
ADEC GCL		730	2,200	2,200	1,500	11,000	11,000	1,500	1,100	1.2	120	1.2	12	0.2	1.2	0.12	1,100	150	150	
MW-9	10/03/05	0.2	<0.02	<0.01	<0.01	0.03	<0.02	0.01	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02		
	07/21/10	0.10	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097			
	09/22/11	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10	10/03/05	2	<0.02	0.5	0.4	0.05	0.03	0.04	0.03	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	
<b>Former Unocal 306456</b>																				
GEI-2	09/17/06	400	<10	<10	11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--	
	09/12/07	560	<10	<10	28	19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--	
	04/11/08	375	<5.00	<5.00	7.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	130	182	
	09/18/08	458	<5.00	<5.00	22.1	13.5	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	261	360
	09/18/08 <sup>a</sup>	519	<5.56	<5.56	23.2	14.6	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	<5.56	290	397
07/22/10	0.67	0.0022	0.0061	0.024	0.023	0.0034	0.0034	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	--	--	
GEI-3	07/21/10	0.48	<0.0025	0.014	0.030	0.029	0.0089	0.0034	0.0046	0.0088	0.0010	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	--	--
GEI-4	07/21/10	0.096	<0.0018	0.0036	0.0079	0.0018	0.0012	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	--	--
GEI-5	07/22/10	0.000096	0.000011	0.000015	<0.000096	0.000076	0.000037	0.000099	0.000097	0.000017	0.000025	0.000024	0.000040	0.000016	<0.000096	<0.000096	0.000018	--	--	
GEI-7	09/12/07	630	3	<1	9	4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
	09/18/08	709	<11.1	<11.1	14.4	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	<11.1	564	716	
	07/22/10	0.68	0.0025	0.0035	0.0097	0.0031	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	
GEI-8	07/22/10	0.87	<0.0025	0.012	0.032	0.0099	0.0015	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	--	--
GEI-9	03/17/07	47	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	--	--	
GEI-10	07/22/10	0.012	<0.0017	0.0061	0.0022	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	<0.00049	--	--
GEI-11	09/17/06	580	<10	<10	20	19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--	
GEI-12	04/12/08	175	<0.943	<0.943	4.34	1.70	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	<0.943	166	213	
	07/22/10	0.42	0.014	0.012	0.034	0.019	0.0033	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	<0.00051	--	--	
K-5	07/22/10	0.045	<0.0027	0.0094	0.018	0.0063	0.0011	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	--	--	
K-7	07/22/10	0.000013	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	--	--
MW-2	07/22/10	0.000093	<0.000098	<0.000098	0.000023	0.000011	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	--	--
MW-3	07/22/10	0.000025	<0.000098	0.000035	<0.000098	0.000054	0.000080	0.000052	0.000068	0.000017	0.000083	<0.000098	0.000012	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	--	--
MW-4	07/22/10	0.000011	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	--	--
	09/23/11	<1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	07/22/10	0.38	0.0059	0.011	0.037	0.044	0.010	0.0053	0.0063	0.0099	0.0012	0.00061	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	<0.00048	--	--
MW-6	07/22/10	0.00060	<0.000010	0.000034	0.000081	0.00018	0.00024	0.00020	0.00017	0.00019	0.000063	0.000026	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	--	--
MW-14	09/22/10	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	09/23/11	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
K-5	07/22/10	45	<2.7	9.4	18	6.3	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
K-7	07/22/10	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.013	<0.0098	<0.0098	<0.0098	--	--

**Notes:**

All results are reported in micrograms per liter (µg/L)

Naphthalene by EPA 8260B

GCL = ADEC 18 AAC 75 Groundwater Cleanup Level

Highlighted concentrations are greater than the applicable ADEC GCL.

Bold Type = Results of most recent sampling event

<sup>a</sup> = duplicate sample

-- = sample was not analyzed for this compound

<25 = result did not exceed indicated method reporting limit; an elevated reporting limit indicates sample was diluted

Highlighted concentrations are greater than the applicab



**Table 5  
Geochemical Parameter Monitoring Results**

Former Chevron Bulk Plant 1001430  
418 Illinois Street  
Fairbanks, Alaska

Relative Location	Monitoring Well ID	Date Sampled	Total Alkalinity (mg/L as CaCO <sub>3</sub> ) <sup>1</sup>	Sulfate (mg/L) <sup>2</sup>	Nitrate as Nitrogen (mg/L) <sup>2</sup>	Nitrite as Nitrogen (mg/L) <sup>2</sup>	Methane (mg/L) <sup>3</sup>
Within Plume	<b>TH-1</b>	07/28/12	424	2.6	<0.25 <sup>4</sup>	<0.4 <sup>4</sup>	1.5
Within Plume	<b>TH-2</b>	07/28/12	358	1.8	0.26 <sup>4</sup>	<0.4 <sup>4</sup>	14
Within Plume Close to Source	<b>TH-5</b>	07/28/12	328	19.4	<0.25 <sup>4</sup>	<0.4 <sup>4</sup>	0.16
Cross gradient	<b>TH-7</b>	07/28/12	269	24.6	<0.25 <sup>4</sup>	<0.4 <sup>4</sup>	0.21
Up gradient	<b>TH-10</b>	07/28/12	305	39.5	0.49 <sup>4</sup>	<0.4 <sup>4</sup>	<0.005

<sup>1</sup>: Total alkalinity analyzed using EPA method 310.1

<sup>2</sup>: Sulfate and nitrate as nitrogen analyzed by EPA method 300.0

<sup>3</sup>: Methane analyzed by RSKSOP-175

<sup>4</sup>: Sample was received and analyzed past holding time

mg/L = milligrams per liter

"<" = Indicates analyte not detected above reporting limit

**Table 6**  
**Geochemical Parameter Monitoring Results**

Former Texaco Bulk Plant 211815  
410 Driveway Street  
Fairbanks, Alaska

Relative Location	Monitoring Well ID	Date Sampled	Total Alkalinity (mg/L as CaCO <sub>3</sub> ) <sup>1</sup>	Sulfate (mg/L) <sup>2</sup>	Nitrate as Nitrogen (mg/L) <sup>2</sup>	Nitrite as Nitrogen (mg/L) <sup>2</sup>	Methane (mg/L) <sup>3</sup>
Cross gradient	AR-81	07/27/12	337	2.4	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	0.69
Up gradient	AR-85	07/27/12	332	3.1	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	0.73
Up gradient	MW-1	07/27/12	338	23.2	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	1.2
Within Plume	MW-3	07/27/12	246	13.1	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	0.14
Within Plume	MW-4	07/27/12	402	<1.5	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	22
Within Plume	MW-5	07/27/12	422	32.6	2.5 <sup>4</sup>	<0.40 <sup>4</sup>	4.7
Within Plume, Down gradient	MW-7	07/27/12	318	<1.5	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	4.5
Within Plume, Down gradient	MW-8	07/27/12	329	2.9	<0.25 <sup>4</sup>	<0.40 <sup>4</sup>	3.7
Down gradient	MW-9	07/27/12	254	16.3	1.1 <sup>4</sup>	<0.40 <sup>4</sup>	0.005

<sup>1</sup>: Total alkalinity analyzed using EPA method 310.1

<sup>2</sup>: Sulfate and nitrate/nitrite as nitrogen analyzed by EPA method 300.0

<sup>3</sup>: Methane analyzed by RSKSOP-175

<sup>4</sup>: Sample was received and analyzed past holding time  
mg/L = milligrams per liter

"<" = Indicates analyte not detected above reporting limit

**Table 7  
Geochemical Parameter Monitoring Results**

Former Unocal Bulk Plant 306456  
328.5 Illinois Street  
Fairbanks, Alaska

Relative Location	Monitoring Well ID	Date Sampled	Total Alkalinity (mg/L as CaCO <sub>3</sub> ) <sup>1</sup>	Sulfate (mg/L) <sup>2</sup>	Nitrate as Nitrogen (mg/L) <sup>2</sup>	Nitrite as Nitrogen (mg/L) <sup>2</sup>	Methane (mg/L) <sup>3</sup>
Within Plume	<b>GEI-5</b>	07/25/12	217	6.4	<0.25	<0.4	1.6
Cross gradient	<b>GEI-6</b>	07/25/12	104	24.4	0.43	<0.4	0.0081
Within Plume	<b>GEI-9</b>	07/25/12	338	3	<0.25	<0.4	0.091
Cross gradient	<b>GEI-10</b>	07/25/12	97.9	16.7	<0.25	<0.4	0.0072
Within Plume Down gradient	<b>MW-1</b>	07/25/12	256	10.9	<0.25	<0.4	0.4
Within Plume Down gradient	<b>MW-2</b>	07/25/12	262	10.6	<0.25	<0.4	0.42
Within Plume Down gradient	<b>MW-3</b>	07/25/12	329	<1.5	<0.25	<0.4	6.4
Down gradient	<b>MW-4</b>	07/25/12	76.3	4.7	0.48	<0.4	<0.005
Within Plume	<b>MW-5</b>	07/25/12	328	<1.5	<0.25	<0.4	3
Cross gradient	<b>MW-6</b>	07/25/12	469	46.3	2.9	<0.4	0.02
Cross gradient	<b>MW-14</b>	07/25/12	350	10.5	<0.25	<0.4	1.1

<sup>1</sup>: Total alkalinity analyzed using EPA method 310.1.

<sup>2</sup>: Sulfate and nitrate as nitrogen analyzed by EPA method 300.0.

<sup>3</sup>: Methane analyzed by RSKSOP-175

<sup>4</sup>: Sample analysis performed past method-specified holding time.

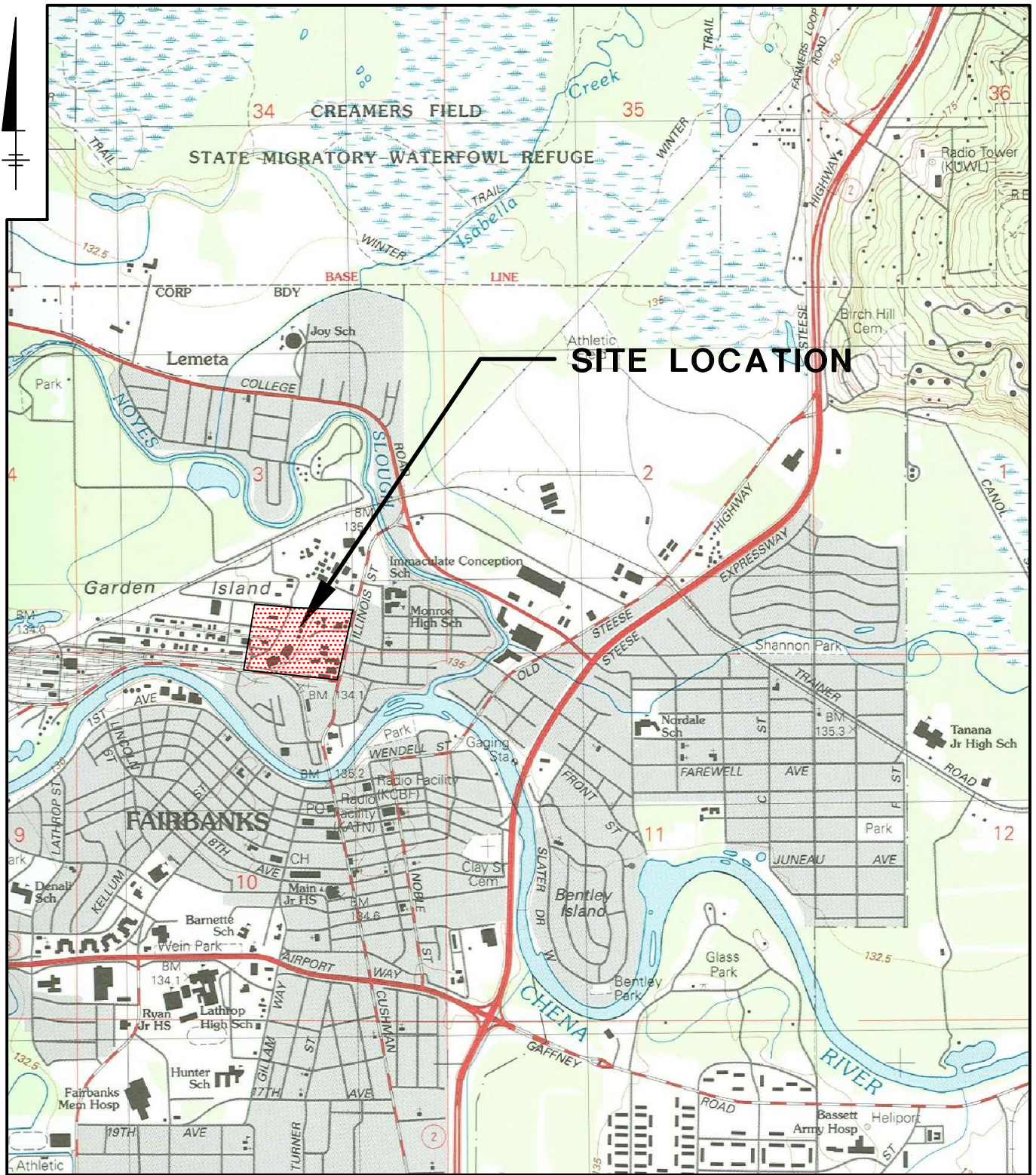
mg/L = milligrams per liter

"<" = Indicates analyte not detected above MRL

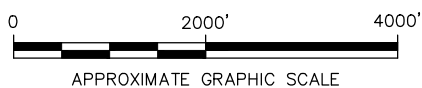
ARCADIS

**Figures**

CITY:TMAPA-FL DIV:GROUP-85 DB:JAR LD:(Opt) PC:(Opt) PM:M:Strickler TM:(Opt) LY:(Option)+OFF="REF" G:\ENV\CAD\TMAPACT\Chevron\USAF\AIR Site\45512.0007\000022012 Annual\800450601.dwg LAYOUT: 1 SAV:ED: 8/30/2012 3:34 PM ACADVER: 18 IS (LMS TECH) PAGESETUP: PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 8/30/2012 3:34 PM BY: RICHARDS, JIM



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: FAIRBANKS (D-2) SE, AK., 1992, FAIRBANKS NORTH STAR BOROUGH, SECTION: 3, TOWNSHIP: 1S, RANGE: 1W



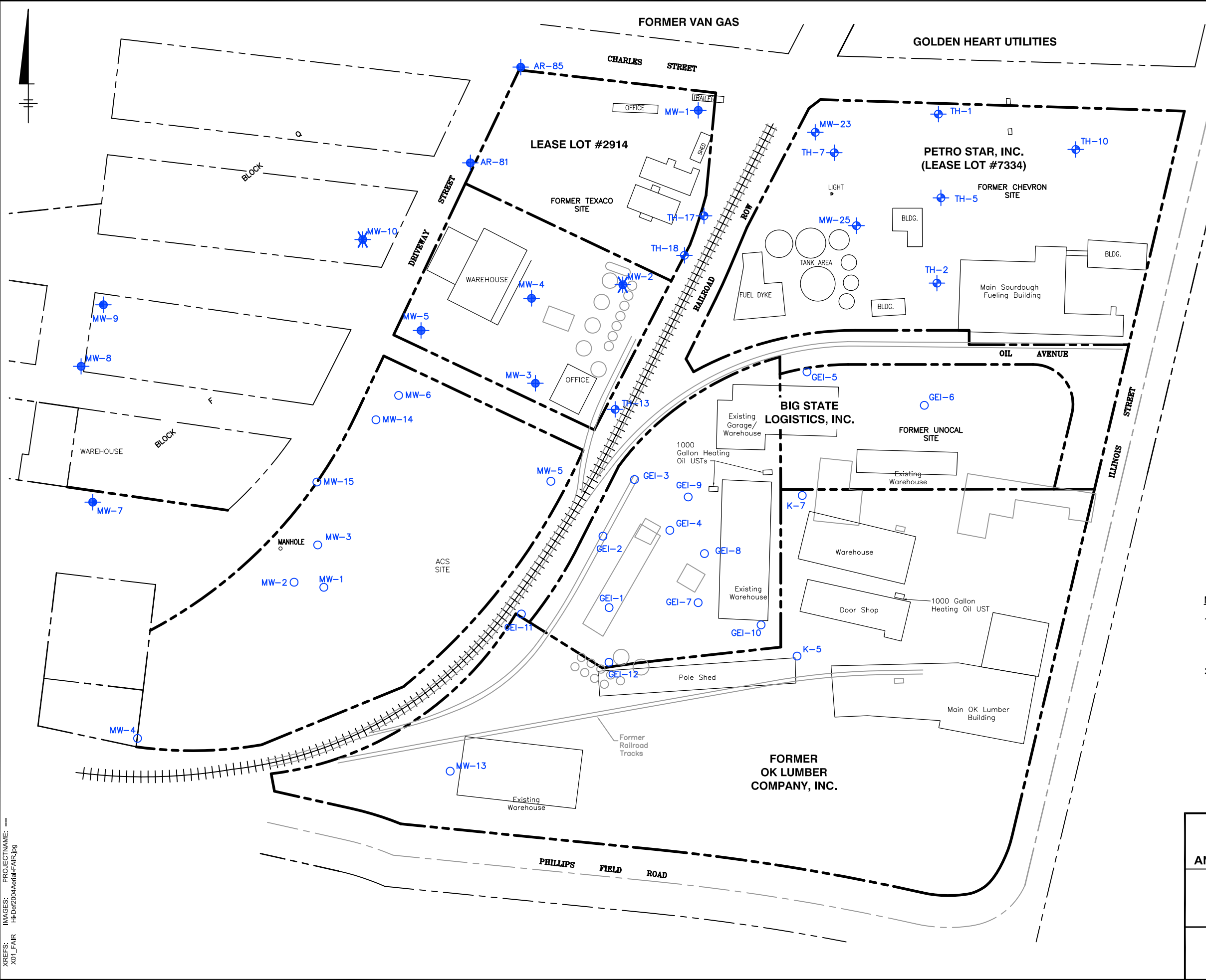
FORMER CHEVRON TERMINAL 1001430 - 418 ILLINOIS ST.  
FORMER TEXACO BULK TERMINAL 211815 - 410 DRIVEWAY ST.  
FORMER UNOCAL BULK TERMINAL 306456 - 328.5 ILLINOIS ST.  
FAIRBANKS, ALASKA  
**ANNUAL 2012 GROUNDWATER MONITORING REPORT**

**SITE LOCATION MAP**



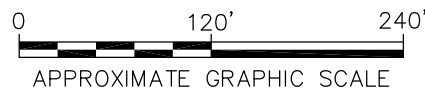
FIGURE  
**1**

CITY: TMA-A, FL DIV: GROUP: 85 DB: JAR, LD: (Opt) PIC: (Opt) PM: M. Strickler, TM: (Opt) LYN: (Opt) ONE: OFF: REF: G:\ENVCAD\TAMPA\ACT\Chevron\USA\FAIR Site\45512\0007\0002\2012 Annual\B0045506B01.dwg LAYOUT: 2. SAVED: 8/30/2012 3:33 PM ACADVER: 18.1 S (LMS TECH) PAGESETUP: PDF-BL PLOTSTYLETABLE: PLT\FULL.CTB PLOTTED: 8/30/2012 3:38 PM BY: RICHARDS, JIM  
 XREFS: IMAGES: PROJECTNAME: H:\del2004\Aerial\FAIR.jpg



- LEGEND**
- ⊕ Chevron Monitoring Well (TH)
  - ⊙ Texaco Monitoring Well (AR)
  - Unocal Monitoring Well (GEI) (K)
  - ✖ Destroyed Texaco Monitoring Well (AR)

- NOTES:**
1. The coordinate system is a local grid. Elevations are State of Alaska TBM "X" NE bolt of fire hydrant on the south side of Phillips Field Road between Illinois Street and Driveway Street. Elevation is 446.59'.
  2. Property boundary and well locations provided by "KARABELNIKOFF SURVEYING", Date Nov. 12, 2007.

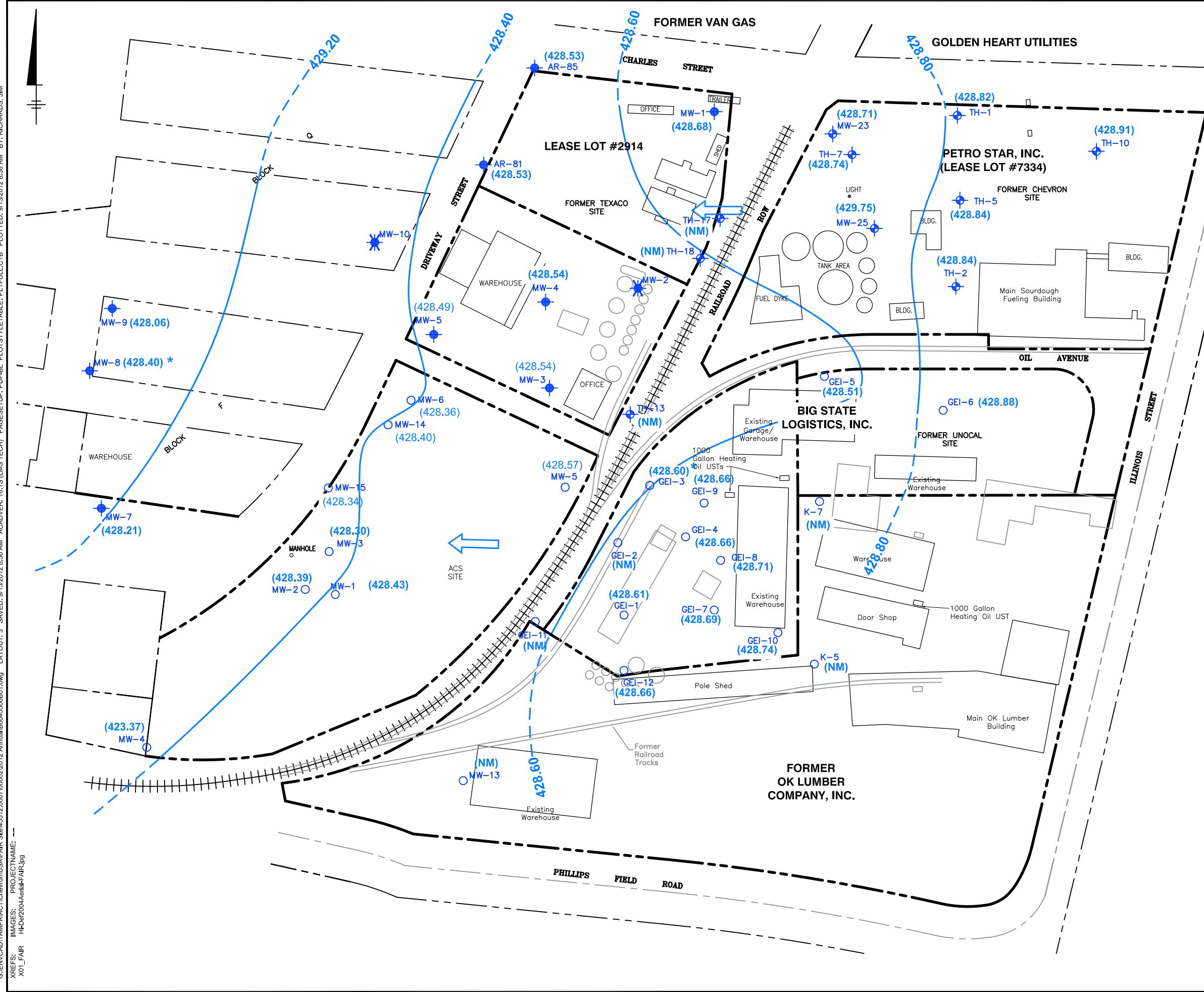


FORMER CHEVRON TERMINAL 1001430 - 418 ILLINOIS ST.  
 FORMER TEXACO BULK TERMINAL 211815 - 410 DRIVEWAY ST.  
 FORMER UNOCAL BULK TERMINAL 306456 - 328.5 ILLINOIS ST.  
 FAIRBANKS, ALASKA  
**ANNUAL 2012 GROUNDWATER MONITORING REPORT**

**SITE MAP**

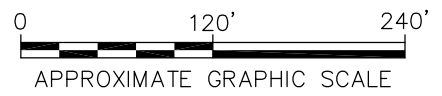


CITY: TMA-A, FL DIV: GROUP: 85 DB: JAR, LD: (Opt) P: C: (Opt) PM: M: Strickler, TM: (Opt) LYR: (Opt) ONE: OFF: REF: G: A: EN: V: C: A: D: I: T: A: M: P: A: A: C: T: C: H: E: V: R: O: N: S: S: I: E: 4: 5: 5: 1: 2: 0: 0: 0: 7: 0: 0: 0: 0: 2: 0: 1: 2: Annual: B: 0: 0: 4: 5: 6: 0: 6: 0: 1: .dwg LAYOUT: 3 SAVED: 9/13/2012 8:36 AM ACADVER: 18.1 S (LMS TECH) PAGESETUP: PDF-BL PLOTSTYLETABLE: PLT-FULL-CTB PLOTTED: 9/13/2012 8:38 AM BY: RICHARDS, JIM XREFS: IMAGES: PROJECTNAME: HD: Del2004AentR-FAIR.jpg



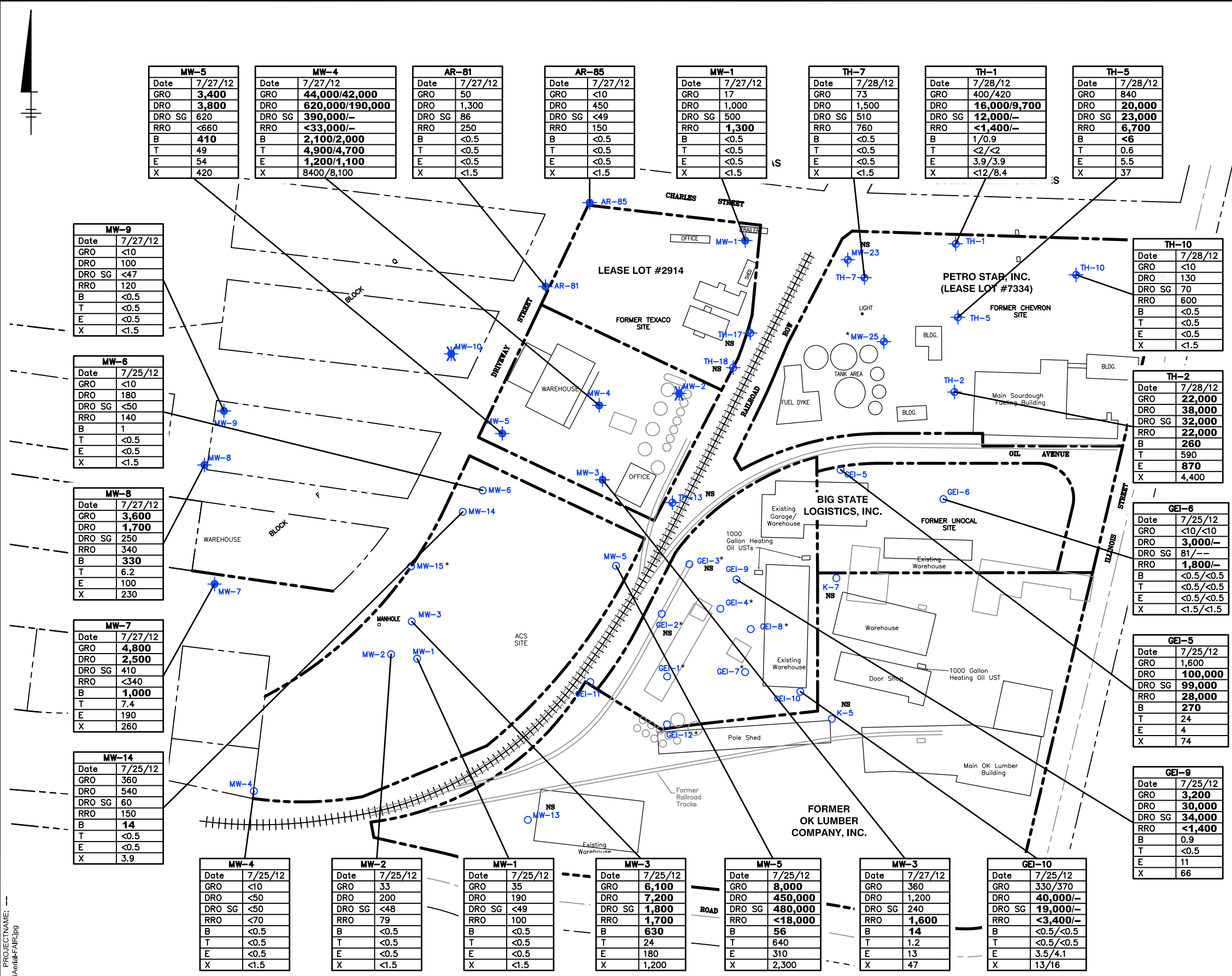
- LEGEND**
- ⊕ Chevron Monitoring Well (TH)
  - ⊙ Texaco Monitoring Well (AR)
  - Unocal Monitoring Well (GEI) (K)
  - ✖ Destroyed Texaco Monitoring Well (AR)
  - WATER-TABLE ELEVATION CONTOUR  
DASHED WHERE INFERRED  
CONTOUR INTERVAL = 0.20 FEET
  - (428.82) WATER-TABLE ELEVATION (FEET)
  - ← APPARENT DIRECTION OF GROUNDWATER FLOW
  - (NM) NOT MEASURED
  - \* DATA NOT USED FOR CONTOURING

- NOTES:**
- The coordinate system is a local grid. Elevations are State of Alaska TBM "X" NE bolt of fire hydrant on the south side of Phillips Field Road between Illinois Street and Driveway Street. Elevation is 446.59'.
  - Property boundary and well locations provided by "KARABELNIKOFF SURVEYING", Date Nov. 12, 2007,



FORMER CHEVRON TERMINAL 1001430 - 418 ILLINOIS ST.  
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FAIRBANKS, ALASKA  
**ANNUAL 2012 GROUNDWATER MONITORING REPORT**  
**GROUNDWATER ELEVATION CONTOUR MAP - JULY 23, 2012**

CITY: TMA-A, FL DIV: GROUP: 85 DB: JAR, LD: (Opt) PMA: Strickler, TM: (Opt) LYR: (Opt) ONE: OFF: REF: G: AENVCAD: TAMP: ACT: Chevron\USA\FAIR Site\45512\2012 Annual\B0045506B01.dwg LAYOUT: 4. SAVED: 9/13/2012 8:36 AM ACADVER: 18.1 S (LMS TECH) PAGES: 18. PLOT: 18.1 S (LMS TECH) PLOT: 9/13/2012 8:39 AM BY: RICHARDS, JIM



Well ID	Date	GRO	DRO	DRO SG	RRO	B	T	E	X
MW-5	7/27/12	3,400	3,800	620	<660	410	49	54	420
MW-4	7/27/12	44,000/42,000	620,000/190,000	390,000/-	<33,000/-	2,100/2,000	4,900/4,700	1,200/1,100	8400/8,100
AR-81	7/27/12	50	1,300	86	250	<0.5	<0.5	<0.5	<1.5
AR-85	7/27/12	<10	450	<49	150	<0.5	<0.5	<0.5	<1.5
MW-1	7/27/12	17	1,000	500	1,300	<0.5	<0.5	<0.5	<1.5
TH-7	7/28/12	73	1,500	510	760	<0.5	<0.5	<0.5	<1.5
TH-1	7/28/12	400/420	16,000/9,700	12,000/-	<1,400/-	1/0.9	<2/<2	3.9/3.9	<12/8.4
TH-5	7/28/12	840	20,000	23,000	6,700	<6	0.6	5.5	37
MW-9	7/27/12	<10	100	<47	120	<0.5	<0.5	<0.5	<1.5
MW-6	7/25/12	<10	180	<50	140	1	<0.5	<0.5	<1.5
MW-8	7/27/12	3,600	1,700	250	340	330	6.2	100	230
MW-7	7/27/12	4,800	2,500	410	<340	1,000	7.4	190	260
MW-14	7/25/12	360	540	60	150	14	<0.5	<0.5	3.9
MW-4	7/25/12	<10	<50	<50	<70	<0.5	<0.5	<0.5	<1.5
MW-2	7/25/12	33	200	<48	79	<0.5	<0.5	<0.5	<1.5
MW-1	7/25/12	35	190	<49	100	<0.5	<0.5	<0.5	<1.5
MW-3	7/25/12	6,100	7,200	1,800	1,700	630	24	180	1,200
MW-5	7/25/12	8,000	450,000	480,000	<18,000	56	640	310	2,300
MW-3	7/27/12	360	1,200	240	1,600	14	1.2	13	47
GEI-10	7/25/12	330/370	40,000/-	19,000/-	<3,400/-	<0.5/<0.5	<0.5/<0.5	3.5/4.1	13/16
TH-10	7/28/12	<10	130	70	600	<0.5	<0.5	<0.5	<1.5
TH-2	7/28/12	22,000	38,000	32,000	22,000	260	590	870	4,400
GEI-6	7/25/12	<10/<10	3,000/-	81/-	1,800/-	<0.5/<0.5	<0.5/<0.5	<0.5/<0.5	<1.5/<1.5
GEI-5	7/25/12	1,600	100,000	99,000	28,000	270	24	4	74
GEI-9	7/25/12	3,200	30,000	34,000	<1,400	0.9	<0.5	11	66

**LEGEND**

- Chevron Monitoring Well (TH)
- Texaco Monitoring Well (AR)
- Unocal Monitoring Well (GEI) (K)
- Destroyed Texaco Monitoring Well (AR)

**SAMPLE LOCATION**

DATE	SAMPLE DATE
GRO	GASOLINE RANGE ORGANICS
DRO	DIETYL RANGE ORGANICS
RRO	RESIDUAL RANGE ORGANICS
B	BENZENE
T	TOLUENE
E	ETHYLBENZENE
X	TOTAL XYLENES
M	METHYL TERT-BUTYL ETHER

RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)

220/210 = DUPLICATE SAMPLE COLLECTED

BOLD VALUE INDICATES CONCENTRATION GREATER THAN ADEC GROUNDWATER CLEANUP LEVELS 18 AAC 75.

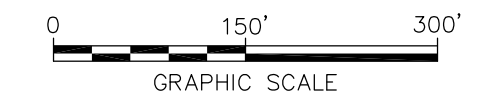
\* = GROUNDWATER SAMPLES WERE NOT COLLECTED DUE TO THE PRESENCE OF LNAPL

NS = SAMPLE COULD NOT BE COLLECTED FROM THE MONITORING WELL

NA = NOT ANALYZED

< = LESS THAN REPORTING LIMIT

- NOTES:**
- The coordinate system is a local grid. Elevations are State of Alaska TBM "X" NE bolt of fire hydrant on the south side of Phillips Field Road between Illinois Street and Driveway Street. Elevation is 446.59'.
  - Property boundary and well locations provided by "KARABELNIKOFF SURVEYING", Date Nov. 12, 2007,



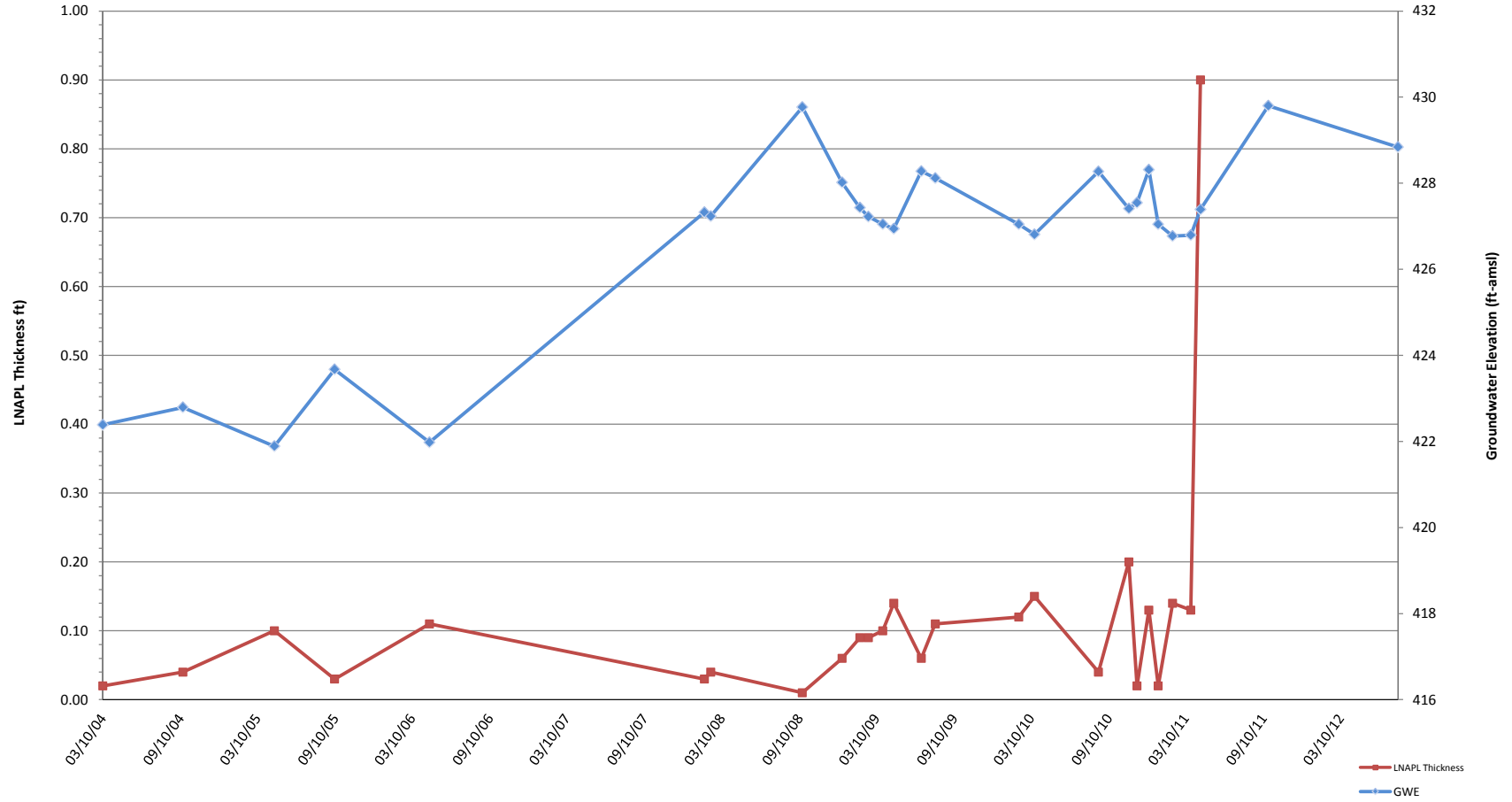
FORMER CHEVRON TERMINAL 1001430 - 418 ILLINOIS ST.  
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 FORMER UNOCAL BULK TERMINAL 306456 - 328.5 ILLINOIS ST.  
 FAIRBANKS, ALASKA

**ANNUAL 2012 GROUNDWATER MONITORING REPORT**

**GROUNDWATER ANALYTICAL RESULTS**  
**JULY 2012**







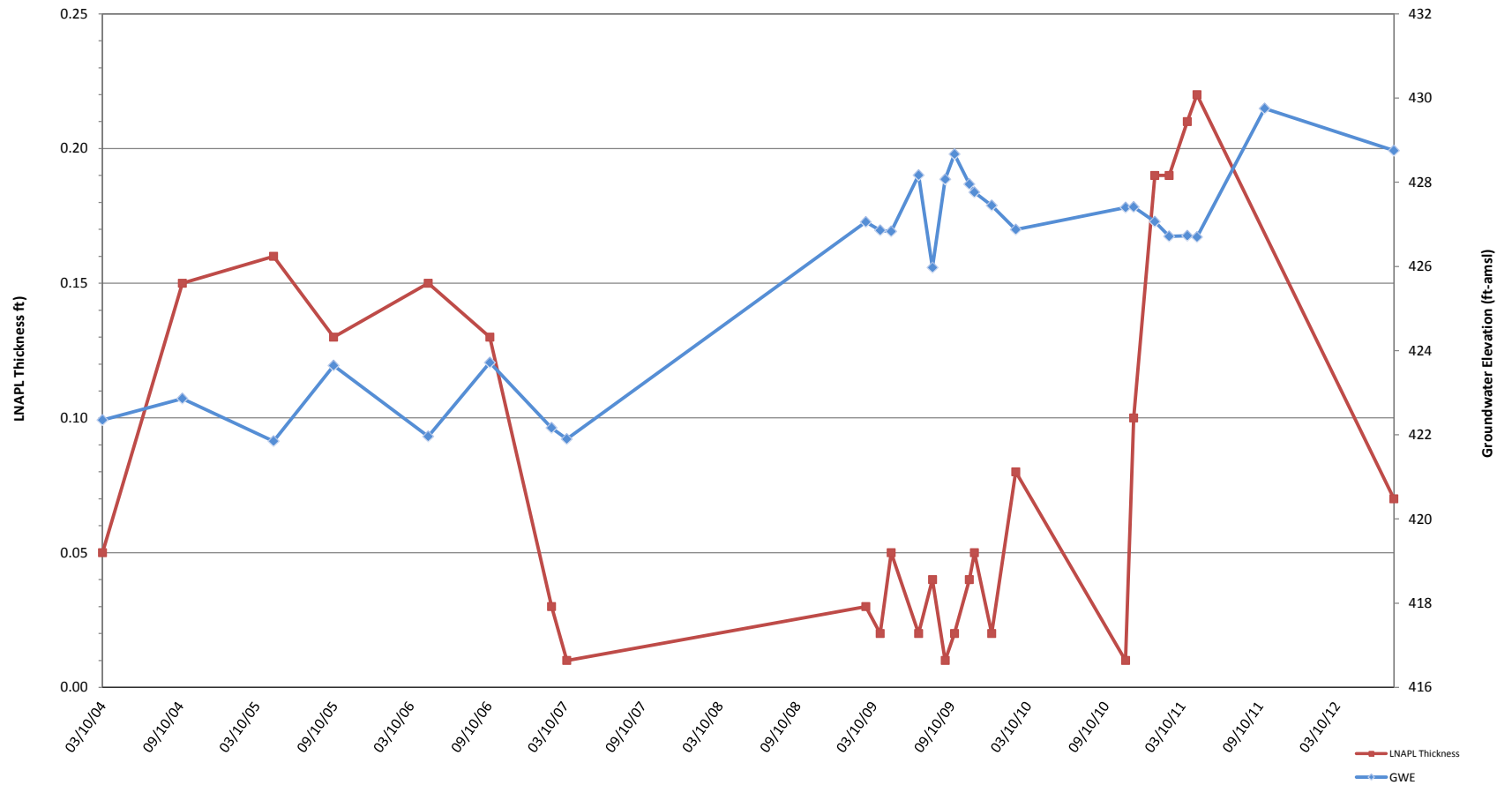
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

FORMER CHEVRON TERMINAL 1001430  
 328.5 ILLINOIS ST, FAIRBANKS, ALASKA  
 ANNUAL 2012 GROUNDWATER MONITORING REPORT

**Monitoring Well TH-2 Historical Groundwater  
 Elevation and LNAPL Thickness**



FIGURE  
**A-1**



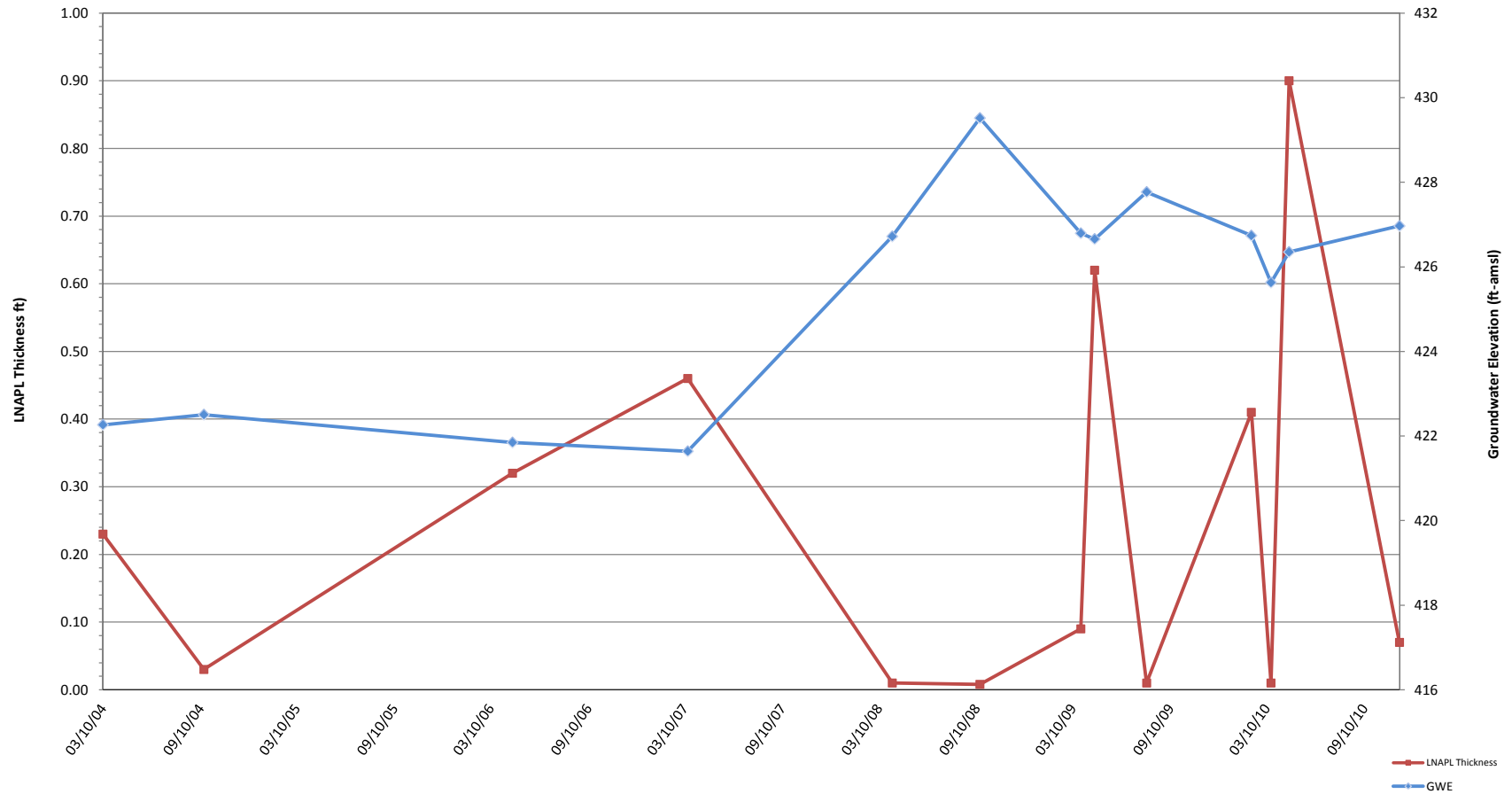
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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**Monitoring Well MW-25 Historical Groundwater Elevation and LNAPL Thickness**




FIGURE  
**A-2**



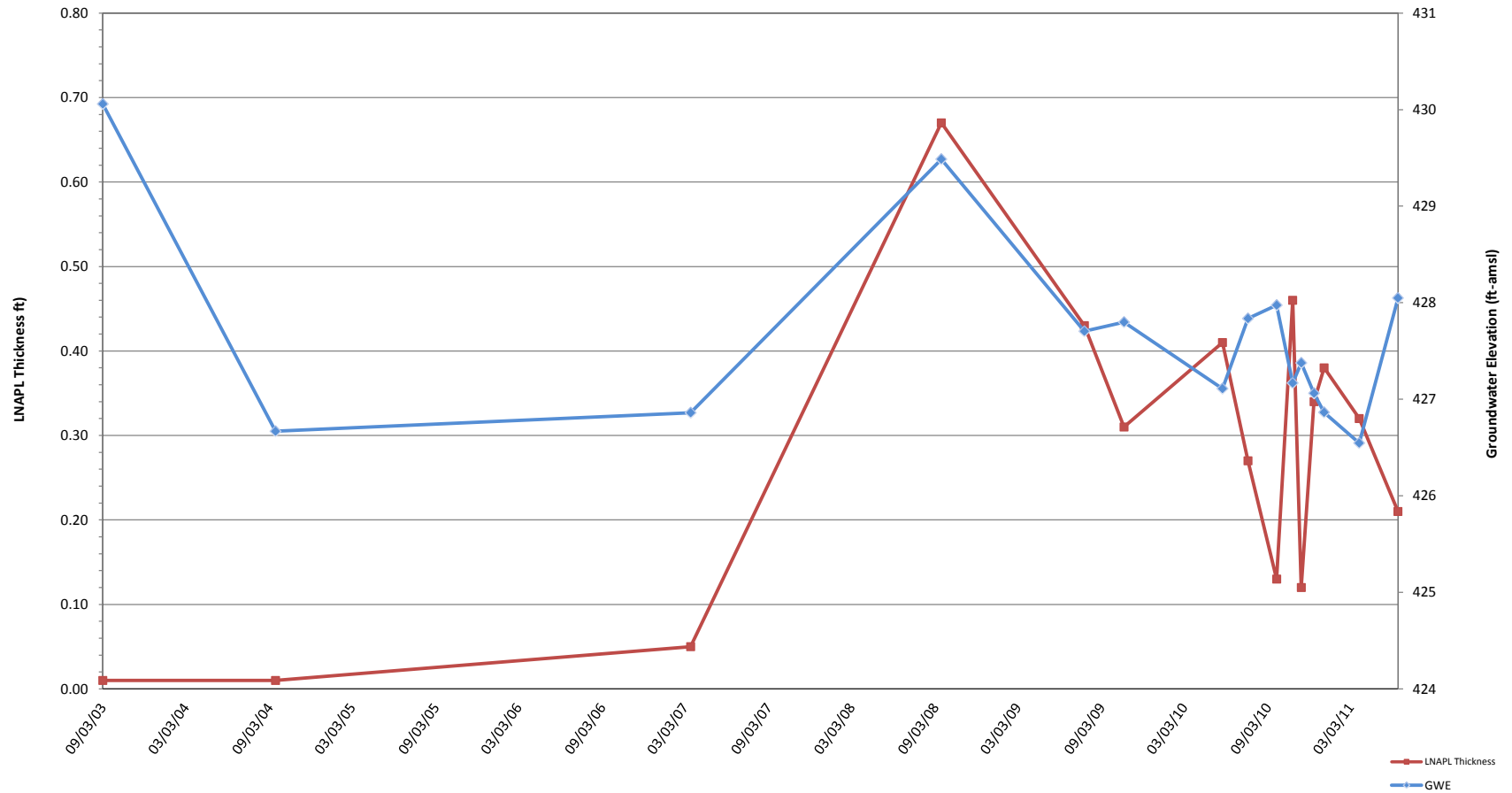
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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**Monitoring Well MW-4 Historical Groundwater  
 Elevation and LNAPL Thickness**

  
 Infrastructure · Water · Environment · Buildings

**FIGURE  
 A-3**



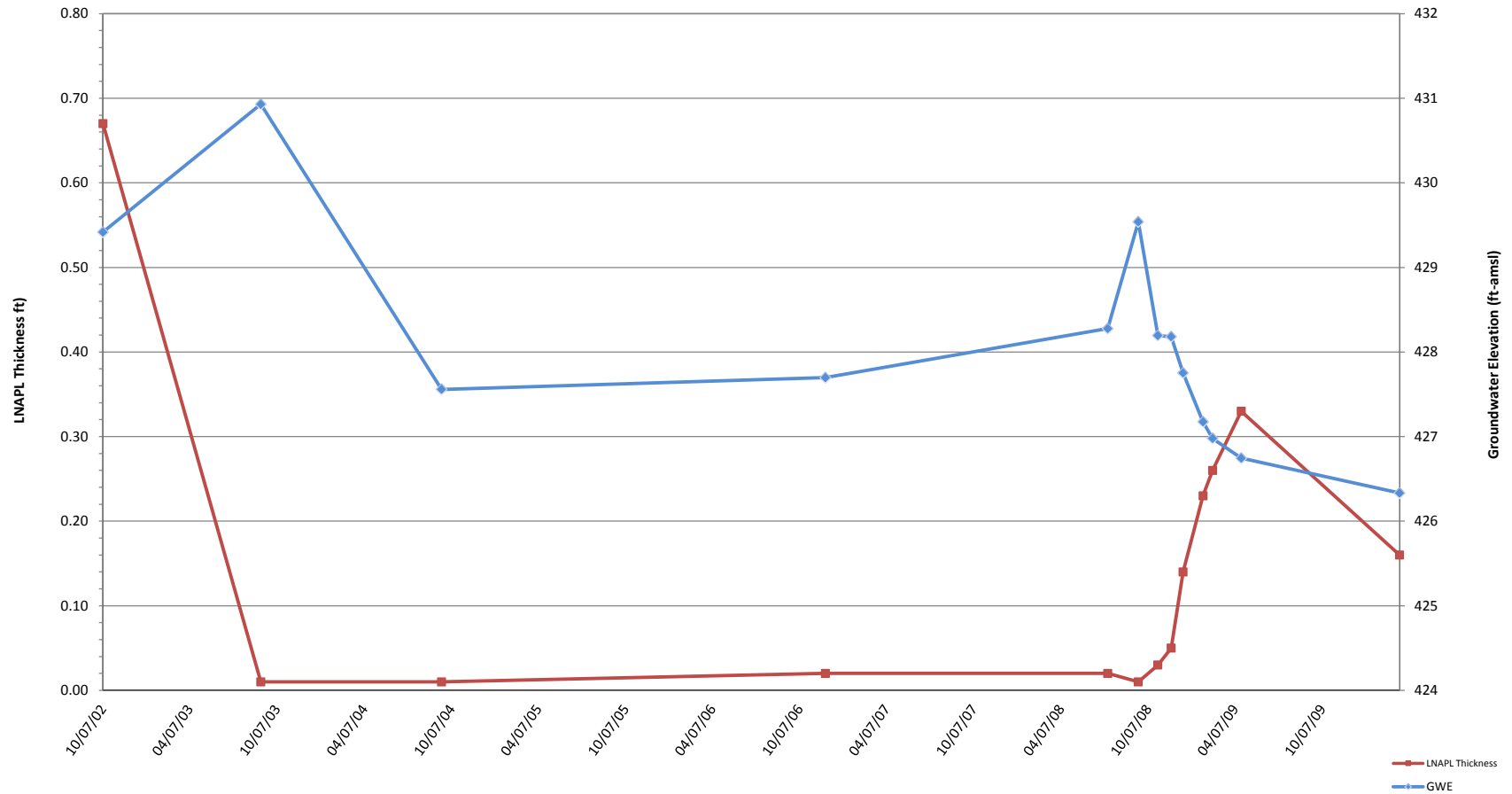
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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Monitoring Well GEI-1 Historical Groundwater  
 Elevation and LNAPL Thickness



FIGURE  
 A-4



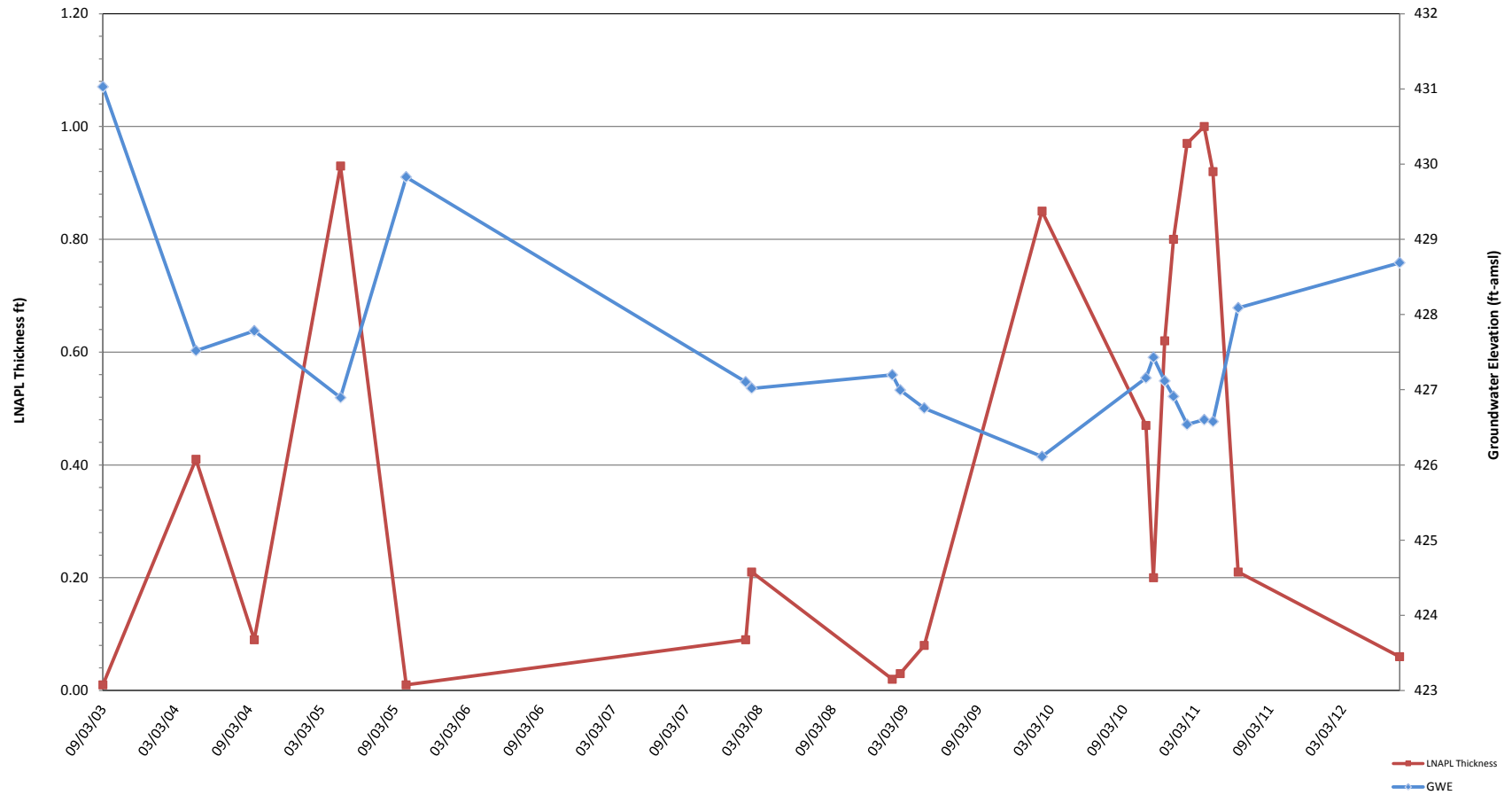
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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Monitoring Well GEI-4 Historical Groundwater  
 Elevation and LNAPL Thickness



FIGURE  
 A-5



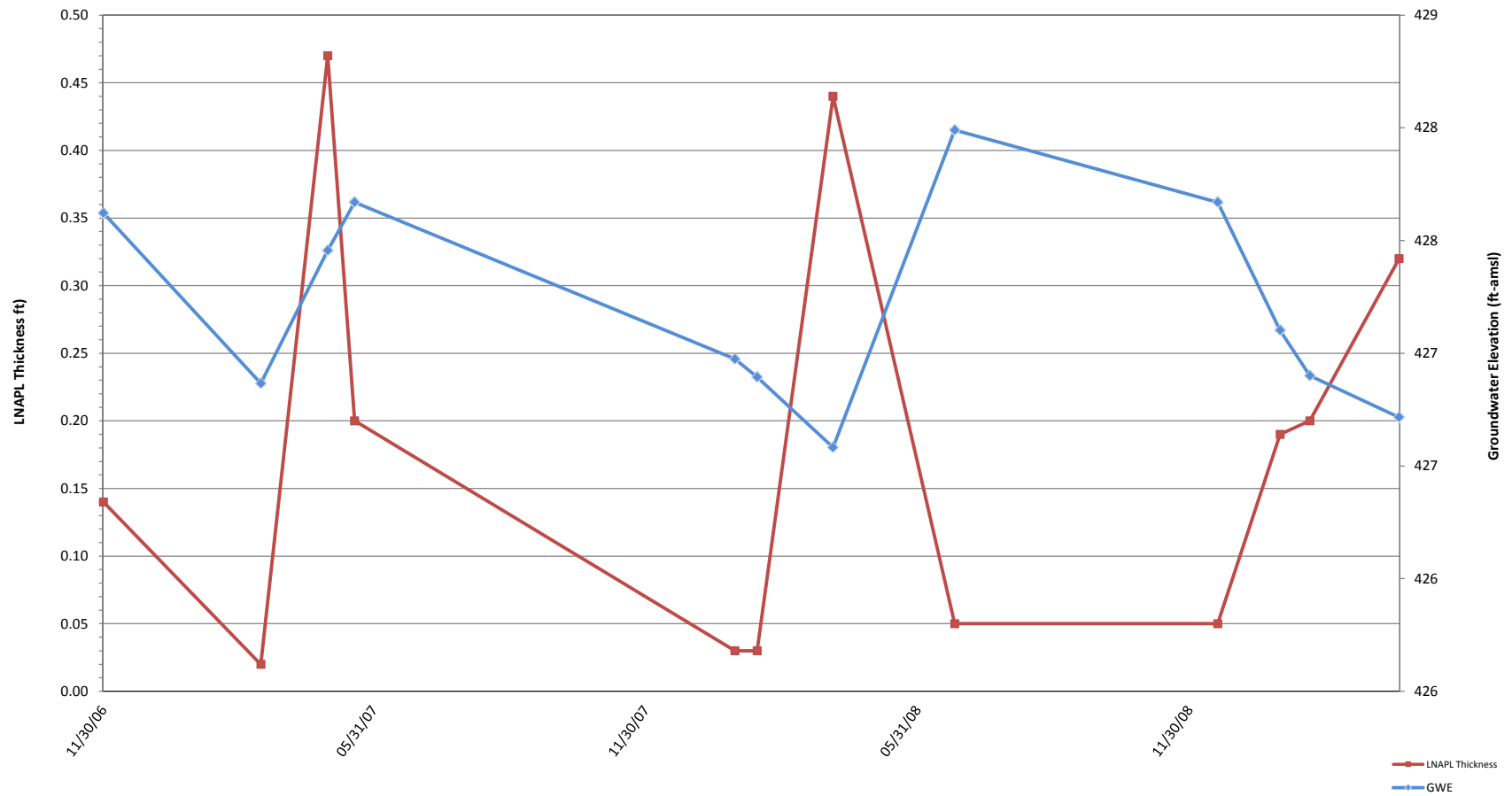
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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Monitoring Well GEI-7 Historical Groundwater  
 Elevation and LNAPL Thickness



FIGURE  
 A-6



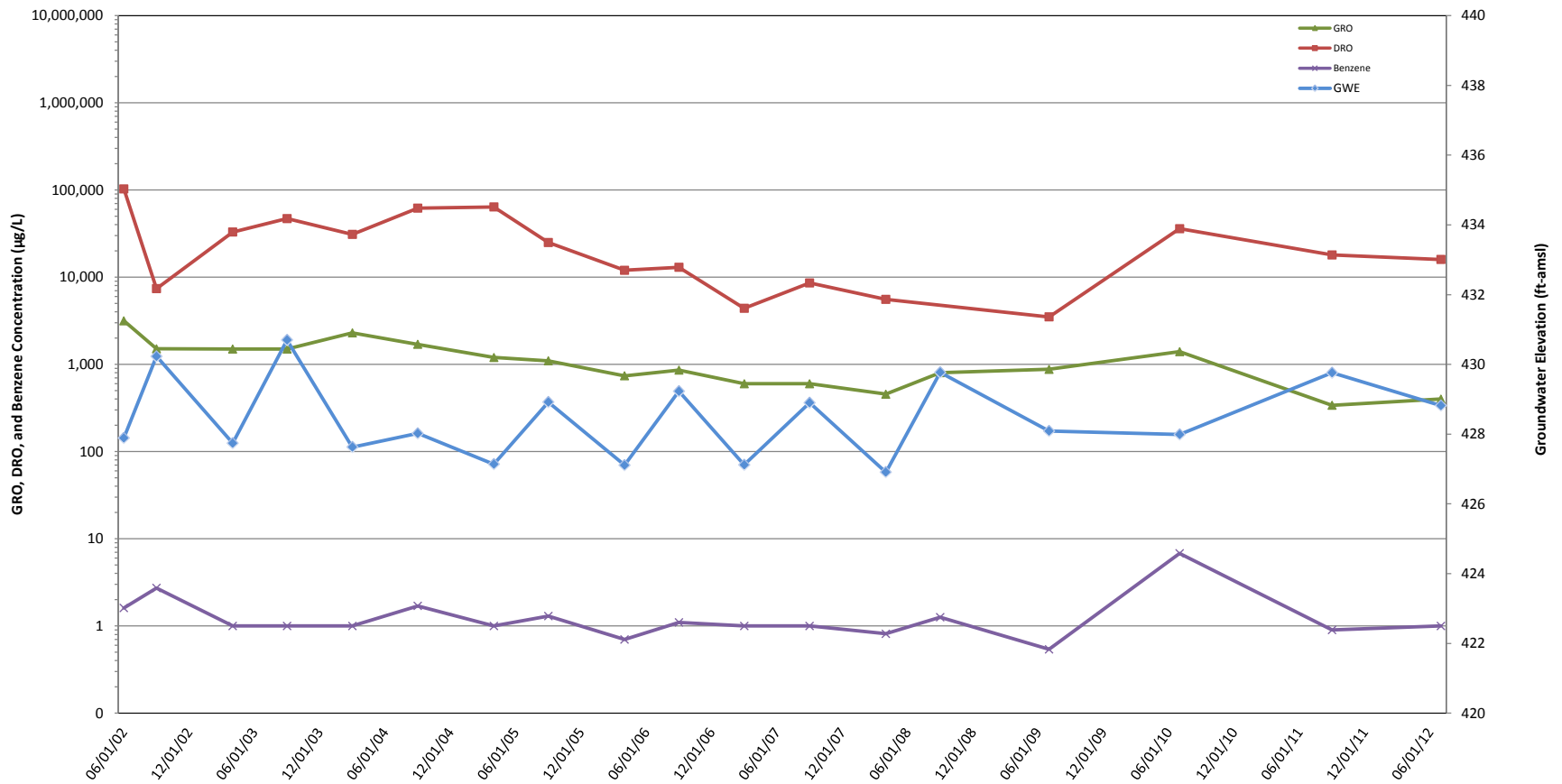
LEGEND:  
 LNAPL = Light Non-Aqueous Phase Liquid  
 ft-amsl = Feet above mean sea level

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**Monitoring Well GEI-11 Historical Groundwater Elevation and LNAPL Thickness**

**FIGURE A-7**





**LEGEND:**

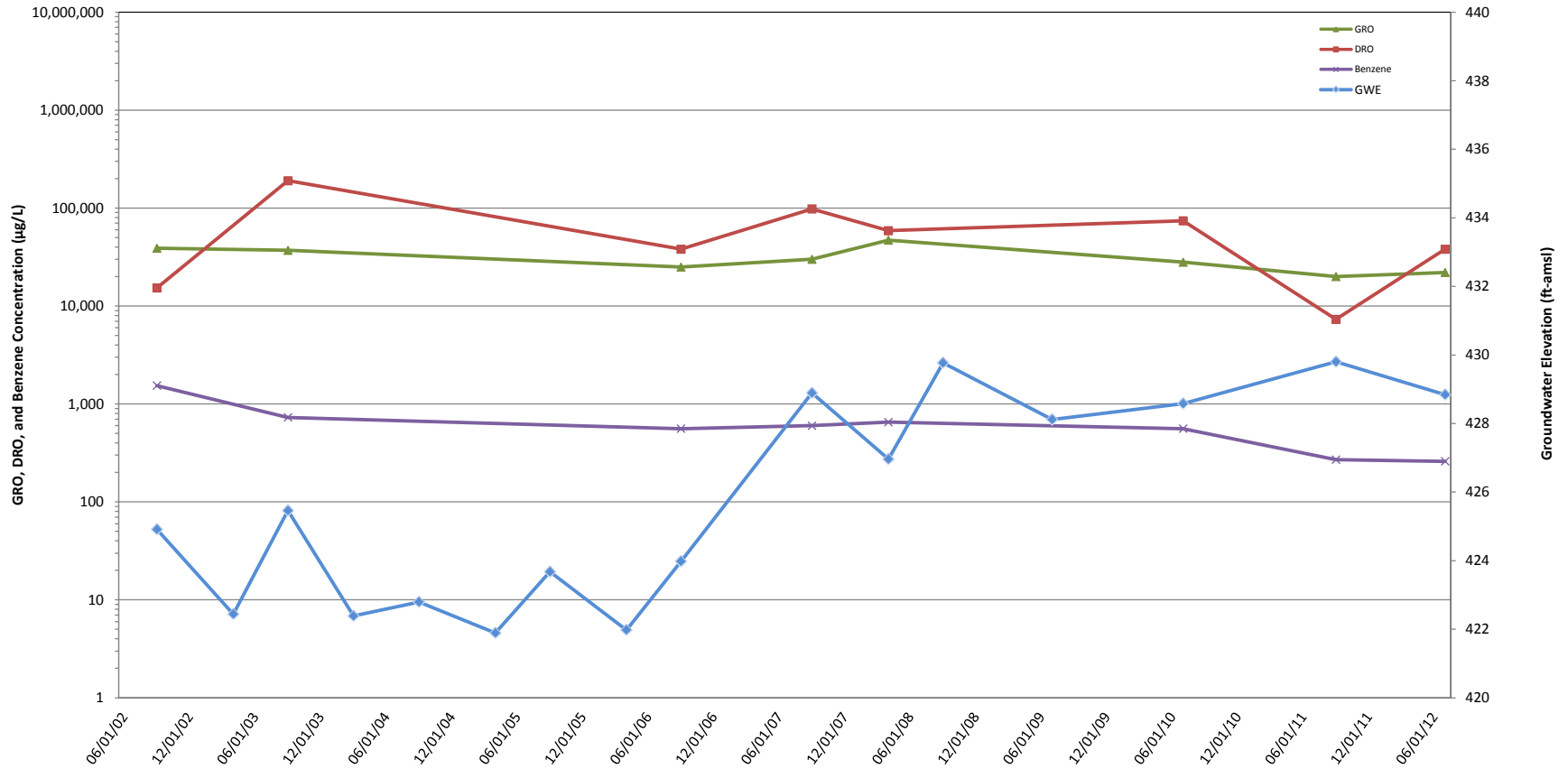
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-1 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-1**



**LEGEND:**

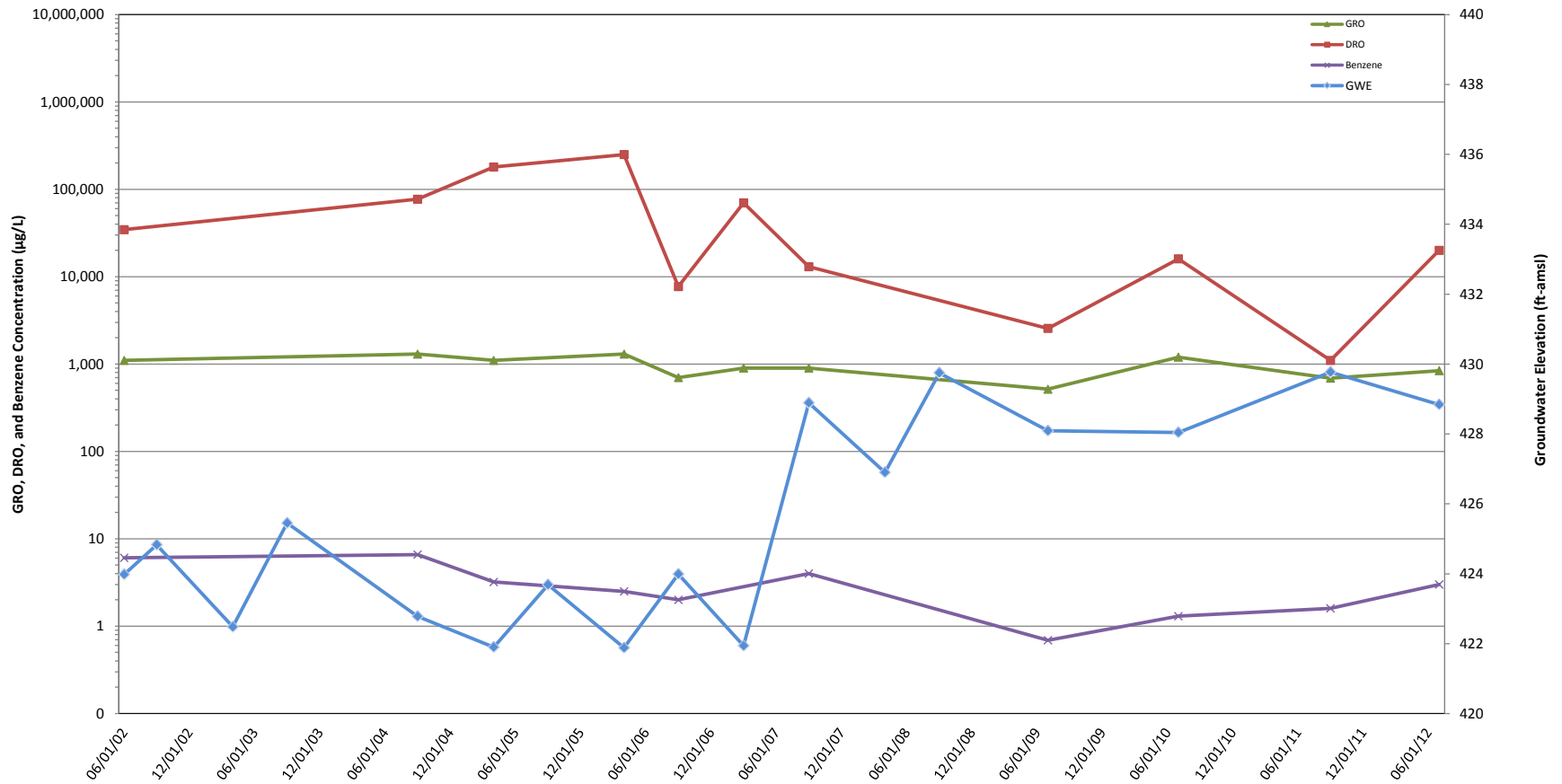
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-2 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-2**



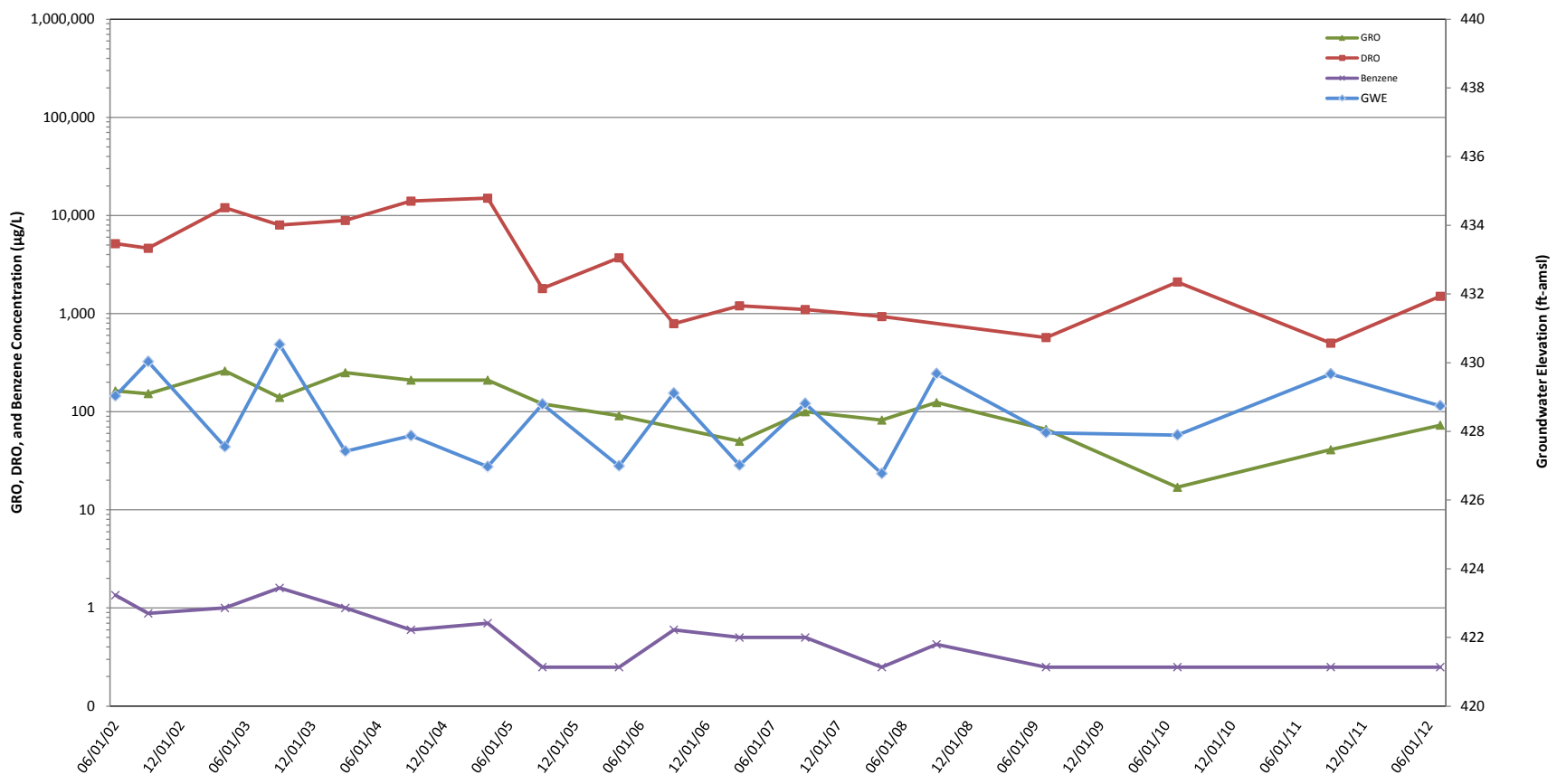
LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-5 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
**B-3**



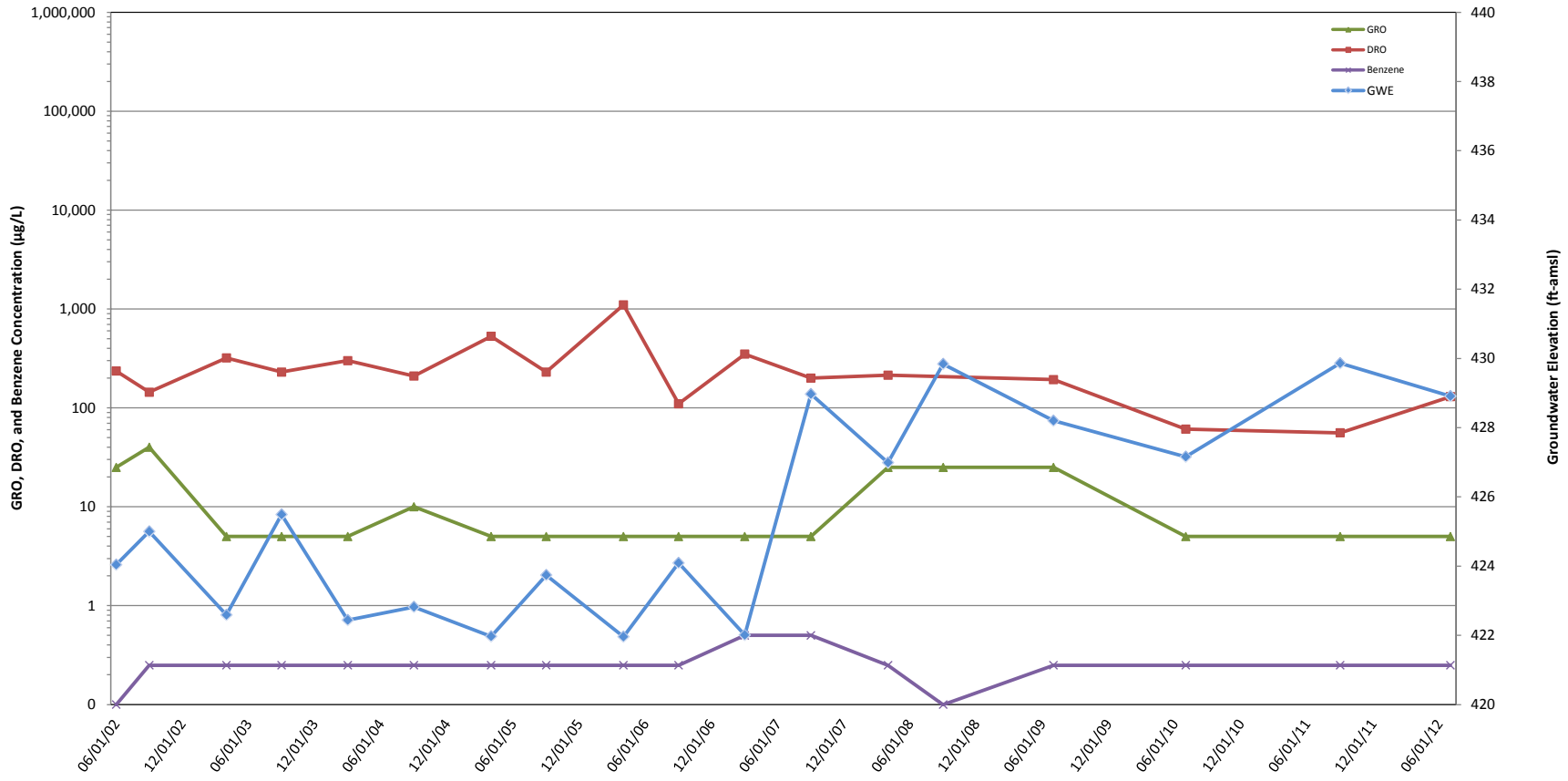
LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-7 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
**B-4**



**LEGEND:**

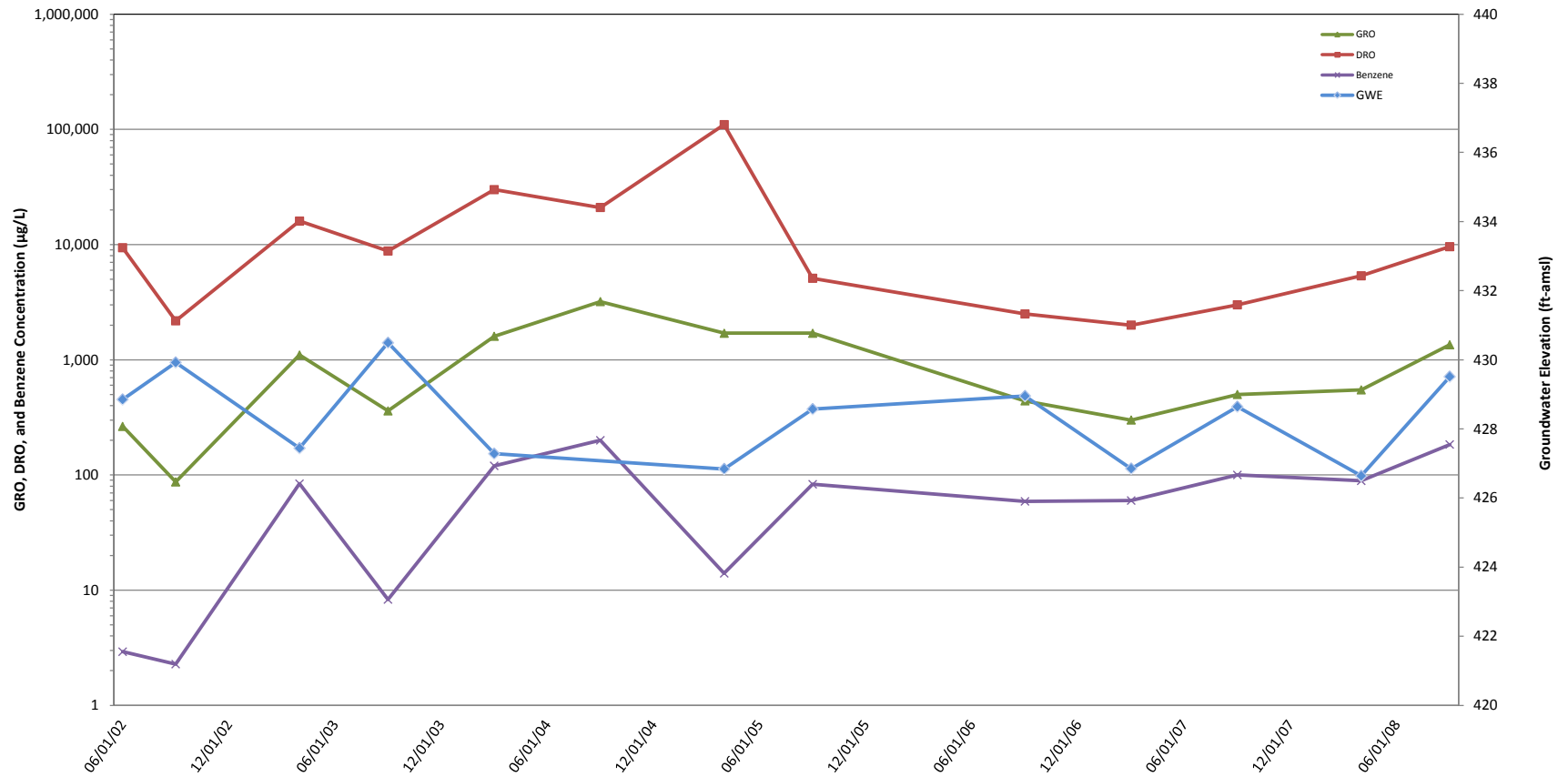
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-10 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-5**



**LEGEND:**

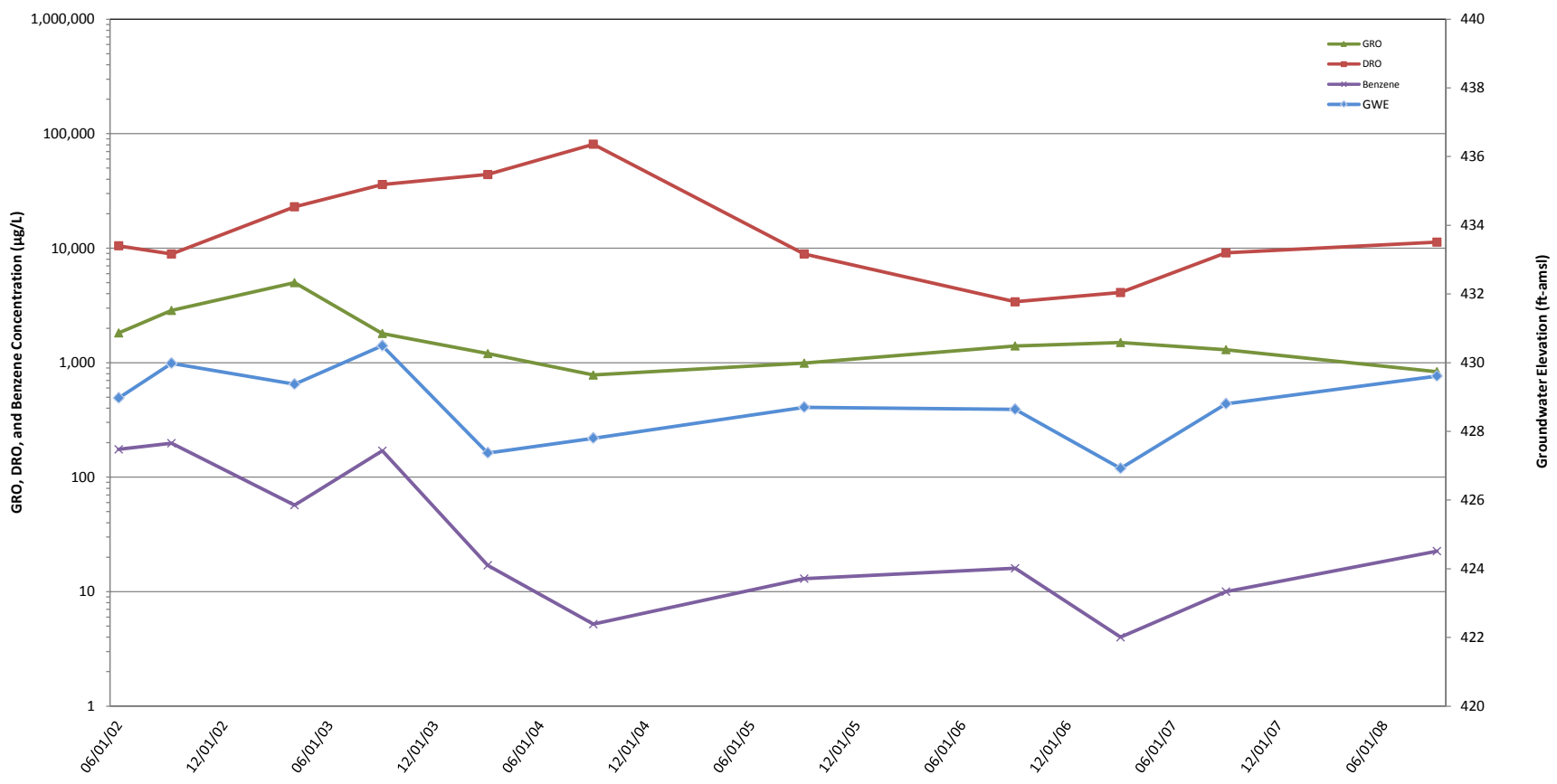
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-13 Historical Groundwater Elevation and Analytical Data**



**FIGURE  
B-6**



**LEGEND:**

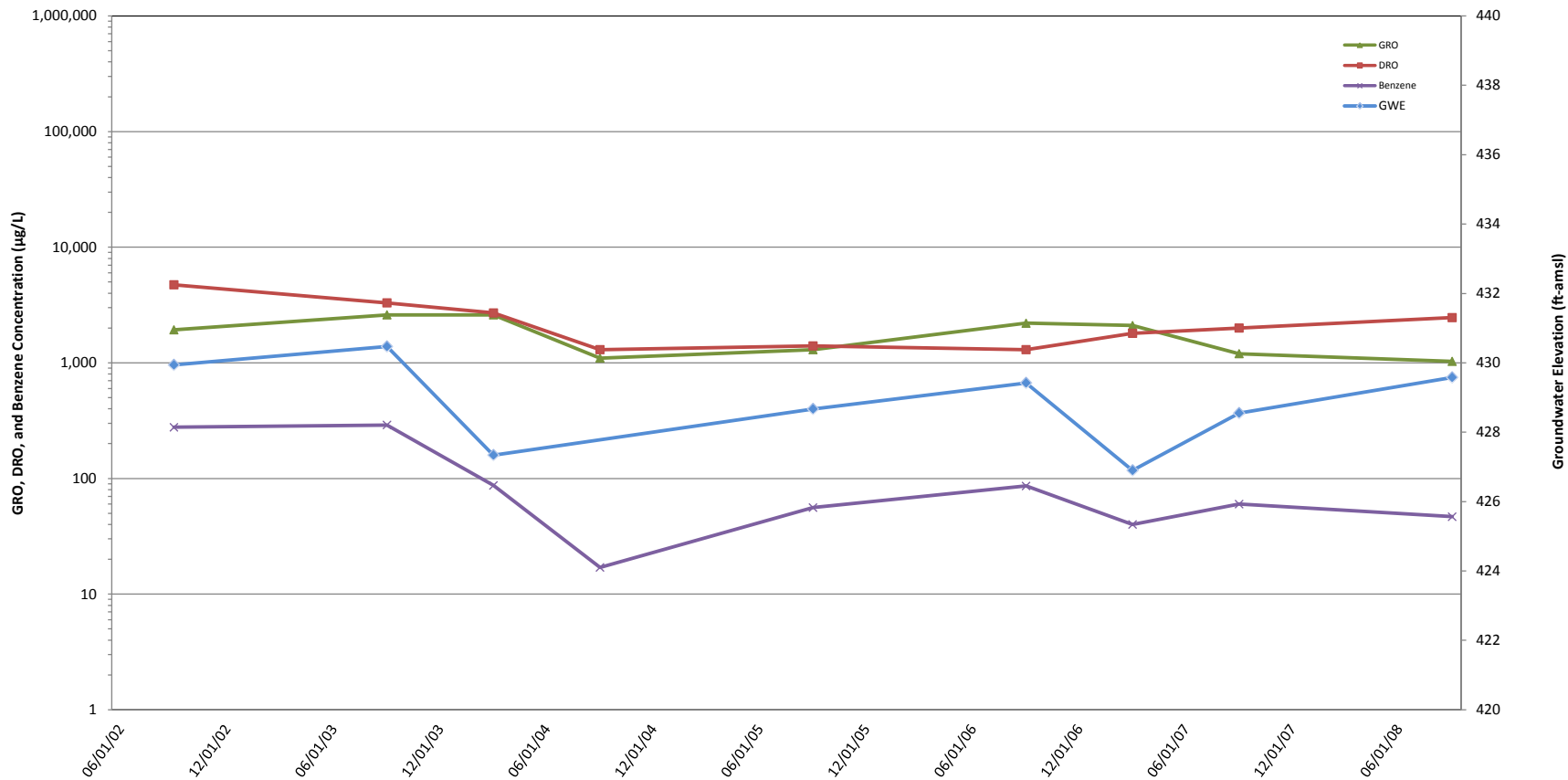
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well TH-17 Historical Groundwater Elevation and Analytical Data**



FIGURE  
**B-7**



LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

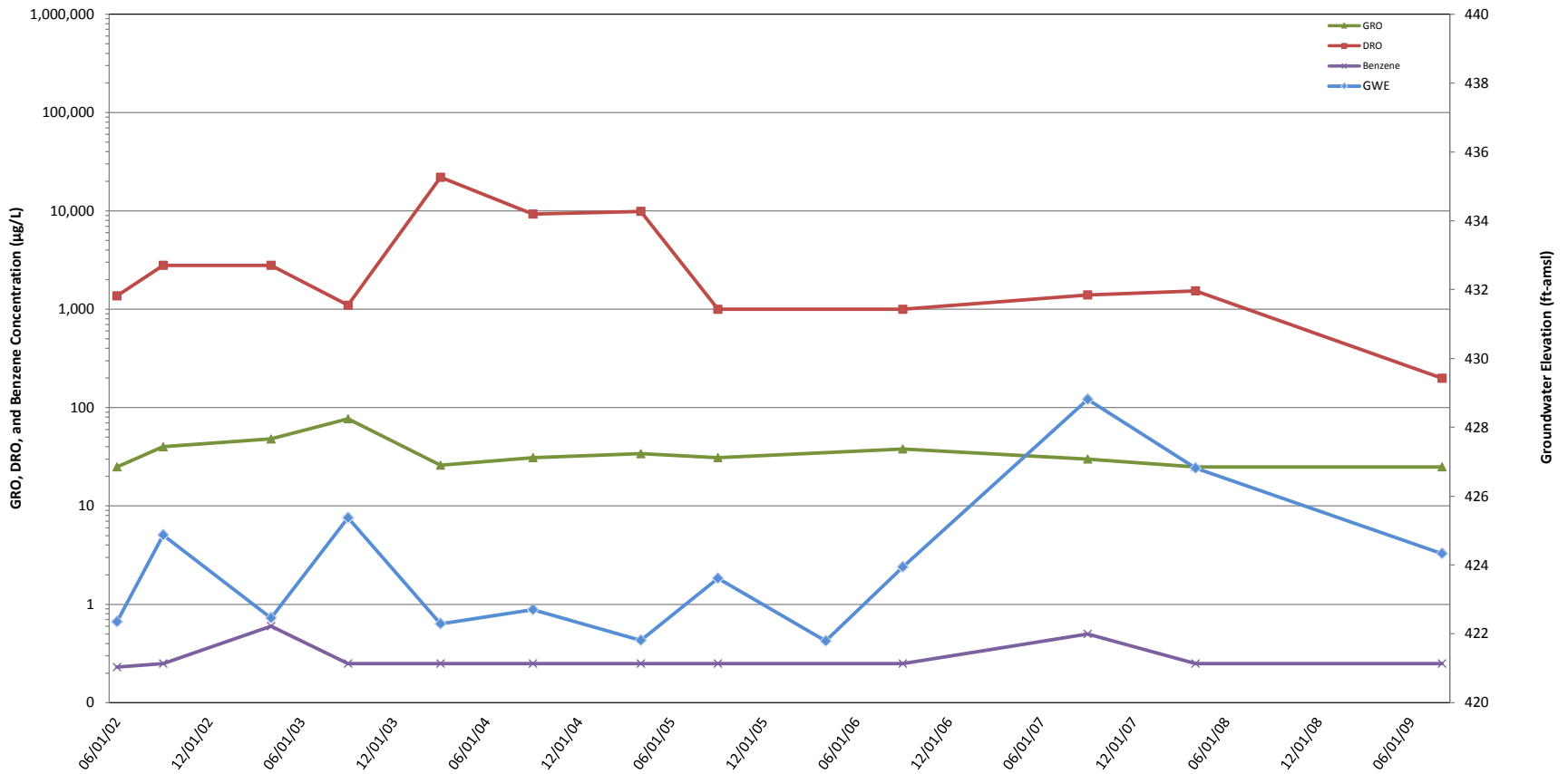
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**Monitoring Well TH-18 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
**B-8**





**LEGEND:**

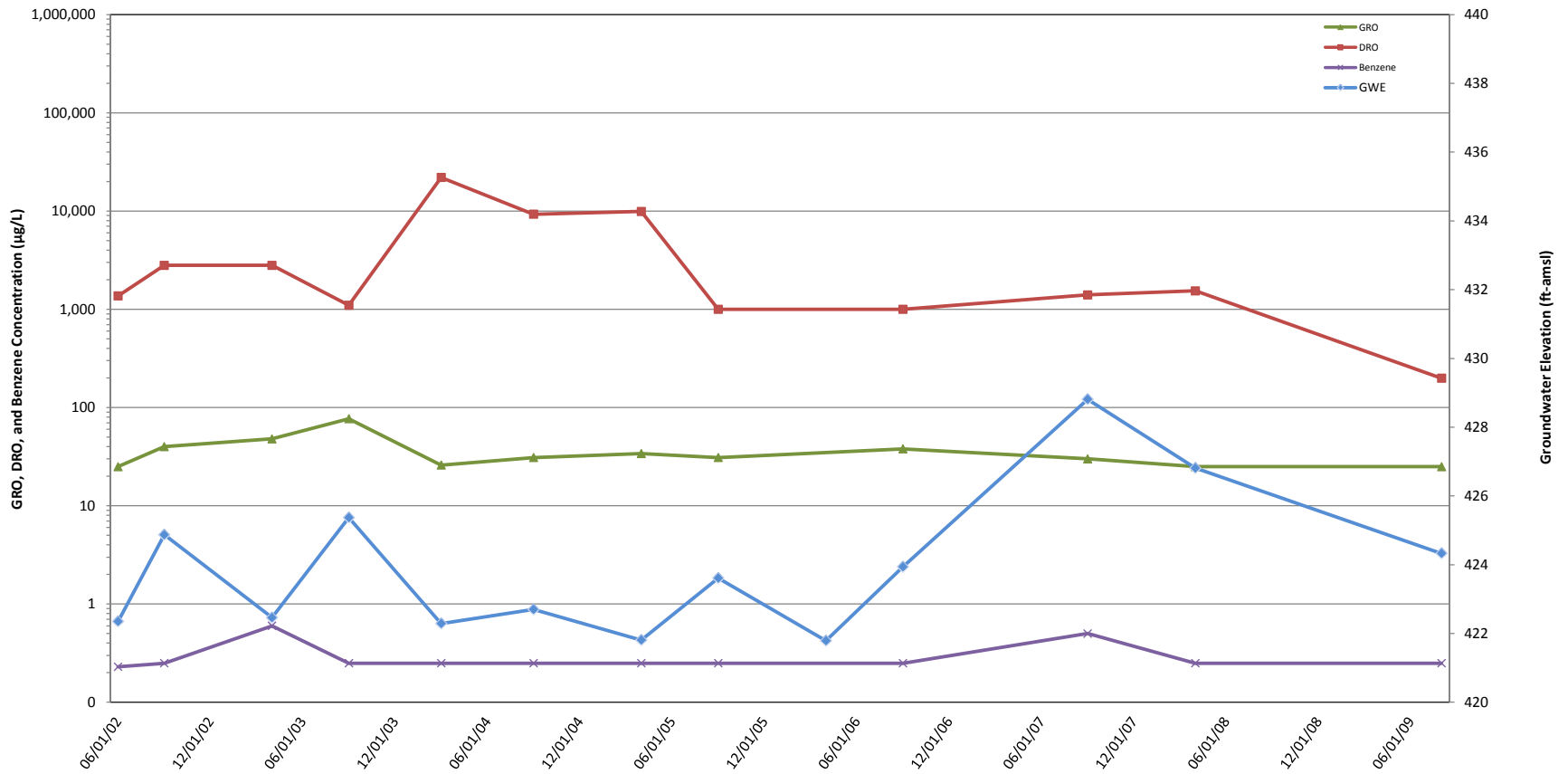
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-23 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-9**



**LEGEND:**

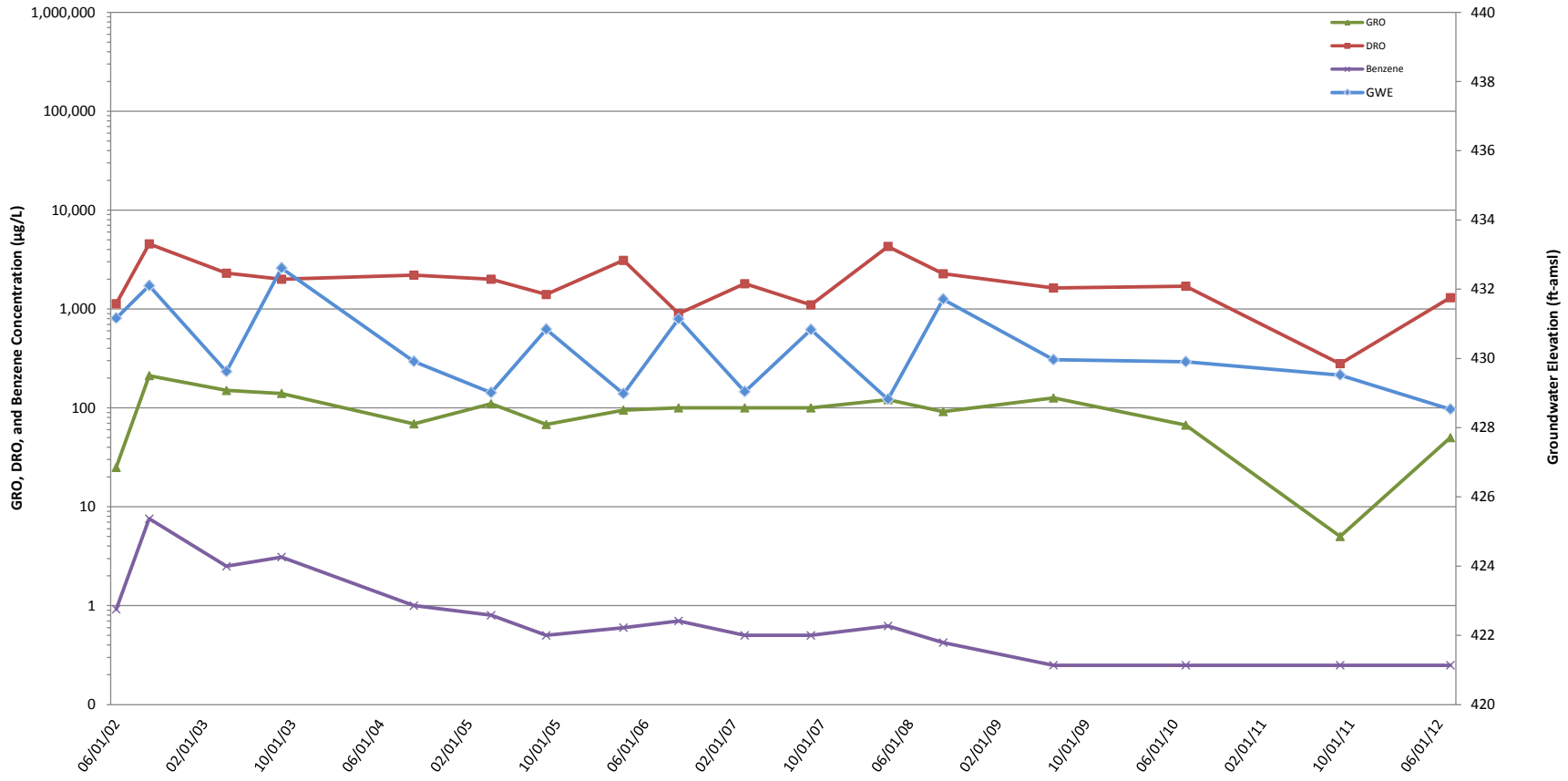
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-25 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-10**



**LEGEND:**

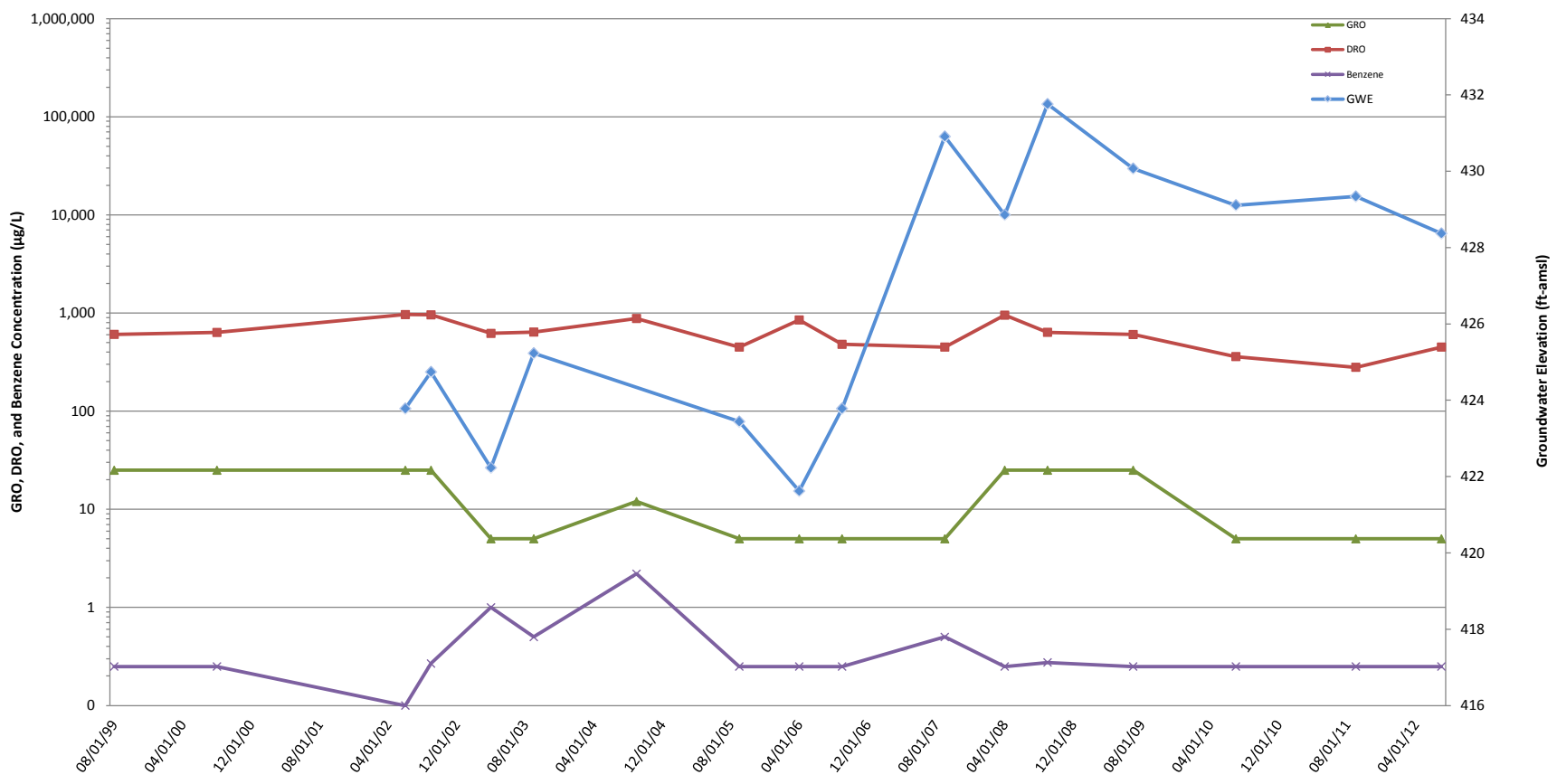
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well AR-81 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-11**



**LEGEND:**

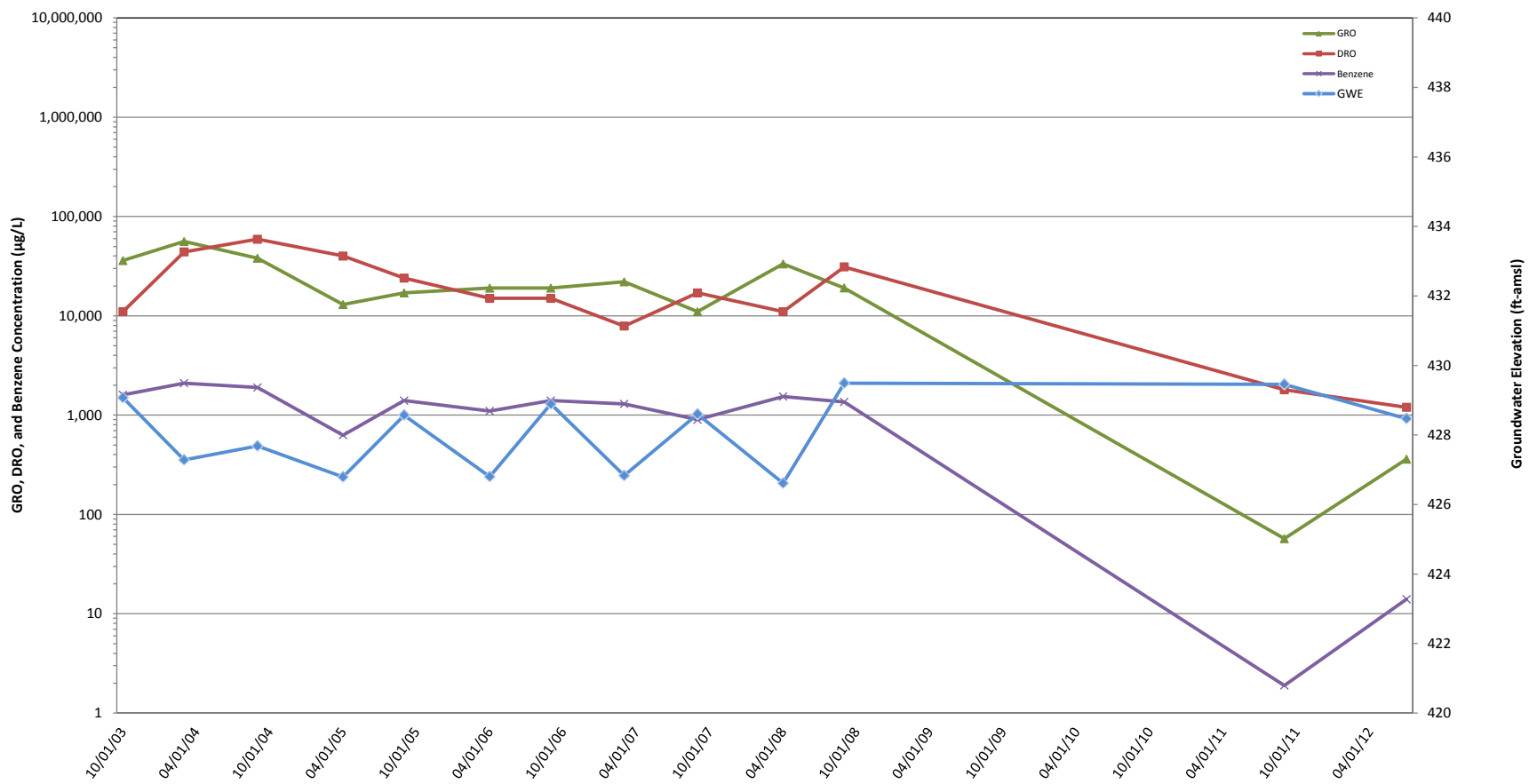
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well AR-85 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-12**




**LEGEND:**  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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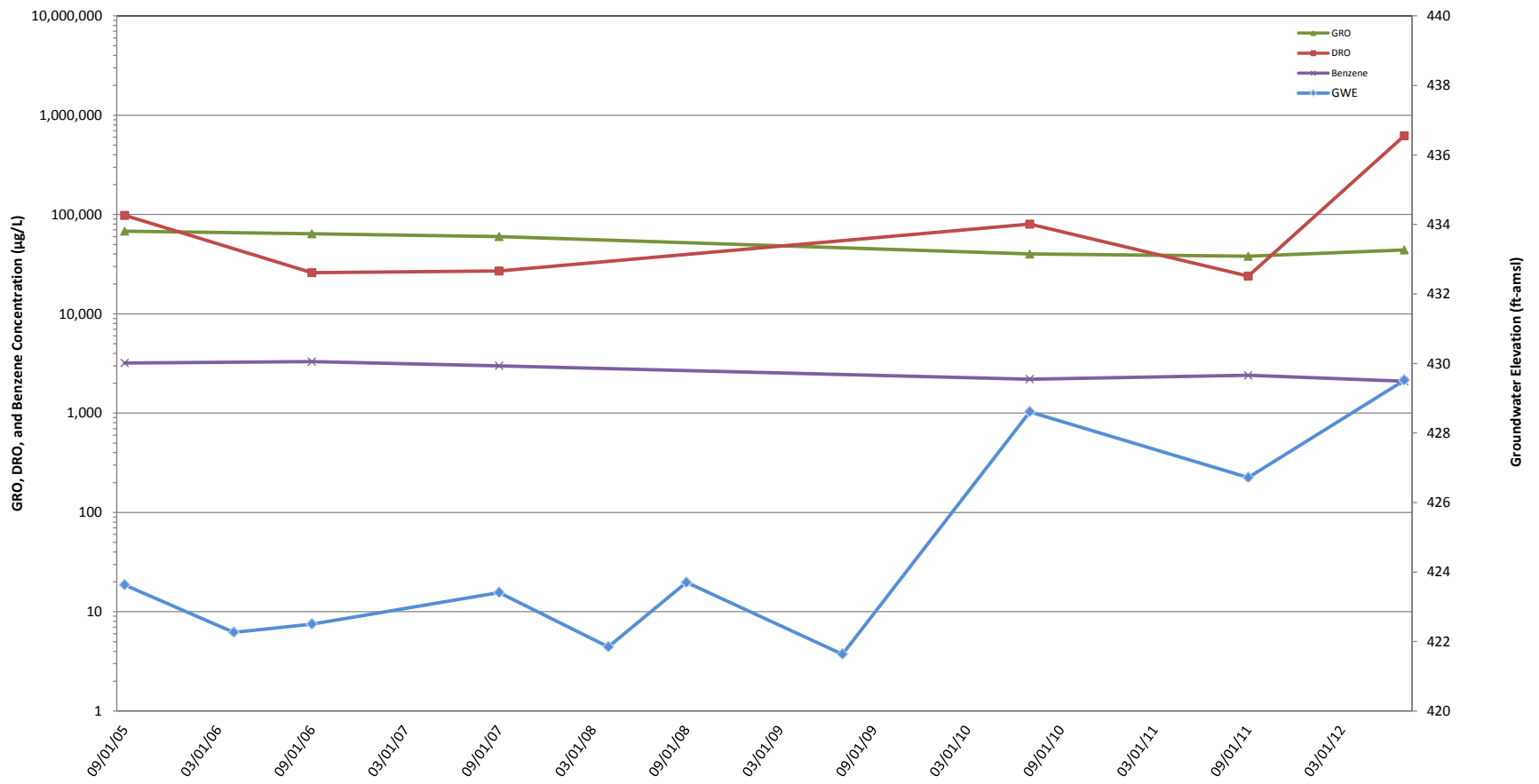
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**Monitoring Well MW-3 Historical Groundwater  
 Elevation and Analytical Data**

---



**FIGURE  
 B-13**



**LEGEND:**

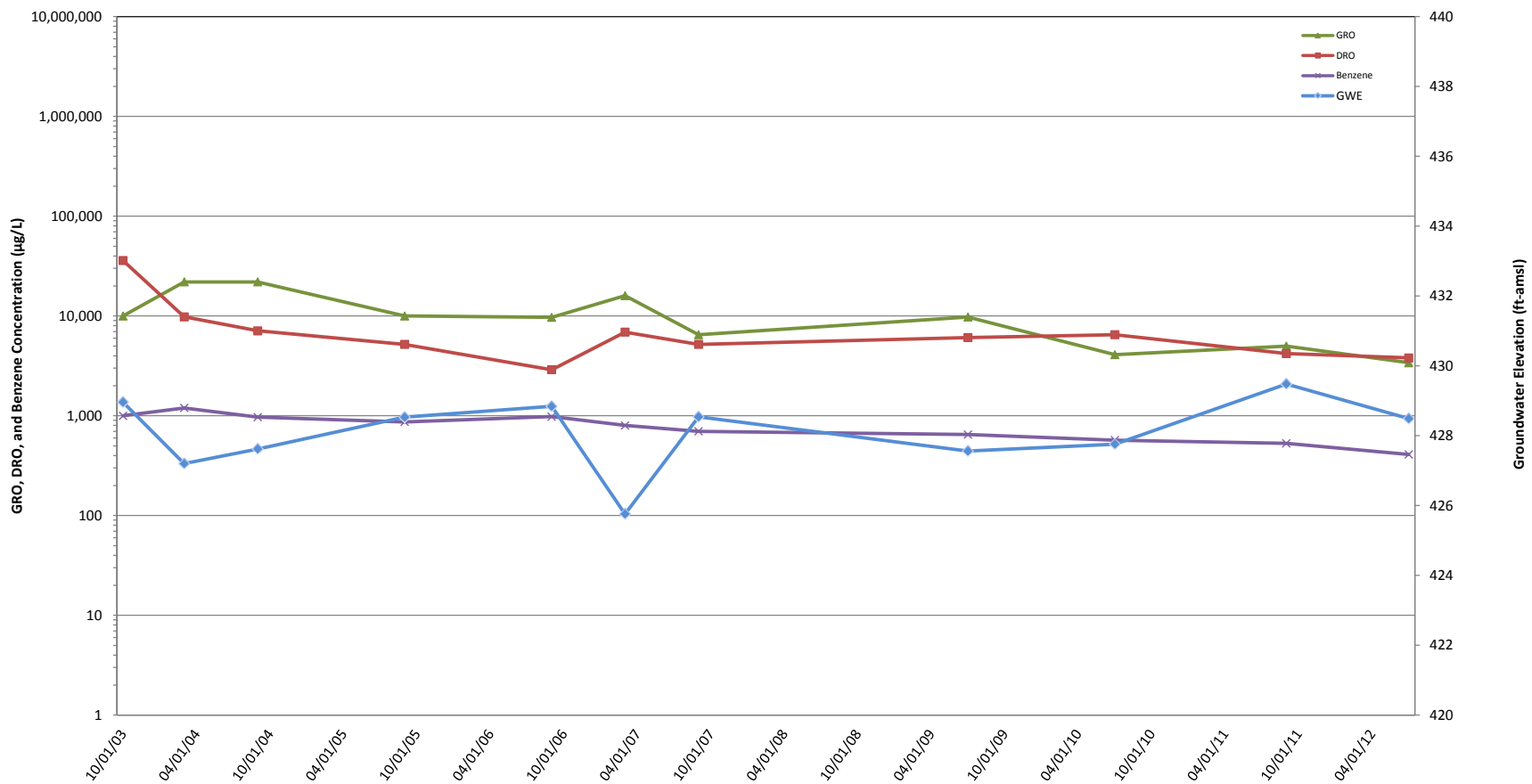
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-4 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-14**



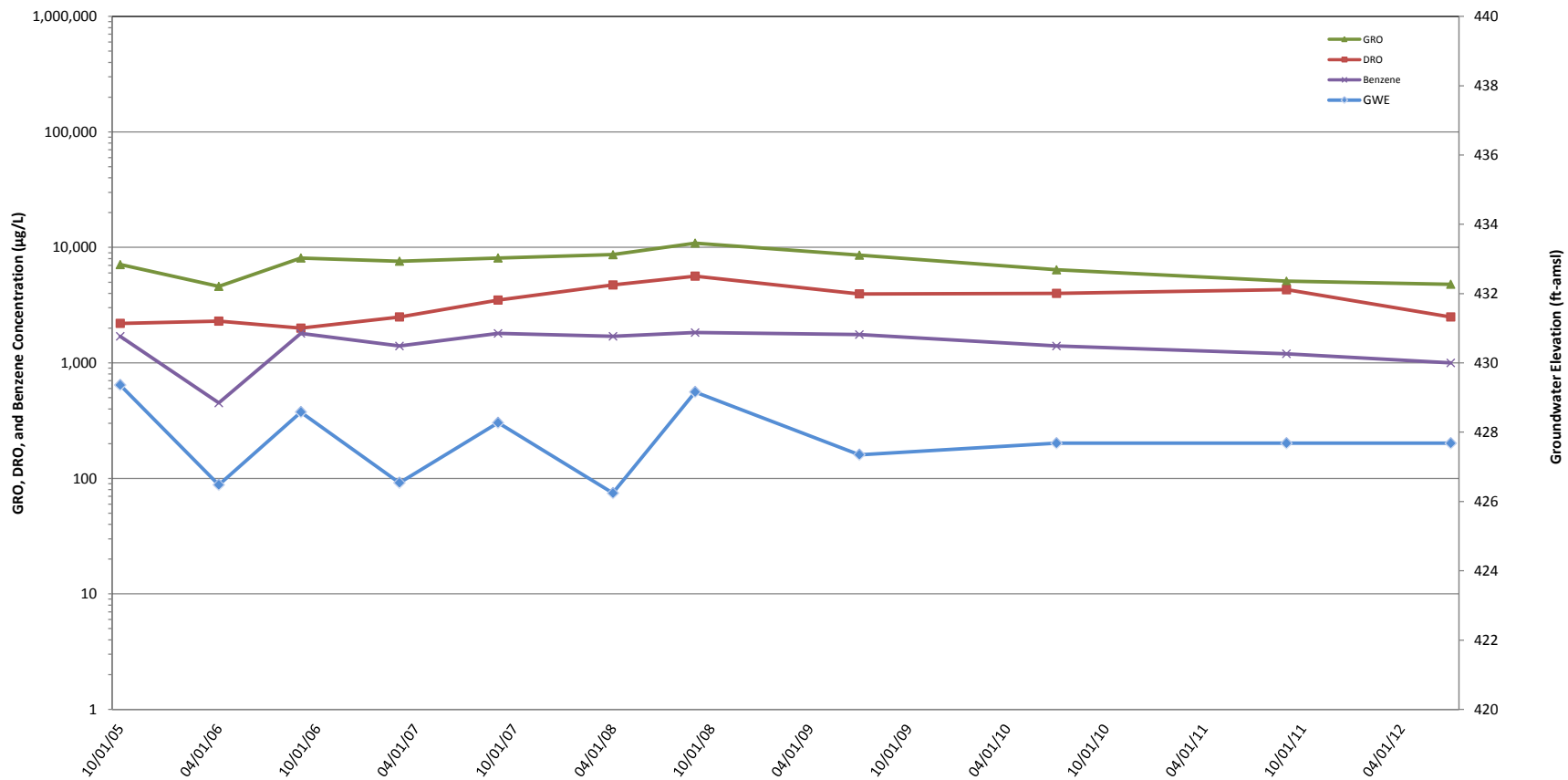
**LEGEND:**  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-5 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-15**



**LEGEND:**

GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

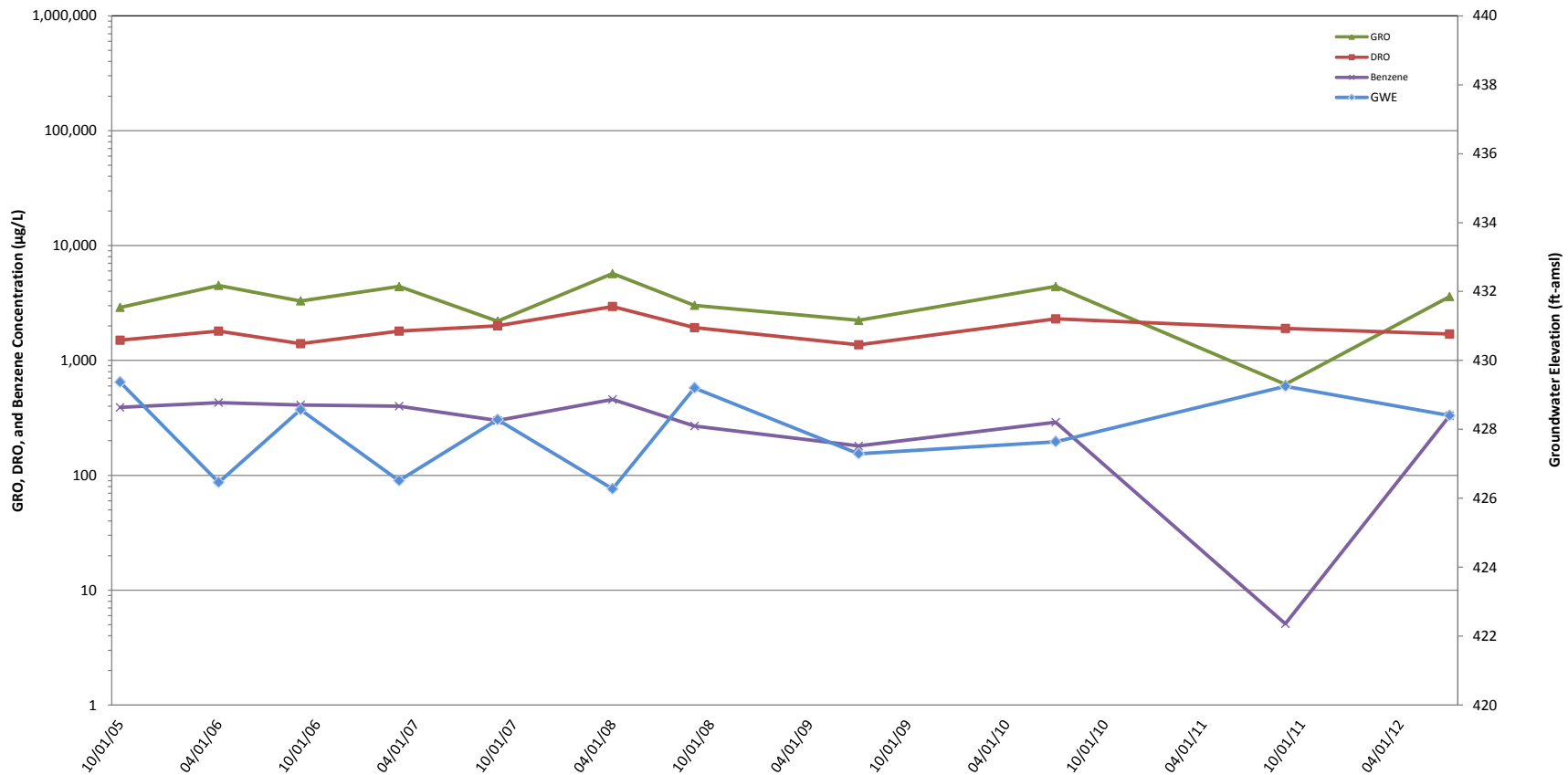
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**Monitoring Well MW-7 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-16**





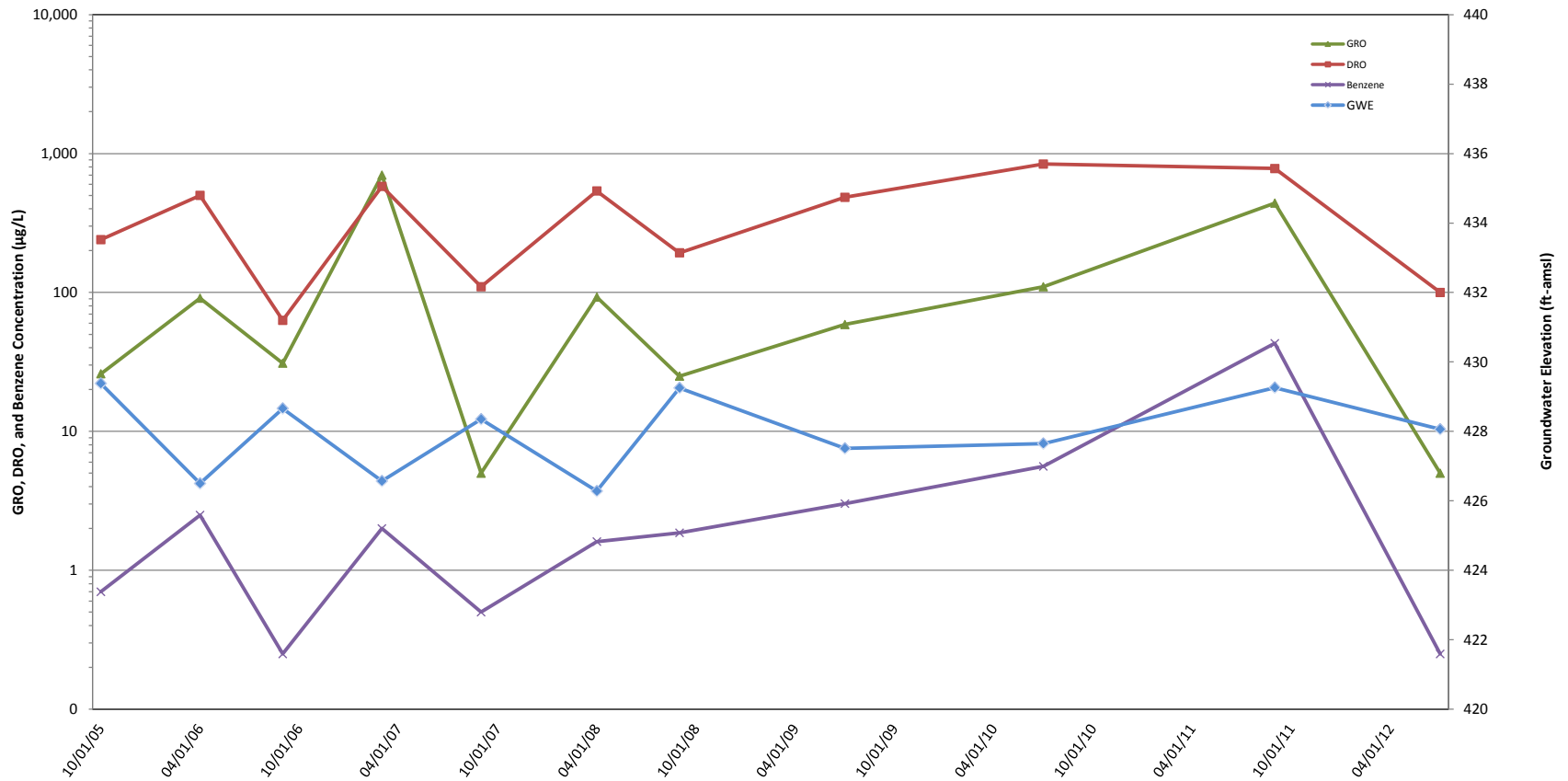
**LEGEND:**  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-8 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-17**



**LEGEND:**

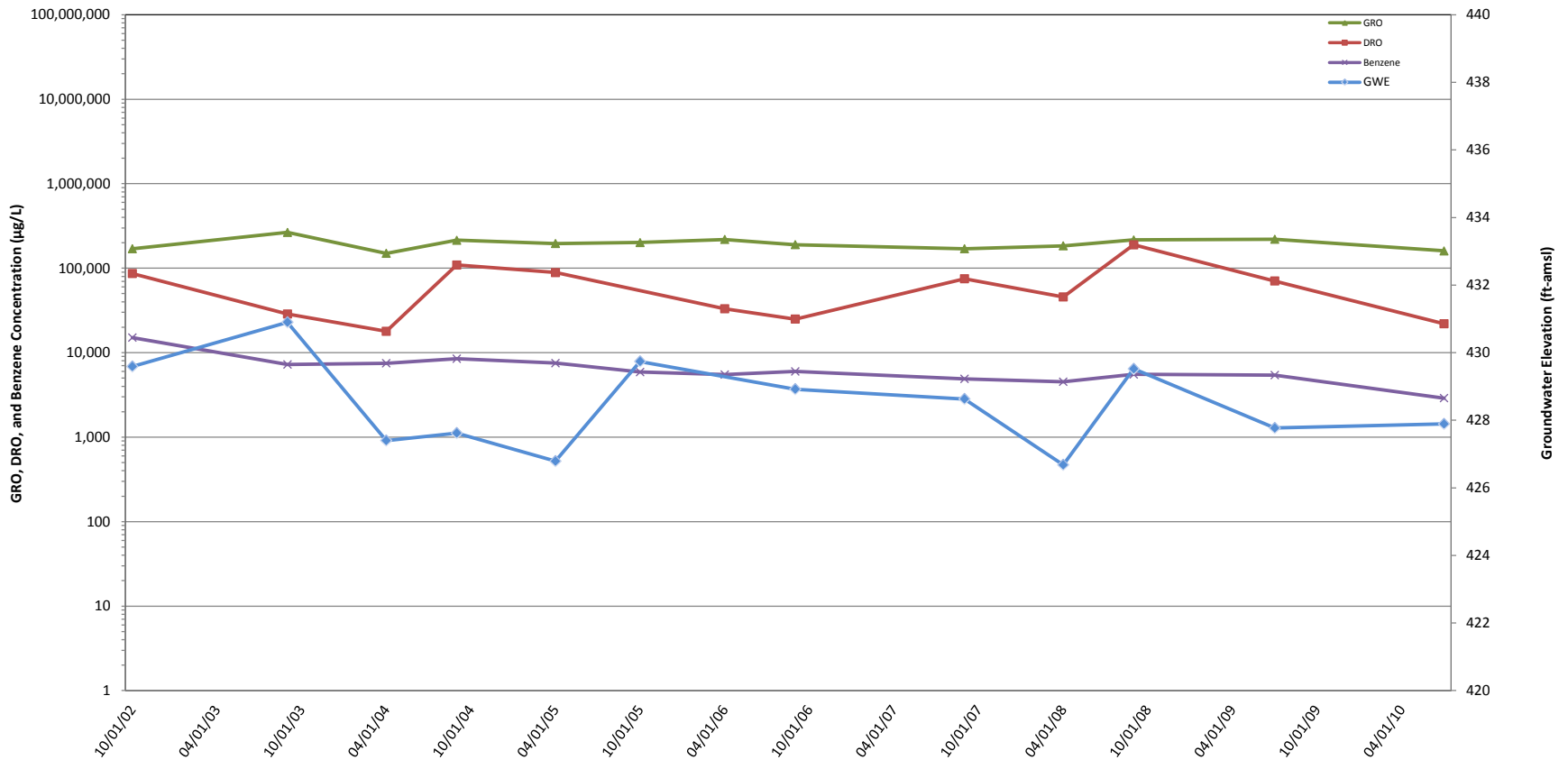
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-9 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-18**



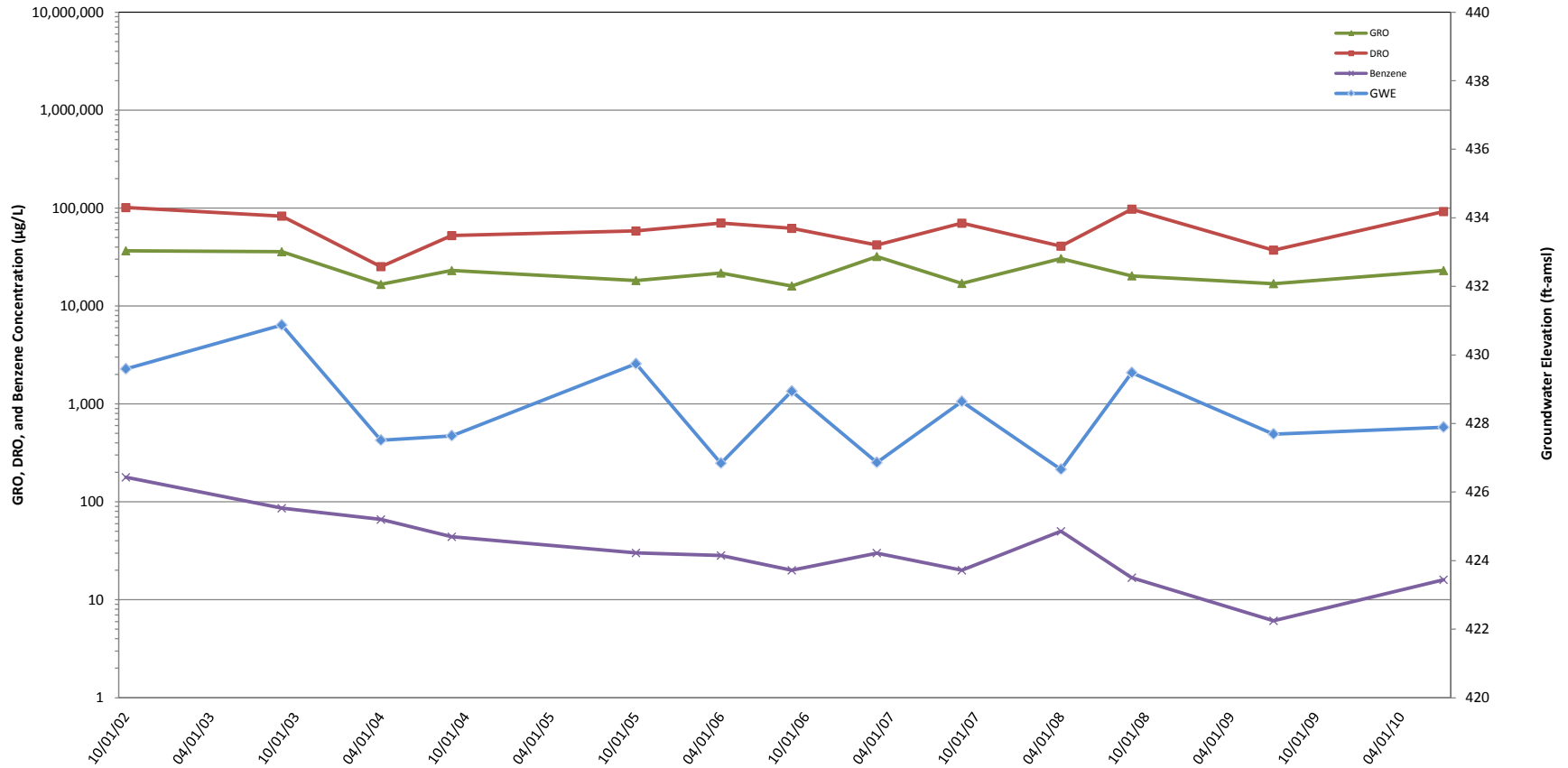
LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-2 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
 B-19



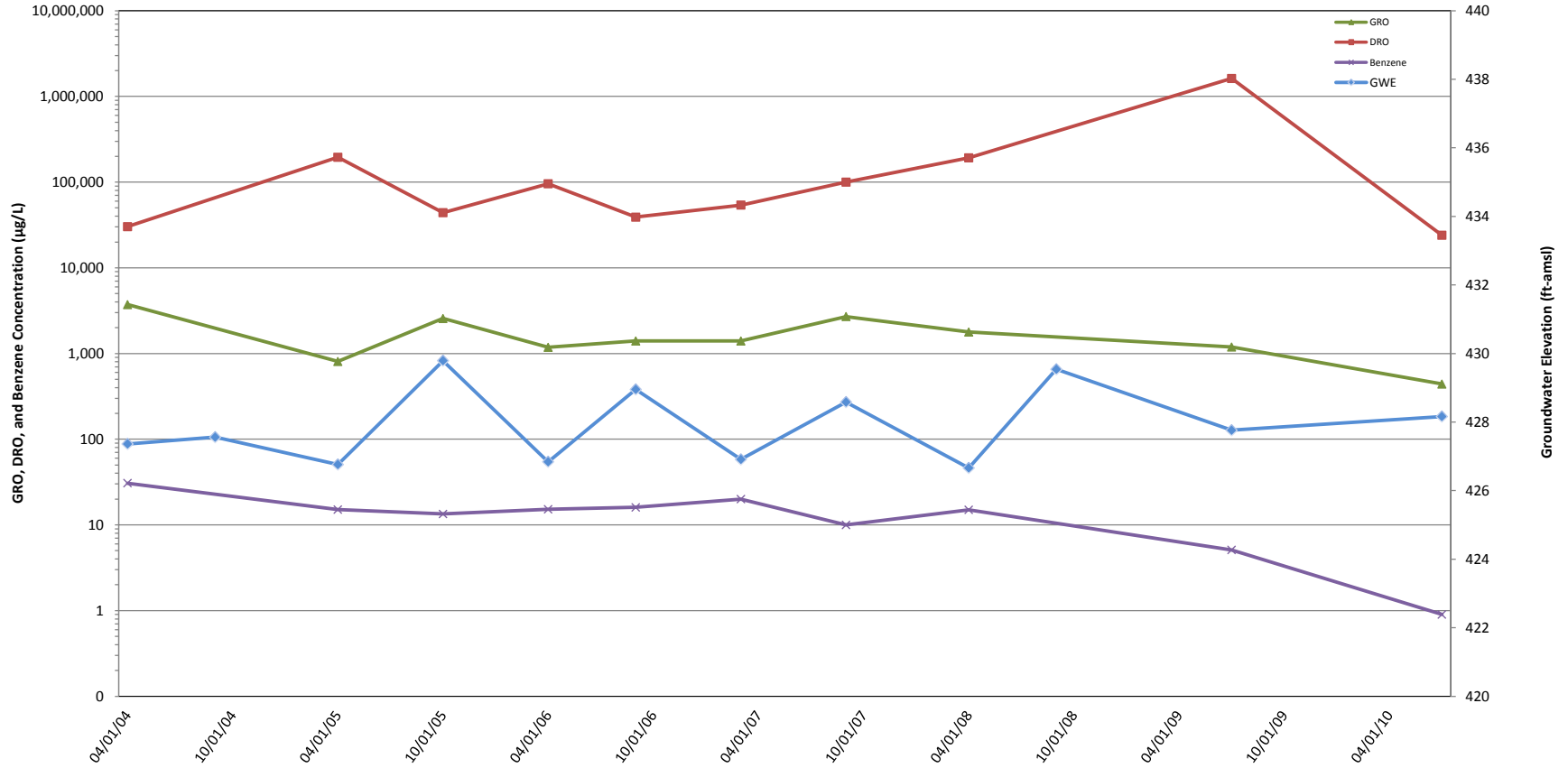
LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-3 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
 B-20



**LEGEND:**

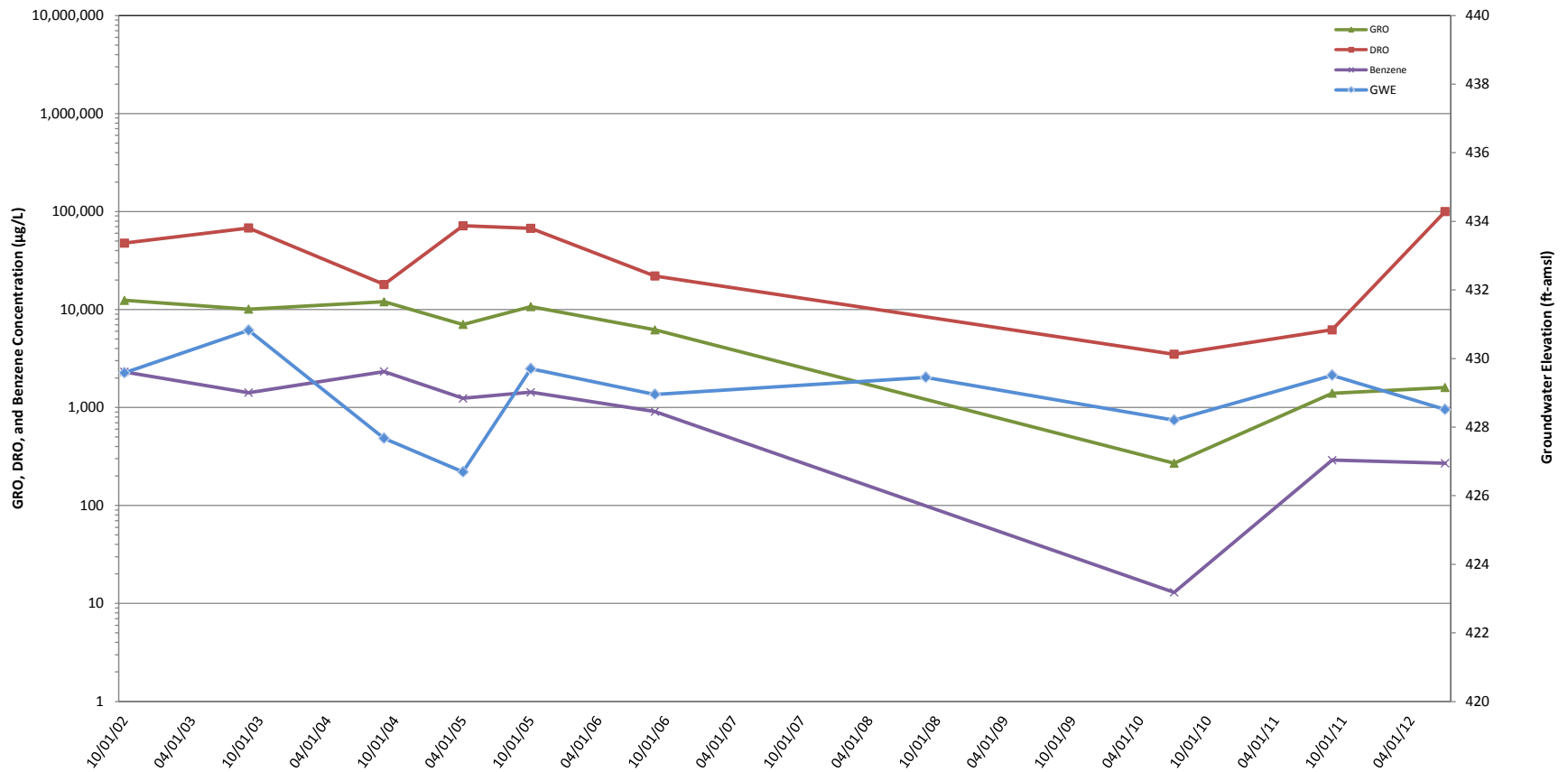
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-4 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-21**



**LEGEND:**

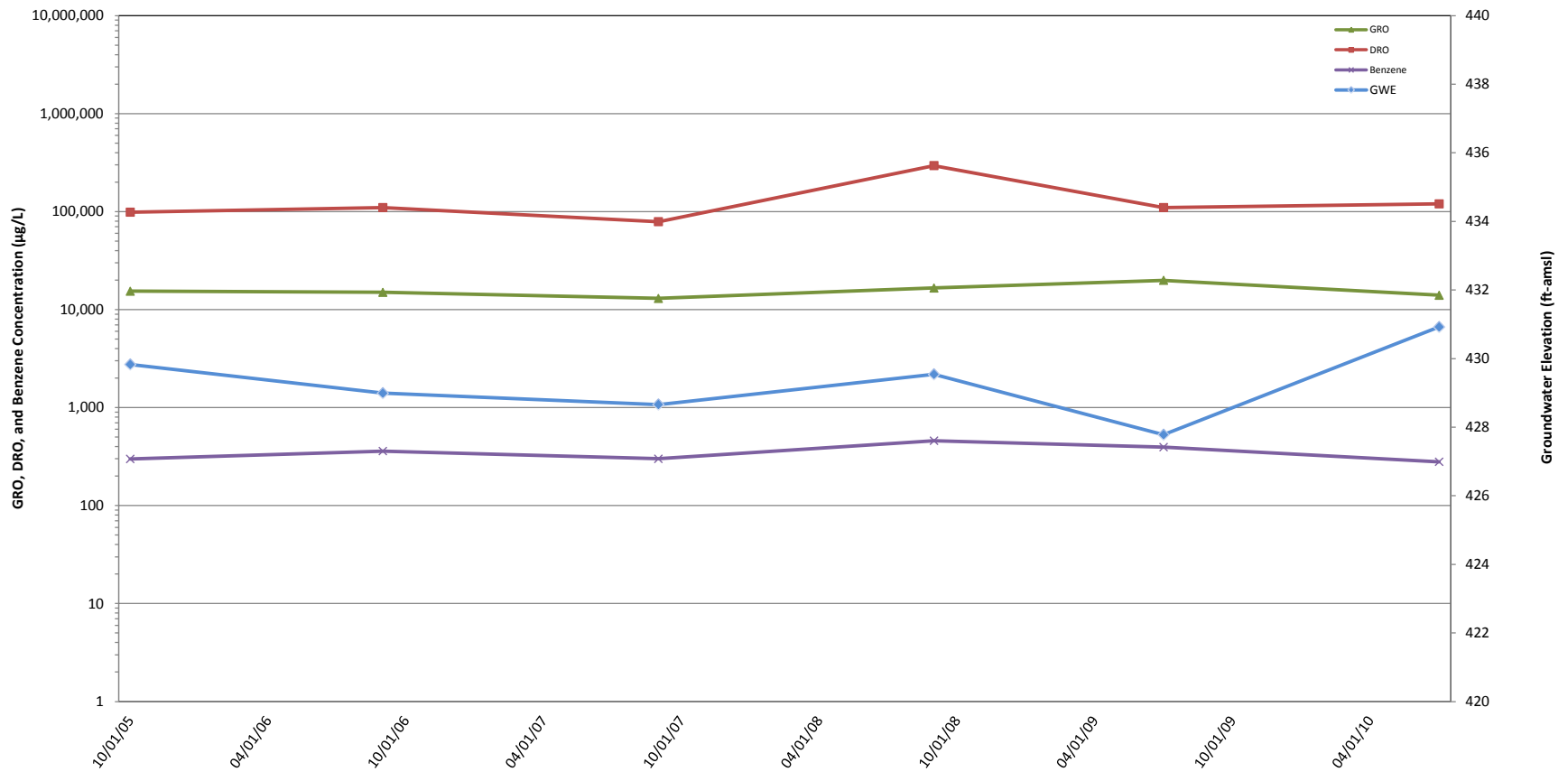
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-5 Historical Groundwater Elevation and Analytical Data**



FIGURE  
 B-22



**LEGEND:**

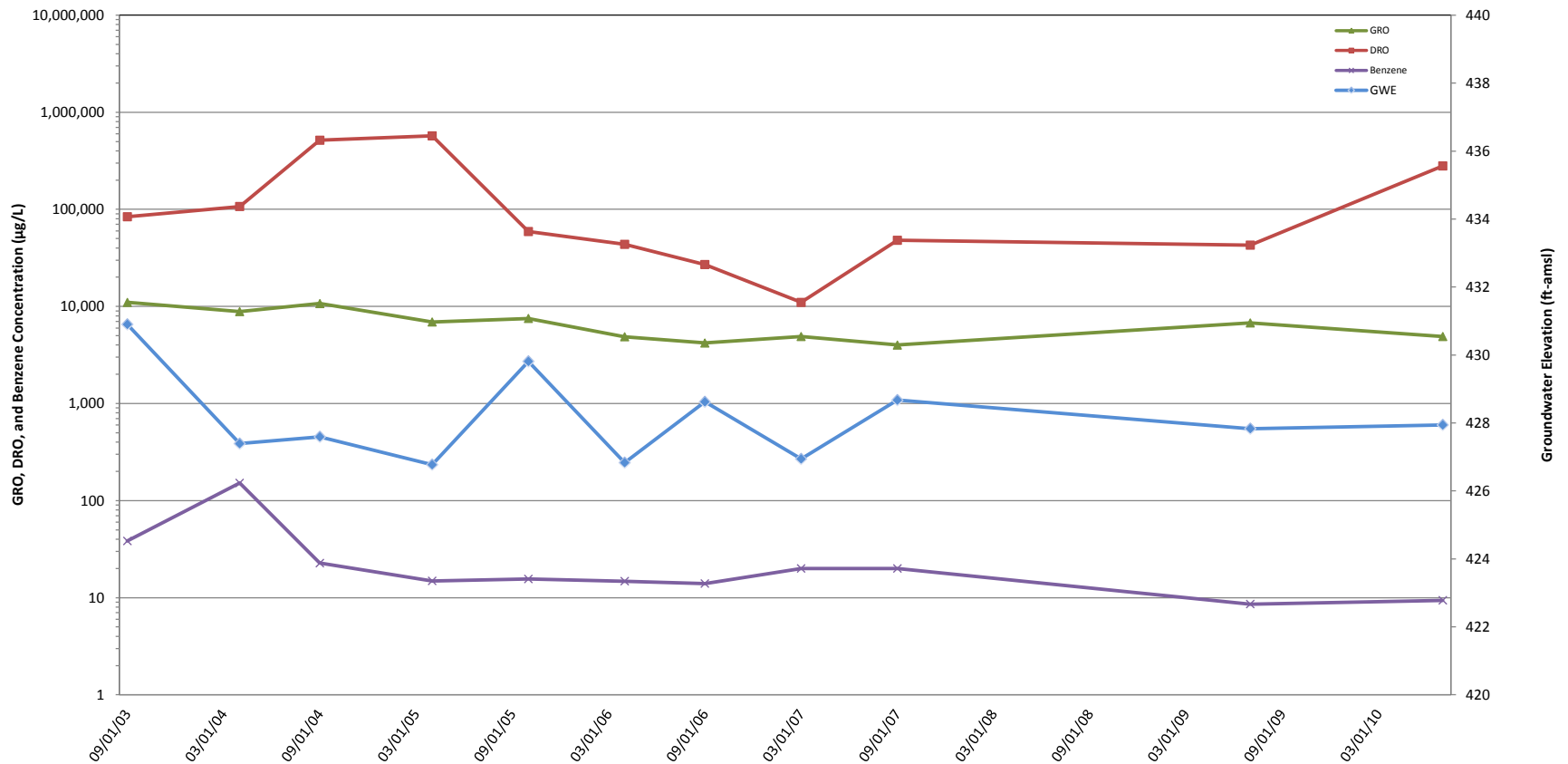
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-7 Historical Groundwater Elevation and Analytical Data**



FIGURE  
 B-23



**LEGEND:**

GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

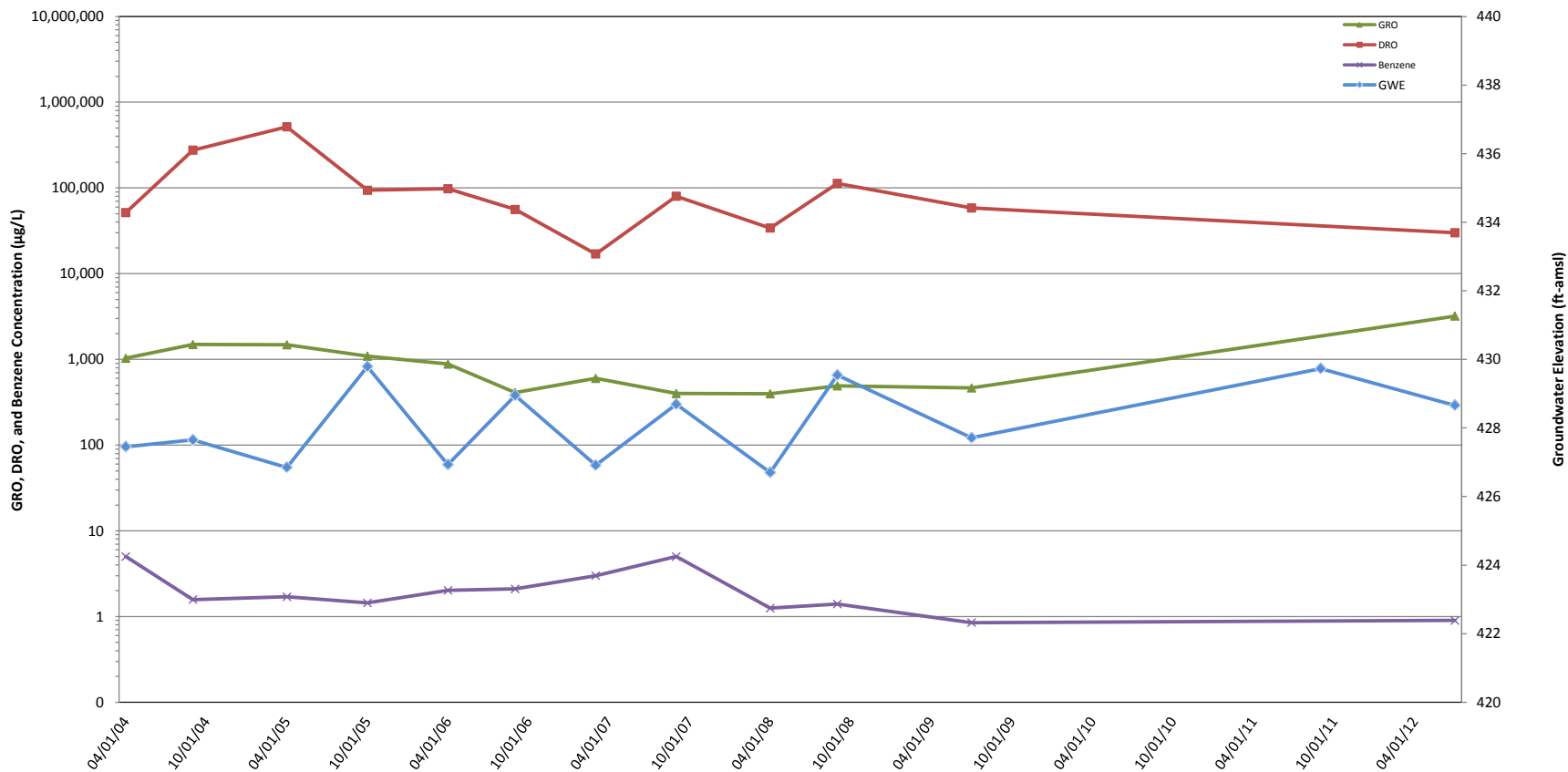
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**Monitoring Well GEI-8 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-24**





**LEGEND:**

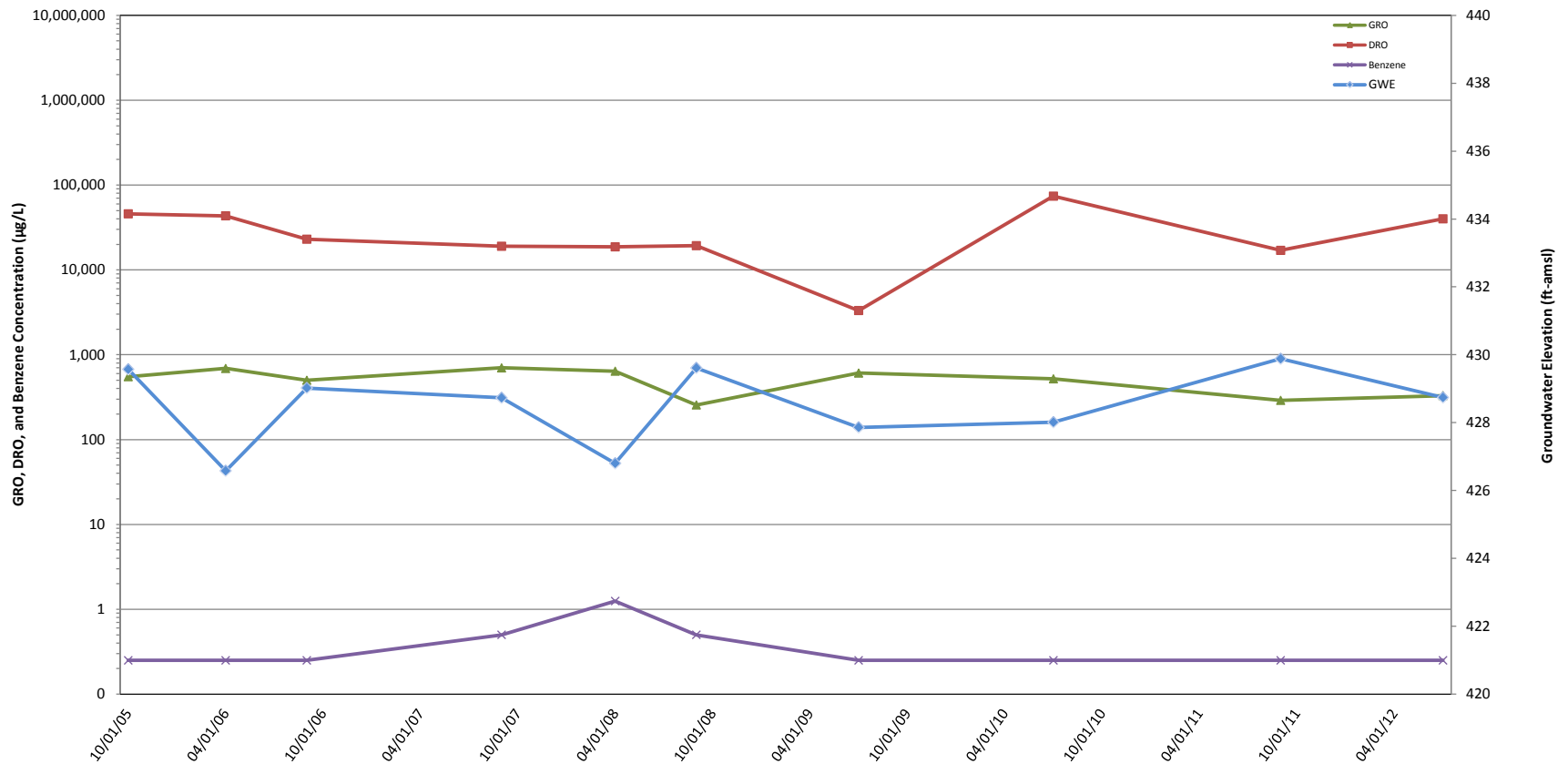
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-9 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-25**



**LEGEND:**

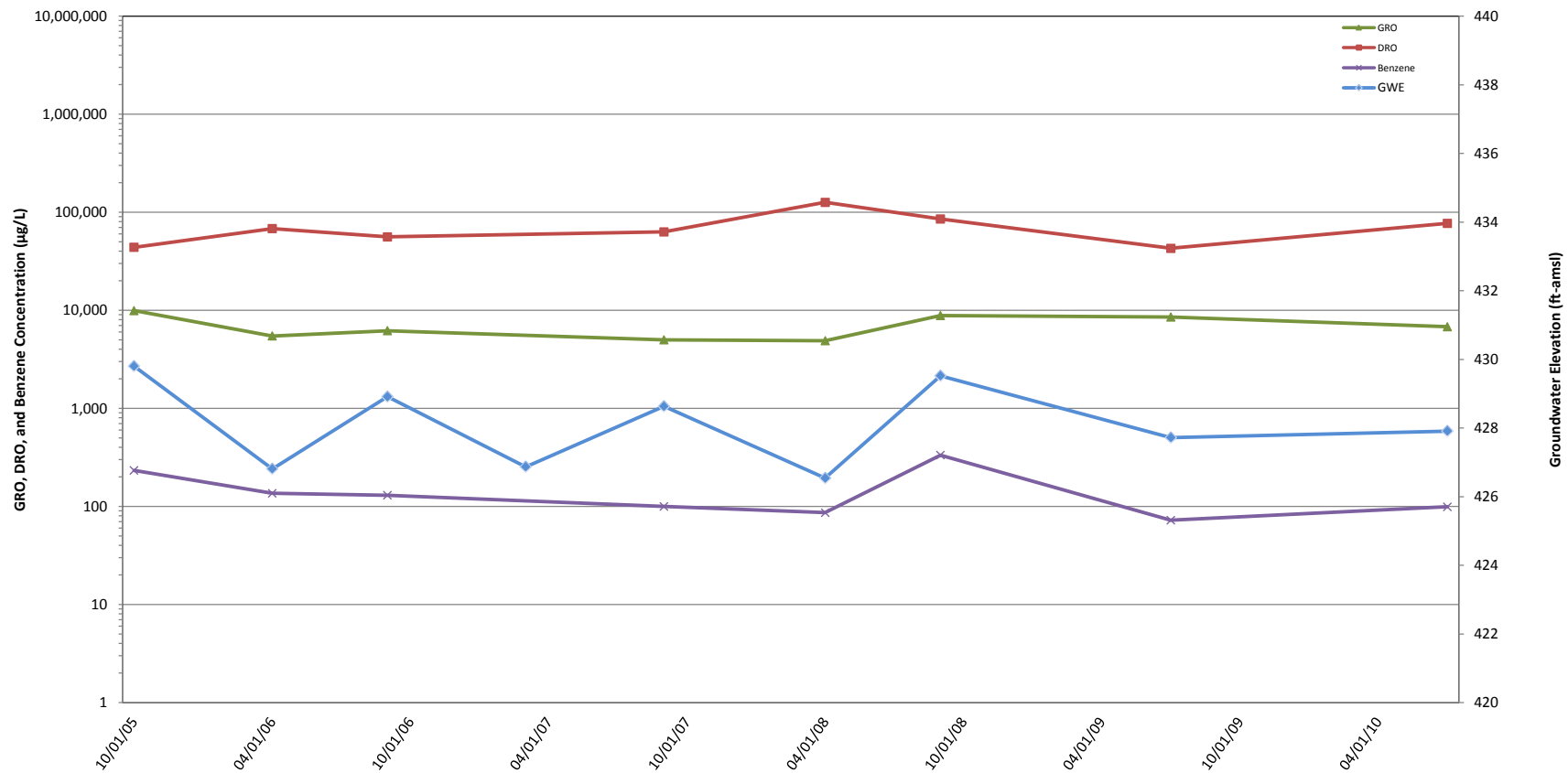
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-10 Historical Groundwater Elevation and Analytical Data**



**FIGURE B-26**



**LEGEND:**

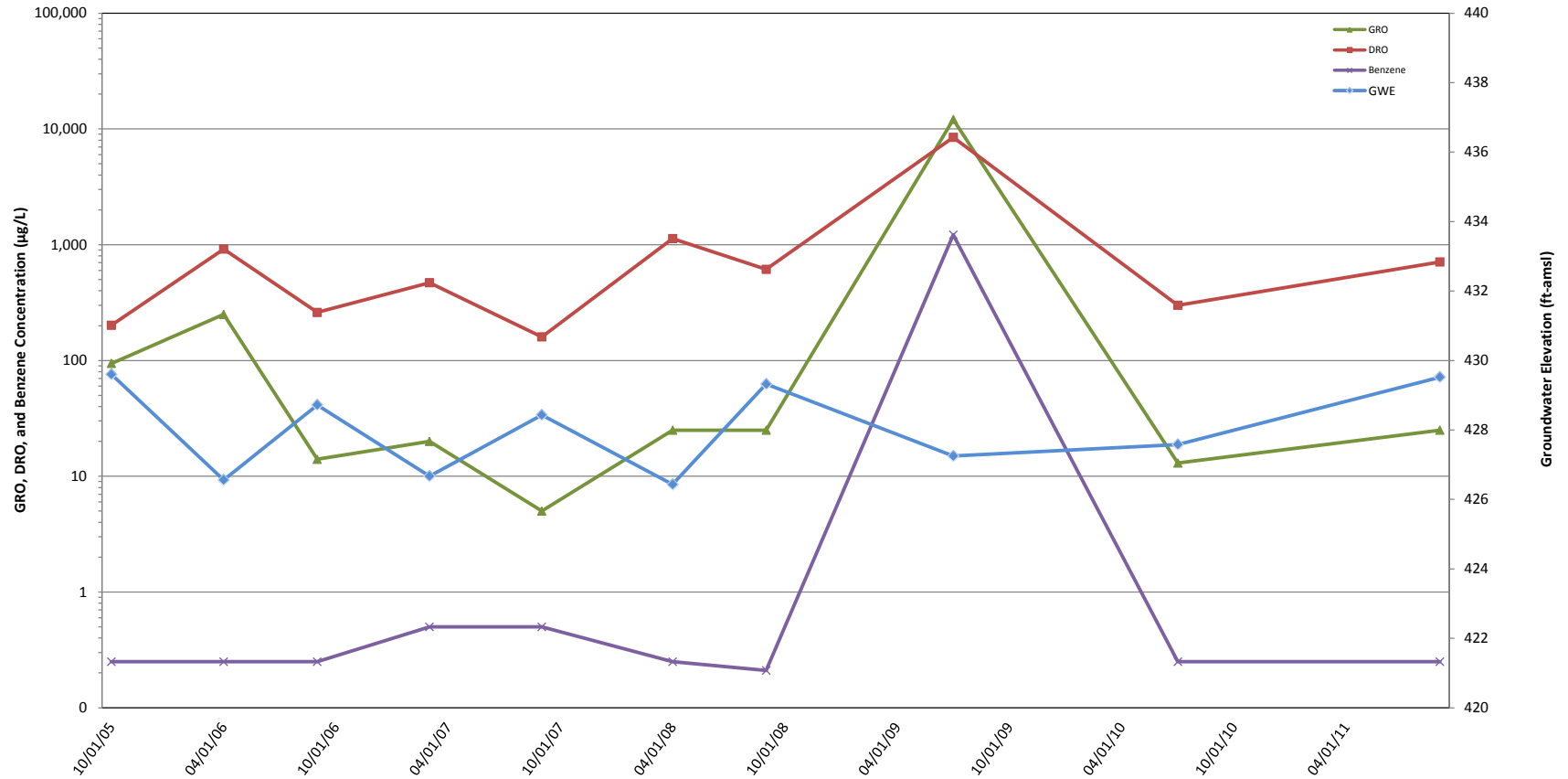
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well GEI-12 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
 B-27



**LEGEND:**

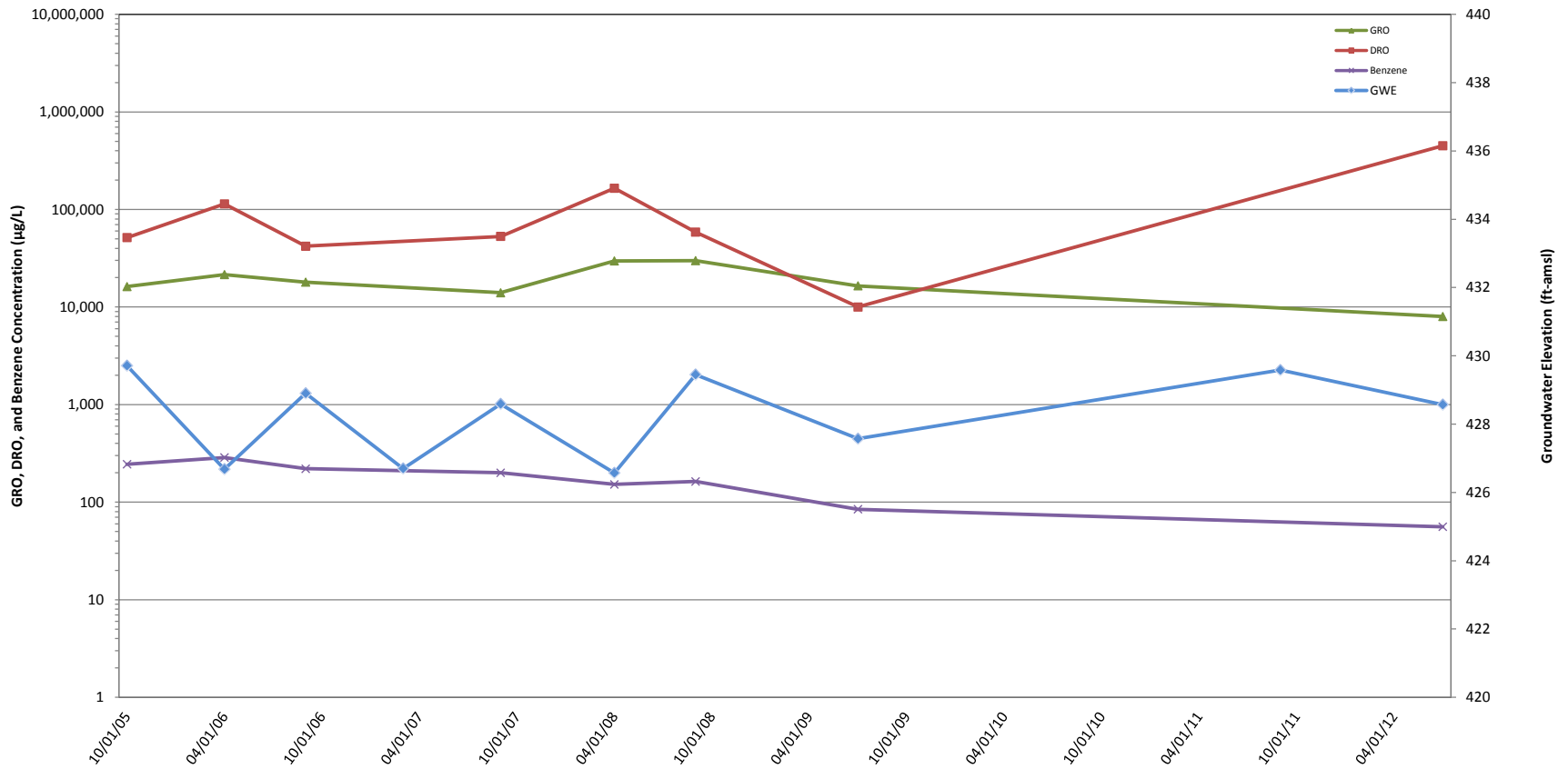
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

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**Monitoring Well MW-2 Historical Groundwater Elevation and Analytical Data**



FIGURE  
**B-28**



**LEGEND:**

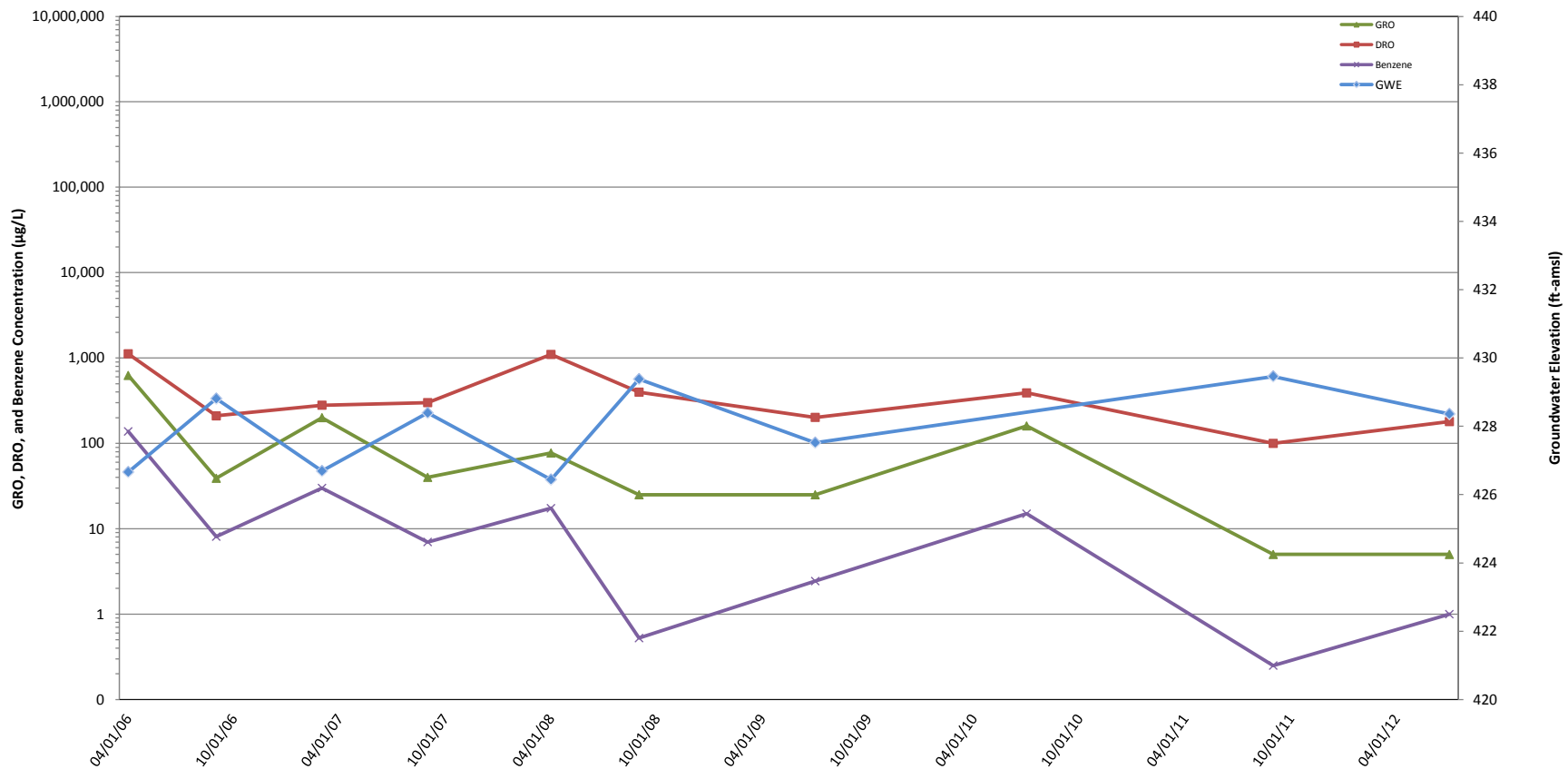
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

FORMER UNOCAL TERMINAL 306456  
 328.5 ILLINOIS ST. FAIRBANKS, ALASKA  
 ANNUAL 2012 GROUNDWATER MONITORING REPORT

**Monitoring Well MW-5 Historical Groundwater Elevation and Analytical Data**



FIGURE  
 B-29



**LEGEND:**

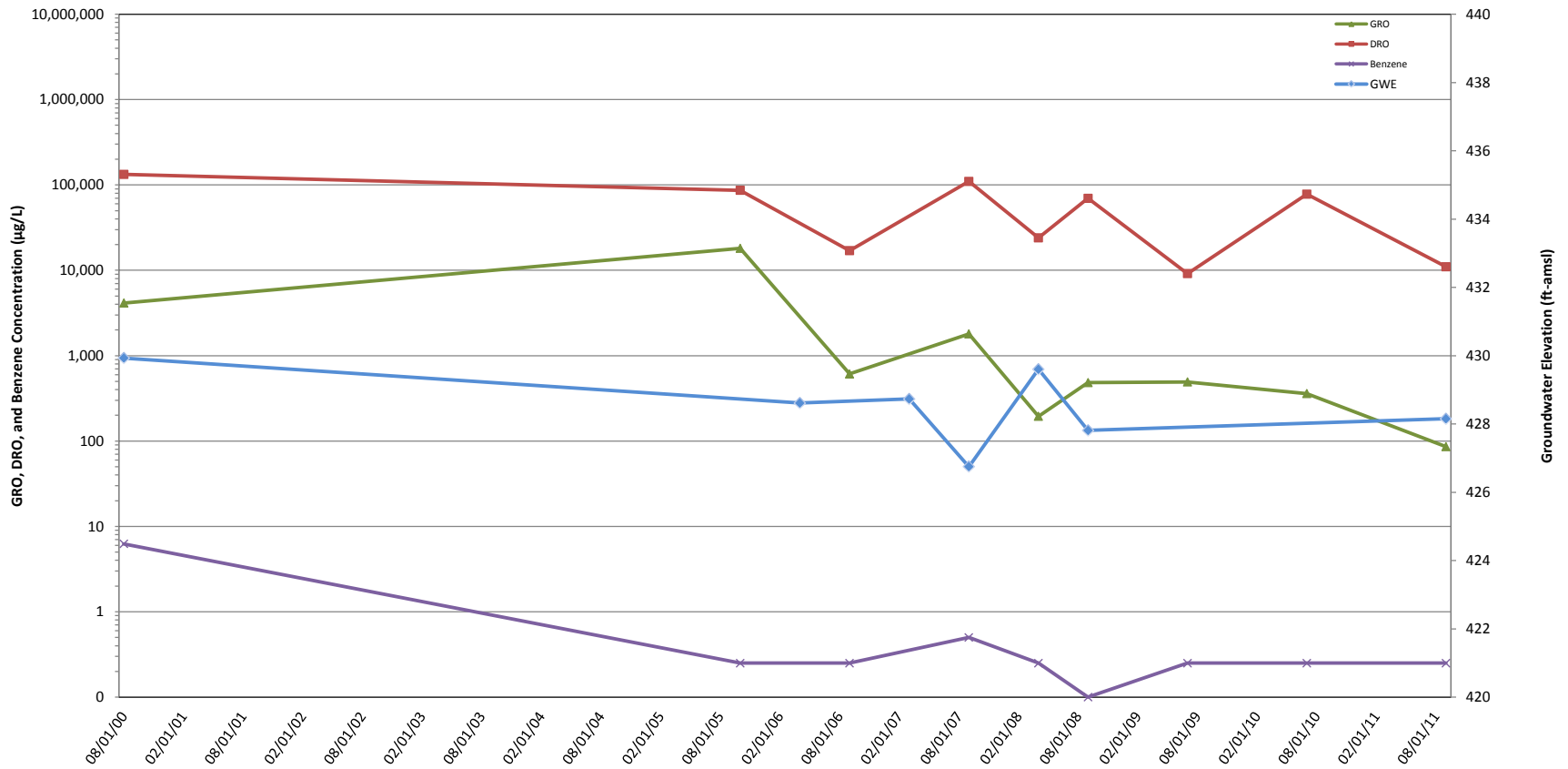
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

FORMER UNOCAL TERMINAL 306456  
 328.5 ILLINOIS ST. FAIRBANKS, ALASKA  
 ANNUAL 2012 GROUNDWATER MONITORING REPORT

**Monitoring Well MW-6 Historical Groundwater Elevation and Analytical Data**



**FIGURE  
 B-30**



**LEGEND:**

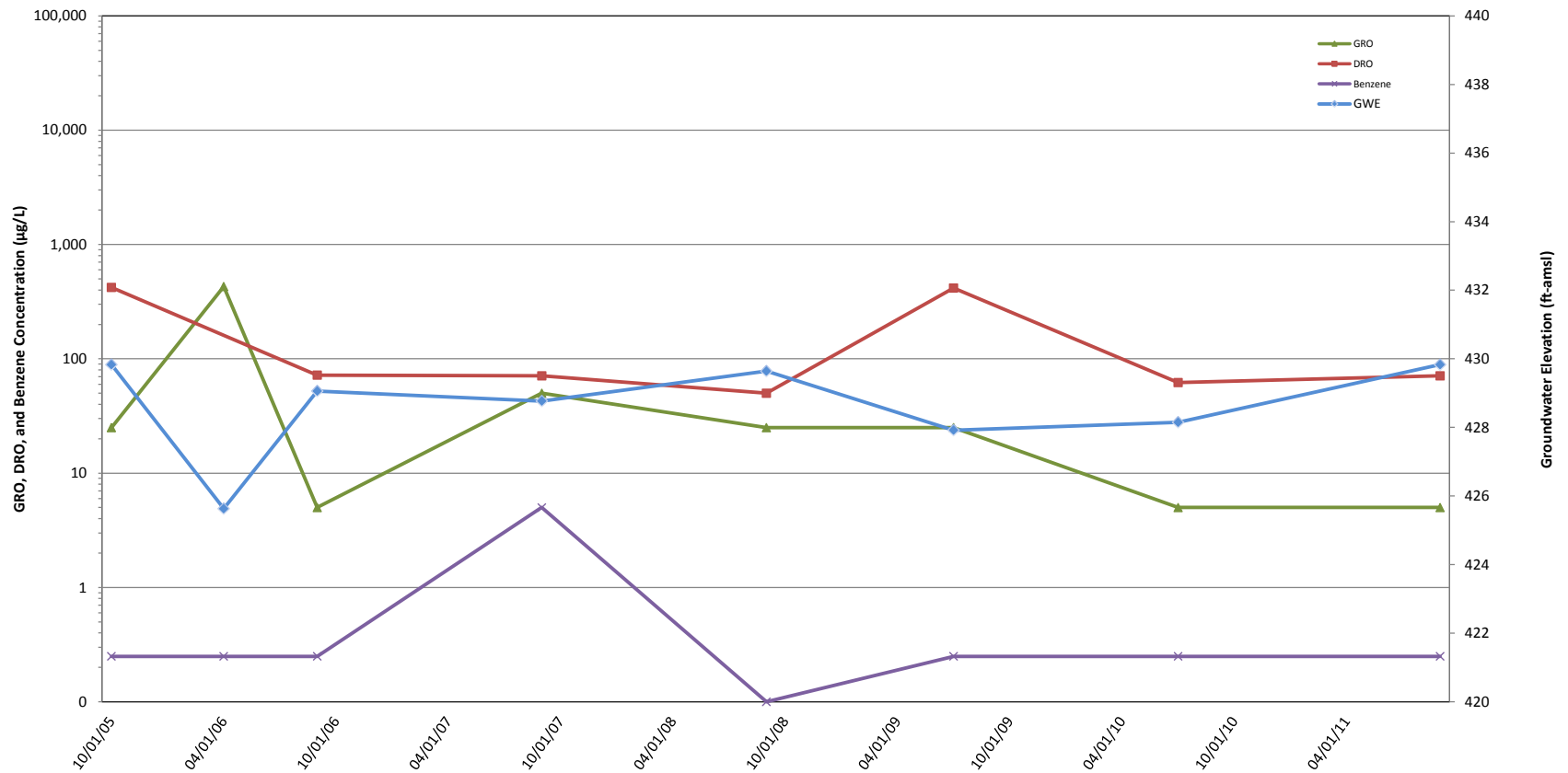
GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

FORMER UNOCAL TERMINAL 306456  
 328.5 ILLINOIS ST. FAIRBANKS, ALASKA  
 ANNUAL 2012 GROUNDWATER MONITORING REPORT

**Monitoring Well K-5 Historical Groundwater  
 Elevation and Analytical Data**



**FIGURE  
 B-31**



LEGEND:  
 GRO = Gasoline range organics  
 DRO = Diesel range organics  
 GWE = Groundwater elevation  
 µg/L = micrograms per liter  
 ft-amsl = Feet above mean sea level  
 Used half of detection limit value for non-detect results

FORMER UNOCAL TERMINAL 306456  
 328.5 ILLINOIS ST. FAIRBANKS, ALASKA  
 ANNUAL 2012 GROUNDWATER MONITORING REPORT

**Monitoring Well K-7 Historical Groundwater  
 Elevation and Analytical Data**



FIGURE  
 B-32



**Appendix A**

Field Data Sheets

11/11/11 FAIR TEXAS Waste Water PU

Personnel: ALBERTO L. FENLEY, D. BEAUBAUM

EMERALD AT E. Meadows

Scope: PU one drum of H2O work

Weather: 20° Cloudy. Snow even

0950 H&S meeting

0955 Setup TCP of load drum

1000 Start to pickup Visqueen

and hiker some soil on top

Contain on Visqueen + put

Visqueen (soil into heavy duty

troubing with non-hazardous

label (Cloro-enc. bin Ballinger Co.

Sin Panna. Still wait, Grogmontman

2000 (492) Will return today

with drum or syringe for more

Permanent containment.

1005 APERTHIS OFFSITE.

12:00 Arrive back on site to Gauge Surface 1

Injector. Pitt Test wells.

12:10 Geyl / H&S meeting - mid-day slots

12:11 ID DTW DTW PID Comments

MW-25 - 17.70 119 ppm

MW-4 - 14.61 957 ppm

Notes

12:45 Mobilize off site to Sanger

7/23/12 FAIR Unocal 306456

Activity: Annual Gauging

Weather: Cloudy Overcast

Personnel: Miguel O. Michael M.

1100 Arrive on site complete PU

conduct H&S tailgate, discuss

SOW and SOP. Calibrate PID.

1115 Begin Gauging wells

WELL ID PID DTW DTR Comments DTR

GEI-1 137 15.09 18.71

GEI-2 OBTURATED BY HEAVY SPARE METAL

GEI-3 725 15.64 20.07

GEI-4 13.2 15.83 20.00

GEI-5 331 13.42 15.21 0000s. Needs new well cap / leak

GEI-6 0.5 13.09 13.24 OBTURATED WITH GRANULAR METAL. NEEDS METAL DISTRIB

GEI-7 517 15.54 -

GEI-8 0.3 15.83 19.55

GEI-9 1.9 15.61 19.64

GEI-10 1.2 14.48 17.51

FEI-11 NOT GAUGED, ACCESS

GEI-12 388 14.79 19.71

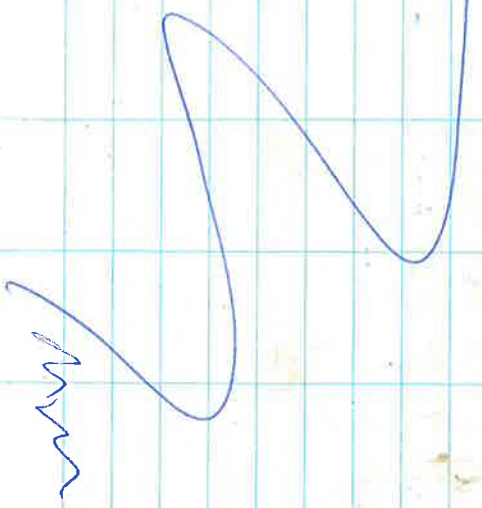
K-5 OBTURATED BY HEAVY EQUIPMENT

K-7 OBTURATED BY HEAVY EQUIPMENT

7/23/12 FAIR Unusual 30456  
 Annual Gauging 2012

Well ID	PID	DTW	DTB	Comments
MW-1	0.1	15.54	21.99	-
MW-2	0.0	15.55	21.94	1 Bolt MISSING
MW-3	0.3	15.94	20.75	-
MW-4	0.3	18.32	24.20	-
MW-5	0.0	15.43	21.41	-
MW-6	0.0	18.56	25.24	-
MW-14	0.1	15.02	19.12	-
MW-15	2.1	14.88	19.13	-

1530 Completed gauging. Moved to FAIR Chevron.



7/23/12 FAIR Chevron 1001430

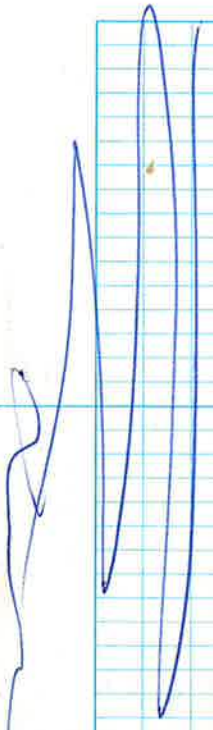
Weather: Partly Cloudy  
 Activity: Annual GW Gauging  
 Personnel: M. O'Grady, M. Mudd, Daniel

1600 Arrive on site. Conduct H/S  
 hydrogate meeting, discuss SOW,  
 complete PM, discuss Hazard  
 ID.

1610 Begin gauging wells

Well ID	PID	DTW	DTB	DTF	Comment
TH-1	56.6	16.85	23.16	-	-
TH-2	37.1	14.91	21.55	-	-
TH-5	205	13.91	22.42	-	-
TH-7	0.1	16.56	23.57	-	-
TH-10	1.0	14.84	23.92	-	-
MW-23	0.0	16.61	30.60	-	-
MW-25	1.3	17.15	-	17.08	-

1650 COMPLETED GAUGING - MOVED TO FAIR TEXAS,



07-23-12 FAIR TEXAS 211815-

WEATHER: PARTLY SUNNY, COOL, CLEAR  
 ACTIVITY: ANNUAL GID EXERCISE  
 PERSONNEL: M. WARDENIEL, M. O'LEARY

ISSUE: ARRIVE ON SITE. CONDUCT HQ'S TRAINING  
 MEETING. COMPLETE FRO. DISCUSS  
 SOU.

WELL ID	PID	DIW	DTB	DTP	COMMENTS
MW-1	0.0	12.79	26.90	-	UNDER-23" GAPANCE
MW-3	0.0	14.20	17.33	-	2 SIDE BOLTS 7/16"
MW-4	437	13.90	20.18	-	2 1/2 BOLTS
MW-5	1.0	13.02	20.43	-	BURIED UNDER FLAG MOUNTANT
MW-7	0.0	14.99	21.13	-	CAP PRESSD OVER.
MW-8	0.0	13.21	21.69	-	-
MW-9	0.0	13.39	21.60	-	-
MW-81	0.0	13.63	18.65	-	LOOSE LID
MW-85	0.0	13.79	17.95	-	-

1815 Completed gauging. Matted off site.



07/25/12 FAIR Vermont 380456

Activity: 2012 Annual GWM  
 Weather: cloudy 62F  
 Personnel: M. Drexler & M. Ward-Dowd

915 Arrive on site, conduct 4+5 talk, discuss SOU of SOI, discuss Hazard ID, check on DE tenants, complete FRO, calibrate PID.

930 Prep for GW sampling.

Well ID	Sample Time	Comments	Well ID	Sample Time	Comments
MW-1	1200		GEI-1	NS	Giddicks
MW-2	1140		GEI-2	NS	Obstructed
MW-3	1110		GEI-3	NS	Giddicks
MW-4	NS	NS/mad	GEI-4	NS	→ Giddicks
MW-5	1310		GEI-5	1520	
MW-6	1325		GEI-6	1500	BD-1
K-5	NS	obstructed	GEI-7	NS	→ LMAP
K-7	NS	obstructed	GEI-8	NS	→ Giddicks
MW-14	1040		GEI-9	1615	
MW-15	NS	Giddicks	GEI-10	1710	BD-2
1750	Completed sampling, matted off site.		GEI-12	NS	Giddicks



-12/12 FAIR TEXAS 211815

Weather: Partly Cloudy TGF

Activity: 2012 GW Sampling

Personnel: M. Orvedo, M. Mace, David

1200 Arrive on site, conduct I+G

tailgate meeting, discuss SOW,

discuss SOP & Hazard ID,

complete PTW, calibrate PID with isobutylene.

1230 Begin sampling wells.

Well ID Sample Time Comments

AR-81 1310

AR-85 1250

MW-1 1330 ns/nsID

MW-3 1535 BD-1, Heavy Screen

MW-4 1550

MW-5 1745

MW-7 1440

MW-8 1505

MW-9 1520

1800 Completed Sampling. Mobbbed off site. 

12/18/12 FAIR Chevron 211815

Weather: Sunny TGF

Activity: 2012 Annual GW Sampling

Personnel: M. Orvedo, M. Mace, David

1015 Arrive on site, conduct

I+G tailgate, discuss SOW,

the IDs, complete PTW, calibrate PID. Notify Sourdough

fuel of SOW.

1025 Begin Sampling Wells

Well ID Sample Time Comments

TH-1 1130 BD-1

TH-2 1110 Screen

TH-5 1150

TH-7 1215 ns/nsID

TH-10 1645

MW-23 NS obstructed (not ice)

1245 Completed Sampling. Mobbbed off site. 

ARCADIS

**Appendix B**

Laboratory Analytical Reports

## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

August 14, 2012

Project: 1001430

Submittal Date: 07/31/2012

Group Number: 1325454

SDG: LSU22

PO Number: 0015097006

Release Number: CARRIER

State of Sample Origin: AK

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
TH-1 Grab Water Sample	6738096
TH-2 Grab Water Sample	6738097
TH-5 Grab Water Sample	6738098
TH-7 Grab Water Sample	6738099
TH-7_MS Grab Water Sample	6738100
TH-7_MSD Grab Water Sample	6738101
TH-10 Grab Water Sample	6738102
BD-1 Grab Water Sample	6738103
Trip_Blank Water Sample	6738104

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

ELECTRONIC COPY TO	Arcadis	Attn: Dana Ramquist
ELECTRONIC COPY TO	Arcadis	Attn: David Beaudoin
ELECTRONIC COPY TO	ARCADIS	Attn: Michael MacDaniel
1 COPY TO	Data Package Group	

Respectfully Submitted,



Jill M. Parker  
Senior Specialist

(717) 556-7262



**Sample Description:** TH-1 Grab Water Sample  
 Facility# 1001430  
 418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738096  
 LLI Group # 1325454  
 Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 11:30 by MM Chevron  
 L4310  
 Submitted: 07/31/2012 09:40 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 22:56 San Ramon CA 94583

FBAT1 SDG#: LSU22-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.40	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.0010	0.0005	1
02102	Ethylbenzene	100-41-4	0.0039	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0020	1
02102	Total Xylenes	1330-20-7	N.D.	0.012	1
Reporting limits were raised due to interference from the sample matrix.					
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	1.5	0.10	20
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	16	0.97	20
02923	C25-C36 RRO	n.a.	N.D.	1.4	20
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	12	0.48	10
Due to the dilution of the sample extract, capric acid recovery can not be determined.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	2.6	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	424	0.70	1

**General 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
---------	---------------	--------	--------	--------	------------------------	---------	-----------------

**Sample Description: TH-1 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738096**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 11:30 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT1 SDG#: LSU22-01

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 03:27	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 03:27	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 03:27	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150009A	08/02/2012 18:47	Elizabeth J Marin	20
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 23:13	Tyler O Griffin	20
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 23:13	Tyler O Griffin	10
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:45	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:45	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 21:45	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 14:38	Michele L Graham	1

**Sample Description:** TH-2 Grab Water Sample  
 Facility# 1001430  
 418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738097  
 LLI Group # 1325454  
 Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 11:10 by MM Chevron  
 L4310  
 Submitted: 07/31/2012 09:40 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 22:56 San Ramon CA 94583

FBAT2 SDG#: LSU22-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	22	0.050	5
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.26	0.0025	5
02102	Ethylbenzene	100-41-4	0.87	0.0025	5
02102	Toluene	108-88-3	0.59	0.0025	5
02102	Total Xylenes	1330-20-7	4.4	0.0075	5
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	14	0.25	50
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	38	2.4	50
02923	C25-C36 RRO	n.a.	22	3.4	50
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	32	1.2	25
Due to the dilution of the sample extract, capric acid recovery can not be determined.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	0.26	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	1.8	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	358	0.70	1

**General 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
---------	---------------	--------	---------------	------------------------	---------	-----------------

**Sample Description: TH-2 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738097**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 11:10 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT2 SDG#: LSU22-02

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 04:44	Catherine J Schwarz	5
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 04:44	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 04:44	Catherine J Schwarz	5
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150009A	08/02/2012 19:05	Elizabeth J Marin	50
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150011A	08/08/2012 00:10	Tyler O Griffin	50
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 23:42	Tyler O Griffin	25
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:59	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:59	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 21:59	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 14:44	Michele L Graham	1

**Sample Description:** TH-5 Grab Water Sample  
 Facility# 1001430  
 418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738098  
 LLI Group # 1325454  
 Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 11:50 by MM Chevron  
 L4310  
 Submitted: 07/31/2012 09:40 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 22:56 San Ramon CA 94583

FBAT5 SDG#: LSU22-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.84	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0060	1
02102	Ethylbenzene	100-41-4	0.0055	0.0005	1
02102	Toluene	108-88-3	0.0006	0.0005	1
02102	Total Xylenes	1330-20-7	0.037	0.0015	1
Reporting limits were raised due to interference from the sample matrix.					
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.16	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	20	0.95	20
02923	C25-C36 RRO	n.a.	6.7	1.3	20
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	23	1.2	25
Due to the dilution of the sample extract, capric acid recovery can not be determined.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	19.4	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	328	0.70	1

**General 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
---------	---------------	--------	--------	--------	------------------------	---------	-----------------

**Sample Description: TH-5 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738098**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 11:50 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT5 SDG#: LSU22-03

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 05:09	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 05:09	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 05:09	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150009A	08/02/2012 12:31	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 23:42	Tyler O Griffin	20
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/08/2012 00:10	Tyler O Griffin	25
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 22:14	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 22:14	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 22:14	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 14:50	Michele L Graham	1

**Sample Description:** TH-7 Grab Water Sample  
Facility# 1001430  
418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738099  
LLI Group # 1325454  
Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 12:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT7 SDG#: LSU22-04BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.073	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.21	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	1.5	0.047	1
02923	C25-C36 RRO	n.a.	0.76	0.066	1
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.51	0.048	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	24.6	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	269	0.70	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 06:26	Catherine J Schwarz	1

**Sample Description: TH-7 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738099**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 12:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT7 SDG#: LSU22-04BKG

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 06:26	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 06:26	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150009A	08/02/2012 12:48	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 11:17	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 07:59	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:03	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 21:03	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 21:03	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 14:55	Michele L Graham	1



**Sample Description:** TH-7\_MS Grab Water Sample  
**Facility#** 1001430  
**418 Illinois St - Fairbanks, AK**

**LLI Sample #** WW 6738100  
**LLI Group #** 1325454  
**Account #** 11964

**Project Name:** 1001430

Collected: 07/28/2012 12:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT7 SDG#: LSU22-04MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	1.0	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.022	0.0005	1
02102	Ethylbenzene	100-41-4	0.021	0.0005	1
02102	Toluene	108-88-3	0.021	0.0005	1
02102	Total Xylenes	1330-20-7	0.063	0.0015	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	2.3	0.048	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 07:42	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 06:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 06:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12215B94A	08/05/2012 07:42	Catherine J Schwarz	1
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 11:45	Tyler O Griffin	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1

**Sample Description:** TH-7\_MSD Grab Water Sample  
 Facility# 1001430  
 418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738101  
 LLI Group # 1325454  
 Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 12:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBAT7 SDG#: LSU22-04MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>			<b>AK 101</b>	<b>mg/l</b>	
01440	TPH-GRO AK water C6-C10	n.a.	1.0	0.010	1
<b>GC Volatiles</b>			<b>SW-846 8021B</b>	<b>mg/l</b>	
02102	Benzene	71-43-2	0.022	0.0005	1
02102	Ethylbenzene	100-41-4	0.021	0.0005	1
02102	Toluene	108-88-3	0.021	0.0005	1
02102	Total Xylenes	1330-20-7	0.063	0.0015	1
<b>GC Petroleum Hydrocarbons</b>			<b>AK 102/103 4/08/02 modified</b>	<b>mg/l</b>	
02923	C10-<C25 DRO	n.a.	3.1	0.048	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 08:08	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 07:17	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 07:17	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12215B94A	08/05/2012 08:08	Catherine J Schwarz	1
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 12:14	Tyler O Griffin	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1

**Sample Description:** TH-10 Grab Water Sample  
Facility# 1001430  
418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738102  
LLI Group # 1325454  
Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012 10:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBA10 SDG#: LSU22-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	N.D.	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	0.13	0.047	1
02923	C25-C36 RRO	n.a.	0.60	0.066	1
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.070	0.047	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	0.49	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	39.5	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	305	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 05:35	Catherine J Schwarz	1

**Sample Description: TH-10 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738102**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 10:15 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBA10 SDG#: LSU22-05

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 05:35	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 05:35	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150009A	08/02/2012 13:41	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 12:42	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 08:27	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 22:56	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 22:56	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 22:56	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 15:20	Michele L Graham	1

**Sample Description: BD-1 Grab Water Sample**  
**Facility# 1001430**  
**418 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6738103**  
**LLI Group # 1325454**  
**Account # 11964**

**Project Name: 1001430**

Collected: 07/28/2012 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:56

San Ramon CA 94583

FBABD SDG#: LSU22-06FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	0.42	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.0009	0.0005	1
02102	Ethylbenzene	100-41-4	0.0039	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0020	1
02102	Total Xylenes	1330-20-7	0.0084	0.0015	1
Reporting limits were raised due to interference from the sample matrix.					
<b>GC Petroleum AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	9.7	0.52	10

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 06:01	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 06:01	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 06:01	Catherine J Schwarz	1
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150011A	08/07/2012 22:45	Tyler O Griffin	10
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150011A	08/03/2012 02:30	Sherry L Morrow	1

**Sample Description:** Trip\_Blank Water Sample  
 Facility# 1001430  
 418 Illinois St - Fairbanks, AK

LLI Sample # WW 6738104  
 LLI Group # 1325454  
 Account # 11964

**Project Name:** 1001430

Collected: 07/28/2012

Chevron

Submitted: 07/31/2012 09:40

L4310

Reported: 08/14/2012 22:56

6001 Bollinger Canyon Road  
 San Ramon CA 94583

FBATB SDG#: LSU22-07TB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12215B94A	08/05/2012 03:01	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12215B94A	08/05/2012 03:01	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12215B94A	08/05/2012 03:01	Catherine J Schwarz	1



## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 10:56 PM

Group Number: 1325454

### Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
Batch number: 122150011A	Sample number(s): 6738096-6738103 UNSPK: 6738099								
C10-<C25 DRO	126*	249*	75-125	29	30				
C25-C36 RRO	76	100	75-125	15	30				
Batch number: 12213655901A	Sample number(s): 6738096-6738099,6738102 UNSPK: 6738099 BKG: 6738099								
Nitrate Nitrogen	95		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	95		90-110			N.D.	N.D.	0 (1)	20
Sulfate	98		90-110			24.6	24.6	0 (1)	20
Batch number: 12214002101A	Sample number(s): 6738096-6738099,6738102 UNSPK: 6738099 BKG: 6738099								
Total Alkalinity	58*		73-121			269	269	0	5

### 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: TPH-GRO AK water C6-C10

Batch number: 12215B94A

	Trifluorotoluene-F	Trifluorotoluene-P
6738096	80	85
6738097	78	80
6738098	79	80
6738099	77	86
6738100	79	86
6738101	82	86
6738102	82	86
6738103	82	82
6738104	74	86
Blank	73	85
LCS	86	86
MS	79	86
MSD	82	86

Limits: 60-120 51-120

Analysis Name: TPH-DRO AK C10-C25 w/Si Gel

Batch number: 122140035A

	Orthoterphenyl
6738096	88
6738097	91
6738098	140
6738099	88
6738102	77
Blank	65
LCS	65
LCSD	73

\*- Outside of specification

- (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.



## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 10:56 PM

Group Number: 1325454

### Surrogate Quality Control

Limits: 50-150

Analysis Name: Volatile Headspace Hydrocarbon  
Batch number: 122150009A  
Propene

6738096	77
6738097	80
6738098	55
6738099	59
6738102	52
Blank	92
LCS	93
MS	52
MSD	55

Limits: 42-131

Analysis Name: TPH-DRO/RRO (AK) water  
Batch number: 122150011A  
Orthoterphenyl                      n-Triacontane-d62

6738096	160*	86
6738097	335*	469*
6738098	440*	88
6738099	96	86
6738100	79	89
6738101	69	75
6738102	99	86
6738103	158*	90
Blank	103	95
LCS	91	87
MS	79	89
MSD	69	75

Limits: 50-150                      50-150

\*- Outside of specification

- (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.

# Chevron Generic Analysis Request/Chain of Custody



**Lancaster Laboratories**

For Lancaster Laboratories use only  
 Acct. # 11964 Group # 1325454 Sample # 6738096-104  
Instructions on reverse side correspond with circled numbers.

1 Client Information			4 Matrix			5 Analyses Requested									
Facility # <u>1001430</u> <small>WBS</small> <u>WTR-0100430-1-LAB</u>			<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air			Total Number of Containers: <u>8260</u> <input checked="" type="checkbox"/> BTEX+MTBE 8260 8260 full scan Oxygenates AK 101 TPHG RO AK 102 TPHD RO Silica Gel Cleanup Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method VPH/EPH Method AK 103 RRO Total Alkalinity EPA 310.1 Sulfate / Nitrate N. EPA 300.1 Methane EPA RSK 175									
Site Address <u>418 Illinois St. Fairbanks, AK</u>															
Chevron PM <u>Don Carrier</u>															
Consultant/Office <u>2300 Eastlake Ave S STE 200 / Seattle, WA, 98102</u>															
Consultant Project Mgr. <u>Gregory Montgomery</u>															
Consultant Phone # <u>206 726 4742</u>															
Sampler <u>m. macDaniel &amp; m. Oviedo</u>															

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

2 Sample Identification	3 Collected		3 Grab	3 Composite	4 Matrix					Total Number of Containers	5 Analyses Requested										6 Remarks				
	Date	Time			Soil	Water	Oil	BTEX+MTBE 8260	8260 full scan		Oxygenates	AK 101 TPHG RO	AK 102 TPHD RO	Silica Gel Cleanup	Lead	Total	Diss.	Method	VPH/EPH Method	AK 103 RRO		Total Alkalinity EPA 310.1	Sulfate / Nitrate N. EPA 300.1	Methane EPA RSK 175	
TH-1	7/28/12	1130	X			X			11	X			X	X			X	X	X	X					Do not analyze BD-1 & ms/msd for DRO w/ Silica Gel  TH-2: Show observed Nitrite added to all field samples per M. MacDaniel. jmp 8/2/12
TH-2	7/28/12	1110	X			X			11	X			X	X			X	X	X	X					
TH-5	7/28/12	1150	X			X			11	X			X	X			X	X	X	X					
TH-7	7/28/12	1215	X			X			11	X			X	X			X	X	X	X					
TH-10	7/28/12	1015	X			X			11	X			X	X			X	X	X	X					
BD-1	7/28/12	-	X			X			5	X			X	X											
MS	7/28/12	1215	X			X			5	X			X	X											
MSD	7/28/12	1215	X			X			5	X			X	X											
Trip Blank	-	-							2	X			X												

7 Turnaround Time Requested (TAT) (please circle)

Standard 5 day      4 day

72 hour      48 hour      24 hour

Relinquished by <u>[Signature]</u>	Date <u>7/30/12</u>	Time <u>9:00</u>	Received by <u>[Signature]</u>	Date	Time
Relinquished by	Date	Time	Received by	Date	Time

8 Data Package Options (please circle if required)

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

Relinquished by Commerical Carrier: UPS _____ FedEx <u>X</u> Other _____	Received by <u>[Signature]</u>	Date <u>7/31/12</u>	Time <u>9:40</u>
Temperature Upon Receipt <u>6.10-7.10</u> °C	Custody Seals Intact?	<u>Yes</u>	No

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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 of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

## Data Qualifiers:

**C** – result confirmed by reanalysis.

**J** - estimated value – The result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>25\%$	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<0.995$

## Analytical test results meet all requirements of NELAC 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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

August 14, 2012

Project: 211815

Submittal Date: 07/31/2012

Group Number: 1325487

SDG: LSU23

PO Number: 0015097006

Release Number: CARRIER

State of Sample Origin: AK

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
AR-81 Grab Water Sample	6738268
AR-85 Grab Water Sample	6738269
MW-1 Grab Water Sample	6738270
MW-3 Grab Water Sample	6738271
MW-3_MS Grab Water Sample	6738272
MW-3_MSD Grab Water Sample	6738273
MW-4 Grab Water Sample	6738274
MW-5 Grab Water Sample	6738275
MW-7 Grab Water Sample	6738276
MW-8 Grab Water Sample	6738277
MW-9 Grab Water Sample	6738278
BD-1 Grab Water Sample	6738279

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

ELECTRONIC COPY TO	Arcadis	Attn: Dana Ramquist
ELECTRONIC COPY TO	Arcadis	Attn: David Beaudoin
ELECTRONIC COPY TO	ARCADIS	Attn: Michael MacDaniel
1 COPY TO	Data Package Group	

Respectfully Submitted,



Jill M. Parker  
Senior Specialist

(717) 556-7262

**Sample Description: AR-81 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738268**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 13:10 by MM Chevron  
 L4310  
 Submitted: 07/31/2012 09:40 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 22:58 San Ramon CA 94583

AR-81 SDG#: LSU23-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.050	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.69	0.025	5
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	1.3	0.049	1
02923	C25-C36 RRO	n.a.	0.25	0.068	1
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.086	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	2.4	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	337	0.70	1

**General Sample Comments**

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
---------	---------------	--------	---------------	------------------------	---------	-----------------

**Sample Description: AR-81 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738268**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 13:10 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

AR-81 SDG#: LSU23-01

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 18:16	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 18:16	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 18:16	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 13:03	Elizabeth J Marin	5
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 02:03	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 08:55	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:10	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:10	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 23:10	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 15:26	Michele L Graham	1

**Sample Description: AR-85 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738269**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 12:50 by MM Chevron  
 Submitted: 07/31/2012 09:40 L4310  
 Reported: 08/14/2012 22:58 6001 Bollinger Canyon Road  
 San Ramon CA 94583

AR-85 SDG#: LSU23-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.73	0.025	5
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	0.45	0.049	1
02923	C25-C36 RRO	n.a.	0.15	0.068	1
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	3.1	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	332	0.70	1

**General Sample Comments**

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
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**Sample Description: AR-85 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738269**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 12:50 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

AR-85 SDG#: LSU23-02

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 18:41	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 18:41	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 18:41	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 13:22	Elizabeth J Marin	5
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 02:32	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 09:24	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:25	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:25	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 23:25	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 15:31	Michele L Graham	1

**Sample Description: MW-1 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738270**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 13:30 by MM Chevron  
 L4310  
 Submitted: 07/31/2012 09:40 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 22:58 San Ramon CA 94583

FBMW1 SDG#: LSU23-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.017	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	1.2	0.050	10
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	1.0	0.050	1
02923	C25-C36 RRO	n.a.	1.3	0.070	1
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.50	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	23.2	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	338	0.70	1

**General Sample Comments**

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
---------	---------------	--------	---------------	------------------------	---------	-----------------

**Sample Description: MW-1 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738270**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 13:30 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW1 SDG#: LSU23-03

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 19:07	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 19:07	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 19:07	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 13:41	Elizabeth J Marin	10
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 03:00	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 09:52	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:39	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:39	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 23:39	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 15:37	Michele L Graham	1

**Sample Description: MW-3 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738271**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 16:35 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW3 SDG#: LSU23-04BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,2-Dichloroethane	107-06-2	0.0006	0.0005	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.36	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.014	0.0005	1
02102	Ethylbenzene	100-41-4	0.013	0.0005	1
02102	Toluene	108-88-3	0.0012	0.0005	1
02102	Total Xylenes	1330-20-7	0.047	0.0015	1
<b>GC Miscellaneous SW-846 8011</b>					
07879	Ethylene dibromide	106-93-4	N.D.	0.0000095	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.14	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	1.2	0.24	5
02923	C25-C36 RRO	n.a.	1.6	0.34	5
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.24	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	13.1	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	246	0.70	1

**Sample Description: MW-3 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738271**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 16:35 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW3 SDG#: LSU23-04BKG

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122141AA	08/01/2012 07:27	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122141AA	08/01/2012 07:27	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94B	08/03/2012 17:21	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94B	08/03/2012 17:21	Carrie E Miller	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94B	08/03/2012 17:21	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94B	08/03/2012 17:21	Carrie E Miller	1
07879	EDB in Wastewater	SW-846 8011	1	122140046A	08/04/2012 08:12	John W Perkins	1
07786	EDB Extraction	SW-846 8011	1	122140046A	08/02/2012 11:45	Edwin Ortiz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 10:14	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 23:06	Tyler O Griffin	5
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 10:20	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 00:07	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 00:07	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901B	08/01/2012 00:07	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101A	08/01/2012 15:48	Michele L Graham	1

**Sample Description:** MW-3\_MS Grab Water Sample  
**Facility#** 211815  
**410 Driveway St - Fairbanks, AK**

**LLI Sample #** WW 6738272  
**LLI Group #** 1325487  
**Account #** 11964

**Project Name:** 211815

Collected: 07/27/2012 16:35 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW3 SDG#: LSU23-04MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	1.1	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.032	0.0005	1
02102	Ethylbenzene	100-41-4	0.030	0.0005	1
02102	Toluene	108-88-3	0.020	0.0005	1
02102	Total Xylenes	1330-20-7	0.096	0.0015	1
<b>GC Petroleum Hydrocarbons AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	1.5	0.24	5

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94B	08/03/2012 18:37	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94B	08/03/2012 17:46	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94B	08/03/2012 17:46	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94B	08/03/2012 18:37	Catherine J Schwarz	1
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 23:34	Tyler O Griffin	5
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1

**Sample Description:** MW-3\_MSD Grab Water Sample  
 Facility# 211815  
 410 Driveway St - Fairbanks, AK

LLI Sample # WW 6738273  
 LLI Group # 1325487  
 Account # 11964

**Project Name:** 211815

Collected: 07/27/2012 16:35 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW3 SDG#: LSU23-04MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles</b>			<b>AK 101</b>	<b>mg/l</b>	
01440	TPH-GRO AK water C6-C10	n.a.	1.1	0.010	1
<b>GC Volatiles</b>			<b>SW-846 8021B</b>	<b>mg/l</b>	
02102	Benzene	71-43-2	0.034	0.0005	1
02102	Ethylbenzene	100-41-4	0.033	0.0005	1
02102	Toluene	108-88-3	0.023	0.0005	1
02102	Total Xylenes	1330-20-7	0.10	0.0015	1
<b>GC Petroleum Hydrocarbons</b>			<b>AK 102/103 4/08/02 modified</b>	<b>mg/l</b>	
02923	C10-<C25 DRO	n.a.	1.8	0.25	5

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94B	08/03/2012 19:03	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94B	08/03/2012 18:12	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94B	08/03/2012 18:12	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94B	08/03/2012 19:03	Catherine J Schwarz	1
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150012A	08/09/2012 00:03	Tyler O Griffin	5
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1

**Sample Description: MW-4 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738274**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:50 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW4 SDG#: LSU23-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B mg/l mg/l</b>					
10903	1,2-Dichloroethane	107-06-2	0.059	0.005	10
10903	Trichloroethene	79-01-6	N.D.	0.010	10
Reporting limits were raised due to interference from the sample matrix.					
<b>GC Volatiles AK 101 mg/l mg/l</b>					
01440	TPH-GRO AK water C6-C10	n.a.	44	0.25	25
<b>GC Volatiles SW-846 8021B mg/l mg/l</b>					
02102	Benzene	71-43-2	2.1	0.013	25
02102	Ethylbenzene	100-41-4	1.2	0.013	25
02102	Toluene	108-88-3	4.9	0.013	25
02102	Total Xylenes	1330-20-7	8.4	0.038	25
<b>GC Miscellaneous SW-846 8011 mg/l mg/l</b>					
07879	Ethylene dibromide	106-93-4	N.D.	0.0000095	1
<b>GC Miscellaneous RSKSOP-175 modified mg/l mg/l</b>					
07105	Methane	74-82-8	22	0.50	100
<b>GC Petroleum AK 102/103 4/08/02 mg/l mg/l</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	620	24	250
02923	C25-C36 RRO	n.a.	N.D.	33	250
<b>GC Petroleum AK 102/AK 103 mg/l mg/l</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	390	12	250
Due to the dilution of the sample extract, capric acid recovery can not be determined.					
<b>Wet Chemistry EPA 300.0 mg/l mg/l</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	N.D.	1.5	5
<b>EPA 310.1 mg/l as CaCO3 mg/l as CaCO3</b>					
12150	Total Alkalinity	n.a.	402	0.70	1



**Sample Description: MW-4 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738274**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:50 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW4 SDG#: LSU23-05

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122141AA	08/01/2012 09:31	Christopher G Torres	10
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122141AA	08/01/2012 09:31	Christopher G Torres	10
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 20:49	Catherine J Schwarz	25
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 20:49	Catherine J Schwarz	25
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 20:49	Catherine J Schwarz	25
07879	EDB in Wastewater	SW-846 8011	1	122140046A	08/04/2012 08:43	John W Perkins	1
07786	EDB Extraction	SW-846 8011	1	122140046A	08/02/2012 11:45	Edwin Ortiz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 14:00	Elizabeth J Marin	100
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/10/2012 05:47	Heather E Williams	250
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/08/2012 00:38	Tyler O Griffin	250
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:53	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901A	07/31/2012 23:53	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901A	07/31/2012 23:53	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 15:54	Michele L Graham	1

**Sample Description: MW-5 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738275**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 17:45 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW5 SDG#: LSU23-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	3.4	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.41	0.0025	5
02102	Ethylbenzene	100-41-4	0.054	0.0005	1
02102	Toluene	108-88-3	0.049	0.0005	1
02102	Total Xylenes	1330-20-7	0.42	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	4.7	0.10	20
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	3.8	0.47	10
02923	C25-C36 RRO	n.a.	N.D.	0.66	10
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.62	0.047	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	2.5	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	32.6	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	422	0.70	1

**General Sample Comments**

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
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**Sample Description: MW-5 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738275**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 17:45 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW5 SDG#: LSU23-06

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 19:32	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 19:32	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 23:48	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 19:32	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94A	08/02/2012 23:48	Catherine J Schwarz	5
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 14:18	Elizabeth J Marin	20
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/09/2012 01:00	Tyler O Griffin	10
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 10:49	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 00:50	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 00:50	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901B	08/01/2012 00:50	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 15:59	Michele L Graham	1

**Sample Description: MW-7 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738276**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 14:40 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW7 SDG#: LSU23-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,2-Dichloroethane	107-06-2	0.030	0.0005	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	4.8	0.050	5
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	1.0	0.0025	5
02102	Ethylbenzene	100-41-4	0.19	0.0005	1
02102	Toluene	108-88-3	0.0074	0.0005	1
02102	Total Xylenes	1330-20-7	0.26	0.0015	1
<b>GC Miscellaneous SW-846 8011</b>					
07879	Ethylene dibromide	106-93-4	N.D.	0.0000095	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	4.5	0.10	20
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	2.5	0.24	5
02923	C25-C36 RRO	n.a.	N.D.	0.34	5
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.41	0.048	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	N.D.	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	318	0.70	1

**Sample Description: MW-7 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738276**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 14:40 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW7 SDG#: LSU23-07

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122151AA	08/02/2012 05:48	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122151AA	08/02/2012 05:48	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 21:15	Laura M Krieger	5
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 21:15	Laura M Krieger	5
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94B	08/02/2012 22:37	Laura M Krieger	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 21:15	Laura M Krieger	5
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94B	08/02/2012 22:37	Laura M Krieger	1
07879	EDB in Wastewater	SW-846 8011	1	122140046A	08/04/2012 09:13	John W Perkins	1
07786	EDB Extraction	SW-846 8011	1	122140046A	08/02/2012 11:45	Edwin Ortiz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 14:37	Elizabeth J Marin	20
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/09/2012 00:31	Tyler O Griffin	5
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 11:17	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 01:04	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 01:04	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901B	08/01/2012 01:04	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 16:12	Michele L Graham	1

**Sample Description: MW-8 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738277**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:05 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW8 SDG#: LSU23-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,2-Dichloroethane	107-06-2	0.011	0.0005	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	3.6	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.33	0.0005	1
02102	Ethylbenzene	100-41-4	0.10	0.0005	1
02102	Toluene	108-88-3	0.0062	0.0005	1
02102	Total Xylenes	1330-20-7	0.23	0.0015	1
<b>GC Miscellaneous SW-846 8011</b>					
07879	Ethylene dibromide	106-93-4	N.D.	0.0000095	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	3.7	0.10	20
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	1.7	0.049	1
02923	C25-C36 RRO	n.a.	0.34	0.069	1
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.25	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	2.9	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	329	0.70	1

**Sample Description: MW-8 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738277**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:05 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW8 SDG#: LSU23-08

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122151AA	08/02/2012 06:11	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122151AA	08/02/2012 06:11	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 19:58	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 19:58	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 19:58	Catherine J Schwarz	1
07879	EDB in Wastewater	SW-846 8011	1	122140046A	08/04/2012 09:44	John W Perkins	1
07786	EDB Extraction	SW-846 8011	1	122140046A	08/02/2012 11:45	Edwin Ortiz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 14:56	Elizabeth J Marin	20
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 04:25	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 11:45	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 01:47	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 01:47	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901B	08/01/2012 01:47	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 16:18	Michele L Graham	1

**Sample Description: MW-9 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738278**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:20 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW9 SDG#: LSU23-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	1,2-Dichloroethane	107-06-2	N.D.	0.0005	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous SW-846 8011</b>					
07879	Ethylene dibromide	106-93-4	N.D.	0.0000095	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.0050	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	0.10	0.047	1
02923	C25-C36 RRO	n.a.	0.12	0.066	1
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.047	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	1.1	0.25	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					
00228	Sulfate	14808-79-8	16.3	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	254	0.70	1



**Sample Description: MW-9 Grab Water Sample**  
**Facility# 211815**  
**410 Driveway St - Fairbanks, AK**

**LLI Sample # WW 6738278**  
**LLI Group # 1325487**  
**Account # 11964**

**Project Name: 211815**

Collected: 07/27/2012 15:20 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMW9 SDG#: LSU23-09

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122141AA	08/01/2012 07:50	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122141AA	08/01/2012 07:50	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 20:23	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 20:23	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 20:23	Catherine J Schwarz	1
07879	EDB in Wastewater	SW-846 8011	1	122140046A	08/04/2012 10:15	John W Perkins	1
07786	EDB Extraction	SW-846 8011	1	122140046A	08/02/2012 11:45	Edwin Ortiz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122150001A	08/02/2012 12:44	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122150012A	08/08/2012 04:54	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122140035A	08/07/2012 12:14	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122140035A	08/02/2012 10:00	Cynthia J Salvatori	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1
00368	Nitrate Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 02:01	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12213655901B	08/01/2012 02:01	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12213655901B	08/01/2012 02:01	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12214002101B	08/01/2012 16:24	Michele L Graham	1

**Sample Description:** BD-1 Grab Water Sample  
 Facility# 211815  
 410 Driveway St - Fairbanks, AK

LLI Sample # WW 6738279  
 LLI Group # 1325487  
 Account # 11964

**Project Name:** 211815

Collected: 07/27/2012 by MM

Chevron

L4310

Submitted: 07/31/2012 09:40

6001 Bollinger Canyon Road

Reported: 08/14/2012 22:58

San Ramon CA 94583

FBMBD SDG#: LSU23-10FD\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	42	0.25	25
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	2.0	0.013	25
02102	Ethylbenzene	100-41-4	1.1	0.013	25
02102	Toluene	108-88-3	4.7	0.013	25
02102	Total Xylenes	1330-20-7	8.1	0.038	25
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	190	11	200

### General Sample Comments

State of Alaska Lab Certification No. UST-061  
 Trip blank vials were not received by the laboratory for this sample group.

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
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94A	08/02/2012 21:40	Catherine J Schwarz	25
02102	Method 8021 Water Master	SW-846 8021B	1	12214A94A	08/02/2012 21:40	Catherine J Schwarz	25
01146	GC VOA Water Prep	SW-846 5030B	1	12214A94A	08/02/2012 21:40	Catherine J Schwarz	25
02923	AK 102 DRO Only	AK 102/103 4/08/02 modified	1	122150012A	08/09/2012 01:56	Tyler O Griffin	200
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122150012A	08/03/2012 02:30	Sherry L Morrow	1

## Quality Control Summary

Client Name: Chevron

Group Number: 1325487

Reported: 08/14/12 at 10:58 PM

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.

### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: W122141AA	Sample number(s): 6738271,6738274,6738278							
1,2-Dichloroethane	N.D.	0.0005	mg/l	95	96	64-130	0	30
Trichloroethene	N.D.	0.001	mg/l	91	93	80-120	2	30
Batch number: W122151AA	Sample number(s): 6738276-6738277							
1,2-Dichloroethane	N.D.	0.0005	mg/l	98	98	64-130	0	30
Trichloroethene	N.D.	0.001	mg/l	92	92	80-120	0	30
Batch number: 12214A94A	Sample number(s): 6738268-6738270,6738274-6738279							
Benzene	N.D.	0.0002	mg/l	100		80-120		
Ethylbenzene	N.D.	0.0002	mg/l	105		80-120		
Toluene	N.D.	0.0002	mg/l	105		80-120		
TPH-GRO AK water C6-C10	N.D.	0.010	mg/l	100		60-120		
Total Xylenes	N.D.	0.0006	mg/l	103		80-120		
Batch number: 12214A94B	Sample number(s): 6738271-6738273,6738276							
Benzene	N.D.	0.0002	mg/l	100		80-120		
Ethylbenzene	N.D.	0.0002	mg/l	105		80-120		
Toluene	N.D.	0.0002	mg/l	105		80-120		
TPH-GRO AK water C6-C10	N.D.	0.010	mg/l	100		60-120		
Total Xylenes	N.D.	0.0006	mg/l	103		80-120		
Batch number: 122140046A	Sample number(s): 6738271,6738274,6738276-6738278							
Ethylene dibromide	N.D.	0.00001	mg/l	104	103	60-140	1	20
		0						
Batch number: 122150001A	Sample number(s): 6738268-6738271,6738274-6738278							
Methane	N.D.	0.0050	mg/l	98		80-120		
Batch number: 122150012A	Sample number(s): 6738268-6738279							
C10-<C25 DRO	N.D.	0.050	mg/l	77		75-125		
C25-C36 RRO	N.D.	0.070	mg/l	80		60-120		
Batch number: 122140035A	Sample number(s): 6738268-6738271,6738274-6738278							
TPH-DRO AK C10-C25 w/Si Gel	N.D.	0.050	mg/l	75	85	75-125	12	20
Batch number: 12213655901A	Sample number(s): 6738268-6738270,6738274							
Nitrate Nitrogen	N.D.	0.050	mg/l	99		90-110		
Nitrite Nitrogen	N.D.	0.080	mg/l	100		90-110		
Sulfate	N.D.	0.30	mg/l	102		90-110		
Batch number: 12213655901B	Sample number(s): 6738271,6738275-6738278							
Nitrate Nitrogen	N.D.	0.050	mg/l	99		90-110		
Nitrite Nitrogen	N.D.	0.080	mg/l	100		90-110		
Sulfate	N.D.	0.30	mg/l	102		90-110		

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron Group Number: 1325487  
Reported: 08/14/12 at 10:58 PM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 12214002101A	Sample number(s): 6738268-6738269,6738271							
Total Alkalinity	N.D.	0.70	mg/l as CaCO3	100		90-110		
Batch number: 12214002101B	Sample number(s): 6738270,6738274-6738278							
Total Alkalinity	N.D.	0.70	mg/l as CaCO3	100		90-110		

## Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 12214A94A	Sample number(s): 6738268-6738270,6738274-6738279 UNSPK: 6738271								
Benzene	90	100	80-130	6	30				
Ethylbenzene	85	100	80-133	10	30				
Toluene	94	109	80-133	14	30				
TPH-GRO AK water C6-C10	67	67	60-120	0	20				
Total Xylenes	82	88	80-132	4	30				
Batch number: 12214A94B	Sample number(s): 6738271-6738273,6738276 UNSPK: 6738271								
Benzene	90	100	80-130	6	30				
Ethylbenzene	85	100	80-133	10	30				
Toluene	94	109	80-133	14	30				
TPH-GRO AK water C6-C10	67	67	60-120	0	20				
Total Xylenes	82	88	80-132	4	30				
Batch number: 122140046A	Sample number(s): 6738271,6738274,6738276-6738278 UNSPK: P736627 BKG: P736628								
Ethylene dibromide	79		65-135			N.D.	N.D.	0 (1)	30
Batch number: 122150001A	Sample number(s): 6738268-6738271,6738274-6738278 UNSPK: 6738271								
Methane	33*	67	35-157	12	20				
Batch number: 122150012A	Sample number(s): 6738268-6738279 UNSPK: 6738271								
C10-<C25 DRO	51*	97	75-125	21	30				
C25-C36 RRO	9*	64*	75-125	33*	30				
Batch number: 12213655901A	Sample number(s): 6738268-6738270,6738274 UNSPK: P738099 BKG: P738099								
Nitrate Nitrogen	95		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	95		90-110			N.D.	N.D.	0 (1)	20
Sulfate	98		90-110			24.6	24.6	0 (1)	20
Batch number: 12213655901B	Sample number(s): 6738271,6738275-6738278 UNSPK: 6738271 BKG: 6738271								
Nitrate Nitrogen	95		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	94		90-110			N.D.	N.D.	0 (1)	20
Sulfate	98		90-110			13.1	13.0	1 (1)	20
Batch number: 12214002101A	Sample number(s): 6738268-6738269,6738271 UNSPK: P738099 BKG: P738099								
Total Alkalinity	58*		73-121			269	269	0	5
Batch number: 12214002101B	Sample number(s): 6738270,6738274-6738278 UNSPK: P738099 BKG: 6738270								
Total Alkalinity	58*		73-121			338	339	0	5

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 10:58 PM

Group Number: 1325487

### Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS</u> <u>%REC</u>	<u>MSD</u> <u>%REC</u>	<u>MS/MSD</u> <u>Limits</u>	<u>RPD</u>	<u>RPD</u> <u>MAX</u>	<u>BKG</u> <u>Conc</u>	<u>DUP</u> <u>Conc</u>	<u>DUP</u> <u>RPD</u>	<u>Dup RPD</u> <u>Max</u>
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### 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: VOCs by 8260B - Water  
Batch number: W122141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6738271	94	101	104	101
6738274	95	100	106	101
6738278	98	105	103	96
Blank	96	104	104	96
LCS	94	103	108	104
LCSD	96	101	106	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: VOCs by 8260B - Water  
Batch number: W122151AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6738276	96	101	105	99
6738277	95	101	106	100
Blank	97	103	104	99
LCS	96	99	107	104
LCSD	99	107	106	103
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO AK water C6-C10  
Batch number: 12214A94A

	Trifluorotoluene-F	Trifluorotoluene-P
6738268	82	86
6738269	89	86
6738270	73	85
6738274	81	90
6738275	95	91
6738276	80	95
6738277	119	107
6738278	75	86
6738279	81	89
Blank	74	86
LCS	90	86
MS	81	88
MSD	79	86
Limits:	60-120	51-120

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 10:58 PM

Group Number: 1325487

### Surrogate Quality Control

Analysis Name: TPH-GRO AK water C6-C10  
Batch number: 12214A94B

	Trifluorotoluene-F	Trifluorotoluene-P
6738271	80	88
6738272	81	88
6738273	79	86
6738276		95
Blank	73	87
LCS	90	86
MS	81	88
MSD	79	86

Limits: 60-120 51-120

Analysis Name: EDB in Wastewater  
Batch number: 122140046A  
1,1,2,2-Tetrachloroethane

6738271	90
6738274	86
6738276	52
6738277	53
6738278	87
Blank	105
DUP	69
LCS	105
LCSD	105
MS	75

Limits: 46-136

Analysis Name: TPH-DRO AK C10-C25 w/Si Gel  
Batch number: 122140035A  
Orthoterphenyl

6738268	76
6738269	73
6738270	79
6738271	69
6738274	0*
6738275	74
6738276	72
6738277	73
6738278	89
Blank	65
LCS	65
LCSD	73

Limits: 50-150

Analysis Name: Volatile Headspace Hydrocarbon  
Batch number: 122150001A  
Propene

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 10:58 PM

Group Number: 1325487

### Surrogate Quality Control

6738268	85
6738269	73
6738270	92
6738271	56
6738274	98
6738275	97
6738276	91
6738277	92
6738278	57
Blank	101
LCS	99
MS	55
MSD	56

---

Limits: 42-131

Analysis Name: TPH-DRO/RRO (AK) water  
Batch number: 122150012A  
Orthoterphenyl                      n-Triacontane-d62

6738268	74	87
6738269	89	77
6738270	95	91
6738271	68	69
6738272	92	68
6738273	68	78
6738274	797*	191*
6738275	92	81
6738276	2*	80
6738277	62	68
6738278	83	74
6738279	127	89
Blank	98	90
LCS	78	76
MS	92	68
MSD	68	78

---

Limits: 50-150                      50-150

\*- Outside of specification

- (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.

# Chevron Generic Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 11964 Group # 1325487 Sample # 6738268-80  
 For Lancaster Laboratories use only  
 Instructions on reverse side correspond with circled numbers.

1 Client Information			4 Matrix			5 Analyses Requested										6 Remarks																										
Facility # <u>211815</u> WBS <u>NWRR-00211815-1-LAB</u> Site Address <u>410 Driveway St. Fairbanks, AK</u> Chevron PM <u>Dan Carrier</u> Lead Consultant <u>ARCADIS</u> Consultant/Office <u>2300 Eastlake Ave E STE 200 Seattle, WA 98102</u> Consultant Project Mgr. <u>Gregory Montgomery</u> Consultant Phone # <u>206-726-4742</u> Sampler <u>M. MacDaniel &amp; M. Ouedo</u>			<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air			Total Number of Containers: <u>80218</u> <input type="checkbox"/> BTEX <input type="checkbox"/> MTBE <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input checked="" type="checkbox"/> <del>8260</del> <u>TLC &amp; EDC ONLY</u> Oxygenates <input checked="" type="checkbox"/> AK 101 TPHGR0 <input checked="" type="checkbox"/> AK 102-TPHGR0 Silica Gel Cleanup Lead Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method VP/IEPH Method <input checked="" type="checkbox"/> AK W3 RRO <input checked="" type="checkbox"/> Total Alk. Limiting EPA 310.1 <input checked="" type="checkbox"/> Sulfate / Nitrate N. EPA 300.0 <input checked="" type="checkbox"/> Methane EPA RSK 175 <input checked="" type="checkbox"/> EDB by EPA 8011										SCR #: _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm MTBE + Naphthalene <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits																										
2 Sample Identification		3 Collected		Grab	Composite	Soil	Water	Oil	Total	BTEX	MTBE	8260	Naphth	AK 101	AK 102-TPHGR0	Lead	Total	Diss.	Method	VP/IEPH Method	AK W3	RRO	Total Alk. Limiting EPA 310.1	Sulfate / Nitrate N. EPA 300.0	Methane EPA RSK 175	EDB by EPA 8011	7	Turnaround Time Requested (TAT) (please circle)	Relinquished by		Received by		8	Data Package Options (please circle if required)	Relinquished by Commercial Carrier:		Received by		Temperature Upon Receipt	Custody Seals Intact?		
Date	Time	Date	Time																										Date	Time	Date	Time			Date	Time	Date	Time		Date	Time	Date
AR-81	7/27/12	1310	X			X			11	X				X	X						X	X	X	X				Standard	5 day	4 day	<u>M. MacDaniel</u>	<u>7/30/12</u>	<u>900</u>	<u>Brian Hunt</u>	<u>2/3/12</u>	<u>940</u>	<u>06</u>	<u>25°C</u>	<u>Yes</u>	<u>No</u>		
AR-85		1250	X			X			11	X				X	X						X	X	X	X				72 hour	48 hour	24 hour												
MW-1		1330	X			X			11	X				X	X						X	X	X	X																		
MW-3		1635	X			X			14	X	X			X	X						X	X	X	X																		
MW-4		1550	X			X			14	X	X			X	X						X	X	X	X																		
MW-5		1745	X			X			11	X				X	X						X	X	X	X																		
MW-7		1440	X			X			14	X	X			X	X						X	X	X	X																		
MW-8		1505	X			X			14	X	X			X	X						X	X	X	X																		
MW-9		1520	X			X			14	X	X			X	X						X	X	X	X																		
BD-1			X			X			5	X				X	X						X																					
MS		1635	X			X			5	X				X	X						X																					
MSD	7/27/12	1635	X			X			5	X				X	X						X																					
Trip Blank									2	X				X																												



# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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 of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

## Data Qualifiers:

**C** – result confirmed by reanalysis.

**J** - estimated value – The result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>25\%$	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<0.995$

**Analytical test results meet all requirements of NELAC 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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## ANALYTICAL RESULTS

Prepared by:

Lancaster Laboratories  
2425 New Holland Pike  
Lancaster, PA 17605-2425

Prepared for:

Chevron  
L4310  
6001 Bollinger Canyon Road  
San Ramon CA 94583

August 14, 2012

Project: 306456

Submittal Date: 07/27/2012

Group Number: 1325017

SDG: LSU20

PO Number: 0015097006

Release Number: CARRIER

State of Sample Origin: AK

<u>Client Sample Description</u>	<u>Lancaster Labs (LLI) #</u>
MW-1 Grab Water Sample	6736012
MW-2 Grab Water Sample	6736013
MW-3 Grab Water Sample	6736014
MW-4 Grab Water Sample	6736015
MW-4_MS Grab Water Sample	6736016
MW-4_MSD Grab Water Sample	6736017
MW-5 Grab Water Sample	6736018
MW-6 Grab Water Sample	6736019
MW-14 Grab Water Sample	6736020
GEI-5 Grab Water Sample	6736021
GEI-6 Grab Water Sample	6736022
GEI-9 Grab Water Sample	6736023
GEI-10 Grab Water Sample	6736024
BD-1 Grab Water Sample	6736025
BD-2 Grab Water Sample	6736026
Trip_Blank Water Sample	6736027

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

ELECTRONIC    Arcadis  
COPY TO  
ELECTRONIC    Arcadis

Attn: Dana Ramquist

Attn: David Beaudoin

COPY TO  
ELECTRONIC      ARCADIS  
COPY TO  
1 COPY TO      Data Package Group

Attn: Michael MacDaniel

Respectfully Submitted,



Jill M. Parker  
Senior Specialist

(717) 556-7262

**Sample Description: MW-1 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736012**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 12:00 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF01 SDG#: LSU20-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	0.035	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Methyl tert-Butyl Ether	1634-04-4	N.D.	0.0025	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>			mg/l	mg/l	
07105	Methane	74-82-8	0.40	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	0.19	0.049	1
02923	C25-C36 RRO	n.a.	0.10	0.068	1
<b>GC Petroleum AK 102/AK 103 modified</b>			mg/l	mg/l	
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.049	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>			mg/l	mg/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	10.9	1.5	5
<b>EPA 310.1</b>			mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity	n.a.	256	0.70	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 13:01	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 13:01	Catherine J Schwarz	1

**Sample Description: MW-1 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736012**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 12:00 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF01 SDG#: LSU20-01

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 13:01	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 12:49	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 01:01	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 09:03	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:32	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:32	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 14:32	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 10:47	Michele L Graham	1

**Sample Description: MW-2 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736013**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 11:40 by MM Chevron  
 L4310  
 Submitted: 07/27/2012 09:20 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 06:09 San Ramon CA 94583

ISF02 SDG#: LSU20-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.033	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.42	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	0.20	0.049	1
02923	C25-C36 RRO	n.a.	0.079	0.068	1
<b>GC Petroleum AK 102/AK 103 Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.048	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	10.6	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	262	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 13:27	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 13:27	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 13:27	Catherine J Schwarz	1

**Sample Description: MW-2 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736013**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 11:40 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF02 SDG#: LSU20-02

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 13:07	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 01:29	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 09:32	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:17	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:17	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 14:17	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 10:53	Michele L Graham	1

**Sample Description: MW-3 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736014**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 11:10 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF03 SDG#: LSU20-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>					
10903	Tetrachloroethene	127-18-4	N.D.	0.0008	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	6.1	0.050	5
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.63	0.0025	5
02102	Ethylbenzene	100-41-4	0.18	0.0025	5
02102	Toluene	108-88-3	0.024	0.0025	5
02102	Total Xylenes	1330-20-7	1.2	0.0075	5
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	6.4	0.25	50
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	7.2	0.49	10
02923	C25-C36 RRO	n.a.	1.7	0.69	10
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	1.8	0.24	5
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	N.D.	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	329	0.70	1

### General 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
---------	---------------	--------	--------	--------	------------------------	---------	-----------------



**Sample Description: MW-3 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736014**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 11:10 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF03 SDG#: LSU20-03

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122141AA	08/01/2012 05:30	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122141AA	08/01/2012 05:30	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 20:16	Catherine J Schwarz	5
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 20:16	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 20:16	Catherine J Schwarz	5
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 17:33	Elizabeth J Marin	50
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 01:08	Tyler O Griffin	10
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/06/2012 22:33	Tyler O Griffin	5
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:02	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:02	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 14:02	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 10:58	Michele L Graham	1

**Sample Description: MW-4 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736015**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 14:00 by MM Chevron  
 Submitted: 07/27/2012 09:20 L4310  
 Reported: 08/14/2012 06:09 6001 Bollinger Canyon Road  
 San Ramon CA 94583

ISF04 SDG#: LSU20-04BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	N.D.	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	N.D.	0.050	1
02923	C25-C36 RRO	n.a.	N.D.	0.070	1
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.050	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	0.48	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	4.7	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	76.3	0.70	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 13:52	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 13:52	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 13:52	Catherine J Schwarz	1

**Sample Description: MW-4 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736015**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 14:00 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF04 SDG#: LSU20-04BKG

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 13:44	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 23:14	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 10:00	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601C	07/27/2012 15:18	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601C	07/27/2012 15:18	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601C	07/27/2012 15:18	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:03	Michele L Graham	1

**Sample Description: MW-4\_MS Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736016**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 14:00 by MM Chevron  
 L4310  
 Submitted: 07/27/2012 09:20 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 06:09 San Ramon CA 94583

ISF04 SDG#: LSU20-04MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	1.1	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.022	0.0005	1
02102	Ethylbenzene	100-41-4	0.022	0.0005	1
02102	Toluene	108-88-3	0.022	0.0005	1
02102	Total Xylenes	1330-20-7	0.063	0.0015	1
<b>GC Petroleum Hydrocarbons AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	0.68	0.049	1
02923	C25-C36 RRO	n.a.	1.2	0.069	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 16:00	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 15:09	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 15:09	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12212B94A	08/01/2012 16:00	Catherine J Schwarz	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 01:58	Tyler O Griffin	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1

**Sample Description: MW-4 MSD Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736017**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 14:00 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF04 SDG#: LSU20-04MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	1.2	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.023	0.0005	1
02102	Ethylbenzene	100-41-4	0.023	0.0005	1
02102	Toluene	108-88-3	0.023	0.0005	1
02102	Total Xylenes	1330-20-7	0.066	0.0015	1
<b>GC Petroleum Hydrocarbons AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	0.77	0.050	1
02923	C25-C36 RRO	n.a.	1.3	0.070	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 16:26	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 15:35	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 15:35	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	2	12212B94A	08/01/2012 16:26	Catherine J Schwarz	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 02:26	Tyler O Griffin	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1

**Sample Description: MW-5 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736018**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 13:10 by MM Chevron  
 Submitted: 07/27/2012 09:20 L4310  
 Reported: 08/14/2012 06:09 6001 Bollinger Canyon Road  
 San Ramon CA 94583

ISF05 SDG#: LSU20-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	8.0	0.10	10
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.056	0.0025	5
02102	Ethylbenzene	100-41-4	0.31	0.0025	5
02102	Toluene	108-88-3	0.64	0.0025	5
02102	Total Xylenes	1330-20-7	2.3	0.0075	5
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	3.0	0.25	50
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	450	13	250
02923	C25-C36 RRO	n.a.	N.D.	18	250
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	480	12	250
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	N.D.	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	328	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12214A94B	08/03/2012 16:55	Carrie E Miller	10
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 20:42	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 20:42	Catherine J Schwarz	5
01146	GC VOA Water Prep	SW-846 5030B	2	12214A94B	08/03/2012 16:55	Carrie E Miller	10

**Sample Description: MW-5 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736018**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 13:10 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF05 SDG#: LSU20-05

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 17:52	Elizabeth J Marin	50
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 03:01	Tyler O Griffin	250
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/06/2012 23:57	Tyler O Griffin	250
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:48	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 14:48	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 14:48	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:20	Michele L Graham	1

**Sample Description: MW-6 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736019**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 13:25 by MM Chevron  
 L4310  
 Submitted: 07/27/2012 09:20 6001 Bollinger Canyon Road  
 Reported: 08/14/2012 06:09 San Ramon CA 94583

ISF06 SDG#: LSU20-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.0010	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Methyl tert-Butyl Ether	1634-04-4	N.D.	0.0025	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.020	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02</b>					
<b>Hydrocarbons modified</b>					
02923	C10-<C25 DRO	n.a.	0.18	0.052	1
02923	C25-C36 RRO	n.a.	0.14	0.073	1
<b>GC Petroleum AK 102/AK 103</b>					
<b>Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	N.D.	0.050	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	2.9	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	46.3	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	469	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 14:18	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 14:18	Catherine J Schwarz	1



**Sample Description: MW-6 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736019**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 13:25 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF06 SDG#: LSU20-06

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 14:18	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 14:58	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/02/2012 23:43	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 10:29	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:03	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:03	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 15:03	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:34	Michele L Graham	1

**Sample Description: MW-14 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736020**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 10:40 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF14 SDG#: LSU20-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>			mg/l	mg/l	
10903	Tetrachloroethene	127-18-4	N.D.	0.0008	1
10903	Trichloroethene	79-01-6	N.D.	0.001	1
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	0.36	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	0.014	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Methyl tert-Butyl Ether	1634-04-4	0.0049	0.0025	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	0.0039	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>			mg/l	mg/l	
07105	Methane	74-82-8	1.1	0.050	10
<b>GC Petroleum Hydrocarbons AK 102/103 4/08/02 modified</b>			mg/l	mg/l	
02923	C10-<C25 DRO	n.a.	0.54	0.049	1
02923	C25-C36 RRO	n.a.	0.15	0.069	1
<b>GC Petroleum Hydrocarbons w/Si AK 102/AK 103 04/08/02</b>			mg/l	mg/l	
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.060	0.050	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>			mg/l	mg/l	
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	10.5	1.5	5
<b>EPA 310.1</b>			mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity	n.a.	350	0.70	1

**General 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
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Sample Description: MW-14 Grab Water Sample  
Facility# 306456  
328.5 Illinois St - Fairbanks, AK

LLI Sample # WW 6736020  
LLI Group # 1325017  
Account # 11964

Project Name: 306456

Collected: 07/25/2012 10:40 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF14 SDG#: LSU20-07

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10903	VOCs by 8260B - Water	SW-846 8260B	1	W122141AA	08/01/2012 05:07	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	W122141AA	08/01/2012 05:07	Christopher G Torres	1
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 14:43	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 14:43	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 14:43	Catherine J Schwarz	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 18:25	Elizabeth J Marin	10
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 00:11	Tyler O Griffin	1
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 10:57	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 13:47	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 13:47	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 13:47	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:39	Michele L Graham	1

**Sample Description: GEI-5 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736021**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 15:20 by MM Chevron  
 Submitted: 07/27/2012 09:20 L4310  
 Reported: 08/14/2012 06:09 6001 Bollinger Canyon Road  
 San Ramon CA 94583

ISFG5 SDG#: LSU20-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	1.6	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.27	0.0005	1
02102	Ethylbenzene	100-41-4	0.0040	0.0005	1
02102	Toluene	108-88-3	0.024	0.0005	1
02102	Total Xylenes	1330-20-7	0.074	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	1.6	0.050	10
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	100	5.0	100
02923	C25-C36 RRO	n.a.	28	7.0	100
<b>GC Petroleum AK 102/AK 103 Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	99	5.5	100
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	6.4	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	217	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 17:42	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 17:42	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 17:42	Catherine J Schwarz	1

**Sample Description: GEI-5 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736021**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 15:20 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFG5 SDG#: LSU20-08

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 18:44	Elizabeth J Marin	10
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 02:33	Tyler O Griffin	100
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/07/2012 00:26	Tyler O Griffin	100
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:48	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:48	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 15:48	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:44	Michele L Graham	1

**Sample Description: GEI-6 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736022**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 15:00 by MM Chevron  
 Submitted: 07/27/2012 09:20 L4310  
 Reported: 08/14/2012 06:09 6001 Bollinger Canyon Road  
 San Ramon CA 94583

ISFG6 SDG#: LSU20-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.0081	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	3.0	0.24	5
02923	C25-C36 RRO	n.a.	1.8	0.34	5
<b>GC Petroleum AK 102/AK 103 Hydrocarbons w/Si 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	0.081	0.047	1
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	0.43	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	24.4	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	104	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 18:08	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 18:08	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 18:08	Catherine J Schwarz	1

**Sample Description: GEI-6 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736022**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 15:00 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFG6 SDG#: LSU20-09

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 16:37	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 00:39	Tyler O Griffin	5
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/02/2012 11:26	Tyler O Griffin	1
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:33	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012 15:33	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012 15:33	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:49	Michele L Graham	1

**Sample Description: GEI-9 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736023**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 16:15 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFG9 SDG#: LSU20-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	3.2	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	0.0009	0.0005	1
02102	Ethylbenzene	100-41-4	0.011	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	0.066	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.091	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	30	0.99	20
02923	C25-C36 RRO	n.a.	N.D.	1.4	20
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	34	1.0	20
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	3.0	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	338	0.70	1

**General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 18:34	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 18:34	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 18:34	Catherine J Schwarz	1



**Sample Description: GEI-9 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736023**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 16:15 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

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Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFG9 SDG#: LSU20-10

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012 16:56	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012 01:36	Tyler O Griffin	20
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/06/2012 23:29	Tyler O Griffin	20
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012 10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012 10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601B	07/27/2012 16:03	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601B	07/27/2012 16:03	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601B	07/27/2012 16:03	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102A	07/31/2012 11:55	Michele L Graham	1

**Sample Description:** GEI-10 Grab Water Sample  
Facility# 306456  
328.5 Illinois St - Fairbanks, AK

LLI Sample # WW 6736024  
LLI Group # 1325017  
Account # 11964

**Project Name:** 306456

Collected: 07/25/2012 17:20 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF10 SDG#: LSU20-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>					
01440	TPH-GRO AK water C6-C10	n.a.	0.33	0.010	1
<b>GC Volatiles SW-846 8021B</b>					
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	0.0035	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	0.013	0.0015	1
<b>GC Miscellaneous RSKSOP-175 modified</b>					
07105	Methane	74-82-8	0.0072	0.0050	1
<b>GC Petroleum AK 102/103 4/08/02 modified</b>					
02923	C10-<C25 DRO	n.a.	40	2.4	50
02923	C25-C36 RRO	n.a.	N.D.	3.4	50
<b>GC Petroleum AK 102/AK 103 04/08/02</b>					
02244	TPH-DRO AK C10-C25 w/Si Gel	n.a.	19	0.47	10
The reverse surrogate, capric acid, is present at <1%.					
<b>Wet Chemistry EPA 300.0</b>					
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.25	5
01506	Nitrite Nitrogen	14797-65-0	N.D.	0.40	5
00228	Sulfate	14808-79-8	16.7	1.5	5
<b>EPA 310.1</b>					
12150	Total Alkalinity	n.a.	97.9	0.70	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 18:59	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 18:59	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 18:59	Catherine J Schwarz	1

**Sample Description: GEI-10 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736024**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 17:20 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISF10 SDG#: LSU20-11

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time		Analyst	Dilution Factor
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	122120003A	07/30/2012	17:15	Elizabeth J Marin	1
02923	TPH-DRO/RRO (AK) water	AK 102/103 4/08/02 modified	1	122120035A	08/03/2012	02:04	Tyler O Griffin	50
02244	TPH-DRO AK C10-C25 w/Si Gel	AK 102/AK 103 04/08/02	1	122120036A	08/06/2012	23:01	Tyler O Griffin	10
11242	AK DRO Ext (W) w/SG	AK 102/AK 103 04/08/02	1	122120036A	07/31/2012	10:00	William H Saadeh	1
11185	AK DRO/ORO Waters Extraction	AK 102/AK 103 04/08/02	1	122120035A	07/31/2012	10:00	William H Saadeh	1
00368	Nitrate Nitrogen	EPA 300.0	1	12209655601A	07/27/2012	17:19	Christopher D Meeks	5
01506	Nitrite Nitrogen	EPA 300.0	1	12209655601A	07/27/2012	17:19	Christopher D Meeks	5
00228	Sulfate	EPA 300.0	1	12209655601A	07/27/2012	17:19	Christopher D Meeks	5
12150	Total Alkalinity	EPA 310.1	1	12213002102B	07/31/2012	12:00	Michele L Graham	1

**Sample Description: BD-1 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736025**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFD1 SDG#: LSU20-12FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			<b>mg/l</b>	<b>mg/l</b>	
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>			<b>mg/l</b>	<b>mg/l</b>	
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 19:25	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 19:25	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 19:25	Catherine J Schwarz	1

**Sample Description: BD-2 Grab Water Sample**  
**Facility# 306456**  
**328.5 Illinois St - Fairbanks, AK**

**LLI Sample # WW 6736026**  
**LLI Group # 1325017**  
**Account # 11964**

**Project Name: 306456**

Collected: 07/25/2012 by MM

Chevron

L4310

Submitted: 07/27/2012 09:20

6001 Bollinger Canyon Road

Reported: 08/14/2012 06:09

San Ramon CA 94583

ISFD2 SDG#: LSU20-13FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	0.37	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	0.0041	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	0.016	0.0015	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 19:51	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 19:51	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 19:51	Catherine J Schwarz	1

**Sample Description:** Trip\_Blank Water Sample  
 Facility# 306456  
 328.5 Illinois St - Fairbanks, AK

LLI Sample # WW 6736027  
 LLI Group # 1325017  
 Account # 11964

**Project Name:** 306456

Collected: 07/25/2012

Chevron

Submitted: 07/27/2012 09:20

L4310

Reported: 08/14/2012 06:09

6001 Bollinger Canyon Road  
 San Ramon CA 94583

ISFTB SDG#: LSU20-14TB\*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
<b>GC Volatiles AK 101</b>			mg/l	mg/l	
01440	TPH-GRO AK water C6-C10	n.a.	N.D.	0.010	1
<b>GC Volatiles SW-846 8021B</b>			mg/l	mg/l	
02102	Benzene	71-43-2	N.D.	0.0005	1
02102	Ethylbenzene	100-41-4	N.D.	0.0005	1
02102	Toluene	108-88-3	N.D.	0.0005	1
02102	Total Xylenes	1330-20-7	N.D.	0.0015	1

### General 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
01440	TPH-GRO AK water C6-C10	AK 101	1	12212B94A	08/01/2012 12:36	Catherine J Schwarz	1
02102	Method 8021 Water Master	SW-846 8021B	1	12212B94A	08/01/2012 12:36	Catherine J Schwarz	1
01146	GC VOA Water Prep	SW-846 5030B	1	12212B94A	08/01/2012 12:36	Catherine J Schwarz	1

## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 06:09 AM

Group Number: 1325017

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.

### Laboratory Compliance Quality Control

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: W122141AA	Sample number(s): 6736014,6736020							
Tetrachloroethene	N.D.	0.0008	mg/l	89	87	79-120	2	30
Trichloroethene	N.D.	0.001	mg/l	91	93	80-120	2	30
Batch number: 12212B94A	Sample number(s): 6736012-6736027							
Benzene	N.D.	0.0002	mg/l	105		80-120		
Ethylbenzene	N.D.	0.0002	mg/l	105		80-120		
Methyl tert-Butyl Ether	N.D.	0.0003	mg/l	90		79-120		
Toluene	N.D.	0.0002	mg/l	105		80-120		
TPH-GRO AK water C6-C10	N.D.	0.010	mg/l	109		60-120		
Total Xylenes	N.D.	0.0006	mg/l	105		80-120		
Batch number: 12214A94B	Sample number(s): 6736018							
TPH-GRO AK water C6-C10	N.D.	0.010	mg/l	100		60-120		
Batch number: 122120003A	Sample number(s): 6736012-6736015,6736018-6736024							
Methane	N.D.	0.0050	mg/l	102		80-120		
Batch number: 122120035A	Sample number(s): 6736012-6736024							
C10-<C25 DRO	N.D.	0.050	mg/l	86	96	75-125	10	20
C25-C36 RRO	N.D.	0.070	mg/l	87	96	60-120	10	20
Batch number: 122120036A	Sample number(s): 6736012-6736015,6736018-6736024							
TPH-DRO AK C10-C25 w/Si Gel	N.D.	0.050	mg/l	81	88	75-125	8	20
Batch number: 12209655601A	Sample number(s): 6736012-6736014,6736018-6736022,6736024							
Nitrate Nitrogen	N.D.	0.050	mg/l	103		90-110		
Nitrite Nitrogen	N.D.	0.080	mg/l	105		90-110		
Sulfate	N.D.	0.30	mg/l	102		90-110		
Batch number: 12209655601B	Sample number(s): 6736023							
Nitrate Nitrogen	N.D.	0.050	mg/l	103		90-110		
Nitrite Nitrogen	N.D.	0.080	mg/l	105		90-110		
Sulfate	N.D.	0.30	mg/l	102		90-110		
Batch number: 12209655601C	Sample number(s): 6736015							
Nitrate Nitrogen	N.D.	0.050	mg/l	103		90-110		
Nitrite Nitrogen	N.D.	0.080	mg/l	105		90-110		
Sulfate	N.D.	0.30	mg/l	102		90-110		
Batch number: 12213002102A	Sample number(s): 6736012-6736015,6736018-6736023							
Total Alkalinity	N.D.	0.70	mg/l as CaCO3	99		90-110		
Batch number: 12213002102B	Sample number(s): 6736024							
Total Alkalinity	N.D.	0.70	mg/l as CaCO3	99		90-110		

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron Group Number: 1325017  
Reported: 08/14/12 at 06:09 AM

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u> CaCO3	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
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### Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 12212B94A	Sample number(s): 6736012-6736027 UNSPK: 6736015								
Benzene	110	115	80-130	4	30				
Ethylbenzene	110	115	80-133	4	30				
Methyl tert-Butyl Ether	100	115	60-128	14	30				
Toluene	110	115	80-133	4	30				
TPH-GRO AK water C6-C10	100	109	60-120	9	20				
Total Xylenes	105	110	80-132	5	30				
Batch number: 12214A94B	Sample number(s): 6736018 UNSPK: P738271								
TPH-GRO AK water C6-C10	67	67	60-120	0	20				
Batch number: 122120003A	Sample number(s): 6736012-6736015,6736018-6736024 UNSPK: 6736015								
Methane	78	83	35-157	6	20				
Batch number: 122120035A	Sample number(s): 6736012-6736024 UNSPK: 6736015								
C10-<C25 DRO	98	110	75-125	13	30				
C25-C36 RRO	102	110	75-125	9	30				
Batch number: 12209655601A	Sample number(s): 6736012-6736014,6736018-6736022,6736024 UNSPK: 6736024 BKG: 6736024								
Nitrate Nitrogen	100		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	100		90-110			N.D.	N.D.	0 (1)	20
Sulfate	97		90-110			16.7	17.1	2 (1)	20
Batch number: 12209655601B	Sample number(s): 6736023 UNSPK: 6736023 BKG: 6736023								
Nitrate Nitrogen	100		90-110			N.D.	N.D.	0 (1)	20
Nitrite Nitrogen	101		90-110			N.D.	N.D.	0 (1)	20
Sulfate	98		90-110			3.0	3.1	1 (1)	20
Batch number: 12209655601C	Sample number(s): 6736015 UNSPK: 6736015 BKG: 6736015								
Nitrate Nitrogen	101		90-110			0.48	0.49	1 (1)	20
Nitrite Nitrogen	102		90-110			N.D.	N.D.	0 (1)	20
Sulfate	100		90-110			4.7	4.0	16 (1)	20
Batch number: 12213002102A	Sample number(s): 6736012-6736015,6736018-6736023 UNSPK: 6736015 BKG: 6736015								
Total Alkalinity	72*		73-121			76.3	76.8	1	5
Batch number: 12213002102B	Sample number(s): 6736024 UNSPK: 6736015 BKG: P736595								
Total Alkalinity	72*		73-121			361	360	0	5

### Surrogate Quality Control

\*- Outside of specification

- (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.



## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 06:09 AM

Group Number: 1325017

### 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: VOCs by 8260B - Water

Batch number: W122141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
6736014	96	102	105	103
6736020	95	100	104	100
Blank	96	104	104	96
LCS	94	103	108	104
LCSD	96	101	106	102
Limits:	80-116	77-113	80-113	78-113

Analysis Name: TPH-GRO AK water C6-C10

Batch number: 12212B94A

	Trifluorotoluene-F	Trifluorotoluene-P
6736012	77	87
6736013	80	87
6736014	78	89
6736015	73	86
6736016	86	87
6736017	89	86
6736018		68
6736019	78	87
6736020	84	87
6736021	81	88
6736022	71	86
6736023	80	70
6736024	79	79
6736025	71	83
6736026	75	81
6736027	73	86
Blank	82	86
LCS	91	86
MS	86	87
MSD	89	86
Limits:	60-120	51-120

Analysis Name: TPH-GRO AK water C6-C10

Batch number: 12214A94B

	Trifluorotoluene-F	Trifluorotoluene-P
6736018	74	
Blank	73	87
LCS	90	86
MS	81	88
MSD	79	86
Limits:	60-120	51-120

Analysis Name: Volatile Headspace Hydrocarbon

Batch number: 122120003A

Propene

\*- Outside of specification

- (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.

## Quality Control Summary

Client Name: Chevron  
Reported: 08/14/12 at 06:09 AM

Group Number: 1325017

### Surrogate Quality Control

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6736012	62
6736013	79
6736014	94
6736015	75
6736018	103
6736019	52
6736020	101
6736021	99
6736022	64
6736023	60
6736024	68
Blank	101
LCS	106
MS	76
MSD	84

---

Limits: 42-131

Analysis Name: TPH-DRO/RRO (AK) water  
Batch number: 122120035A  
Orthoterphenyl                      n-Triacontane-d62

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6736012	87	61
6736013	78	52
6736014	122	80
6736015	97	75
6736016	86	72
6736017	92	80
6736018	238*	123
6736019	96	81
6736020	78	62
6736021	204*	0*
6736022	95	86
6736023	167*	84
6736024	82	74
Blank	79	73
LCS	86	81
LCSD	92	87
MS	86	72
MSD	92	80

---

Limits: 50-150                      50-150

Analysis Name: TPH-DRO AK C10-C25 w/Si Gel  
Batch number: 122120036A  
Orthoterphenyl

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6736012	68
6736013	64
6736014	87
6736015	68
6736018	478*
6736019	68
6736020	73
6736021	455*
6736022	61
6736023	97

\*- Outside of specification

- (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.

**Quality Control Summary**

Client Name: Chevron  
Reported: 08/14/12 at 06:09 AM

Group Number: 1325017

**Surrogate Quality Control**

6736024	119
Blank	72
LCS	77
LCSD	81

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Limits: 50-150

\*- Outside of specification

- (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.

# Chevron Generic Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 11964

Group # 1322017

For Lancaster Laboratories use only

Sample # 0736012-07

1 of 2

Instructions on reverse side correspond with circled numbers.

1 Client Information				4 Matrix				5 Analyses Requested										SCR #: _____																			
Facility # <u>304456</u>		WBS <u>NWTRB-0306456-1-LAB</u>		Sediment <input type="checkbox"/>		Ground <input checked="" type="checkbox"/>		Surface <input type="checkbox"/>		Total Number of Containers		BTEX <input checked="" type="checkbox"/> MTBE <input checked="" type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/>		8260 full scan		AK 103 <u>RSC Organics</u>		AK 101 TPHGR0		AK 102 TPHDR0 <u>Silica Gel Cleanup</u>		Lead <input type="checkbox"/> Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method <input type="checkbox"/>		VPH/EPH Method _____		MTBE <u>80213</u>		PCE / TCE <u>by EPA 8260B *</u>		Sulfate, Nitrate / Nitrite <u>EPA 8260C</u>		Methane <u>RSK 175</u>		Total Alkalinity <u>EPA 8260-1</u>		SCR # _____ <input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm MTBE + Naphthalene <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run _____ oxy's on highest hit <input type="checkbox"/> Run _____ oxy's on all hits	
Site Address <u>328 1/2 Illinois St. Fairbanks, AK</u>		Lead Consultant <u>ARCADIS</u>		Potable <input type="checkbox"/>		NPDES <input type="checkbox"/>		Air <input type="checkbox"/>		80213		TPHGR0		TPHDR0		Total		VPH/EPH Method		Methane		Total Alkalinity		3 All analyses run per <u>G. Montgomery Imp 7/3/12</u> 6 Remarks													
Chevron PM <u>Dan Carrier</u>		Consultant/Office <u>2300 Eastlake Ave E Ste 200 / Seattle, WA 98102</u>		Soil <input type="checkbox"/>		Water <input type="checkbox"/>		Oil <input type="checkbox"/>		Grab		Composite		Soil		Water		Oil		Grab		Composite				* Do not run 8260B full scan only analyze for PCE/TCE Analyze for Both DRO AND DRO w/ Silica Gel GEE wells → shown observed. MW-14: Hold Analysis for Sulfate/Nitrate, Methane, Total Alk. 3											
Consultant Project Mgr. <u>Greg Montgomery</u>		Consultant Phone # <u>206-726-4742</u>		Sampler <u>M. MacDaniel &amp; M. Casado</u>		Date		Time		Grab		Composite		Soil		Water		Oil		Grab		Composite		Date Time													
Sample Identification		Collected		Date		Time		Grab		Composite		Soil		Water		Oil		Grab		Composite		Date				Time											
MW-1		7/25/12		1200		X						X		X		X		X		X		X		X													
MW-2		↑		1140		↑						X		X		X		X		X		X		X													
MW-3		↑		1110		↑						X		X		X		X		X		X		X													
MW-4		↑		1400		↑						X		X		X		X		X		X		X													
MW-5		↑		1310		↑						X		X		X		X		X		X		X													
MW-6		↑		1325		↑						X		X		X		X		X		X		X													
MW-14		↑		1040		↑						X		X		X		X		X		X		X													
GEE-5		↑		1520		↑						X		X		X		X		X		X		X													
GEE-6		↑		1500		↑						X		X		X		X		X		X		X													
GEE-9		↑		1615		↑						X		X		X		X		X		X		X													
GEE-10		7/25/12		1720		X						X		X		X		X		X		X		X													
7 Turnaround Time Requested (TAT) (please circle) Standard <u>5 day</u> 4 day 72 hour      48 hour      24 hour				Relinquished by <u>[Signature]</u> Date <u>7/26/12</u> Time <u>1000</u>				Received by <u>[Signature]</u> Date _____ Time _____				Relinquished by _____ Date _____ Time _____				Received by _____ Date _____ Time _____																					
8 Data Package Options (please circle if required) Type I - Full      Type VI (Raw Data) <u>Alaska/Type III</u>				Relinquished by Commerical Carrier: UPS _____ FedEx <u>X</u> Other _____				Received by <u>[Signature]</u> Date <u>7/27/12</u> Time <u>920</u>				Temperature Upon Receipt <u>0.6-1.4 °C</u>				Custody Seals Intact? <u>(Yes)</u> No																					

# Chevron Generic Analysis Request/Chain of Custody



**Lancaster Laboratories**

Acct. # 11964

For Lancaster Laboratories use only  
 Group # 1325017 Sample # 6736012-27  
Instructions on reverse side correspond with circled numbers.

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1 Client Information				4 Matrix			5 Analyses Requested										6 Remarks									
Facility # <u>306456</u>		WBS <u>NUMER-ESL-USE 1-LAB</u>		Sediment <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Surface <input type="checkbox"/>	Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Air <input type="checkbox"/>	Oil <input type="checkbox"/>	Total Number of Containers	BTEX <input type="checkbox"/> 8260 <input type="checkbox"/> Naphth <input type="checkbox"/>	8260 full scan	Oxygenates	AK 101 TPHRO	AK 102 TPHRO	Shine-Gal Cleanup <input type="checkbox"/>	Lead <input type="checkbox"/> Total <input type="checkbox"/> Diss. <input type="checkbox"/> Method	VPH/EPH Method	AK 103 RRO	SCR #: _____									
Site Address <u>328 1/2 Illinois St. Fairbanks, AK</u>		Lead Consultant <u>ARCADIS</u>															<input type="checkbox"/> Results in Dry Weight <input type="checkbox"/> J value reporting needed <input type="checkbox"/> Must meet lowest detection limits possible for 8260 compounds <input type="checkbox"/> 8021 MTBE Confirmation <input type="checkbox"/> Confirm MTBE + Naphthalene <input type="checkbox"/> Confirm highest hit by 8260 <input type="checkbox"/> Confirm all hits by 8260 <input type="checkbox"/> Run ___ oxy's on highest hit <input type="checkbox"/> Run ___ oxy's on all hits									
Chevron PM <u>Dan Carrier</u>		Consultant/Office <u>2300 Eastlake Ave East STE 200 Seattle WA 98102</u>																								
Consultant Project Mgr. <u>Gregory Montgomery</u>		Consultant Phone # <u>206-726-4742</u>																								
Sampler <u>m. macdonald, Daniel &amp; m. oriedo</u>		Composite <input type="checkbox"/>																								
Sample Identification		Collected																								
	Date	Time	Grab											Held DRO/RRO Analysis for MS/MSD. DRO/RRO added to MS/MSD per Greg												
BD-1	7/25/12	-	X	X	3	X	X	X	X	X	X	X	X			X	X	X								
BD-2	7/25/12	-	X	X	3	X	X	X	X	X	X	X	X			X	X	X								
MS	7/25/12	1400	X	X	5	X	X	X	X	X	X	X	X			X	X	X								
MSD	7/25/12	1400	X	X	5	X	X	X	X	X	X	X	X			X	X	X								
Trip Blank	-	-		X	3	X	X	X	X	X	X	X	X			X	X	X								
7 Turnaround Time Requested (TAT) (please circle)				Relinquished by <u>[Signature]</u>		Date <u>7/26/12</u>	Time <u>1000</u>	Received by <u>[Signature]</u>		Date	Time	9														
Standard <input checked="" type="radio"/> 5 day 4 day 72 hour 48 hour 24 hour				Relinquished by		Date	Time	Received by		Date	Time															
8 Data Package Options (please circle if required)				Relinquished by Commerical Carrier:				Received by <u>[Signature]</u>		Date <u>7/27/12</u>	Time <u>920</u>															
Type I - Full Type VI (Raw Data) <input checked="" type="radio"/> Alaska/Type III				UPS FedEx <input checked="" type="checkbox"/> Other				Temperature Upon Receipt <u>0.6 - 1.1 °C</u>		Custody Seals Intact? <input checked="" type="radio"/> Yes <input type="radio"/> No																

# Explanation of Symbols and Abbreviations

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

<b>RL</b>	Reporting Limit	<b>BMQL</b>	Below Minimum Quantitation Level
<b>N.D.</b>	none detected	<b>MPN</b>	Most Probable Number
<b>TNTC</b>	Too Numerous To Count	<b>CP Units</b>	cobalt-chloroplatinate units
<b>IU</b>	International Units	<b>NTU</b>	nephelometric turbidity units
<b>umhos/cm</b>	micromhos/cm	<b>ng</b>	nanogram(s)
<b>C</b>	degrees Celsius	<b>F</b>	degrees Fahrenheit
<b>meq</b>	milliequivalents	<b>lb.</b>	pound(s)
<b>g</b>	gram(s)	<b>kg</b>	kilogram(s)
<b>µg</b>	microgram(s)	<b>mg</b>	milligram(s)
<b>mL</b>	milliliter(s)	<b>L</b>	liter(s)
<b>m<sup>3</sup></b>	cubic meter(s)	<b>µL</b>	microliter(s)
		<b>pg/L</b>	picogram/liter
<b>&lt;</b>	less than - The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
<b>&gt;</b>	greater than		
<b>ppm</b>	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 of gas per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	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.		

## Data Qualifiers:

**C** – result confirmed by reanalysis.

**J** - estimated value – The result is  $\geq$  the Method Detection Limit (MDL) and  $<$  the Limit of Quantitation (LOQ).

## U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
<b>A</b>	TIC is a possible aldol-condensation product	<b>B</b>	Value is $<$ CRDL, but $\geq$ IDL
<b>B</b>	Analyte was also detected in the blank	<b>E</b>	Estimated due to interference
<b>C</b>	Pesticide result confirmed by GC/MS	<b>M</b>	Duplicate injection precision not met
<b>D</b>	Compound quantitated on a diluted sample	<b>N</b>	Spike sample not within control limits
<b>E</b>	Concentration exceeds the calibration range of the instrument	<b>S</b>	Method of standard additions (MSA) used for calculation
<b>N</b>	Presumptive evidence of a compound (TICs only)	<b>U</b>	Compound was not detected
<b>P</b>	Concentration difference between primary and confirmation columns $>$ 25%	<b>W</b>	Post digestion spike out of control limits
<b>U</b>	Compound was not detected	<b>*</b>	Duplicate analysis not within control limits
<b>X,Y,Z</b>	Defined in case narrative	<b>+</b>	Correlation coefficient for MSA $<$ 0.995

**Analytical test results meet all requirements of NELAC 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 LANCASTER LABORATORIES 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 LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES 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 Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions, and Lancaster hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

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**Appendix C**

ADEC Data Review Checklists

## Laboratory Data Review Checklist

Completed by:

Title:  Date:

CS Report Name:  Report Date:

Consultant Firm:

Laboratory Name:  Report Number:

ADEC File Number:  ADEC RecKey Number:

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?  
 Yes  No  NA (Please explain.)      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  NA (Please explain.)      Comments:

2. Chain of Custody (COC)

- a. COC information completed, signed, and dated (including released/received by)?  
 Yes  No  NA (Please explain.)      Comments:

- b. Correct analyses requested?  
 Yes  No  NA (Please explain.)      Comments:

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?  
 Yes  No  NA (Please explain.)      Comments:

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?  
 Yes  No  NA (Please explain.)      Comments:



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

Yes  No  NA (Please explain.)                      Comments:

NA – No documentation

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  NA (Please explain.)                      Comments:

No

e. Data quality or usability affected? (Please explain.)

Comments:

No

#### 4. Case Narrative

a. Present and understandable?

Yes  No  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

No

c. Were all corrective actions documented?

Yes  No  NA (Please explain.)                      Comments:

NA (No corrective action required)

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

Comments:

No effect.

#### 5. Samples Results

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

Yes  No  NA (Please explain.)                      Comments:

Yes.

b. All applicable holding times met?

Yes  No  NA (Please explain.)                      Comments:

No – the holding time for Nitrate/Nitrite Nitrogen analysis was not met for all samples.

c. All soils reported on a dry weight basis?  
 Yes  No  NA (Please explain.)

Comments:

NA (No soil samples submitted for analysis)

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?  
 Yes  No  NA (Please explain.)

Comments:

No

e. Data quality or usability affected?

Comments:

No, the reported PQL that exceeded the GCL was from a sample known to be impacted and the results were for confirmatory purposes.

## 6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?  
 Yes  No  NA (Please explain.)

Comments:

Yes

ii. All method blank results less than PQL?  
 Yes  No  NA (Please explain.)

Comments:

Yes

iii. If above PQL, what samples are affected?

Comments:

None

iv. Do the affected sample(s) have data flags and if so, are the data flags clearly defined?  
 Yes  No  NA (Please explain.)

Comments:

NA (No affected samples)

v. Data quality or usability affected? (Please explain.)

Comments:

No

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  NA (Please explain.)

Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

NA (No metals/Inorganic analysis requested for submitted samples)

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  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Comments:

None

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

Yes  No  NA (Please explain.)                      Comments:

NA (No affected samples)

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

Comments:

No

c. Surrogates – Organics Only

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

Yes  No  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)

Comments:

NA (No samples have failed surrogate recoveries)

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

Comments:

No

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

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

Yes  No  NA (Please explain.)

Comments:

Yes

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  NA (Please explain.)

Comments:

Yes

iii. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

Yes

iv. If above PQL, what samples are affected?

Comments:

NA

v. Data quality or usability affected? (Please explain.)

Comments:

No, data quality or usability does not appear to be affected.

e. Field Duplicate

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

Yes  No  NA (Please explain.)

Comments:

Yes

ii. Submitted blind to lab?

Yes  No  NA (Please explain.)

Comments:

Yes

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

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

Where R1 = Sample Concentration

R2 = Field Duplicate Concentration

Yes  No  NA (Please explain.)

Comments:

No, The RPD for DRO was out of specification.

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

Comments:

No, the RDP for the DRO on the blind duplicate was likely out of specification due to the heavy sheen present when the sample was collected.

f. Decontamination or Equipment Blank (If not used explain why).

Yes  No  NA (Please explain.)

Comments:

NA (Sample collected with a disposable bailer.)

i. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

NA

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? (Please explain.)

Comments:

NA

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

a. Defined and appropriate?

Yes  No  NA (Please explain.)

Comments:

Yes

## Laboratory Data Review Checklist

Completed by:

Title:  Date:

CS Report Name:  Report Date:

Consultant Firm:

Laboratory Name:  Report Number:

ADEC File Number:  ADEC RecKey Number:

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?  
 Yes  No  NA (Please explain.)      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  NA (Please explain.)      Comments:

2. Chain of Custody (COC)

- a. COC information completed, signed, and dated (including released/received by)?  
 Yes  No  NA (Please explain.)      Comments:

- b. Correct analyses requested?  
 Yes  No  NA (Please explain.)      Comments:

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ}$  C)?  
 Yes  No  NA (Please explain.)      Comments:

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?  
 Yes  No  NA (Please explain.)      Comments:

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

Yes  No  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

Yes, Trip blank not received – sent in a cooler for a different site shipped on the same day.

e. Data quality or usability affected? (Please explain.)

Comments:

No

#### 4. Case Narrative

a. Present and understandable?

Yes  No  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

No

c. Were all corrective actions documented?

Yes  No  NA (Please explain.)                      Comments:

NA (No corrective action required)

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

Comments:

No effect.

#### 5. Samples Results

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

Yes  No  NA (Please explain.)                      Comments:

Yes

b. All applicable holding times met?

Yes  No  NA (Please explain.)                      Comments:

No – the holding time for Nitrate/Nitrite Nitrogen analysis was not met for all samples.

c. All soils reported on a dry weight basis?  
 Yes  No  NA (Please explain.)

Comments:

NA (No soil samples submitted for analysis)

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

Yes  No  NA (Please explain.)

Comments:

No

e. Data quality or usability affected?

Comments:

No, the reported PQL that exceeded the GCL was from a sample known to be impacted and the results were for confirmatory purposes.

## 6. QC Samples

a. Method Blank

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

Yes  No  NA (Please explain.)

Comments:

Yes

ii. All method blank results less than PQL?

Yes  No  NA (Please explain.)

Comments:

Yes

iii. If above PQL, what samples are affected?

Comments:

None

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

Yes  No  NA (Please explain.)

Comments:

NA (No affected samples)

v. Data quality or usability affected? (Please explain.)

Comments:

No

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  NA (Please explain.)

Comments:

Yes



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

Yes  No  NA (Please explain.)                      Comments:

NA (No metals/Inorganic analysis requested for submitted samples)

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  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Comments:

NA

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

Yes  No  NA (Please explain.)                      Comments:

NA (No affected samples)

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

Comments:

No

c. Surrogates – Organics Only

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

Yes  No  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)

Comments:

NA

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

Comments:

No, data quality and usability does not appear to be affected.

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

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

Yes  No  NA (Please explain.)

Comments:

No – A trip blank was submitted for a different site and shipped at the same time as the coolers for this sampling event were shipped.

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  NA (Please explain.)

Comments:

Yes

iii. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

NA

iv. If above PQL, what samples are affected?

Comments:

NA

v. Data quality or usability affected? (Please explain.)

Comments:

No

e. Field Duplicate

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

Yes  No  NA (Please explain.)

Comments:

Yes

ii. Submitted blind to lab?

Yes  No  NA (Please explain.)

Comments:

Yes

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

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

Where R1 = Sample Concentration

R2 = Field Duplicate Concentration

Yes  No  NA (Please explain.)

Comments:

No, The RPD for DRO was out of specification.

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

Comments:

No, the RDP for the DRO on the blind duplicate was likely out of specification due LNAPL globules present in the sampling matrix.

f. Decontamination or Equipment Blank (If not used explain why).

Yes  No  NA (Please explain.)

Comments:

NA (Sample collected with a disposable bailer.)

i. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

NA

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? (Please explain.)

Comments:

NA

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

a. Defined and appropriate?

Yes  No  NA (Please explain.)

Comments:

Yes

## Laboratory Data Review Checklist

Completed by:

Title:  Date:

CS Report Name:  Report Date:

Consultant Firm:

Laboratory Name:  Report Number:

ADEC File Number:  ADEC RecKey Number:

1. Laboratory

- a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?  
 Yes  No  NA (Please explain.)      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  NA (Please explain.)      Comments:

2. Chain of Custody (COC)

- a. COC information completed, signed, and dated (including released/received by)?  
 Yes  No  NA (Please explain.)      Comments:

- b. Correct analyses requested?  
 Yes  No  NA (Please explain.)      Comments:

3. Laboratory Sample Receipt Documentation

- a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?  
 Yes  No  NA (Please explain.)      Comments:

- b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?  
 Yes  No  NA (Please explain.)      Comments:

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

Yes  No  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

No

e. Data quality or usability affected? (Please explain.)

Comments:

No

#### 4. Case Narrative

a. Present and understandable?

Yes  No  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

No

c. Were all corrective actions documented?

Yes  No  NA (Please explain.)                      Comments:

NA (No corrective action required)

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

Comments:

No effect.

#### 5. Samples Results

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

Yes  No  NA (Please explain.)                      Comments:

Yes

b. All applicable holding times met?

Yes  No  NA (Please explain.)                      Comments:

Yes

c. All soils reported on a dry weight basis?  
 Yes  No  NA (Please explain.)

Comments:

NA (No soil samples submitted for analysis)

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?  
 Yes  No  NA (Please explain.)

Comments:

No.

e. Data quality or usability affected?

Comments:

No, reported PQLs that exceeded the GCL were from a samples known to be impacted and the results can still be used for confirmatory purposes.

## 6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?  
 Yes  No  NA (Please explain.)

Comments:

Yes

ii. All method blank results less than PQL?  
 Yes  No  NA (Please explain.)

Comments:

Yes

iii. If above PQL, what samples are affected?

Comments:

None

iv. Do the affected sample(s) have data flags and if so, are the data flags clearly defined?  
 Yes  No  NA (Please explain.)

Comments:

NA (No affected samples)

v. Data quality or usability affected? (Please explain.)

Comments:

No

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  NA (Please explain.)

Comments:

Yes

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

Yes  No  NA (Please explain.)                      Comments:

NA (No metals/Inorganic analysis requested for submitted samples)

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  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Comments:

None

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

Yes  No  NA (Please explain.)                      Comments:

NA (No affected samples)

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

Comments:

No

c. Surrogates – Organics Only

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

Yes  No  NA (Please explain.)                      Comments:

Yes

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  NA (Please explain.)                      Comments:

Yes

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

Yes  No  NA (Please explain.)

Comments:

NA (No samples have failed surrogate recoveries)

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

Comments:

No

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

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

Yes  No  NA (Please explain.)

Comments:

Yes

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  NA (Please explain.)

Comments:

Yes

iii. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

Yes

iv. If above PQL, what samples are affected?

Comments:

NA

v. Data quality or usability affected? (Please explain.)

Comments:

No

e. Field Duplicate

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

Yes  No  NA (Please explain.)

Comments:

Yes



ii. Submitted blind to lab?

Yes  No  NA (Please explain.)

Comments:

Yes

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

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

Where R1 = Sample Concentration

R<sub>2</sub> = Field Duplicate Concentration

Yes  No  NA (Please explain.)

Comments:

Yes.

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

Comments:

No, data quality or usability does not appear to be affected.

f. Decontamination or Equipment Blank (If not used explain why).

Yes  No  NA (Please explain.)

Comments:

NA (Sample collected with a disposable bailer.)

i. All results less than PQL?

Yes  No  NA (Please explain.)

Comments:

NA

ii. If above PQL, what samples are affected?

Comments:

NA

iii. Data quality or usability affected? (Please explain.)

Comments:

NA

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

a. Defined and appropriate?

Yes  No  NA (Please explain.)

Comments:

Yes