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Chevron Environmental Management Company

Second Semi-annual 2013 Groundwater Monitoring Report

Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska
ADEC File Number: 100.26.023

January 10, 2014

ARCADIS

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1.0 Introduction

On behalf of Chevron Environmental Management Company (Chevron EMC), ARCADIS US, Inc. (ARCADIS), has prepared this report to document the second semi-annual 2013 groundwater sampling event for Former Chevron Facility 211081 (the site), located at 4103 Geist Road Fairbanks, Alaska. The site location and surrounding area are shown on **Figure 1**.

This report summarizes semi-annual sampling of groundwater monitoring wells and quarterly water sampling of University of Alaska Fairbanks production wells pursuant to agreements reached between the Alaska Department of Environmental Conservation (ADEC) and Chevron. This work was conducted under the direction of a "qualified person" [18 AAC 75. 990 (100), and 18 AAC 78.995 (118)].

2.0 Groundwater Monitoring

2.1 Groundwater Gauging Methods

The second semi-annual 2013 groundwater gauging event was conducted on October 10, 2013. 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.

In order to prevent the possibility of cross-contamination, wells were gauged in the order of lowest to highest historical petroleum hydrocarbon concentrations in groundwater. In addition, non-disposable groundwater gauging equipment was decontaminated prior to and after each use with a detergent solution and rinsed in potable water.

2.2 Groundwater Elevation and Flow Direction

On October 10, 2013, monitoring wells G-1R, G-3, G-4, G-5, G-7, G-8, G-9, MW-211, MW-301D, MW-301S, MW-302D, MW-302S, MW-303D, MW-303S, MW-304D, MW-304S, MW-305, MW-306, and MW-307 were gauged to determine depth-to-groundwater. Monitoring well MW-307 was not used in contouring; the well was obstructed by ice. LNAPL was not detected in the monitoring wells during gauging activities in October 2013. The groundwater monitoring event field notes are presented in **Appendix A**.

Depth-to-groundwater measured on October 10, 2013 ranged between 11.86 feet below top of casing (TOC) (G-3) and 17.98 feet below TOC (MW-302S). Groundwater elevations ranged from 422.09 feet mean sea level (msl) in well MW-304D to 427.38 feet msl in well MW-302D.

The inferred groundwater flow direction for the second semi-annual 2013 monitoring event is to the northwest, and is consistent with historical flow direction. Current and historical groundwater depth-to-water and elevation data are included in **Table 1**. Groundwater elevations and the inferred flow direction are shown on **Figure 2**.

2.3 Groundwater Sampling Methods

The second semi-annual 2013 groundwater monitoring sampling event was conducted on October 10, 2013. Groundwater samples were collected from monitoring wells G-1R, G-3, G-4, G-5, G-7, G-8, MW-301D, and MW-304D using no purge sampling procedures in accordance with ADEC *Draft Field Sampling Guidance* (ADEC, 2010), ARCADIS *Bailer-Grab Groundwater Sampling* (ARCADIS, 2009), and ARCADIS *Groundwater sampling with HydraSleeves – Standard Operating Procedure* (ARCADIS 2011). Disposable Teflon® bailers and HydraSleeves™ were used to collect the samples. HydraSleeves™ were lowered into the water column and were allowed to sit in the monitoring wells for at least two hours prior to sampling. After the necessary sample bottles were filled using the HydraSleeves™ for analysis of gasoline range organics (GRO) and benzene, toluene, ethylbenzene, and total xylenes (BTEX), Teflon® disposable bailers (bailers) were used to fill the remaining sample bottles for analysis of diesel range organics (DRO) and residual range organics (RRO). Bailers were lowered slowly into the water column to mitigate potential volatilization.

Samples were submitted to Pace Analytical Services (Pace) in Minneapolis, Minnesota under proper chain-of-custody procedures. Groundwater samples were submitted for analysis of the following:

Groundwater samples collected from monitoring wells G-3, G-4, G-5, G-7 and G-8 were submitted to the analytical laboratory for the following analysis:

- BTEX, by EPA method 8260
- GRO by method AK101
- DRO by method AK102
- DRO with silica gel cleanup (SGC) by method AK 102
- RRO by method AK103

Concentrations of DRO include not only dissolved petroleum hydrocarbons, but also polar non-hydrocarbon compounds. Polar compounds can result from 1) biodegradation of original petroleum hydrocarbons, 2) sampling or lab artifacts, 3) other chemicals (e.g. chlorinated compounds), or 4) naturally occurring organics. In some cases, polar compounds are a very large portion of the organics being measured as DRO. Groundwater samples from the October 10-11, 2013 event were analyzed for both DRO and DRO using SGC protocols for comparison. The DRO and DRO with SGC data are present in **Table 2**.

Groundwater samples collected from monitoring well G-1R were submitted to the analytical laboratory for the following analysis:

- BTEX by EPA method 8260
- GRO by method AK101
- DRO by method AK102

Groundwater samples collected from monitoring well MW-301D and MW-304D were submitted to the analytical laboratory for the following analysis:

- BTEX by EPA method 8260

A groundwater duplicate sample was collected from monitoring well G-1R (BD-1). The duplicate sample was analyzed for GRO by method AK101, DRO by method AK102 and BTEX by EPA method 8260. The duplicate sample was submitted blind with the sample set to Pace.

2.4 Quarterly UAF Sampling Methods

Quarterly water sampling is conducted at the UAF well treatment plant before it is treated for drinking preparation (influent) and after treatment (effluent). Water samples are also collected from two drinking water supply wells (GW-1B and GW-2) located north of the site. The UAF treatment plan influent and effluent samples were collected during the third and fourth quarter on August 15th and November 6th of 2013, respectively. Drinking water supply wells GW-1B and GW-2 were sampled during the third quarter, on August 15, 2013. Some plumbing modifications were being made with in the production well house during the fourth quarter sampling event and GW-1B and GW-2 could not be sampled.

2.5 Groundwater Analytical Results

Groundwater samples collected during the second semi-annual event in October 2013 contained concentrations of GRO greater than the ADEC groundwater cleanup level (GCL) of 2,200 micrograms per liter (µg/L) in monitoring wells G-3 (10,400 µg/L), G-4 (15,900 µg/L), G-5 (44,300 µg/L), and G-7 (2,290 µg/L). The second semi-annual groundwater analytical results are relatively consistent with the historical decreasing trend for GRO concentrations in monitoring wells G-3, G-4, G-5, G-7, and G-8. Concentrations in the remaining monitoring wells were non-detect.

Groundwater samples contained concentrations of DRO greater than the ADEC GCL (1,500 µg/L) in monitoring wells G-3 (3,100 µg/L), G-4 (7,300 µg/L) and G-5 (11,000 µg/L). Concentrations of DRO in the above monitoring wells are relatively consistent with the historical decreasing trends. The second semi-annual analytical results for the samples collected from monitoring well G-7 indicate a DRO concentration at the ADEC GCL (1,500 µg/L). DRO concentrations in monitoring well G-8 continue to fluctuate greater than and less than the ADEC GCL. DRO concentrations in monitoring well G-1R remain below the ADEC GCL.

Groundwater samples contained concentrations of DRO using SGC are greater than the ADEC GCL (1,500 µg/L) in monitoring wells G-3 (1,800 µg/L), G-4 (3,700 µg/L), and G-5 (6,900 µg/L). The concentration of DRO using SGC is below the ADEC GCL in monitoring well G-7 and less than the reporting limit in monitoring well G-8. The concentrations of DRO using SGC are lower than the concentrations analyzed without SGC.

Groundwater samples contained concentrations of benzene greater than the ADEC GCL (5 µg/L) in monitoring wells G-4 (164 µg/L), G-7 (46 µg/L) and G-8 (12 µg/L). Benzene concentration for the monitoring well G-5 sample (<20 µg/L) was reported below a method detection limit greater than the ADEC GCL. Concentrations of benzene in monitoring wells G-4, G-5, G-7 and G-8 continue to indicate a general decreasing trend.

The site monitoring well groundwater samples analyzed for RRO were below the ADEC GCL (1,100 µg/L) with the exception of those from monitoring Well G-3. RRO concentrations for G-3 were reported at the ADEC GCL (1,100 µg /L).

Monitoring wells MW-211, MW-302S, MW-303S, MW-304S, MW-305, MW-306, MW-307, and GB-1B have not exceeded concentrations greater than their respective

ADEC GCLs since the monitoring wells were installed. The remaining monitoring wells indicate a decreasing trend in concentrations.Routine analytical results for the above-mentioned constituents obtained from the second semi-annual 2013 groundwater monitoring event are summarized in **Table 2** and are shown on **Figure 3**. Historical groundwater analytical results for VOCs and metals are presented on **Table 3**. Historical groundwater elevation data plotted against analytical results are depicted in **Figures 4** through **11** as hydrographs.

3.0 Laboratory Data Quality Assurance Summary

As required by ADEC (Technical Memorandum 06-002, dated March 2009b), ARCADIS completed a laboratory data review checklist for the Pace report during the second semi-annual 2013 reporting period. The laboratory report is included as **Appendix B** and the data review checklist is 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 for Pace met precision objectives for laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) relative percent differences (RPDs) with the following exceptions: the DRO/RRO results were outside specification for samples G-3, G-4, G-5, G-7 and G-8.

3.2 Accuracy

The data meets accuracy objectives for the quality and usability of the data presented in the report.

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 meet the ADEC completeness goal.

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 exception of benzene in monitoring well G-5.

4.0 Conclusions

The analytical results from second semi-annual 2013 groundwater monitoring event indicate a decreasing trend in most monitoring wells. Laboratory analysis for the 2013 second semi-annual event indicate groundwater samples collected from monitoring wells G-3, G-4, G-5, G-7 and G-8 contained concentrations greater than their respective ADEC GCLs for one or more of the following analytes: GRO, DRO, DRO using SGC, RRO and benzene. Concentrations are consistent with the historical decreasing trend. The downgradient monitoring wells indicate concentrations are less than their respective ADEC GCLs and/or laboratory reports limits. The groundwater elevations, flow direction, and gradient are consistent with previous monitoring events.

Groundwater monitoring will continue in accordance with the current semi-annual schedule. The first semi-annual sampling event of 2014 will be conducted in the spring of 2014. The UAF wells and plant will be sampled during the first quarter of 2014.

If you have any questions or require additional information, please contact Greg Montgomery, ARCADIS at 206.726.4742.

5.0 References

ADEC, May, 2010. *Draft Field Sampling Guidance*. Division of Spill Prevention and Response Contaminated Sites Program.

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

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

ASTM Standard E1943-98, 2004. *Standard Guide for Remediation of Ground Water by Natural Attenuation at Petroleum Release Sites*. ASTM International, West Conshohocken, PA. DOI:10 1520/E1943-98R04.

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Tables

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
G-1R	03/28/00	430.69	15.37	415.32	n. e.	0.0
	06/27/00	430.69	12.07	418.62	n. e.	0.0
	09/26/00	430.69	11.09	419.60	n. e.	0.0
	12/19/00	430.69	13.59	417.10	n. e.	0.0
	03/28/01	430.69	14.51	416.18	n. e.	0.0
	06/27/01	430.69	12.96	417.73	n. e.	0.0
	09/19/01	430.69	12.03	418.66	n. e.	0.0
	12/12/01	430.69	14.32	416.37	n. e.	0.0
	03/27/02	430.69	14.62	416.07	n. e.	0.0
	06/25/02	430.69	11.86	418.83	n. e.	0.0
	09/28/02	430.69	11.62	419.07	n. e.	0.0
	12/17/02	430.69	12.87	417.82	n. e.	0.0
	04/08/03	430.69	12.61	418.08	n. e.	0.0
	06/24/03	430.69	13.07	417.62	n. e.	0.0
	09/16/03	430.69	9.82	420.87	n. e.	0.0
	12/22/03	430.69	12.69	418.00	n. e.	0.0
	03/24/04	430.69	14.50	416.19	n. e.	0.0
	06/21/04	430.69	11.98	418.71	n. e.	0.0
	09/29/04	430.69	13.32	417.37	n. e.	0.0
	12/02/04	430.69	14.49	416.20	n. e.	0.0
	04/06/05	430.69	14.61	416.08	n. e.	0.0
	06/27/05	430.69	11.04	419.65	n. e.	0.0
	09/22/05	430.69	12.20	418.49	n. e.	0.0
	12/06/05	430.69	13.92	416.77	n. e.	0.0
	03/29/06	430.69	15.29	415.40	n. e.	0.0
	06/08/06	430.69	12.94	417.75	n. e.	0.0
	09/26/06	98.87	12.99	85.88	n. e.	0.0
	03/31/07	98.87	15.31	83.56	n. e.	0.0
	09/15/07	98.87	12.35	86.52	n. e.	0.0
	03/26/08	98.87	14.92	83.95	n. e.	0.0
	09/09/08	98.87	11.87	87.00	n. e.	0.0
	05/11/09	98.87	13.70	85.17	n. e.	0.0
	10/02/09	435.81	13.26	422.55	n. e.	0.0
	06/16/10	435.81	13.84	421.97	n. e.	0.0
	09/25/10	435.81	12.80	423.01	n. e.	0.0
	06/08/11	435.81	13.51	422.30	n. e.	0.0
	09/19/11	435.81	12.22	423.59	n. e.	0.0
	06/11/12	435.81	12.68	423.13	n.e.	0.0
	10/02/12	435.77	13.23	422.54	n.e.	0.0
	06/10/13	435.77	12.00	423.77	n.e.	0.0
	10/10/13	**435.77**	**13.25**	**422.52**	**n.e.**	**0.0**
G-2	03/28/00	430.11	--	Well inaccessible under snow bank		
	06/27/00	430.11	11.51	418.60	n. e.	0.0
	09/26/00	430.11	10.56	419.55	n. e.	0.0
	03/27/02	430.11	--		n. e.	0.0
	04/08/03	430.11	--	Well inaccessible under snow bank		
	03/24/04	430.11	--	Well inaccessible under snow bank		
	04/06/05	430.11	--	Submerged in pond - low spot in parking lot		
	06/27/05	430.11	10.47	419.64	n. e.	0.0
	09/22/05	430.11	11.62	418.49	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
G-2	03/30/06	430.11	14.73	415.38	n. e.	0.0
cont.	--	--	--		Well abandoned	
G-3	07/15/94	--	--	--	n. e.	0.0
	07/25/94	--	--	--	n. e.	0.0
	05/12/09	429.36	11.89	417.47	n. e.	0.0
	10/02/09	434.46	11.87	422.59	n. e.	0.0
	06/16/10	434.46	12.43	422.03	n. e.	0.0
	09/25/10	434.46	11.42	423.04	n. e.	0.0
	06/08/11	434.46	--		Well obstructed	
	09/19/11	434.46	12.50	421.96	n. e.	0.0
	06/11/12	434.46	--		Well obstructed with ice	
	10/02/12	434.42	11.85	422.57	n. e.	0.0
	06/10/13	434.42	10.57	423.85	n. e.	0.0
	10/10/13	**434.42**	**11.86**	**422.56**	**n. e.**	**0.0**
G-4	03/28/00	431.62	--		Well frozen	
	06/27/00	431.62	13.10	418.52	n. e.	0.0
	09/26/00	431.62	12.05	419.57	n. e.	0.0
	12/19/00	431.62	14.56	417.06	n. e.	0.0
	03/30/01	431.62	--		Well frozen	
	06/28/01	431.62	14.02	417.60	n. e.	0.0
	09/19/01	431.62	13.12	418.50	n. e.	0.0
	12/12/01	431.62	15.30	416.32	n. e.	0.0
	03/27/02	431.62	15.59	416.03	n. e.	0.0
	06/25/02	431.62	12.90	418.72	n. e.	0.0
	09/28/02	431.62	12.53	419.09	n. e.	0.0
	12/17/02	431.62	13.89	417.73	n. e.	0.0
	04/08/03	431.62	--		Well frozen shut	
	06/25/03	431.62	--		Casing damaged	
	09/16/03	431.62	--		Casing damaged	
	12/22/03	431.62	--		Well frozen shut	
	03/24/04	431.62	--		Well frozen shut	
	06/21/04	431.62	--		Casing damaged	
	09/29/04	431.62	14.04	417.58	n. e.	0.0
	12/02/04	431.62	15.23	416.39	n. e.	0.0
	04/06/05	431.62	15.41	416.21	n. e.	0.0
	06/27/05	431.62	11.95	419.67	n. e.	0.0
	09/22/05	431.62	12.90	418.72	n. e.	0.0
	12/07/05	--	--		Well frozen shut	
	03/30/06	--	--		Well frozen shut	
	06/08/06	--	13.93	--	n. e.	0.0
	09/26/06	99.66	13.70	85.96	n. e.	0.0
	12/20/06	--	--		Well frozen shut	
	03/31/07	--	--		Well frozen shut	
	09/15/07	99.66	13.12	86.54	n. e.	0.0
	01/30/08	99.66	15.11	84.55	n. e.	0.0
	03/26/08	99.66	15.72	83.94	n. e.	0.0
	06/27/08	99.66	--		Well frozen	
	09/09/08	99.66	12.59	87.07	n. e.	0.0
	12/12/08	99.66	15.14	84.52	n. e.	0.0
	01/13/09	99.66	15.32	84.34	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
G-4 cont.	05/08/09	99.66	14.65	85.01	n. e.	0.0
	10/02/09	436.50	14.00	422.50	n. e.	0.0
	06/16/10	436.50	--		Well obstructed	
	09/25/10	436.50	13.58	422.92	n. e.	0.0
	06/08/11	436.50	--		Well obstructed	
	09/19/11	436.50	13.03	423.47	n. e.	0.0
	06/11/12	434.46	13.50	420.96	n. e.	0.0
	10/02/12	436.53	14.01	422.52	n. e.	0.0
	06/10/13	436.53	--		Well obstructed @ 4.40	
	10/10/13	**436.53**	**13.99**	**422.54**	**n. e.**	**0.0**
G-5	03/28/00	430.19	14.86	415.33	n. e.	0.0
	06/27/00	430.19	11.56	418.63	n. e.	0.0
	09/26/00	430.19	10.53	419.66	n. e.	0.0
	12/19/00	430.19	13.07	417.12	n. e.	0.0
	03/30/01	430.19	14.05	416.14	n. e.	0.0
	06/27/01	430.19	12.43	417.76	n. e.	0.0
	09/19/01	430.19	11.69	418.50	n. e.	0.0
	12/12/01	430.19	13.82	416.37	n. e.	0.0
	03/27/02	430.19	14.10	416.09	n. e.	0.0
	06/25/02	430.19	11.37	418.82	n. e.	0.0
	09/28/02	430.19	11.05	419.14	n. e.	0.0
	12/17/02	430.19	12.39	417.80	n. e.	0.0
	04/08/03	430.19	12.12	418.07	n. e.	0.0
	06/24/03	430.19	12.57	417.62	n. e.	0.0
	09/16/03	430.19	9.30	420.89	n. e.	0.0
	12/22/03	430.19	12.18	418.01	n. e.	0.0
	03/24/04	430.19	14.01	416.18	n. e.	0.0
	06/21/04	430.19	11.46	418.73	n. e.	0.0
	09/29/04	430.19	12.80	417.39	n. e.	0.0
	12/02/04	430.19	13.98	416.21	n. e.	0.0
	04/06/05	430.19	14.11	416.08	n. e.	0.0
	06/27/05	430.19	10.52	419.67	n. e.	0.0
	09/22/05	430.19	11.67	418.52	n. e.	0.0
	12/07/05	430.19	13.40	416.79	n. e.	0.0
	03/30/06	430.19	14.75	415.44	n. e.	0.0
	06/08/06	430.19	12.50	417.69	n. e.	0.0
	09/26/06	98.39	12.45	85.94	n. e.	0.0
	12/20/06	98.39	13.91	84.48	n. e.	0.0
	03/31/07	98.39	14.79	83.60	n. e.	0.0
	06/10/07	98.39	13.17	85.22	n. e.	0.0
	09/15/07	98.39	11.82	86.57	n. e.	0.0
	01/30/082	98.39	13.78	84.61	n. e.	0.0
	01/30/082	98.39	13.78	84.61	n. e.	0.0
	03/26/08	98.39	14.40	83.99	n. e.	0.0
	06/30/08	98.39	12.57	85.82	n. e.	0.0
	07/08/08	98.39	12.58	85.81	n. e.	0.0
	08/07/08	98.39	9.94	88.45	n. e.	0.0
	09/09/08	98.39	11.32	87.07	n. e.	0.0
	12/12/08	98.39	13.82	84.57	n. e.	0.0
	01/13/09	98.39	13.97	84.42	n. e.	0.0

Table 1

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4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
G-5 cont.	05/13/09	98.39	13.18	85.21	n. e.	0.0
	10/01/09	435.28	12.71	422.57	n. e.	0.0
	06/16/10	435.28	13.86	421.42	n. e.	0.0
	09/25/10	435.28	12.29	422.99	n. e.	0.0
	06/08/11	435.28	12.99	422.29	n. e.	0.0
	09/19/11	435.28	11.71	423.57	n. e.	0.0
	06/11/12	435.28	12.10	423.18	n. e.	0.0
	10/02/12	435.29	12.71	422.58	n. e.	0.0
	06/10/13	435.29	11.48	423.81	n. e.	0.0
	10/10/13	**435.29**	**12.69**	**422.60**	**n. e.**	**0.0**
G-6	3/28/004	430.40	--	--	n. e.	0.0
	06/27/00	430.40	11.71	418.69	n. e.	0.0
	03/27/02	430.40	--	Removed from sampling program 6/01		
	09/26/06	98.43	--	--	--	--
G-7	03/28/00	431.54	16.27	415.27	n. e.	0.0
	06/27/00	431.54	13.00	418.54	n. e.	0.0
	09/26/00	431.54	11.94	419.60	n. e.	0.0
	12/19/00	431.54	14.49	417.05	n. e.	0.0
	03/30/01	431.54	15.49	416.05	n. e.	0.0
	06/27/01	431.54	14.00	417.54	n. e.	0.0
	09/19/01	431.54	12.88	418.66	n. e.	0.0
	12/12/01	431.54	15.22	416.32	n. e.	0.0
	03/27/02	431.54	15.60	415.94	n. e.	0.0
	06/25/02	431.54	12.78	418.76	n. e.	0.0
	09/28/02	431.54	12.46	419.08	n. e.	0.0
	12/17/02	431.54	13.82	417.72	n. e.	0.0
	04/08/03	431.54	13.57	417.97	n. e.	0.0
	06/24/03	431.54	14.01	417.53	n. e.	0.0
	09/16/03	431.54	10.72	420.82	n. e.	0.0
	12/22/03	431.54	13.64	417.90	n. e.	0.0
	03/24/04	431.54	15.42	416.12	n. e.	0.0
	06/21/04	431.54	13.00	418.54	n. e.	0.0
	09/29/04	431.54	14.18	417.36	n. e.	0.0
	12/02/04	431.54	15.40	416.14	n. e.	0.0
	04/06/05	431.54	15.55	415.99	n. e.	0.0
	06/27/05	431.54	11.96	419.58	n. e.	0.0
	09/22/05	431.54	13.05	418.49	n. e.	0.0
	12/07/05	431.54	14.81	416.73	n. e.	0.0
	03/30/06	431.54	16.11	415.43	n. e.	0.0
	06/08/06	431.54	14.02	417.52	n. e.	0.0
	09/26/06	99.65	13.74	85.91	n. e.	0.0
	12/20/06	99.65	15.24	84.41	n. e.	0.0
	03/31/07	99.65	16.10	83.55	n. e.	0.0
	06/10/07	98.43	14.59	83.84	n. e.	0.0
	09/15/07	98.43	13.15	85.28	n. e.	0.0
	03/26/08	98.43	15.74	82.69	n. e.	0.0
	06/06/08	98.43	14.55	83.88	n. e.	0.0
	07/08/08	98.43	14.00	84.43	n. e.	0.0
	08/07/08	98.43	11.41	87.02	n. e.	0.0
	09/09/08	98.43	12.66	85.77	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
G-7 cont.	12/12/08	98.43	15.19	83.24	n. e.	0.0
	01/13/09	98.43	15.33	83.10	n. e.	0.0
	05/13/09	98.43	14.64	83.79	n. e.	0.0
	10/02/09	436.57	14.05	422.52	n. e.	0.0
	06/16/10	436.57	13.10	423.47	n. e.	0.0
	09/25/10	436.57	13.63	422.94	n. e.	0.0
	06/08/11	436.57	14.40	422.17	n. e.	0.0
	09/19/11	436.57	13.03	423.54	n. e.	0.0
	06/11/12	436.57	13.56	423.01	n. e.	0.0
	10/02/12	436.57	14.06	422.51	n. e.	0.0
	06/10/13	436.57	12.92	423.65	n. e.	0.0
	10/10/13	**436.57**	**14.03**	**422.54**	**n. e.**	**0.0**
G-8	09/26/06	99.12	13.21	85.91	n. e.	0.0
	12/20/06	99.12	14.67	84.45	n. e.	0.0
	03/31/07	99.12	15.56	83.56	n. e.	0.0
	06/10/07	99.12	14.01	85.11	n. e.	0.0
	09/15/07	99.12	12.76	86.36	n. e.	0.0
	01/30/08	99.12	14.59	84.53	n. e.	0.0
	03/26/08	99.12	15.18	83.94	n. e.	0.0
	06/06/08	99.12	14.00	85.12	n. e.	0.0
	07/08/08	99.12	13.43	85.69	n. e.	0.0
	08/07/08	99.12	10.83	88.29	n. e.	0.0
	09/09/08	99.12	12.11	87.01	n. e.	0.0
	12/12/08	99.12	14.62	84.50	n. e.	0.0
	01/13/09	99.12	14.78	84.34	n. e.	0.0
	05/12/09	99.12	14.04	85.08	n. e.	0.0
	10/02/09	436.03	13.44	422.59	n. e.	0.0
	06/16/10	436.03	14.16	421.87	n. e.	0.0
	09/25/10	436.03	13.07	422.96	n. e.	0.0
	06/08/11	436.03	13.84	422.19	n. e.	0.0
	09/19/11	436.03	12.52	423.51	n. e.	0.0
	06/11/12	436.03	13.00	423.03	n. e.	0.0
	10/02/12	436.03	13.50	422.53	n. e.	0.0
	06/10/13	436.03	12.32	423.71	n. e.	0.0
	10/10/13	**436.03**	**13.46**	**422.57**	**n. e.**	**0.0**
G-9	09/26/06	98.78	12.87	85.91	n. e.	0.0
	12/20/06	98.78	14.33	84.45	n. e.	0.0
	03/31/07	98.78	15.24	83.54	n. e.	0.0
	06/10/07	98.78	13.63	85.15	n. e.	0.0
	09/15/07	98.78	12.20	86.58	n. e.	0.0
	03/26/08	98.78	14.81	83.97	n. e.	0.0
	09/09/08	98.78	11.73	87.05	n. e.	0.0
	05/11/09	98.78	13.70	85.08	n. e.	0.0
	10/02/09	435.67	13.14	422.53	n. e.	0.0
	06/16/10	435.67	13.50	422.17	n. e.	0.0
	09/25/10	435.67	12.72	422.95	n. e.	0.0
	06/08/11	435.67	13.50	422.17	n. e.	0.0
	09/19/11	435.67	12.19	423.48	n. e.	0.0
	06/11/12	435.67	12.68	422.99	n. e.	0.0
	10/02/12	435.69	13.19	422.50	n. e.	0.0
	06/10/13	435.69	12.06	423.63	n. e.	0.0
	10/10/13	**435.69**	**13.17**	**422.52**	**n. e.**	**0.0**
MW-211	03/29/00	430.48	14.97	415.51	n. e.	0.0
	06/28/00	430.48	11.74	418.74	n. e.	0.0
	09/26/00	430.48	10.76	419.72	n. e.	0.0
	12/19/00	430.48	13.10	417.38	n. e.	0.0
	03/30/01	430.48	14.12	416.36	n. e.	0.0
	06/27/01	430.48	12.62	417.86	n. e.	0.0
	09/19/01	430.48	11.43	419.05	n. e.	0.0
	03/27/02	430.48	14.19	416.29	n. e.	0.0
	09/28/02	430.48	11.00	419.48	n. e.	0.0
	04/07/03	430.48	12.19	418.29	n. e.	0.0
	09/16/03	430.48	9.30	421.18	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-211 cont.	03/23/04	430.48	13.95	416.53	n. e.	0.0
	09/29/04	430.48	12.66	417.82	n. e.	0.0
	04/06/05	430.48	14.23	416.25	n. e.	0.0
	09/22/05	430.48	12.08	418.40	n. e.	0.0
	03/29/06	430.48	16.02	414.46	n. e.	0.0
	03/30/07	430.48	15.99	414.49	n. e.	0.0
	05/11/09	430.48	12.23	418.25	n. e.	0.0
	10/01/09	435.19	12.78	422.41	n. e.	0.0
	06/16/10	435.19	12.80	422.39	n. e.	0.0
	09/25/10	435.19	12.38	422.81	n. e.	0.0
	06/08/11	435.19	13.24	421.95	n. e.	0.0
	09/19/11	435.19	11.85	423.34	n. e.	0.0
	06/11/12	435.19	12.40	422.79	n. e.	0.0
	10/02/12	435.22	12.83	422.39	n. e.	0.0
	06/10/13	435.22	12.14	423.08	n. e.	0.0
	10/10/13	**435.22**	**12.74**	**422.48**	**n. e.**	**0.0**
MW-301D	03/29/00	432.81	17.63	415.18	n. e.	0.0
	06/28/00	432.81	14.46	418.35	n. e.	0.0
	09/27/00	432.81	13.43	419.38	n. e.	0.0
	12/20/00	432.81	15.78	417.03	n. e.	0.0
	03/30/01	432.81	16.79	416.02	n. e.	0.0
	06/28/01	432.81	15.34	417.47	n. e.	0.0
	09/19/01	432.81	14.17	418.64	n. e.	0.0
	03/27/02	432.81	16.89	415.92	n. e.	0.0
	09/28/02	432.81	13.74	419.07	n. e.	0.0
	04/07/03	432.81	14.89	417.92	n. e.	0.0
	09/16/03	432.81	12.07	420.74	n. e.	0.0
	03/23/04	432.81	16.66	416.15	n. e.	0.0
	09/29/04	432.81	15.40	417.41	n. e.	0.0
	04/06/05	432.81	16.91	415.90	n. e.	0.0
	06/27/05	432.81	13.47	419.34	n. e.	0.0
	09/22/05	433.81	14.40	419.41	n. e.	0.0
	12/06/05	433.81	16.10	417.71	n. e.	0.0
	03/29/06	433.81	17.69	416.12	n. e.	0.0
	06/07/06	433.81	15.45	418.36	n. e.	0.0
	09/26/06	100.97	15.11	85.86	n. e.	0.0
	03/30/07	100.97	17.48	83.49	n. e.	0.0
	09/15/07	100.97	14.53	86.44	n. e.	0.0
	03/26/08	100.97	17.20	83.77	n. e.	0.0
	09/09/08	100.97	14.09	86.88	n. e.	0.0
	05/12/09	100.97	16.20	84.77	n. e.	0.0
	09/30/09	437.84	15.50	422.34	n. e.	0.0
	06/16/10	437.84	16.30	421.54	n. e.	0.0
	09/25/10	437.84	15.07	422.77	n. e.	0.0
	06/08/11	437.84	15.94	421.90	n. e.	0.0
	09/19/11	437.84	14.49	423.35	n. e.	0.0
	06/11/12	437.84	15.08	422.76	n. e.	0.0
	10/02/12	437.87	15.44	422.43	n. e.	0.0
	06/10/13	437.87	14.55	423.32	n. e.	0.0
	10/10/13	**437.87**	**15.35**	**422.52**	**n. e.**	**0.0**
MW-301S	03/29/00	432.44	17.26	415.18	n. e.	0.0
	06/28/00	432.44	14.06	418.38	n. e.	0.0
	09/27/00	432.44	13.06	419.38	n. e.	0.0
	12/20/00	432.44	15.41	417.03	n. e.	0.0
	03/30/01	432.44	16.43	416.01	n. e.	0.0
	06/28/01	432.44	14.95	417.49	n. e.	0.0
	09/19/01	432.44	13.78	418.66	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-301S cont.	12/12/01	432.44	16.13	416.31	n. e.	0.0
	03/27/02	432.44	16.50	415.94	n. e.	0.0
	06/25/02	432.44	13.78	418.66	n. e.	0.0
	09/28/02	432.44	13.36	419.08	n. e.	0.0
	12/17/02	432.44	14.76	417.68	n. e.	0.0
	04/07/03	432.44	14.50	417.94	n. e.	0.0
	06/24/03	432.44	15.01	417.43	n. e.	0.0
	09/16/03	432.44	11.69	420.75	n. e.	0.0
	12/22/03	432.44	14.56	417.88	n. e.	0.0
	03/23/04	432.44	16.29	416.15	n. e.	0.0
	06/21/04	432.44	13.93	418.51	n. e.	0.0
	09/29/04	432.44	15.03	417.41	n. e.	0.0
	12/02/04	432.44	16.31	416.13	n. e.	0.0
	04/06/05	432.44	16.52	415.92	n. e.	0.0
	06/27/05	432.44	13.08	419.36	n. e.	0.0
	09/22/05	433.44	14.03	419.41	n. e.	0.0
	12/06/05	433.44	15.75	417.69	n. e.	0.0
	03/29/06	433.44	17.27	416.17	n. e.	0.0
	06/07/06	433.44	15.05	418.39	n. e.	0.0
	09/26/06	100.60	14.73	85.87	n. e.	0.0
	03/30/07	100.60	17.12	83.48	n. e.	0.0
	09/15/07	100.60	14.18	86.42	n. e.	0.0
	03/26/08	100.60	16.80	83.80	n. e.	0.0
	09/09/08	100.60	13.73	86.87	n. e.	0.0
	05/11/09	100.60	15.50	85.10	n. e.	0.0
	10/01/09	437.49	15.10	422.39	n. e.	0.0
	06/16/10	437.49	15.93	421.56	n. e.	0.0
	09/25/10	437.49	14.70	422.79	n. e.	0.0
	06/08/11	437.49	15.57	421.92	n. e.	0.0
	09/19/11	437.49	14.13	423.36	n. e.	0.0
	06/11/12	437.49	14.70	422.79	n. e.	0.0
	10/02/12	437.51	15.08	422.43	n. e.	0.0
	06/10/13	437.51	14.22	423.29	n. e.	0.0
	10/10/13	**437.51**	**15.00**	**422.51**	**n. e.**	**0.0**
MW-302D	03/29/00	435.32	20.28	415.04	n. e.	0.0
	06/28/00	435.32	17.15	418.17	n. e.	0.0
	09/27/00	435.32	16.09	419.23	n. e.	0.0
	12/20/00	435.32	18.44	416.88	n. e.	0.0
	03/30/01	435.32	19.45	415.87	n. e.	0.0
	06/28/01	435.32	18.05	417.27	n. e.	0.0
	09/19/01	435.32	16.76	418.56	n. e.	0.0
	03/27/02	435.32	19.54	415.78	n. e.	0.0
	09/28/02	435.32	16.32	419.00	n. e.	0.0
	04/07/03	435.32	17.52	417.80	n. e.	0.0
	09/16/03	435.32	14.73	420.59	n. e.	0.0
	03/23/04	435.32	19.24	416.08	n. e.	0.0
	09/29/04	435.32	17.97	417.35	n. e.	0.0
	04/06/05	435.32	19.58	415.74	n. e.	0.0
	06/27/05	435.32	16.20	419.12	n. e.	0.0
	09/22/05	435.32	17.01	418.31	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-302D cont.	12/06/05	435.32	18.74	416.58	n. e.	0.0
	03/29/06	435.32	20.55	414.77	n. e.	0.0
	06/07/06	435.32	18.34	416.98	n. e.	0.0
	09/26/06	103.50	17.69	85.81	n. e.	0.0
	03/30/07	103.50	20.11	83.39	n. e.	0.0
	09/15/07	103.50	17.18	86.32	n. e.	0.0
	03/25/08	103.50	19.95	83.55	n. e.	0.0
	09/09/08	103.50	16.78	86.72	n. e.	0.0
	05/12/09	103.50	18.99	84.51	n. e.	0.0
	09/30/09	440.39	18.05	422.34	n. e.	0.0
	06/16/10	440.39	19.05	421.34	n. e.	0.0
	09/25/10	440.39	17.77	422.62	n. e.	0.0
	06/08/11	440.39	18.73	421.66	n. e.	0.0
	09/19/11	440.39	17.26	423.13	n. e.	0.0
	06/11/12	440.39	17.92	422.47	n. e.	0.0
	10/02/12	440.38	18.15	422.23	n. e.	0.0
	06/10/13	440.38	17.41	422.97	n. e.	0.0
	10/10/13	**440.38**	**17.98**	**422.40**	**n. e.**	**0.0**
MW-302S	03/29/00	434.91	19.85	415.06	n. e.	0.0
	06/28/00	434.91	16.74	418.17	n. e.	0.0
	09/27/00	434.91	15.70	419.21	n. e.	0.0
	12/20/00	434.91	18.03	416.88	n. e.	0.0
	03/30/01	434.91	19.05	415.86	n. e.	0.0
	06/28/01	434.91	17.62	417.29	n. e.	0.0
	09/19/01	434.91	16.35	418.56	n. e.	0.0
	12/12/01	434.91	18.74	416.17	n. e.	0.0
	03/28/02	434.91	19.15	415.76	n. e.	0.0
	06/25/02	434.91	16.40	418.51	n. e.	0.0
	09/28/02	434.91	15.91	419.00	n. e.	0.0
	12/17/02	434.91	17.38	417.53	n. e.	0.0
	04/07/03	434.91	17.12	417.79	n. e.	0.0
	06/24/03	434.91	17.66	417.25	n. e.	0.0
	09/16/03	434.91	14.32	420.59	n. e.	0.0
	12/22/03	434.91	17.16	417.75	n. e.	0.0
	03/23/04	434.91	18.84	416.07	n. e.	0.0
	06/21/04	434.91	16.63	418.28	n. e.	0.0
	09/29/04	434.91	17.56	417.35	n. e.	0.0
	12/02/04	434.91	18.90	416.01	n. e.	0.0
	04/06/05	434.91	19.19	415.72	n. e.	0.0
	06/27/05	434.91	15.81	419.10	n. e.	0.0
	09/22/05	434.91	16.61	418.30	n. e.	0.0
	12/06/05	434.91	18.34	416.57	n. e.	0.0
	03/29/06	434.91	20.04	414.87	n. e.	0.0
	06/07/06	434.91	17.84	417.07	n. e.	0.0
	09/26/06	103.10	17.29	85.81	n. e.	0.0
	03/30/07	103.10	19.70	83.40	n. e.	0.0
	09/15/07	103.10	16.78	86.32	n. e.	0.0
	03/25/08	103.10	19.45	83.65	n. e.	0.0
	09/09/08	103.10	16.37	86.73	n. e.	0.0
	05/08/09	103.10	--	Well blocked at 4.07 feet bgs - ice		

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-302S cont.	10/01/09	440.00	17.68	422.32	n. e.	0.0
	06/16/10	440.00	18.70	421.30	n. e.	0.0
	09/25/10	440.00	17.37	422.63	n. e.	0.0
	06/08/11	440.00	18.32	421.68	n. e.	0.0
	09/19/11	440.00	16.81	423.19	n. e.	0.0
	06/11/12	440.00	17.46	422.54	n. e.	0.0
	10/02/12	439.99	17.73	422.26	n. e.	0.0
	06/10/13	439.99	17.02	422.97	n. e.	0.0
	10/10/13	**439.99**	**17.57**	**422.42**	**n. e.**	**0.0**
MW-303D	09/25/10	435.42	12.80	422.62	n. e.	0.0
	06/08/11	435.42	--		Well obstructed	
	09/19/11	435.42	12.10	423.32	n. e.	0.0
	06/11/12	435.42	12.77	422.65	n. e.	0.0
	10/02/12	435.41	13.01	422.40	n. e.	0.0
	06/10/13	435.41	12.45	422.96	n. e.	0.0
	10/10/13	**435.41**	**13.00**	**422.41**	**n. e.**	**0.0**
MW-303S	03/28/00	429.99	--		Well Dry	
	06/27/00	429.99	11.96	418.03	n. e.	0.0
	09/26/00	429.99	10.90	419.09	n. e.	0.0
	12/19/00	429.99	13.19	416.80	n. e.	0.0
	03/30/01	429.99	14.28	415.71	n. e.	0.0
	06/28/01	429.99	--		Well Dry	
	03/27/02	429.99	14.40	415.59	n. e.	0.0
	04/07/03	429.99	12.27	417.72	n. e.	0.0
	03/24/04	429.99	13.99	416.00	n. e.	0.0
	04/06/05	429.99	14.41	415.58	n. e.	0.0
	03/30/06	429.99	15.06	414.93	n. e.	0.0
	09/26/06	98.24	--	--	n. e.	0.0
	03/31/07	98.24	14.88	83.36	n. e.	0.0
	05/13/09	98.24	13.91	84.33	n. e.	0.0
	10/01/09	435.10	12.90	422.20	n. e.	0.0
	06/16/10	435.10	13.91	421.19	n. e.	0.0
	09/25/10	435.10	12.57	422.53	n. e.	0.0
	06/08/11	435.10	13.57	421.53	n. e.	0.0
	09/19/11	435.10	10.81	424.29	n. e.	0.0
	06/11/12	435.10	--	--	--	--
	10/02/12	435.11	12.73	422.38	n. e.	0.0
	06/10/13	435.11	12.42	422.69	n. e.	0.0
	10/10/13	**435.11**	**12.71**	**422.40**	**n. e.**	**0.0**
MW-304D	03/28/00	434.86	20.15	414.71	n. e.	0.0
	06/28/00	434.86	17.19	417.67	n. e.	0.0
	09/27/00	434.86	16.04	418.82	n. e.	0.0
	12/20/00	434.86	18.31	416.55	n. e.	0.0
	03/30/01	434.86	19.35	415.51	n. e.	0.0
	06/28/01	434.86	18.03	416.83	n. e.	0.0
	09/19/01	434.86	16.56	418.30	n. e.	0.0
	12/12/01	434.86	19.00	415.86	n. e.	0.0
	03/27/02	434.86	19.47	415.39	n. e.	0.0
	06/25/02	434.86	16.67	418.19	n. e.	0.0
	09/28/02	434.86	16.14	418.72	n. e.	0.0
	12/17/02	434.86	17.59	417.27	n. e.	0.0
	04/07/03	434.86	17.35	417.51	n. e.	0.0
	06/24/03	434.86	18.00	416.86	n. e.	0.0
	09/16/03	434.86	14.69	420.17	n. e.	0.0
	12/22/03	434.86	17.37	417.49	n. e.	0.0
	03/23/04	434.86	19.03	415.83	n. e.	0.0
	06/21/04	434.86	17.16	417.70	n. e.	0.0
	09/29/04	434.86	17.71	417.15	n. e.	0.0
	12/02/04	434.86	19.16	415.70	n. e.	0.0
	04/06/05	434.86	19.52	415.34	n. e.	0.0
	06/27/05	434.86	16.20	418.66	n. e.	0.0
	09/21/05	434.86	16.85	418.01	n. e.	0.0
	12/06/05	434.86	18.65	416.21	n. e.	0.0
	03/29/06	434.86	20.00	414.86	n. e.	0.0

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-304D cont.	06/07/06	434.86	17.83	417.03	n. e.	0.0
	09/26/06	103.00	17.48	85.52	n. e.	0.0
	12/19/06	103.00	18.91	84.09	n. e.	0.0
	03/28/07	103.00	19.94	83.06	n. e.	0.0
	06/08/07	103.00	18.72	84.28	n. e.	0.0
	09/15/07	103.00	17.10	85.90	n. e.	0.0
	01/30/082	103.00	18.98	84.02	n. e.	0.0
	03/25/08	103.00	19.98	83.02	n. e.	0.0
	06/30/08	103.00	18.15	84.85	n. e.	0.0
	09/09/08	103.00	16.93	86.07	n. e.	0.0
	12/12/08	103.00	--	Well not sampled - low temperatures		
	01/13/09	103.00	19.62	83.38	n. e.	0.0
	05/12/09	103.00	19.10	83.90	n. e.	0.0
	9/30/0910	439.87	17.95	421.92	n. e.	0.0
	06/16/10	439.87	13.91	425.96	n. e.	0.0
	09/25/10	439.87	17.85	422.02	n. e.	0.0
	06/08/11	439.87	19.12	420.75	n. e.	0.0
	09/19/11	439.87	16.70	423.17	n. e.	0.0
	06/11/12	439.87	17.42	422.45	n. e.	0.0
	10/02/12	439.90	17.61	422.29	n. e.	0.0
	06/10/13	439.90	17.47	422.43	n. e.	0.0
	10/10/13	**439.90**	**17.81**	**422.09**	**n. e.**	**0.0**
MW-304S	03/28/00	434.51	19.65	414.86	n. e.	0.0
	06/28/00	434.51	16.68	417.83	n. e.	0.0
	09/27/00	434.51	15.54	418.97	n. e.	0.0
	12/20/00	434.51	10.00	424.51	n. e.	0.0
	03/30/01	434.51	18.90	415.61	n. e.	0.0
	06/28/01	434.51	17.57	416.94	n. e.	0.0
	03/27/02	434.51	18.97	415.54	n. e.	0.0
	04/07/03	434.51	16.86	417.65	n. e.	0.0
	03/23/04	434.51	18.58	415.93	n. e.	0.0
	04/06/05	434.51	19.04	415.47	n. e.	0.0
	03/29/06	434.51	19.57	414.94	n. e.	0.0
	09/26/06	102.69	--	--	n. e.	0.0
	03/28/07	102.69	19.48	83.21	n. e.	0.0
	05/11/09	102.69	18.91	83.78	n. e.	0.0
	10/01/09	439.54	17.41	422.13	n. e.	0.0
	06/16/10	439.54	18.65	420.89	n. e.	0.0
	09/25/10	439.54	17.26	422.28	n. e.	0.0
	06/08/11	439.54	18.43	421.11	n. e.	0.0
	09/19/11	439.54	16.35	423.19	n. e.	0.0
	06/11/12	439.54	17.05	422.49	n. e.	0.0
	10/02/12	439.57	17.25	422.32	n. e.	0.0
	06/10/13	439.57	16.93	422.64	n. e.	0.0
	10/10/13	**439.57**	**17.33**	**422.24**	**n. e.**	**0.0**
MW-305	03/28/00	431.81	15.90	415.91	n. e.	0.0
	09/26/00	431.81	11.63	420.18	n. e.	0.0
	03/30/01	431.81	15.08	416.73	n. e.	0.0
	03/27/02	431.81	15.18	416.63	n. e.	0.0
	04/08/03	431.81	13.22	418.59	n. e.	0.0
	03/24/04	431.81	15.04	416.77	n. e.	0.0
	04/06/05	431.81	15.21	416.60	n. e.	0.0
	03/30/06	431.81	16.78	415.03	n. e.	0.0
	09/26/06	99.50	--	--	n. e.	0.0
	03/31/07	99.50	15.82	83.68	n. e.	0.0
	10/01/09	436.76	13.75	423.01	n. e.	0.0
	06/16/10	436.76	14.45	422.31	n. e.	0.0
	09/25/10	436.76	13.37	423.39	n. e.	0.0
	06/08/11	436.76	14.12	422.64	n. e.	0.0
	09/19/11	436.76	12.76	424.00	n. e.	0.0
	06/11/12	436.76	13.25	423.51	n. e.	0.0
	10/02/12	436.38	13.78	422.60	n. e.	0.0
	06/10/13	436.38	12.70	423.68	n. e.	0.0
	10/10/13	**436.38**	**13.71**	**422.67**	**n. e.**	**0.0**

Table 1

Groundwater Elevation Data Summary
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Well	Sample Date	Well Elevation (feet)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet)	Depth to LNAPL (feet)	LNAPL Thickness (feet)
MW-306	07/13/06	Unknown	10.36	--	n. e.	0.0
	09/26/06	97.93	--	--	n. e.	0.0
	03/31/07	97.93	14.21	83.72	n. e.	0.0
	05/12/09	97.93	12.58	85.35	n. e.	0.0
	10/01/09	434.35	11.76	422.59	n. e.	0.0
	06/16/10	434.35	12.10	422.25	n. e.	0.0
	09/25/10	434.35	11.33	423.02	n. e.	0.0
	06/08/11	434.35	12.01	422.34	n. e.	0.0
	09/19/11	434.35	10.80	423.55	n. e.	0.0
	06/11/12	434.35	11.13	423.22	n. e.	0.0
	10/02/12	434.41	11.82	422.59	n. e.	0.0
	06/10/13	434.41	10.45	423.96	n. e.	0.0
	10/10/13	**434.41**	**11.87**	**422.54**	**n. e.**	**0.0**
MW-307	07/13/06	Unknown	13.90	--	n. e.	0.0
	09/26/06	101.09	--	--	n. e.	0.0
	03/31/07	--	--	Unable to locate well		
	05/08/09	--	--	Well dry		
	10/01/09	438.10	15.29	422.81	n. e.	0.0
	06/16/10	438.10	--	Well was obstructed		
	09/25/10	439.10	--	Well obstructed at 14.05 feet BTOC		
	06/08/11	439.10	--	DRY		
	09/19/11	439.10	14.38	424.72	n. e.	0.0
	06/11/12	439.10	14.80	424.30	n. e.	0.0
	10/02/12	438.19	--	DRY		
	06/10/13	438.19	14.22	423.97	n. e.	0.0
	10/10/13	**438.19**	**--**	Well obstructed at 14.50 feet BTOC		
MW-309S	03/28/00	436.91	--	--	n. e.	0.0
	06/28/00	436.91	18.70	418.21	n. e.	0.0
	03/30/01	436.91	20.95	415.96	n. e.	0.0
	03/27/02	436.91	--	Removed from sampling program 6/01		

Notes:
Bold indicates data associated with current reporting period.
BTOC = below top of casing
LNAPL = Light Non-Aqueous Liquid
-- = not measured
n. e. = LNAPL not encountered

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
G-1R	03/23/04	1,600	--	--	--	94	1.4	140	3
	09/29/04	69	--	--	--	13	<0.5	1.9	<1.5
	12/02/04	740	160	--	120	43	<0.5	48	2.5
	04/07/05	1,700	400	--	180	87	0.9	150	9
	06/27/05	2,300	450	--	140	110	0.9	160	8.1
	09/22/05	140	53	--	39	15	<0.5	13	<1.5
	12/06/05	290	--	--	--	26	<0.5	20	<1.5
	09/26/06	24	--	--	--	2.7	<0.5	1.4	<1.5
	03/31/07	500	--	--	--	30	<1	20	<2
	09/15/07	20	--	--	--	8	<1	<1	<2
	03/26/08	427	--	--	--	32.9	<0.500	15.9	2.5
	09/09/08	30	--	--	--	1	<1	<1	<2
	05/11/09	1,800	--	--	--	74.0	0.7	120	15.0
	10/02/09	24	--	--	--	1.1	<0.5	<0.5	<1.5
	06/16/10	680	340	--	--	15.0	1.0	28	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/09/11	24	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/12/12	280	180	81	99	7.4	0.5	5.8	1.8
	10/02/12	12	480	<52	3,700	0.6	<0.5	<0.5	<1.5
	06/11/13	560	--	--	--	17.4	<1.0	44.3	7.9
	10/10/13	**<100**	**<430**	--	--	**<1.0**	**<1.0**	**<1.0**	**<3.0**
	10/10/2013[D]	**<100**	**<430**	--	--	**<1.0**	**<1.0**	**<1.0**	**<3.0**
G-2	06/27/05	<10	210		490	<0.5	<0.5	<0.5	<1.5
					WELL ABANDONED				
G-3	05/12/09	19,000	3,200	--	--	14	100	960	4,000
	10/02/09	9,000	--	--	--	11	69	410	2,500
	06/17/10	13,000	27,000	--	--	69	890	540	3,300
	09/25/10	33,000	12,000	--	<1,400	130	880	980	7,800
	06/08/11					OBSTRUCTED			
	09/20/11	22,000	4,800		<1,300	<31	41	720	4,800
	06/12/12					NS - OBSTRUCTED WITH ICE			
	10/02/12	12,000	9,000	4,400	870	<41	18	610	3,300
	10/02/12[D]	12,000	8,000	--	1,100	<39	19	620	3,400
	06/11/13	3,480	2,700	1,600	<1,000	<2.0	4.7	188	516
	10/10/13	**10,400**	**3,100**	**1,800**	**1,100**	**<1.0**	**11.9**	**33.5**	**3,210**
G-4	09/29/04	290	--	--	--	<0.5	0.5	1.5	40
	12/02/04	15	62	--	89	3.8	<0.5	<0.5	<1.5
	04/07/05	<10	270	--	320	<0.5	<0.5	<0.5	<1.5
	06/27/05	5,000	750	--	120	11	430	77	830
	09/22/05	3,000	1,200	--	1,100	12	450	55	620
	09/26/06	1,600	--	--	--	19	1.6	30	380
	09/15/07	5,200	--	--	--	400	200	400	1000
	01/30/08	--	--	--	--	600	3,200	1,100	2,800
	03/26/08	68,100	--	--	--	1,060	11,400	2,500	9,180
	09/09/08	5,400	--	--	--	200	200	300	900
	01/13/09	22,000	--	--	--	300	3,500	1,100	4,600
	05/12/09	31,000	--	--	--	2,600	4,200	1,200	4,600
	10/02/09	44,000	--	--	--	300	5,500	1,700	11,000
	08/17/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	280	2,300	--	820	<2.5	<2.5	6.7	85
	06/08/11					OBSTRUCTED			
	09/20/11	3,900	6,100	--	<1,300	30	8.1	190	830
	06/12/12					NS - OBSTRUCTED WITH ICE			
	10/02/12	17,000	6,300	2,900	<330	140	1,700	970	4,600
	06/11/13					NS - OBSTRUCTED WITH ICE			
	10/10/13	**15,900**	**7,300**	**3,700**	**770**	**164**	**816**	**651**	**4,040**

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
G-5	03/24/04	94,000	--	--	--	<100	5,800	2,600	15,000
	09/29/04	110,000	--	--	--	140	6,400	3,400	21,000
	12/02/04	97,000	26,000	--	3,400	120	6,000	3,200	17,000
	04/07/05	53,000	5,300	--	530	48	3,000	2,000	8,800
	06/27/05	76,000	7,000	--	1,100	100	4,200	2,800	16,000
	09/23/05	65,000	8,100	--	<1,000	74	3,400	2,500	16,000
	12/07/05	80,000	8,500	--	--	71	3,700	3,000	17,000
	09/27/06	83,000	7,300	--	--	72	3,400	3,300	21,000
	12/20/06	66,000	4,400	--	--	56	3,700	2,600	16,000
	03/31/07	40,000	2,000	--	<200	90	2,000	1,800	9,100
	06/10/07	34,000	1,900	--	<94	<1,000	2,100	1,500	7,600
	09/15/07	55,000	12,000	--	--	80	2,100	2,100	15,000
	01/30/08	--	6,100	--	--	<40	1,800	1,800	9,300
	03/26/08	31,000	3,260	--	<743	8.44	1,560	1,380	6,870
	06/30/08	36,000	11,000	--	<980	<50	900	1,300	8,400
	07/08/08	44,000	12,000	--	--	<50	900	1,600	11,000
	08/07/08	26,000	2,800	--	--	<40	400	1,200	7,800
	09/09/08	23,000	2,400	--	<500	30	300	900	6,300
	01/13/09	23,000	3,500	--	<480	<100	400	1,400	6,900
	05/13/09	7,100	900	--	<100	<2.5	110	290	1,900
	10/01/09	48,000	3,100	--	<980	<100	400	2,200	13,000
	06/17/10	11,000	3,500	--	--	<20	69	510	3,500
	09/25/10	43,000	12,000	--	1,400	<50	140	1,900	9,500
	09/25/10[D]	44,000	--	--	--	<20	150	1,900	9,600
	06/09/11	40,000	6,000	--	<1,300	34	82	1,600	12,000
	06/9/11[D]	40,000	--	--	--	<40	73	1,600	13,000
	09/20/11	49,000	10,000	--	<1,300	44	57	2,000	11,000
	06/12/12	46,000	19,000	9,200	<1,400	<63	35	1,800	11,000
	10/02/12	32,000	12,000	6,900	<360	<75	21	1,700	10,000
	06/11/13	15,200	3,200	2,000	<1,000	<1.0	3.3	467	2,830
Duplicate	06/11/13	3,760	3,800	--	<1,200	<1.0	1.2	98.3	541
	10/10/13	**44,300**	**11,000**	**6,900**	**<430**	**<20.0**	**<20.0**	**1,730**	**11,600**

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
G-7	03/24/04	28,000	--	--	--	230	77	1,400	6,100
	09/29/04	7,400	--	--	--	42	6.4	640	970
	12/02/04	8,700	3,400	--	940	54	31	810	970
	04/07/05	16,000	6,500	--	1,700	130	9.7	1,500	1,700
	06/27/05	17,000	4,100	--	910	67	6.3	1,700	1,800
	09/23/05	4,100	6,300	--	<420	18	8	360	930
	12/07/05	8,400	9,700	--	--	46	3.7	860	440
	09/26/06	5,000	6,100	--	--	31	3.3	610	600
	12/20/06	5,900	6,500	--	--	50	<5.0	860	480
	03/31/07	8,400	4,200	--	840	400	<5	800	800
	06/10/07	9,100	2,900	--	<94	400	20	1,100	900
	09/15/07	2,700	2,300	--	--	<10	100	100	900
	03/26/08	8,380	7,670	--	1,020	336	<25.0	935	1000
	03/26/08[D]	8,520	7,630	--	1,050	342	2.98	896	969
	07/08/08	10,000	2,700	--	--	400	600	600	1,900
	08/07/08	6,900	1,900	--	--	300	90	700	1,200
	09/09/08	<10	630	--	380	<1	<1	<1	<2
	12/12/08	--	1,500	--	<0.50	--	--	--	--
	01/13/09	7,600	3,200	--	670	400	<5	1,000	1,400
	05/13/09	9,800	2,400	--	<240	340	13	1,300	800
	10/02/09	5,300	1,300	--	260	130	7.0	680	670
	04/20/10	3,400	--	--	--	290	49	380	620
	06/16/10	17,000	2,600	--	--	660	1,200	1,100	3,200
	09/25/10	4,400	3,900	--	560	150	1.8	350	460
	09/25/10[D]	4,800	--	--	--	160	2.0	380	490
	06/09/11	3,700	2,100	--	820	100	<2.5	530	350
	09/20/11	3,200	1,600	--	<1,300	27	2	230	230
	06/12/12	4,700	2,300	800	340	180	2.8	660	360
	10/02/12	3,000	2,900	1,400	380	32	1.5	320	200
	06/11/13	NS - WELL SAMPLING EQUIPMENT BECAME FROZEN IN WELL							
	10/10/13	**2,290**	**1,500**	**780**	**<430**	**46**	**<2.0**	**167**	**114**
G-8	09/26/06	21,000	--	--	--	72	70	720	4,000
	12/20/06	5,000	3,200	--	--	50	4.6	180	520
	03/31/07	12,000	2,400	--	<210	100	30	500	1,900
	06/10/07	19,000	1,900	--	54	2,100	60	1,200	2,000
	09/15/07	3,100	2,300	--	--	300	<10	200	500
	01/30/08	--	2,600	--	--	400	40	600	1,300
	03/26/08	13,800	4,550	--	899	630	233	719	2,100
	07/08/08	5,500	1,500	--	--	300	90	200	800
	08/07/08	3,500	620	--	--	90	30	200	700
	09/09/08	11,000	1,800	--	<260	600	400	400	1,600
	01/13/09	5,100	2,700	--	1,100	500	40	500	800
	05/12/09	3,300	680	--	150	340	15	220	300
	10/02/09	95	350	--	400	3.0	<0.5	1.4	3.2
	04/20/10	0.67	--	--	--	0.9	3.9	4.3	130
	06/16/10	0.28	1,000	--	0.35	1.8	<0.5	4.7	41

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
G-8 cont.	09/25/10	86	610	--	570	<0.5	<0.5	<0.5	30
	06/09/11	2,200	1,300	--	470	310	1.1	57	150
	06/09/11[D]	2,700	--	--	--	300	1.5	68	250
	09/20/11	3,200	1,700	--	<680	130	2.1	45	720
	06/12/12	4,700	1,700	610	440	340	2	390	260
	6/12/12[D]	4,700	1,200	--	240	340	2	390	250
	10/02/12	26	480	<49	170	6.0	<0.5	<0.5	<1.5
	06/11/13	4,330	1,900	990	<1,200	227	5.7	405	402
	10/10/13	**<500**	**580**	**<430**	**440**	**12**	**<1.0**	**<1.0**	**<3.0**
G-9	09/26/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	12/20/06	<10	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/31/07	<10	--	--	--	<1	<1	<1	<2
	06/10/07	<10	--	--	--	2	<1	<1	<2
	09/15/07	<10	--	--	--	<1	<1	<1	<2
	03/26/08	<50.0	223	--	<743	9.38	<0.500	<0.500	<1.00
	09/09/08	<10	200	--	--	<1	<1	<1	<2
	05/11/09	<10	66	--	--	<0.5	<0.5	<0.5	<1.5
	10/02/09	<10	59	--	--	<0.5	<0.5	<0.5	<1.5
	06/16/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-211	03/23/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/29/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	04/06/05	<10	<19	--	32	<0.5	<0.5	<0.5	<1.5
	09/22/05	<10	<21	--	27	<0.5	<0.5	<0.5	<1.5
	03/30/07	<10	--	--	--	<1	<1	<1	<2
	05/11/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-301D	03/23/04	31	--	--	--	11	<0.5	<0.5	<1.5
	09/29/04	35	--	--	--	6.5	<0.5	<0.5	<1.5
	04/06/05	23	33	--	23	7.4	<0.5	<0.5	<1.5
	06/27/05	12	37	--	67	2.9	<0.5	<0.5	<1.5
	09/22/05	14	<20	--	22	2.2	<0.5	<0.5	<1.5
	12/06/05	13	--	--	--	2.9	<0.5	<0.5	<1.5
	09/26/06	14	--	--	--	1.7	<0.5	<0.5	<1.5
	03/30/07	10	--	--	--	3	<1	<1	<2
	09/15/07	20	--	--	--	5	<1	<1	<2
	03/26/08	<50.0	--	--	--	7.57	<0.500	<0.500	<1.00
	09/09/08	<10	--	--	--	<1	<1	<1	<2
	05/12/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/30/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/16/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/09/11	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11	--	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/12/12	<10	--	--	--	<0.5	<0.5	0.5	<1.5
	10/02/12	--	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/10/13	<100	--	--	--	1.6	<1.0	<1.0	<3.0
	10/10/13	**--**	**--**	**--**	**--**	**<1.0**	**<1.0**	**<1.0**	**<3.0**

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
MW-301S	03/23/04	13	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/29/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	12/02/04	<10	58	--	100	<0.5	<0.5	<0.5	<1.5
	04/06/05	12	51	--	54	<0.5	<0.5	<0.5	<1.5
	06/27/05	240	230	--	170	84	<0.5	<0.5	<1.5
	09/22/05	<10	140	--	360	1.8	<0.5	<0.5	<1.5
	12/06/05	<10	--	--	--	1.6	<0.5	<0.5	<1.5
	09/26/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	03/30/07	<10	--	--	--	<1	<1	<1	<2
	09/15/07	<10	--	--	--	<1	<1	<1	<2
	03/26/08	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00
	09/09/08	<10	--	--	--	<1	<1	<1	<2
	05/11/09	11	--	--	--	<0.5	<0.5	<0.5	<1.5
	10/01/09	20	--	--	--	3.4	<0.5	<0.5	<1.5
	06/16/10	60	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-302D	03/23/04	47	--	--	--	22	<0.5	<0.5	<1.5
	09/29/04	140	--	--	--	44	<0.5	<0.5	<1.5
	04/06/05	29	51	--	120	11	<0.5	<0.5	<1.5
	06/27/05	17	35	--	63	6.1	<0.5	<0.5	<1.5
	09/21/05	68	<21	--	<21	24	<0.5	<0.5	<1.5
	12/06/05	56	--	--	--	17	<0.5	d	<1.5
	09/26/06	40	--	--	--	13	<0.5	<0.5	<1.5
	03/30/07	<10	--	--	--	4	<1	<1	<2
	09/15/07	20	--	--	--	10	<1	<1	<2
	03/25/08	<50.0	--	--	--	2.74	<0.500	<0.500	<1.00
	09/09/08	10	--	--	--	4	<1	<1	<2
	05/12/09	<10	--	--	--	1.7	<0.5	<0.5	<1.5
	09/30/09	11	--	--	--	2.8	<0.5	<0.5	<1.5
	06/16/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
MW-302S	03/23/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/29/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	12/02/04	12	79	--	120	<0.5	<0.5	<0.5	<1.5
	04/06/05	20	95	--	57	<0.5	<0.5	<0.5	<1.5
	06/27/05	28	200	--	130	<0.5	<0.5	<0.5	<1.5
	09/21/05	10	30	--	77	2.1	<0.5	<0.5	<1.5
	12/06/05	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/26/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	03/30/07	20	--	--	--	<1	<1	<1	<2
	09/15/07	<10	--	--	--	<1	<1	<1	<2
	03/25/08	<50.0	--	--	--	<0.500	<0.500	<0.500	<1.00
	09/09/08	<10	--	--	--	<1	<1	<1	<2
	10/01/09	19	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/16/10	87	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-303S	03/24/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	04/06/05	<10	<40	--	40	<0.5	<0.5	<0.5	<1.5
	03/31/07	<10	--	--	--	<1	<1	<1	<2
	05/13/09	11	--	--	--	0.9	<0.5	<0.5	<1.5
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-304D	03/23/04	160	--	--	--	60	<0.5	<0.5	<1.5
	03/24/04	1,500	--	--	--	97	1.4	140	6.7
	09/29/04	490	--	--	--	150	0.5	<0.5	<1.5
	12/02/04	190	70	--	86	62	<0.5	<0.5	<1.5
	04/06/05	120	66	--	140	41	<0.5	<0.5	<1.5
	06/27/05	290	48	--	64	96	<0.5	<0.5	<1.5
	09/21/05	210	28	--	<19	71	<0.5	<0.5	<1.5
	12/06/05	87	--	--	--	23	<0.5	<0.5	<1.5
	09/26/06	92	--	--	--	26	<0.5	<0.5	<1.5

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Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
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Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
MW-304D	12/19/06	40	--	--	--	7.1	<1.0	<1.0	<2.0
(Cont)	03/28/07	30	--	--	--	8	<1	<1	<2
	06/08/07	40	--	--	--	10	<1	<1	<2
	09/15/07	40	--	--	--	10	<1	<1	<2
	01/30/08	--	--	--	--	6	<1	<1	<1
	03/25/08	<50.0	--	--	--	3.77	<0.500	<0.500	<1.00
	06/30/08	30	--	--	--	7	<1	<1	<2
	09/09/08	100	--	--	--	40	<1	<1	<2
	01/13/09	40	--	--	--	20	<1	<1	<2
	05/12/09	20	--	--	--	4.9	<0.5	<0.5	<1.5
	09/30/09	15	--	--	--	2.6	<0.5	<0.5	<1.5
	06/16/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/09/11	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	10/02/12	--	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/10/13	<100	--	--	--	3.9	<1.0	<1.0	<3.0
Duplicate	06/10/13	<100	--	--	--	4.1	<1.0	<1.0	<3.0
	10/10/13	**--**	**--**	**--**	**--**	**4.2**	**<1.0**	**<1.0**	**<3.0**
MW-304S	03/23/04	<10	--	-	--	<0.5	<0.5	<0.5	<1.5
	04/06/05	<10	<40	--	<40	<0.5	<0.5	<0.5	<1.5
	03/28/07	<10	--	--	--	<1	<1	<1	<2
	05/11/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-305	03/23/04	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	04/07/05	<10	<40	--	56	<0.5	<0.5	<0.5	<1.5
	03/31/07	<10	--	--	--	<1	<1	<1	<2
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			
MW-306	07/13/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	03/31/07	<10	--	--	--	<1	<1	<1	<2
	05/12/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/25/10	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	09/20/11					NS			
	06/12/12					NS			
	10/02/12					NS			
	06/11/13					NS			
	10/10/13					**NS**			

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
MW-307	07/13/06	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	10/01/09	<10	--	--	--	<0.5	<0.5	<0.5	<1.5
	06/12/12	NS - OBSTRUCTED WITH ICE							
	10/02/12	NS							
	06/11/13	NS							
	10/10/13	**NS - OBSTRUCTED WITH ICE**							
GW-1B	12/02/04	19	66	--	94	4.2	<0.5	<0.5	<1.5
	06/27/05	12	42	--	100	4.3	<0.5	<0.5	<1.5
	09/21/05	20	<20	--	<20	4.1	1.3	<0.5	<1.5
	12/06/05	<10	--	--	--	2	<0.5	<0.5	<1.5
	09/26/06	<10	--	--	--	1.3	<0.5	<0.5	<1.5
	12/19/06	<10	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/28/07	<10	--	--	--	<1	<1	<1	<2
	06/08/07	<10	--	--	--	<1	<1	<1	<2
	09/14/07	<10	--	--	--	1	<1	<1	<2
	06/06/08	<10	--	--	--	<1	<1	<1	<2
	06/27/08	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	07/15/08	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	08/05/08	<100	--	--	--	2.4	<1.0	2.2	<2.0
	09/26/08	<100	--	--	--	1.5	<1.0	<1.0	<2.0
	10/28/08	<100	--	--	--	1.3	<1.0	<1.0	<2.0
	11/19/08	<100	--	--	--	1.8	<1.0	<1.0	<2.0
	12/22/08	<100	--	--	--	1.6	<1.0	<1.0	<2.0
	01/29/09	<100	--	--	--	1.0	<1.0	<1.0	<2.0
	02/26/09	<100	--	--	--	2.2	<1.0	<1.0	<2.0
	03/26/09	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	04/21/09	<100	--	--	--	1.0	<1.0	<1.0	<2.0
	05/08/09	<100	--	--	--	2.4	<1.2	<1.5	<2.0
	06/24/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/09	<100	--	--	--	1.1	<1.2	<1.5	<3.0
	08/26/09	370	--	--	--	3.3	2.1	<1.5	<3.0
	09/28/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/23/09	<100	--	--	--	1	<1.2	<1.5	<3.0
	11/05/09	voa vials frozen							
	12/14/09	<100	--	--	--	1.0	<1.2	<1.5	<3.0
	01/13/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	02/10/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	03/17/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	04/21/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	05/26/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/16/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	08/17/10	--	--	--	--	--	--	--	--
	09/28/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/09/11	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/20/11	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/12/12	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/02/12	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/11/13	NS							
	08/15/13	**<100**	**--**	**--**	**--**	**<1.0**	**<1.2**	**<1.5**	**<3.0**
	11/06/13	NS							

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
GW-2	06/27/05	34	31	--	79	12	<0.5	<0.5	<1.5
	09/21/05	17	<21	--	<21	5.2	<0.5	<0.5	<1.5
	03/28/07	<10	--	--	--	<1	<1	<1	<2
	06/08/07	<10	--	--	--	1	<1	<1	<2
	09/14/07	<10	--	--	--	1	<1	<1	<2
	06/06/08	<10	--	--	--	<1	<1	<1	<2
	06/27/08	<100	--	--	--	7.9	<1.0	<1.0	<2.0
	07/15/08	<100	--	--	--	3.9	<1.5	<1.2	<3.0
	08/05/08	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/26/08	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	10/28/08	<100	--	--	--	1.1	<1.0	<1.0	<2.0
	11/19/08	<100	--	--	--	1.7	<1.0	<1.0	<2.0
	12/22/08	<100	--	--	--	1.5	<1.0	<1.0	<2.0
	01/29/09	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	02/26/09	<100	--	--	--	1.6	<1.0	<1.0	<2.0
	03/26/09	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	04/21/09	<100	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/08/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/24/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/09	<100	--	--	--	1.3	<1.2	<1.5	<3.0
	08/26/09	380	--	--	--	3.6	<1.2	<1.5	<3.0
	09/28/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/23/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	11/05/09	voa vials frozen							
	12/14/09	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	01/13/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	02/10/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	03/17/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	04/21/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	05/26/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/16/10	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/10	--	--	--	--	--	--	--	--
	08/17/10	<100	--	--	--	2.1	<1.2	<1.5	<3.0
	09/28/10	--	--	--	--	--	--	--	--
	06/09/11	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/19/11	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/12/12	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/02/12	<100	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/11/13	NS							
	08/15/13	**<100**	**--**	**--**	**--**	**<1.0**	**<1.2**	**<1.5**	**<3.0**
	11/06/13	NS							

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		2,200	1,500	1,500	1,100	5.0	1,000	700	10,000
Influent	01/22/02	--	--	--	--	5.60	<0.50	<0.50	<0.50
	02/19/02	--	--	--	--	7.51	<0.50	<0.50	<0.50
	03/19/02	--	--	--	--	6.75	<0.50	<0.50	<1.00
	04/29/02	--	--	--	--	8.54	<0.50	<0.50	<1.00
	05/29/02	--	--	--	--	16.1	<0.50	<0.50	<0.50
	06/21/02	--	--	--	--	10.1	<0.50	<0.50	<0.50
	07/26/02	--	--	--	--	11.1	<0.50	<0.50	<1.00
	08/22/02	--	--	--	--	6.84	<0.50	<0.50	<1.00
	09/10/02	--	--	--	--	<0.50	<0.50	<0.50	<1.00
	10/23/02	--	--	--	--	4.17	<0.50	<0.50	<1.00
	11/19/02	--	--	--	--	4.17	<0.50	<0.50	<1.00
	12/16/02	--	--	--	--	3.91	<0.50	<0.50	<1.00
	01/28/03	--	--	--	--	1.42	<0.50	<0.50	<1.00
	02/25/03	--	--	--	--	6.8	<0.50	<0.50	<1.00
	03/20/03	--	--	--	--	5.21	<0.50	<0.50	<1.00
	04/22/03	--	--	--	--	5.47	<0.50	<0.50	<1.00
	05/20/03	--	--	--	--	4.75	<0.50	<0.50	<1.00
	06/25/03	--	--	--	--	7.29	<0.50	<0.50	<1.00
	07/23/03	--	--	--	--	9.1	<0.50	<0.50	<1.00
	08/25/03	--	--	--	--	5.65	<0.50	<0.50	<1.00
	09/23/03	--	--	--	--	5.44	<0.50	<0.50	<1.00
	10/15/03	--	--	--	--	3.69	<0.50	<0.50	<1.00
	11/18/03	--	--	--	--	4.32	<0.50	<0.50	<1.00
	12/11/03	--	--	--	--	3.6	<0.50	<0.50	<1.00
	01/22/04	--	--	--	--	2.0	<0.50	<0.50	<1.00
	02/17/04	--	--	--	--	2.7	<0.50	<0.50	<1.00
	03/12/04	--	--	--	--	3.0	<0.50	<0.50	<1.00
	04/20/04	--	--	--	--	2.2	<1.0	<1.0	<1.0
	05/24/04	--	--	--	--	3.6	<1.0	<1.0	<2.0
	06/22/04	--	--	--	--	7.2	<1.0	<1.0	<2.0
	07/13/04	--	--	--	--	13.0	<1.0	<1.0	<2.0
	08/19/04	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/24/04	--	--	--	--	6.6	<1.0	<1.0	<2.0
	10/25/04	--	--	--	--	5.9	<1.0	<1.0	<2.0
	11/23/04	--	--	--	--	4.2	<1.0	<1.0	<2.0

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		2,200	1,500	1,500	1,100	5.0	1,000	700	10,000
Influent Cont'd	12/14/04	--	--	--	--	3.5	<1.0	<1.0	<2.0
	01/19/05	--	--	--	--	2.2	<1.0	<1.0	<2.0
	02/15/05	--	--	--	--	3.3	<1.0	<1.0	<2.0
	03/08/05	--	--	--	--	4.6	<1.0	<1.0	<2.0
	04/19/05	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/24/05	--	--	--	--	5.5	<1.0	<1.0	<2.0
	06/14/05	--	--	--	--	2.9	<1.0	<1.0	<2.0
	07/14/05	--	--	--	--	7.6	<1.0	<1.0	<2.0
	08/10/05	--	--	--	--	3.7	<1.0	<1.0	<2.0
	09/15/05	--	--	--	--	5.3	<1.0	<1.0	<2.0
	10/17/05	--	--	--	--	3.7	<1.0	<1.0	<2.0
	11/08/05	--	--	--	--	2.5	<1.0	<1.0	3.3
	12/16/05	--	--	--	--	2.1	<1.0	<1.0	<2.0
	01/11/06	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	02/01/06	--	--	--	--	1.1	<1.0	<1.0	<2.0
	03/06/06	--	--	--	--	1.4	<1.0	<1.0	<2.0
	04/25/06	--	--	--	--	1.7	<1.0	<1.0	<2.0
	05/17/06	--	--	--	--	3.5	<1.0	<1.0	<2.0
	06/12/06	--	--	--	--	1.4	<1.0	<1.0	<2.0
	07/06/06	--	--	--	--	2.1	<1.0	<1.0	<2.0
	08/01/06	--	--	--	--	2.1	<1.0	<1.0	<2.0
	09/28/06	--	--	--	--	1.1	<1.0	<1.0	<2.0
	10/31/06	--	--	--	--	1.0	<1.0	<1.0	<2.0
	11/28/06	--	--	--	--	1.0	<1.0	<1.0	<2.0
	12/26/06	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	01/31/07	--	--	--	--	2.0	<1.0	<1.0	<2.0
	03/05/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	04/06/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/14/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	06/08/07	--	--	--	--	1.1	<1.0	<1.0	<2.0
	07/13/07	--	--	--	--	1.3	<1.0	<1.0	<2.0
	08/21/07	--	--	--	--	1.4	<1.0	<1.0	<2.0
	09/14/07	--	--	--	--	1.1	<1.0	<1.0	<2.0
	10/12/07	--	--	--	--	1.6	1.1	<1.0	<2.0
	11/20/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	12/11/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	01/29/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	02/14/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/25/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/27/08	--	--	--	--	1.3	<1.0	<1.0	<2.0
	06/27/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	07/15/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
Influent Cont'd	08/05/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/26/08	--	--	--	--	1.7	<1.0	<1.0	<2.0
	10/28/08	--	--	--	--	1.3	<1.0	<1.0	<2.0
	11/19/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	12/22/08	--	--	--	--	1.6	<1.0	<1.0	<2.0
	01/29/09	--	--	--	--	1.3	<1.0	<1.0	<2.0
	02/26/09	--	--	--	--	2.1	<1.0	<1.0	<2.0
	03/26/09	--	--	--	--	1.1	<1.2	<1.5	<3.0
	04/21/09	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/08/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/24/09	--	--	--	--	1.0	<1.2	<1.5	<3.0
	07/23/09	--	--	--	--	1.4	<1.2	<1.5	<3.0
	08/26/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/28/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/23/09	--	--	--	--	1.0	<1.2	<1.5	<3.0
	11/05/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	12/14/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	01/13/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	02/10/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	03/17/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	04/21/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	05/26/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/16/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	08/17/10	--	--	--	--	2.3	<1.2	<1.5	<3.0
	09/28/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/09/11	--	--	--	--	2.4	<1.2	<1.5	<3.0
	09/19/11	--	--	--	--	2.4	<1.2	<1.5	<3.0
	06/11/12	--	--	--	--	1.0	<1.2	<1.5	<3.0
	10/02/12	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/11/13					NS			
	08/15/13	**--**	**--**	**--**	**--**	**<1.0**	**<1.2**	**<1.5**	**<3.0**
	11/06/13	**--**	**--**	**--**	**--**	**<1.0**	**<1.2**	**<1.5**	**<3.0**

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		2,200	1,500	1,500	1,100	5.0	1,000	700	10,000
Effluent	01/23/02	--	--	--	--	--	--	--	--
	02/19/02	--	--	--	--	--	--	--	--
	03/19/02	--	--	--	--	<0.5	<0.5	<0.5	<1.0
	04/29/02	--	--	--	--	--	--	--	--
	05/29/02	--	--	--	--	--	--	--	--
	06/21/02	--	--	--	--	<0.5	<0.5	<0.5	<1.0
	07/26/02	--	--	--	--	--	--	--	--
	08/23/02	--	--	--	--	--	--	--	--
	09/10/02	--	--	--	--	<0.5	<0.5	<0.5	<1.0
	10/23/02	--	--	--	--	--	--	--	--
	11/19/02	--	--	--	--	--	--	--	--
	12/16/02	--	--	--	--	<0.5	<0.5	<0.5	<1.0
	01/23/03	--	--	--	--	--	--	--	--
	02/25/03	--	--	--	--	--	--	--	--
	04/23/03	--	--	--	--	--	--	--	--
	05/27/03	--	--	--	--	--	--	--	--
	06/25/03	--	--	--	--	<0.5	<0.5	<0.5	<1.0
	08/25/03	--	--	--	--	--	--	--	--
	09/23/03	--	--	--	--	<1.0	<1.0	<1.0	<1.0
	10/15/03	--	--	--	--	--	--	--	--
	01/26/04	--	--	--	--	--	--	--	--
	02/17/04	--	--	--	--	--	--	--	--
	05/24/04	--	--	--	--	--	--	--	--
	06/22/04	--	--	--	--	<1.0	<1.0	<1.0	<3.0
	08/19/04	--	--	--	--	--	--	--	--
	12/16/05	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	01/11/06	--	--	--	--	--	--	--	--
	06/12/06	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/28/06	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	12/26/06	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/05/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		2,200	1,500	1,500	1,100	5.0	1,000	700	10,000
Effluent Cont'd	04/06/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/14/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	06/08/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	07/13/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	08/21/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/14/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	10/12/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	11/20/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	12/11/07	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	01/29/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	02/14/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/25/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/27/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	06/27/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	07/15/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	08/05/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	09/26/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	10/28/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	11/19/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	12/22/08	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	01/29/09	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	02/26/09	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	03/26/09	--	--	--	--	<1.0	<1.2	<1.5	<2.0
	04/21/09	--	--	--	--	<1.0	<1.0	<1.0	<2.0
	05/08/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/24/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	08/26/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/28/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/23/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	11/05/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0

Table 2

Grounwater Analytical Data (BTEX, GRO, DRO, and RRO)
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	GRO	DRO	DRO with SGC	RRO	Benzene	Toluene	Ethylbenzene	Total Xylenes
ADEC GCL µg/L:		**2,200**	**1,500**	**1,500**	**1,100**	**5.0**	**1,000**	**700**	**10,000**
Effluent Cont'd	12/14/09	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	01/13/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	02/10/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	03/17/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	04/21/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	05/26/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/16/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	07/23/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	08/17/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/28/10	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/09/11	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	09/19/11	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/11/12	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	10/02/12	--	--	--	--	<1.0	<1.2	<1.5	<3.0
	06/11/13					NS			
	08/15/13	**--**	**--**	**--**	**--**	**<1.0**	**<1.2**	**<1.5**	**<3.0**
	11/06/13	--	--	--	--	**<1.0**	**<1.2**	**<1.5**	**<3.0**
SELC	01/30/08	--	36	--	--	<1	<1	<1	<2
	03/25/08	--	<99.0	--	--	--	--	--	--
	04/08/08	--	<23	--	--	--	--	--	--
	06/06/08	--	<23	--	--	<1	<1	<1	<2
	09/25/08	--	<48	--	--	<1	<1	<1	<2
	12/15/08	--	<50	--	--	<0.5	<0.5	<0.5	<2

Notes:
All results are reported in micrograms per liter (µg/L).
Bold indicates data associated with current reporting period.
Highlighted cell indicates concentrations exceeds respective GCL.
(<) = Indicates result did not exceed method reporting limit; an elevated reporting limit indicates sample was diluted.
GRO = gasoline range organic hydrocarbons.
DRO = diesel range organic hydrocarbons.
DRO with SGC = diesel range hydrocarbons with silica gel cleanup.
RRO = residual range organic hydrocarbons.
SGC = silica gel cleanup
ADEC - Alaska Department of Environmental Conservation.
GCL = groundwater cleanup level based on ADEC 18 AAC 75.
-- = sample was not analyzed for this compound.
D - Duplicate of preceding sample.
NS = Not sampled
SELC = Syndoulous Evangelical Lutheran Church.

Table 3

Groundwater VOC and RCRA Metals Analytical Data
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	EDB	1,1-DCA	1,2-DCA	1,2-DBCP	1,2-DCB	1,3-DCB	1,4-DCB	Mercury	Arsenic	Selenium	Barium	Cadmium	Chromium	Lead	Silver	MTBE
ADEC GCL µg/L:		**0.05**	**7,300**	**5**	NE	**600**	**3,300**	**75**	**2**	**10**	**50**	**2,000**	**5**	**100**	**15**	**100**	**470**
G-1R	12/02/04	<0.0098	--	<1	--	--	--	--	0.040	8.1	<5.9	174	<0.76	<2.5	<10.0	<2.0	--
	04/07/05	<0.0098	--	<0.5	--	--	--	--	<0.028	15.4	<5.9	187	1.2	<2.5	<10.0	<2.0	--
	06/27/05	--	--	--	--	--	--	--	--	<9.3	--	--	<0.97	--	<8.4	--	--
	09/22/05	<0.0098	--	<0.5	--	--	--	--	<0.062	<9.3	<9.4	147	<0.97	<4.8	<8.4	<2.0	--
G-2	06/27/05	<0.0097	--	<1	--	--	--	--	--	10.3	--	--	6.7	--	25.6	--	--
G-3	05/12/09	0.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/17/10	0.60	--	--	--	--	--	--	--	--	--	--	--	--	1.8	--	--
	09/25/10	3.9	--	--	--	--	--	--	--	--	--	--	--	--	6.2	--	--
	09/19/11	4.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/12	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	**6.0**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-4	12/02/04	<0.0096	--	<1	--	--	--	--	0.045	41.7	<5.9	431	<0.76	<2.5	<10.0	<2.0	--
	04/07/05	<0.0098	--	<0.5	--	--	--	--	0.053	38.5	<5.9	301	2.2	16.0	25.0	<2.0	--
	06/27/05	--	--	--	--	--	--	--	--	<9.3	--	--	<0.97	--	<8.4	--	--
	09/22/05	0.065	--	<0.5	--	--	--	--	<0.062	11.1	<9.4	174	<0.97	<4.8	<8.4	<2.0	--
	09/25/10	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	1.1	--	--
G-5	12/02/04	1.9	--	<100	--	--	--	--	0.30	159	6.7	1,240	2.7	95.2	437	<2.0	--
	04/07/05	1.2	--	<1	--	--	--	--	0.19	119	<5.9	1,090	11.0	88.2	239	<2.0	--
	06/27/05	2.1	--	--	--	--	--	--	--	37.7	--	--	<0.97	--	34.0	--	--
	09/23/05	1.2	--	<3	--	--	--	--	<0.062	30.0	<9.4	161	1.3	<4.8	15.1	<2.0	--
	12/07/05	2.3	<10	<5	--	--	--	--	--	--	--	--	--	--	20.9	--	<63
	09/27/06	0.69	--	--	--	--	--	--	--	--	--	--	--	--	8.9	--	--
	12/20/06	0.10	--	--	--	--	--	--	--	--	--	--	--	--	7.2	--	--
	03/31/07	0.050	--	--	--	--	--	--	--	--	--	--	--	--	8.9	--	--
	06/10/07	0.079	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/15/07	0.024	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/30/08	<0.0091	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/26/08	<0.010	--	--	<0.01	--	--	--	--	--	--	--	--	--	--	--	--
	06/30/08	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/09/08	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/13/09	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/13/09	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/01/09	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/17/10	<0.018	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/25/10	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/11	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/19/11	<0.0099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/12/12	<0.0099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/12	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	**<0.0098**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-7	12/02/04	0.88	--	<2	--	--	--	--	0.052	31.8	<5.9	76.1	<0.76	<2.5	44.0	<2.0	--
	04/07/05	0.18	--	<1	--	--	--	--	<0.028	42.5	<5.9	61.5	1.0	<2.5	16.4	<2.0	--
	06/27/05	0.32	--	--	--	--	--	--	--	31.5	--	--	<0.97	--	9.1	--	--
	09/23/05	2.2	--	<1	--	--	--	--	<0.062	19.4	<9.4	100	<0.97	<4.8	<8.4	<2.0	--
	12/07/05	0.42	<5	<3	--	--	--	--	--	--	--	--	--	--	--	--	<10
	09/26/06	0.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/20/06	0.036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/31/07	0.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/10/07	0.060	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/15/07	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/26/08	<0.010	--	--	<0.01	--	--	--	--	--	--	--	--	--	--	--	--
	09/09/08	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/13/09	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/13/09	0.012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/09	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/16/10	<0.017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/25/10	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/11	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/11	<0.0099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/12/12	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/12	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	**<0.0097**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G-8	12/20/06	<0.0099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/31/07	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/10/07	0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/15/07	<0.0097	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/26/08	<0.010	--	--	0.024	--	--	--	--	--	--	--	--	--	--	--	--
	09/09/08	<0.0099	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/13/09	<0.010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/12/09	0.025	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/09	<0.0098	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/16/10	<0.017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/25/10	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/11	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/12/12	0.012	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/12	<0.0096	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/10/13	**<0.0098**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-211	04/06/05	<0.0094	--	<0.5	--	--	--	--	0.12	62.4	9.3	1,130	10.1	97.4	89.1	<2.0	--
	09/22/05	<0.0097	--	<0.5	--	--	--	--	<0.062	54.3	<9.4	463	4.5	92.0	57.9	<2.0	--
	09/25/10	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.052	--	--
MW-301D	04/06/05	<0.0097	--	<0.5	--	--	--	--	<0.028	29.7	<5.9	399	<0.76	<2.5	<10.0	<2.0	--
	06/27/05	<0.0094	--	<1	--	--	--	--	--	29.2	--	--	<0.97	--	<8.4	--	--
	09/22/05	<0.0097	--	<0.5	--	--	--	--	<0.062	30.5	<9.4	423	<0.97	<4.8	<8.4	<2.0	--
MW-301S	12/02/04	<0.0097	--	<1	--	--	--	--	0.091	159	<5.9	1,730	3.8	53.4	49.1	<2.0	--
	04/06/05	<0.0097	--	<0.5	--	--	--	--	0.041	91.3	<5.9	970	4.8	45.1	47.4	<2.0	--
	06/27/05	--	--	--	--	--	--	--	--	101	--	--	1.0	--	9.7	--	--
	09/22/05	<0.0096	--	<0.5	--	--	--	--	<0.062	56.7	<9.4	310	1.1	10.1	<8.4	<2.0	--

Table 3

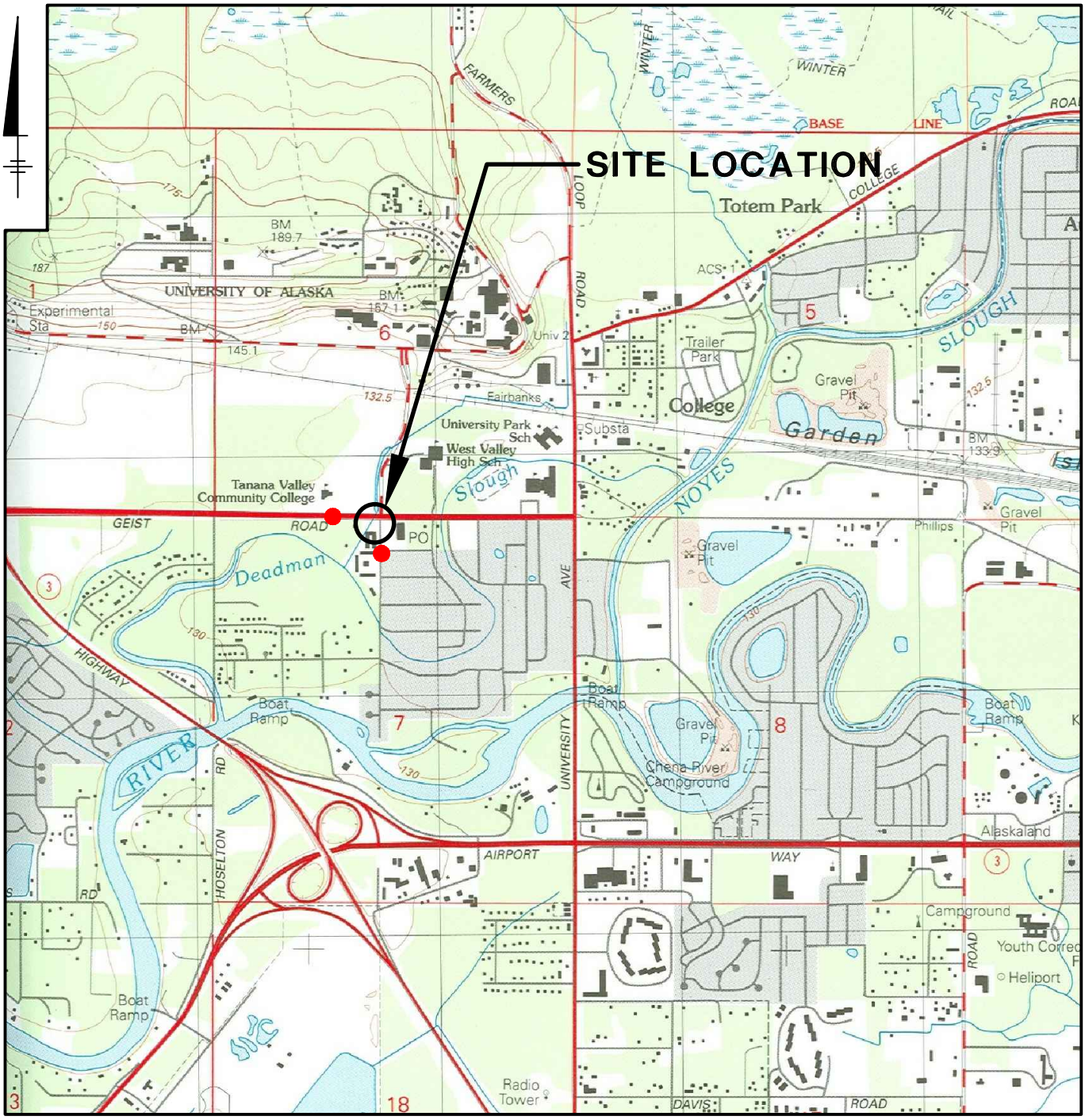
Groundwater VOC and RCRA Metals Analytical Data
Former Chevron Facility 211081
4103 Geist Road
Fairbanks, Alaska

Location	Sample Date	EDB	1,1-DCA	1,2-DCA	1,2-DBCP	1,2-DCB	1,3-DCB	1,4-DCB	Mercury	Arsenic	Selenium	Barium	Cadmium	Chromium	Lead	Silver	MTBE
ADEC GCL µg/L:		**0.05**	**7,300**	**5**	NE	**600**	**3,300**	**75**	**2**	**10**	**50**	**2,000**	**5**	**100**	**15**	**100**	**470**
MW-302D	04/06/05	<0.0095	--	<0.5	--	--	--	--	<0.028	33.4	<5.9	388	<0.76	<2.5	<10.0	<2.0	--
	06/27/05	<0.0096	--	<1	--	--	--	--	--	27.1	--	--	<0.97	--	<8.4	--	--
	09/21/05	<0.0096	--	<0.5	--	--	--	--	<0.062	36.7	<9.4	446	<0.97	<4.8	<8.4	<2.0	--
MW-302S	12/02/04	<0.0096	--	<1	--	--	--	--	0.075	94.5	<5.9	1,080	2.2	22.3	21.5	<2.0	--
	04/06/05	<0.0095	--	2	--	--	--	--	0.043	139	<5.9	852	2.2	37.3	36.7	<2.0	--
	06/27/05	--	--	2	--	--	--	--	--	50.9	--	--	<0.97	--	<8.4	--	--
	09/21/05	<0.0096	--	0.7	--	--	--	--	<0.062	33.3	<9.4	199	<0.97	<4.8	<8.4	<2.0	--
	12/06/05	<0.5	<1	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-303S	04/06/05	<0.0098	--	<0.5	--	--	--	--	<0.028	37.5	<5.9	582	5.2	29.8	35.2	<2.0	--
MW-304D	12/02/04	<0.0098	--	<1	--	--	--	--	0.053	27.2	<5.9	365	<0.76	<2.5	<10.0	<2.0	--
	04/06/05	<0.0094	--	<0.5	--	--	--	--	<0.028	25.2	<5.9	379	<0.76	<2.5	<10.0	<2.0	--
	06/27/05	--	--	--	--	--	--	--	--	25.7	--	--	<0.97	--	<8.4	--	--
MW-304D	09/21/05	<0.0097	--	1	--	--	--	--	<0.062	31.0	<9.4	412	<0.97	<4.8	<8.4	<2.0	--
MW-304S	04/06/05	<0.0094	--	<0.5	--	--	--	--	0.078	19.2	<5.9	1,020	4.7	40.5	38.0	<2.0	--
MW-305	04/07/05	<0.0097	--	<0.5	--	--	--	--	0.053	321	<5.9	743	3.1	36.6	35.8	<2.0	--
GW-1B	12/02/04	<0.0096	--	<1	--	--	--	--	0.053	39.0	<5.9	429	<0.76	<2.5	<10.0	<2.0	--
	06/27/05	--	--	--	--	--	--	--	--	42.3	--	--	<0.97	--	<8.4	--	--
	09/21/05	<0.0096	--	<0.5	--	--	--	--	<0.062	45.3	<9.4	398	1.1	<4.8	10.4	<2.0	--
	06/06/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3
GW-2	06/27/05	<0.0096	--	<1	--	--	--	--	--	32.4	--	--	<0.97	--	<8.4	--	--
	09/21/05	<0.0097	--	<0.5	--	--	--	--	<0.062	37.9	<9.4	363	<0.97	<4.8	<8.4	<2.0	--
	06/06/08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<3
Influent	06/11/12	--	--	--	--	<3.0	<3.0	<3.0	--	--	--	--	--	--	--	--	--
Effluent	06/11/12	--	--	--	--	<3.0	<3.0	<3.0	--	--	--	--	--	--	--	--	--

Notes:
All results are reported in micrograms per liter (µg/L).
(<) = Indicates result did not exceed method reporting limit; an elevated reporting limit indicates sample was diluted.
Bold type indicates results of the most recent sampling event.
VOC = volatile organic compounds; samples analyzed using EPA Method 8260B.
RCRA = Resource Conservation and Recovery Act; samples
EDB = 1, 2-dibromoethane.
DCA = dichloroethane.
DBCP = 1,2-dibromo-3-chlorpropane.
DCB = Dichlorbenzene (1,2-DCB, 1,3-DCB, and 1,4-DCB) by EPA Method 602.
MTBE = methyl tertiary butyl ether.
NE = not established
ADEC - Alaska Department of Environmental Conservation.
GCL = groundwater cleanup level.
-- = not analyzed.

ARCADIS

Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: FAIRBANKS (D-2) SW, AK., 1992, FAIRBANKS NORTH STAR BOROUGH, SECTION: 7, TOWNSHIP: 1S, RANGE: 1W

LEGEND

POTABLE WELL

0 2000' 4000'

APPROXIMATE GRAPHIC SCALE

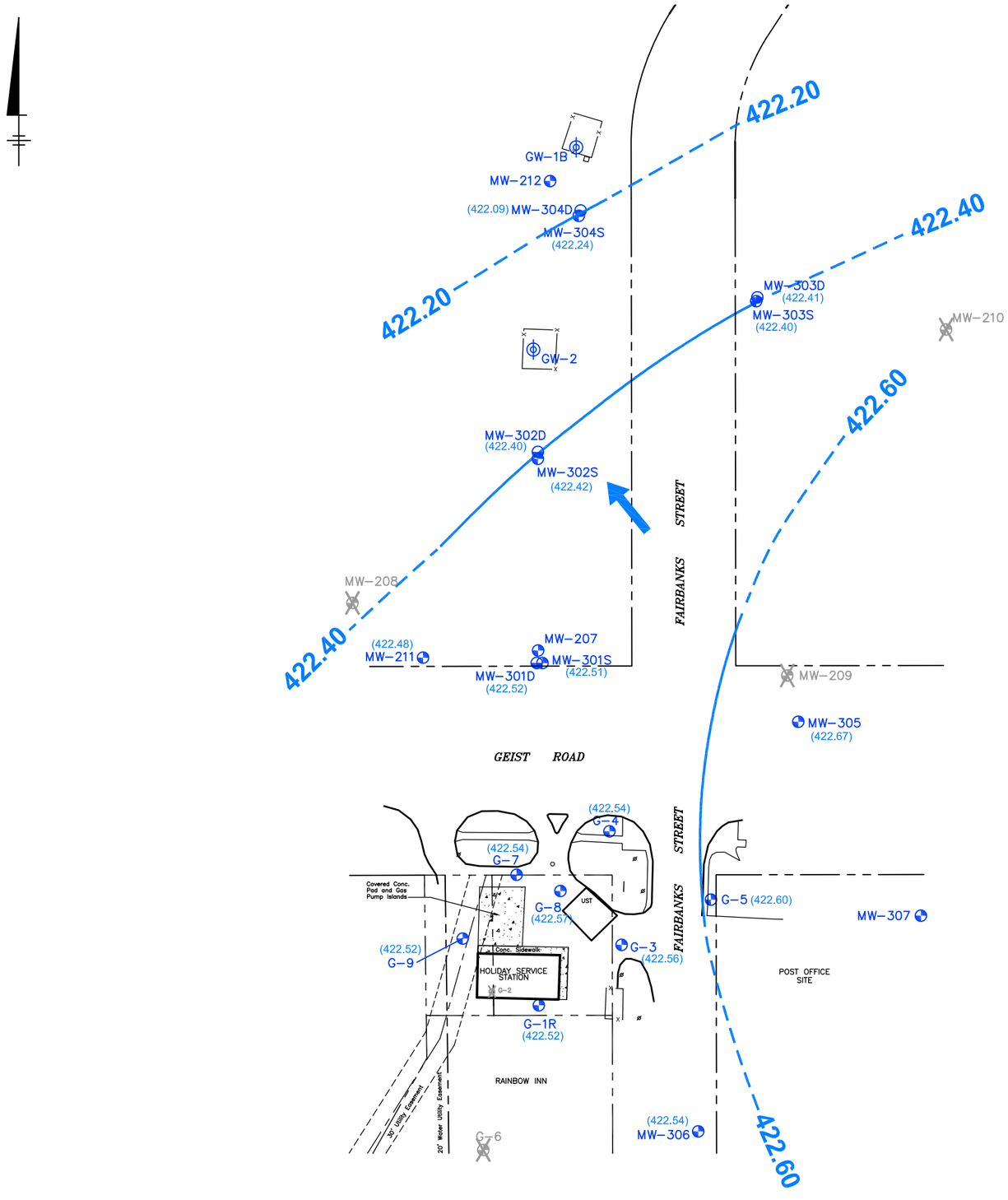
FORMER CHEVRON FACILITY #211081
4103 GEIST ROAD, FAIRBANKS, ALASKA
SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

SITE LOCATION MAP

ARCADIS

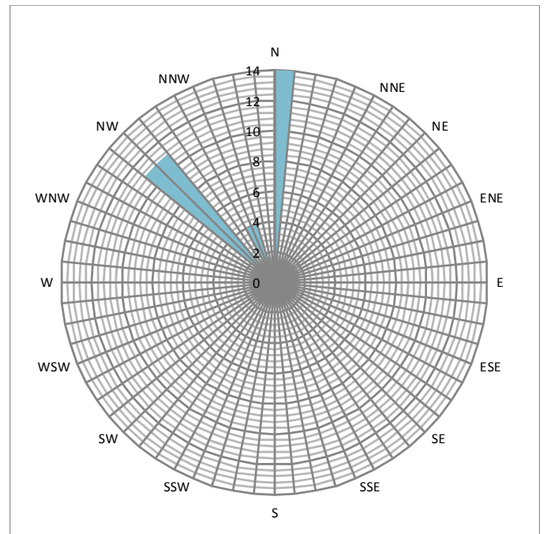
FIGURE 1

CITY:(Reqd) DIV/GROUP:(Reqd) DB:(Reqd) LD:(Opt) PIC:(Opt) PM:M.Strickler TM:(Opt) LYR:(Opt)ON=*;OFF=*REF*
G:\ENVCAD\TAMPA\ACT\ChevronUSA\Chevron 211081\B0045498\0008.GWR02\2nd SA 2013 GMRB0045498N01.dwg LAYOUT: 1 SAVED: 1/3/2014 2:37 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 1/3/2014 2:38 PM BY: RICHARDS, JIM
XREFS: IMAGES: PROJECTNAME: ----
ALASKA.jpg
Fairbanks-SW.jpg



LEGEND

- PUBLIC R-O-W BOUNDARY
- UTILITY/POWER POLE
- MANHOLE
- MONITORING WELL
- DEEP MONITORING WELL
- DESTROYED/ABANDONED MONITORING WELL
- (422.40) WATER TABLE ELEVATION (FEET)
- 422.20 POTENTIOMETRIC CONTOUR (DASHED WHERE INFERRED) (CONTOUR INTERVAL 0.20 FEET)
- INFERRED DIRECTION OF GROUNDWATER FLOW



0 120' 240'

GRAPHIC SCALE

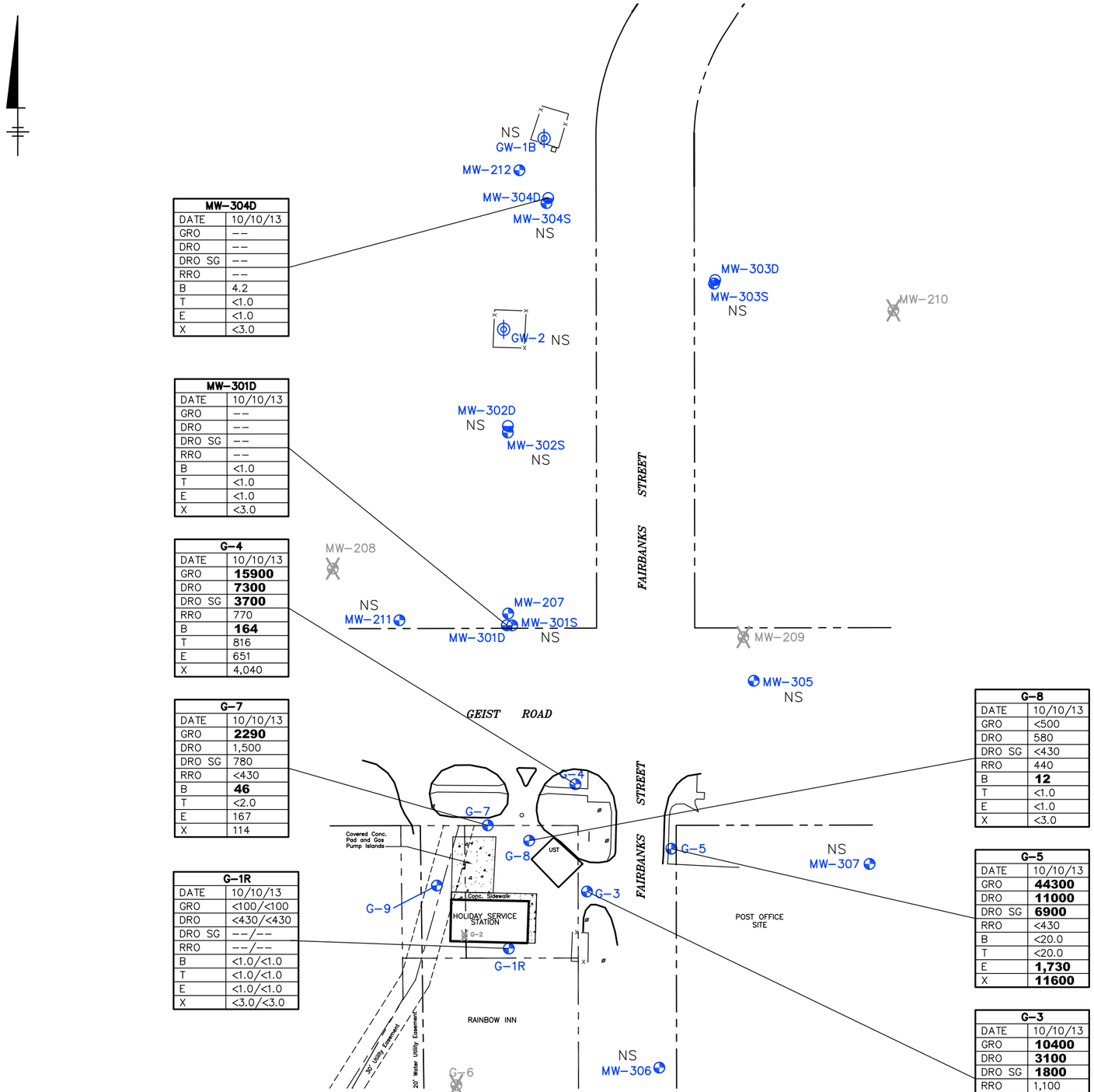
NOTE:
1. WELL G-6 NOT SURVEYED.
2. BASE MAP PROVIDED BY McCLANE CONSULTING INC., 10/19/2009.

FORMER CHEVRON FACILITY #211081
4103 GEIST ROAD, FAIRBANKS, ALASKA
SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

POTENTIOMETRIC SURFACE MAP OCTOBER 10, 2013

ARCADIS

FIGURE 2



MW-304D	
DATE	10/10/13
GRO	--
DRO	--
DRO SG	--
RRO	--
B	4.2
T	<1.0
E	<1.0
X	<3.0

MW-301D	
DATE	10/10/13
GRO	--
DRO	--
DRO SG	--
RRO	--
B	<1.0
T	<1.0
E	<1.0
X	<3.0

G-4	
DATE	10/10/13
GRO	**15900**
DRO	**7300**
DRO SG	**3700**
RRO	770
B	**164**
T	816
E	651
X	4,040

G-7	
DATE	10/10/13
GRO	**2290**
DRO	1,500
DRO SG	780
RRO	<430
B	**46**
T	<2.0
E	167
X	114

G-1R	
DATE	10/10/13
GRO	<100/<100
DRO	<430/<430
DRO SG	--/--
RRO	--/--
B	<1.0/<1.0
T	<1.0/<1.0
E	<1.0/<1.0
X	<3.0/<3.0

G-8	
DATE	10/10/13
GRO	<500
DRO	580
DRO SG	<430
RRO	440
B	**12**
T	<1.0
E	<1.0
X	<3.0

G-5	
DATE	10/10/13
GRO	**44300**
DRO	**11000**
DRO SG	**6900**
RRO	<430
B	<20.0
T	<20.0
E	**1,730**
X	**11600**

G-3	
DATE	10/10/13
GRO	**10400**
DRO	**3100**
DRO SG	**1800**
RRO	1,100
B	<1.0
T	**11.9**
E	33.5
X	3,210

LEGEND

- PUBLIC R-O-W BOUNDARY
- UTILITY/POWER POLE
- MANHOLE
- MONITORING WELL
- DEEP MONITORING WELL
- DESTROYED/ABANDONED MONITORING WELL

SAMPLE LOCATION	
DATE	SAMPLE DATE
GRO	Gasoline range organics
DRO	Diesel range organics
DRO SGC	Diesel range organics with silica gel cleanup
RRO	Residual range organics
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total Xylenes

ALL RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)

BOLD VALUES EXCEED ADEC 18 AAC 75 GROUNDWATER CLEANUP LEVEL (GCL)

ADEC = ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<1.0/<1.0 = DUPLICATE SAMPLE WAS COLLECTED

-- = NOT ANALYZED

<1.0 = NON DETECT

NS = NOT SAMPLED

ADEC GCL	
GRO	2,200
DRO	1,500
RRO	1,100
B	5.0
T	1,000
E	700
X	10,000

NOTE:

1. WELL G-6 NOT SURVEYED.
2. BASE MAP PROVIDED BY McCLANE CONSULTING INC., 10/19/2009.

0 120' 240'

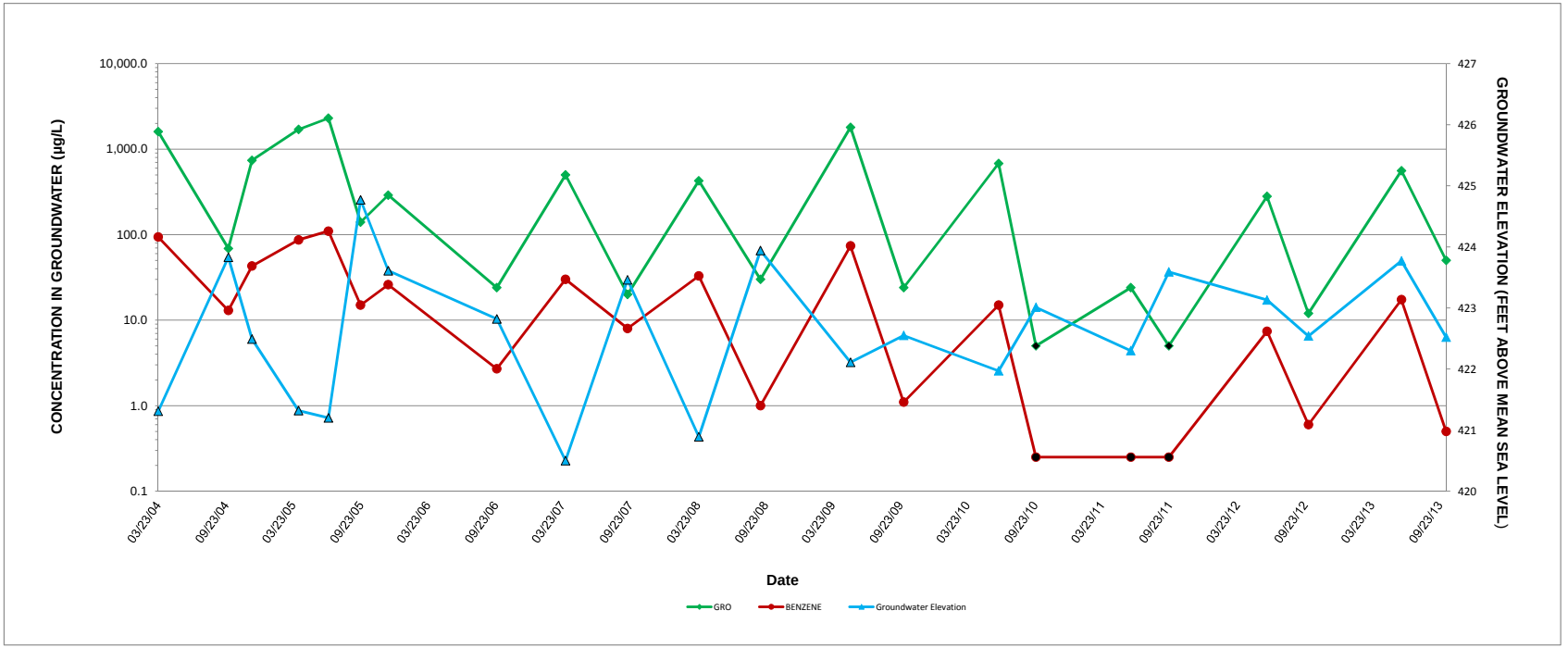
GRAPHIC SCALE

FORMER CHEVRON FACILITY #211081
4103 GEIST ROAD, FAIRBANKS, ALASKA
SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

GROUNDWATER ANALYTICAL SUMMARY MAP - OCTOBER 10, 2013

ARCADIS

FIGURE 3



LEGEND:

GRO = Gas Range Organic Compounds

µg/L = micro grams per liter

Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.

Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well G-1R Analytical Hydrograph

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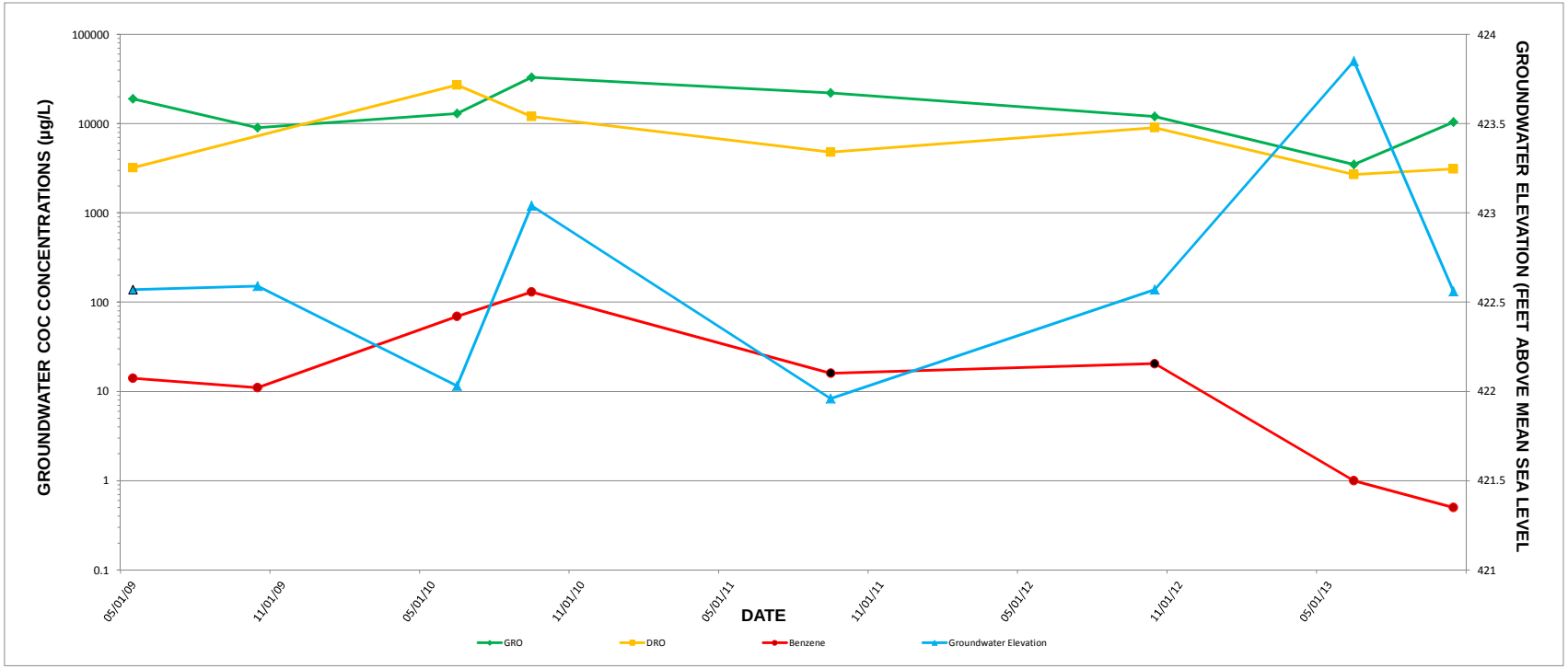
Infrastructure · Water · Environment · Buildings

FIGURE
4



LEGEND:

GRO = Gas Range Organic Compounds
µg/L = micro grams per liter
Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.
Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well G-3 Analytical Hydrograph

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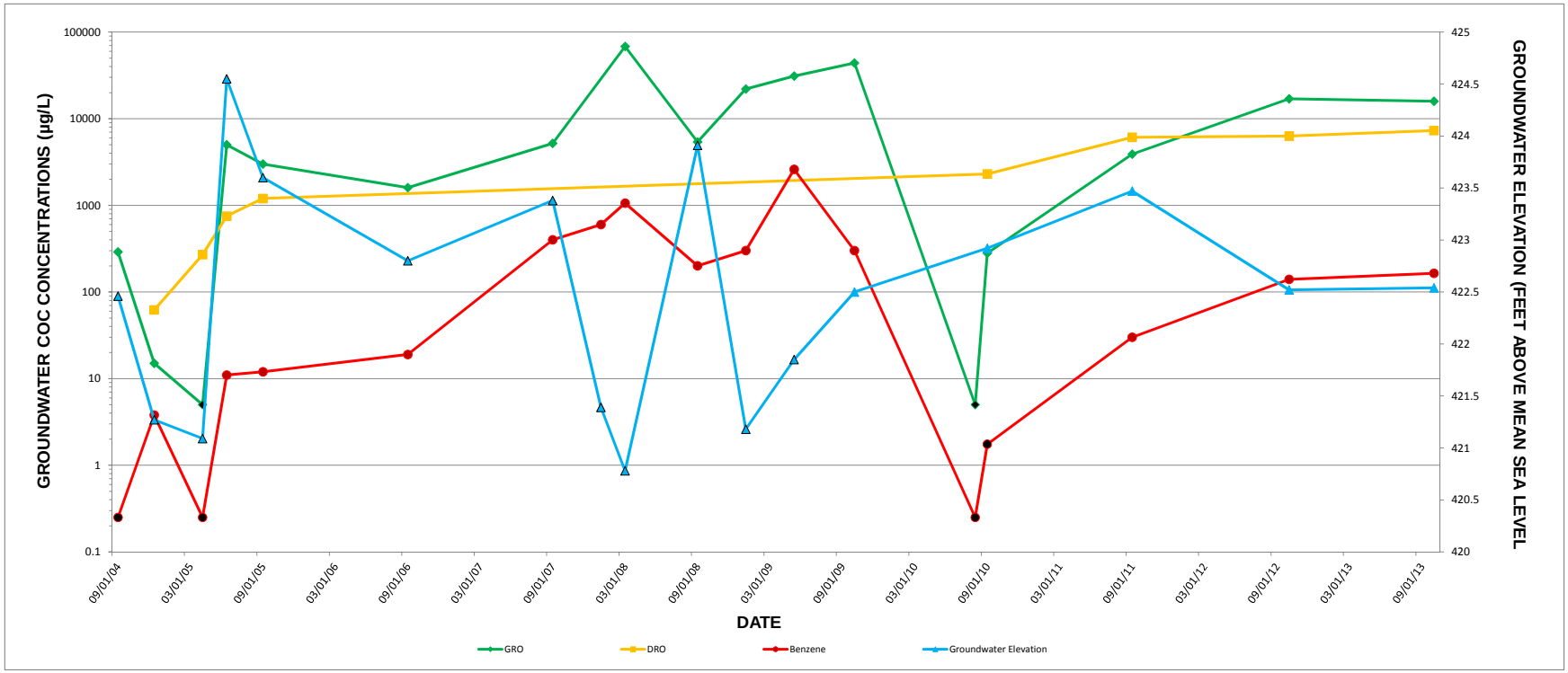
FIGURE
5



LEGEND:

GRO = Gas Range Organic Compounds

µg/L = micro grams per liter

Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.

Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well G-4 Analytical Hydrograph

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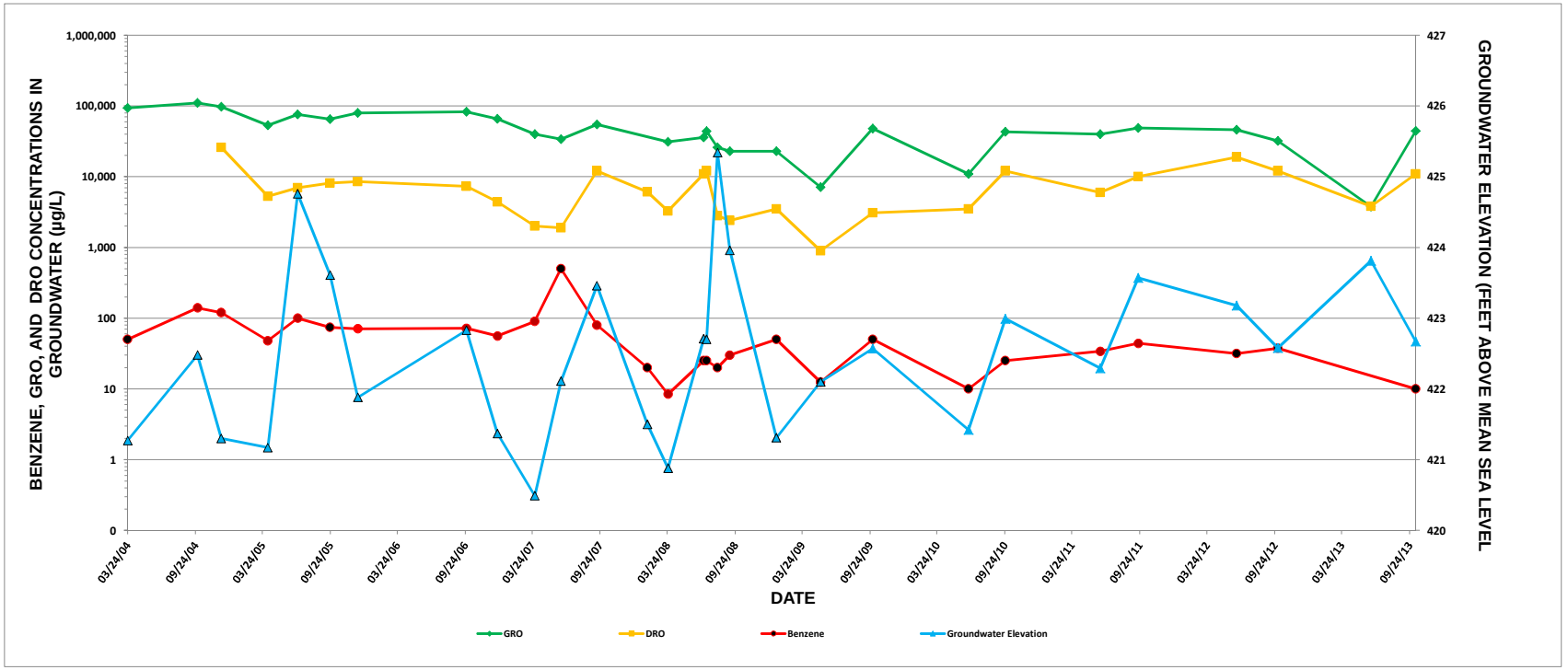
Infrastructure · Water · Environment · Buildings

FIGURE
6



LEGEND:

GRO = Gas Range Organic Compounds
µg/L = micro grams per liter
Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.
Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well G-5 Analytical Hydrograph

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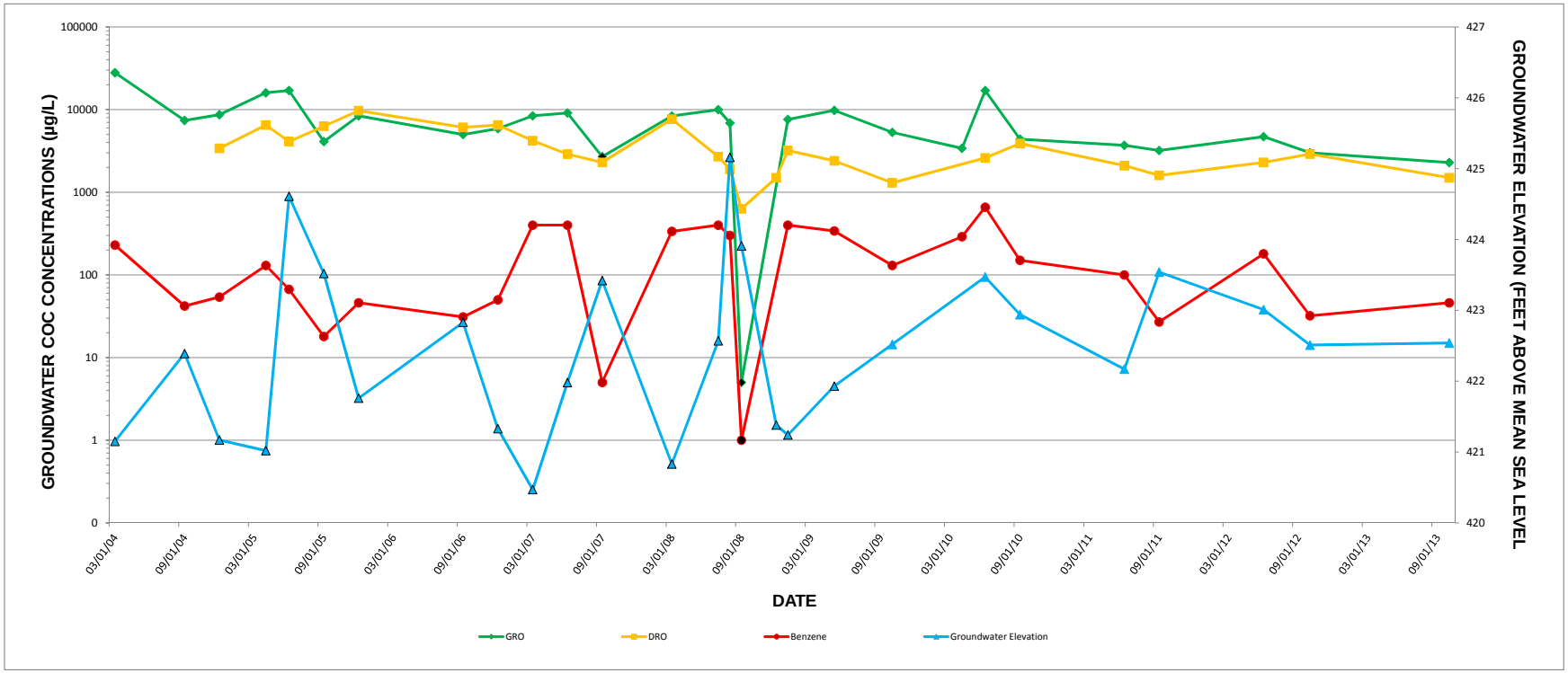
FIGURE
7



LEGEND:

GRO = Gas Range Organic Compounds

µg/L = micro grams per liter

Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.

Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well G-7 Analytical Hydrograph

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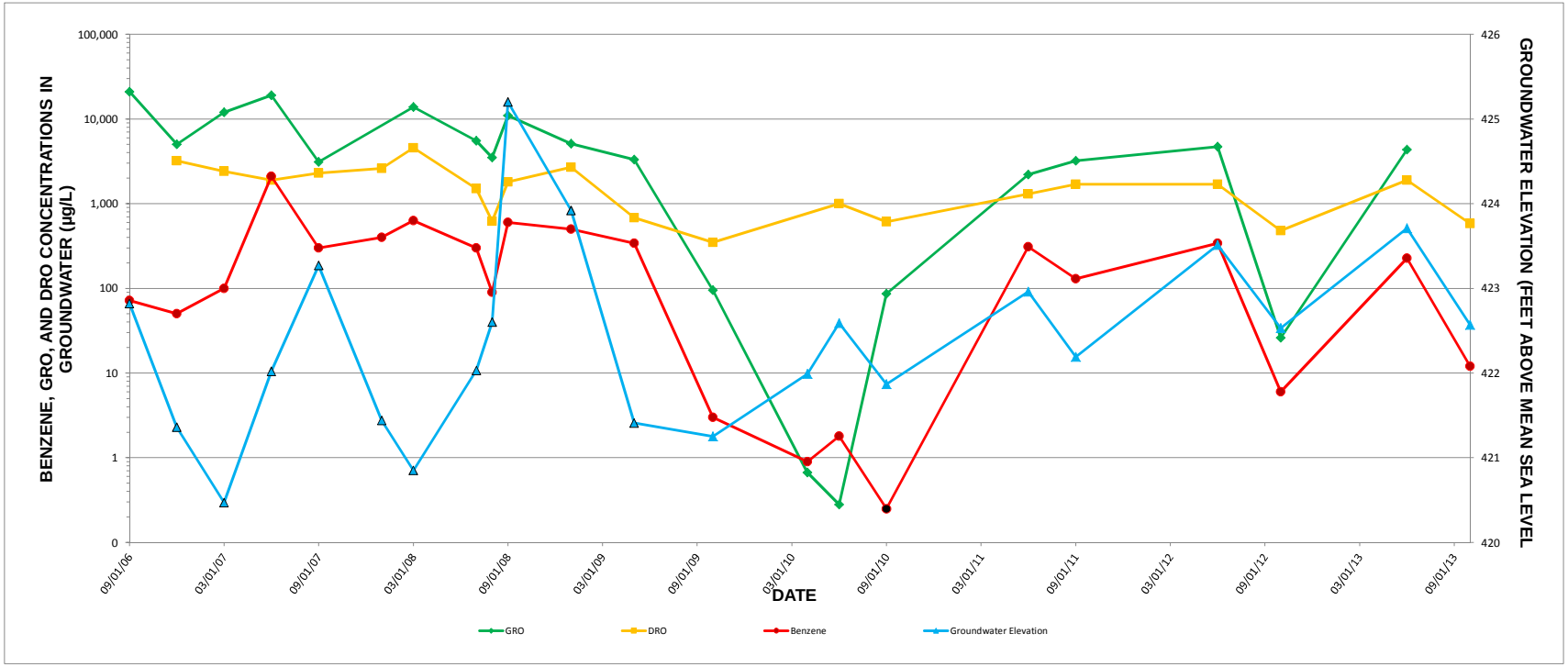
FIGURE
8



FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2012 GROUNDWATER MONITORING REPORT

Monitoring Well G-8 Analytical Hydrograph

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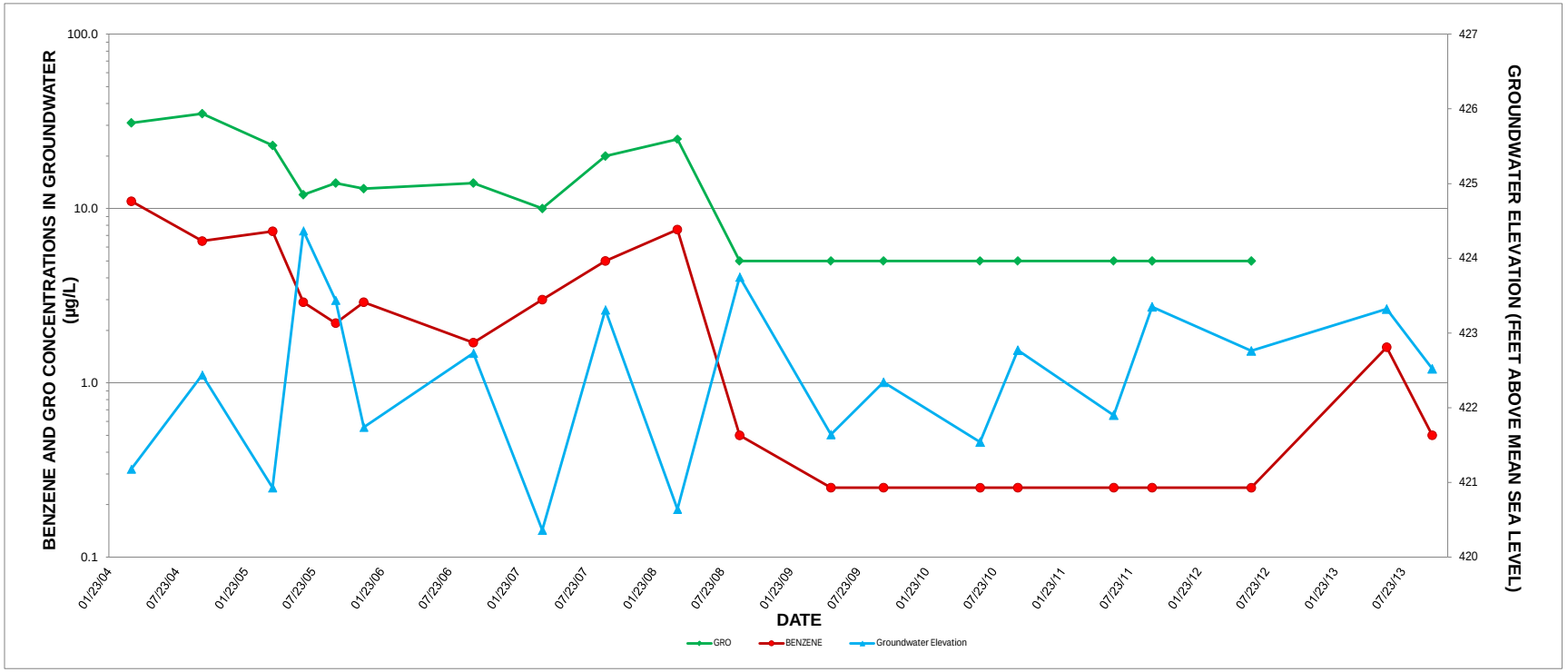
FIGURE
9



LEGEND:

GRO = Gas Range Organic Compounds
µg/L = micro grams per liter
Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.
Groundwater elevation data measured before October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

Note: GRO was not analyzed on 09/20/2011. A value consistet with the current and previous concentrations was used for trending purposes.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well MW-301D Analytical Hydrograph

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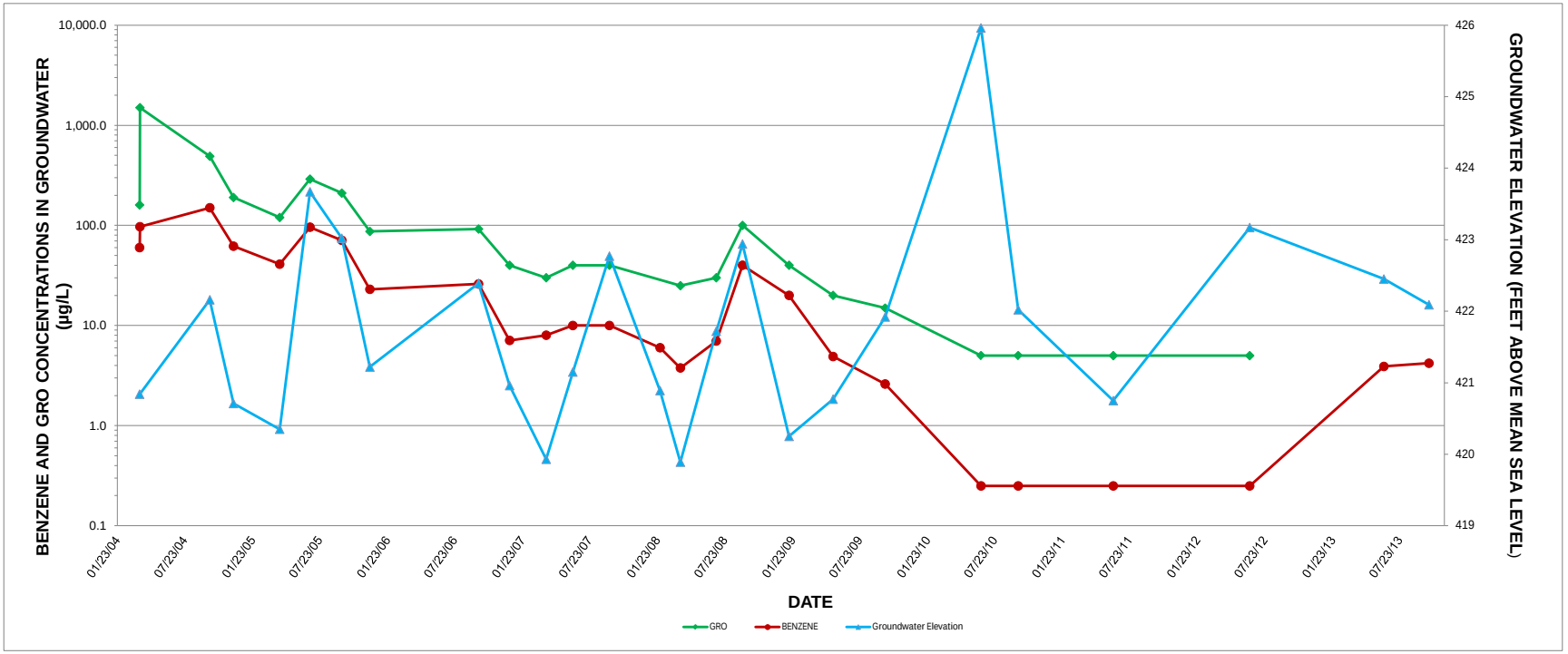
FIGURE
10



LEGEND:

GRO = Gas Range Organic Compounds
µg/L = micro grams per liter
Analytical results below the method dection limit (mdl) are plotted at half the mdl value and these data points are plotted with black fill.
Groundwater elevation data measured befor e October 2009 was recalculated using the 2009 top of casing elevation data and these data points are plotted with a black black outline.

FORMER CHEVRON FACILITY 211081
4103 GEIST ROAD, FAIRBANKS, ALASKA

SECOND SEMI-ANNUAL 2013 GROUNDWATER MONITORING REPORT

Monitoring Well MW-304D Analytical Hydrograph

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FIGURE
11

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Appendix A

Field Notes

Location 4103 Geist Rd Date 10-10-13

Project / Client 211081 / CEMC

25A13 GW/M Event

8:30	Complete loading of Field Vehicle at the Wetmore Hotel/ Mobilize to Storage Unit
9:10	Complete Loading Field Tools Mobilize to Metro Fire & Safety Pick up Nitrile & Warm Gloves
9:45	Mobilize to College Rd System to Pickup Fire Extinguisher & delimators.
10:15	Depart College for Geist site
10:25	Arrive on site
Personnel:	Dave Beardon & Seamus McGuinn
Activity:	GW/M (25A13)
Weather:	33° F, Clear
10:45	Complete H&S Tailgate meeting PTW, HASP Test/Signing, Scope, PPE inspection, Haz ID, FOBK
11:00	Complete Fire Ext Inspection, First Aid Kit Inspection, Equipment Calibrate PID Begin Gauging/Sampling

Location 4103 Geist Rd Date 10-10-13

Project / Client 211081 / CEMC

25A13 GW/M Event

Well ID	DTW (ft btoc)	DTB (ft btoc)	Comments PID (ppm)	Sample Time
G-1R	13.25'	18.03	0.0	15:15 BD Collected
G-3	11.86	NM	79.5	15:45 Collected BTEX, GRO
G-4	13.99	18.60	0.0	17:30 DRO, RRO BTEX, GRO
G-5	12.69	19.02	0.0	13:15 DRO, RRO
G-7	14.03	17.81	0.0	14:15 BTEX, GRO, DRO, RRO
G-8	13.46	19.74	0.0	17:00 DRO, ARO BTEX, GRO
G-9	13.17'	19.34	0.0	Gauge Only
MW-301D	15.35	52.20	0.0	12:00 BTEX Only
~~MW-301S~~		~~60.06~~		
MW-302	ice @ 14.50'	14.54	0.0	Obstruction/Ice
MW-21	12.74'	16.63	0.0	Gauge Only
MW-301S	15.03'	18.97	0.0	Gauge Only
MW-302D	17.98'	61.21	0.0	12:30 BTEX Only
MW-302S	17.57'	21.80	0.0	Gauge Only
MW-303D	13.01'	58.03	0.0	Gauge Only
MW-303S	12.71'	15.74	0.0	Gauge Only
MW-304D	17.81'	60.04	0.0	12:15 BTEX Only
MW-304S	17.33'	21.25	0.0	Gauge Only
MW-305	13.71'	17.10	0.0	Gauge Only
MW-306	11.97'	14.34	0.0	Gauge Only
18:30	Complete Sampling, Secure Site Mobilize to Hotel			

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Appendix B

Laboratory Analytical Reports

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

December 09, 2013

Gregory Montgomery
Arcadis US, Inc.
1100 Olive Way
Suite 800
Seattle, WA 98101

RE: Project: 211081 Geist
Pace Project No.: 10245652

Dear Gregory Montgomery:
Enclosed are the analytical results for sample(s) received by the laboratory on October 12, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jennifer Gross

jennifer.gross@pacelabs.com
Project Manager

Enclosures

cc: David Beaudoin, Arcadis US, Inc.
Michael MacDaniel, Arcadis US, Inc.
Tammy Parise, Arcadis US, Inc.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 211081 Geist
Pace Project No.: 10245652

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Dept of Environmental Management #40770
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 5 #WD-15J
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification#C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky Dept of Envi. Protection - DW #90062
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 211081 Geist
Pace Project No.: 10245652

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10245652001	**G-1R**	Water	10/10/13 15:15	10/12/13 08:30
10245652002	**G-3**	Water	10/10/13 15:45	10/12/13 08:30
10245652003	**G-4**	Water	10/10/13 17:30	10/12/13 08:30
10245652004	**G-5**	Water	10/10/13 13:15	10/12/13 08:30
10245652005	**G-7**	Water	10/10/13 18:00	10/12/13 08:30
10245652006	**G-8**	Water	10/10/13 17:00	10/12/13 08:30
10245652007	**MW-301D**	Water	10/10/13 12:00	10/12/13 08:30
10245652008	**MW-304D**	Water	10/10/13 12:15	10/12/13 08:30
10245652009	**Trip Blank**	Water	10/10/13 00:00	10/12/13 08:30
10245652010	**BD-1**	Water	10/10/13 00:00	10/12/13 08:30

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 211081 Geist
Pace Project No.: 10245652

Lab ID	Sample ID	Method	Analysts	Analytes Reported
10245652001	**G-1R**	Alaska 102/103	MT	3
		Alaska 101	LLC	2
		EPA 8260	LPM	7
10245652002	**G-3**	EPA 8011	KL1	2
		Alaska 102/103	JRH, MT	5
		Alaska 101	LLC	2
		EPA 8260	EB2, SH2	7
10245652003	**G-4**	Alaska 102/103	JRH, MT	5
		Alaska 101	LLC	2
		EPA 8260	LPM	7
10245652004	**G-5**	EPA 8011	KL1	2
		Alaska 102/103	JRH, MT	5
		Alaska 101	LLC	2
		EPA 8260	LPM	7
10245652005	**G-7**	EPA 8011	KL1	2
		Alaska 102/103	JRH, MT	5
		Alaska 101	LLC	2
		EPA 8260	LPM	7
10245652006	**G-8**	EPA 8011	KL1	2
		Alaska 102/103	JRH, MT	5
		Alaska 101	LLC	2
		EPA 8260	LPM	7
10245652007	**MW-301D**	EPA 8260	SH2	7
10245652008	**MW-304D**	EPA 8260	SH2	7
10245652009	**Trip Blank**	Alaska 101	LLC	2
		EPA 8260	SH2	7
10245652010	**BD-1**	Alaska 102/103	MT	4
		Alaska 101	LLC	2
		EPA 8260	SH2	7

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **EPA 8011**
Description: 8011 GCS EDB and DBCP
Client: Arcadis_Chevron
Date: December 09, 2013

General Information:
4 samples were analyzed for EPA 8011. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 8011 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/23362

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- G-3 (Lab ID: 10245652002)
  - 4-Bromofluorobenzene (S)
- MS (Lab ID: 1554986)
  - 4-Bromofluorobenzene (S)
- MSD (Lab ID: 1554987)
  - 4-Bromofluorobenzene (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: OEXT/23362

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10245652002

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 1554986)
  - 1,2-Dibromoethane (EDB)

Additional Comments:

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 102/103**
Description: DRO and RRO by AK102/103
Client: Arcadis_Chevron
Date: December 09, 2013

General Information:
7 samples were analyzed for Alaska 102/103. All samples were received in acceptable condition with any exceptions noted below.

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- G-3 (Lab ID: 10245652002)
- G-4 (Lab ID: 10245652003)
- G-5 (Lab ID: 10245652004)
- G-7 (Lab ID: 10245652005)
- G-8 (Lab ID: 10245652006)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: OEXT/23445

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCSD (Lab ID: 1561470)
  - DRO by AK 102 Silica Gel Clean

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 102/103**
Description: DRO and RRO by AK102/103
Client: Arcadis_Chevron
Date: December 09, 2013

Analyte Comments:

QC Batch: OEXT/23387

N2: The lab does not hold TNI accreditation for this parameter.

- BD-1 (Lab ID: 10245652010)
  - DRO by AK 102
  - Residual Range Organics AK103
- BLANK (Lab ID: 1557387)
  - DRO by AK 102
  - Residual Range Organics AK103
- G-1R (Lab ID: 10245652001)
  - DRO by AK 102
- G-3 (Lab ID: 10245652002)
  - DRO by AK 102
  - Residual Range Organics AK103
- G-4 (Lab ID: 10245652003)
  - DRO by AK 102
  - Residual Range Organics AK103
- G-5 (Lab ID: 10245652004)
  - DRO by AK 102
  - Residual Range Organics AK103
- G-7 (Lab ID: 10245652005)
  - DRO by AK 102
  - Residual Range Organics AK103
- G-8 (Lab ID: 10245652006)
  - DRO by AK 102
  - Residual Range Organics AK103
- LCS (Lab ID: 1557388)
  - DRO by AK 102
  - Residual Range Organics AK103
- LCSD (Lab ID: 1557442)
  - DRO by AK 102
  - Residual Range Organics AK103
- MS (Lab ID: 1557389)
  - DRO by AK 102
  - Residual Range Organics AK103
- MS (Lab ID: 1557391)
  - DRO by AK 102
  - Residual Range Organics AK103
- MSD (Lab ID: 1557390)
  - DRO by AK 102
  - Residual Range Organics AK103
- MSD (Lab ID: 1557392)
  - DRO by AK 102
  - Residual Range Organics AK103

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 102/103**
Description: DRO and RRO by AK102/103
Client: Arcadis_Chevron
Date: December 09, 2013

Analyte Comments:

QC Batch: OEXT/23445

N2: The lab does not hold TNI accreditation for this parameter.

- BLANK (Lab ID: 1561468)
  - DRO by AK 102 Silica Gel Clean
- G-3 (Lab ID: 10245652002)
  - DRO by AK 102 Silica Gel Clean
- G-4 (Lab ID: 10245652003)
  - DRO by AK 102 Silica Gel Clean
- G-5 (Lab ID: 10245652004)
  - DRO by AK 102 Silica Gel Clean
- G-7 (Lab ID: 10245652005)
  - DRO by AK 102 Silica Gel Clean
- G-8 (Lab ID: 10245652006)
  - DRO by AK 102 Silica Gel Clean
- LCS (Lab ID: 1561469)
  - DRO by AK 102 Silica Gel Clean
- LCSD (Lab ID: 1561470)
  - DRO by AK 102 Silica Gel Clean
- MS (Lab ID: 1561471)
  - DRO by AK 102 Silica Gel Clean
- MSD (Lab ID: 1561472)
  - DRO by AK 102 Silica Gel Clean

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 101**
Description: AK101 GCV
Client: Arcadis_Chevron
Date: December 09, 2013

General Information:
8 samples were analyzed for Alaska 101. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: GCV/11404

S0: Surrogate recovery outside laboratory control limits.

- MS (Lab ID: 1557657)
  - a,a,a-Trifluorotoluene (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCV/11398

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10245652002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1555834)
  - AK101 Gasoline Range Organics

QC Batch: GCV/11404

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10246316002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1557657)
  - AK101 Gasoline Range Organics

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 101**
Description: AK101 GCV
Client: Arcadis_Chevron
Date: December 09, 2013

Additional Comments:

Analyte Comments:

QC Batch: GCV/11398

1M: Surrogate recovery outside laboratory control limits due to matrix interferences.

- MSD (Lab ID: 1555834)
  - a,a,a-Trifluorotoluene (S)

N2: The lab does not hold TNI accreditation for this parameter.

- BD-1 (Lab ID: 10245652010)
  - AK101 Gasoline Range Organics
- BLANK (Lab ID: 1555830)
  - AK101 Gasoline Range Organics
- G-1R (Lab ID: 10245652001)
  - AK101 Gasoline Range Organics
- G-3 (Lab ID: 10245652002)
  - AK101 Gasoline Range Organics
- G-4 (Lab ID: 10245652003)
  - AK101 Gasoline Range Organics
- G-5 (Lab ID: 10245652004)
  - AK101 Gasoline Range Organics
- G-8 (Lab ID: 10245652006)
  - AK101 Gasoline Range Organics
- LCS (Lab ID: 1555831)
  - AK101 Gasoline Range Organics
- LCSD (Lab ID: 1555832)
  - AK101 Gasoline Range Organics
- MS (Lab ID: 1555833)
  - AK101 Gasoline Range Organics
- MSD (Lab ID: 1555834)
  - AK101 Gasoline Range Organics
- Trip Blank (Lab ID: 10245652009)
  - AK101 Gasoline Range Organics

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- G-8 (Lab ID: 10245652006)
  - AK101 Gasoline Range Organics

QC Batch: GCV/11404

N2: The lab does not hold TNI accreditation for this parameter.

- BLANK (Lab ID: 1557654)
  - AK101 Gasoline Range Organics
- G-7 (Lab ID: 10245652005)
  - AK101 Gasoline Range Organics
- LCS (Lab ID: 1557655)
  - AK101 Gasoline Range Organics

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **Alaska 101**
Description: AK101 GCV
Client: Arcadis_Chevron
Date: December 09, 2013

Analyte Comments:

QC Batch: GCV/11404

N2: The lab does not hold TNI accreditation for this parameter.

- LCSD (Lab ID: 1557656)
  - AK101 Gasoline Range Organics
- MS (Lab ID: 1557657)
  - AK101 Gasoline Range Organics
- MSD (Lab ID: 1557658)
  - AK101 Gasoline Range Organics

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **EPA 8260**
Description: 8260 MSV UST
Client: Arcadis_Chevron
Date: December 09, 2013

General Information:
10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/25323

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10245307003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1554230)
  - Toluene

QC Batch: MSV/25330

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10245652002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1554745)
  - Ethylbenzene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1554746)
  - Ethylbenzene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 211081 Geist
Pace Project No.: 10245652

Method: **EPA 8260**
Description: 8260 MSV UST
Client: Arcadis_Chevron
Date: December 09, 2013

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: G-1R **Lab ID: 10245652001** Collected: 10/10/13 15:15 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	ND	mg/L	0.43	1	10/21/13 07:13	10/21/13 21:12		N2
Surrogates								
o-Terphenyl (S)	76	%	50-150	1	10/21/13 07:13	10/21/13 21:12	84-15-1	
n-Triacontane (S)	84	%	50-150	1	10/21/13 07:13	10/21/13 21:12	638-68-6	
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	ND	ug/L	100	1		10/18/13 18:41		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	60-120	1		10/18/13 18:41	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/19/13 15:36	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/19/13 15:36	100-41-4	
Toluene	ND	ug/L	1.0	1		10/19/13 15:36	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/19/13 15:36	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	75-125	1		10/19/13 15:36	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/19/13 15:36	2037-26-5	
4-Bromofluorobenzene (S)	105	%	75-125	1		10/19/13 15:36	460-00-4	

Sample: G-3 **Lab ID: 10245652002** Collected: 10/10/13 15:45 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	**6.0**	ug/L	0.20	20	10/17/13 01:22	10/22/13 19:08	106-93-4	M6
Surrogates								
4-Bromofluorobenzene (S)	0	%	70-130	20	10/17/13 01:22	10/22/13 19:08	460-00-4	S4
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	**3.1**	mg/L	0.43	1	10/21/13 07:13	10/21/13 19:43		N2
DRO by AK 102 Silica Gel Clean	**1.8**	mg/L	0.43	1	10/21/13 07:13	10/25/13 14:29		L2,N2
Residual Range Organics AK103	**1.1**	mg/L	0.43	1	10/21/13 07:13	10/21/13 19:43		N2
Surrogates								
o-Terphenyl (S) SG	63	%	50-150	1	10/21/13 07:13	10/25/13 14:29	84-15-1	
n-Triacontane (S) SG	66	%	50-150	1	10/21/13 07:13	10/25/13 14:29		
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	**10400**	ug/L	500	5		10/18/13 12:39		M1,N2
Surrogates								
a,a,a-Trifluorotoluene (S)	99	%	50-150	5		10/18/13 12:39	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/17/13 11:57	71-43-2	
Ethylbenzene	**33.5**	ug/L	1.0	1		10/17/13 11:57	100-41-4	M1,R1
Toluene	**11.9**	ug/L	1.0	1		10/17/13 11:57	108-88-3	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: G-3 **Lab ID: 10245652002** Collected: 10/10/13 15:45 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Xylene (Total)	**3210**	ug/L	60.0	20		10/18/13 15:47	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	95	%	75-125	1		10/17/13 11:57	17060-07-0	
Toluene-d8 (S)	95	%	75-125	1		10/17/13 11:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%	75-125	1		10/17/13 11:57	460-00-4	

Sample: G-4 **Lab ID: 10245652003** Collected: 10/10/13 17:30 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	**7.3**	mg/L	0.42	1	10/21/13 07:13	10/21/13 20:50		N2
DRO by AK 102 Silica Gel Clean	**3.7**	mg/L	0.42	1	10/21/13 07:13	10/25/13 15:36		L2,N2
Residual Range Organics AK103	**0.77**	mg/L	0.42	1	10/21/13 07:13	10/21/13 20:50		N2
Surrogates								
o-Terphenyl (S) SG	64	%	50-150	1	10/21/13 07:13	10/25/13 15:36	84-15-1	
n-Triacontane (S) SG	69	%	50-150	1	10/21/13 07:13	10/25/13 15:36		
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	**15900**	ug/L	1000	10		10/18/13 18:01		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	97	%	60-120	10		10/18/13 18:01	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**164**	ug/L	20.0	20		10/19/13 14:50	71-43-2	
Ethylbenzene	**651**	ug/L	20.0	20		10/19/13 14:50	100-41-4	
Toluene	**816**	ug/L	20.0	20		10/19/13 14:50	108-88-3	
Xylene (Total)	**4040**	ug/L	60.0	20		10/19/13 14:50	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%	75-125	20		10/19/13 14:50	17060-07-0	
Toluene-d8 (S)	102	%	75-125	20		10/19/13 14:50	2037-26-5	
4-Bromofluorobenzene (S)	105	%	75-125	20		10/19/13 14:50	460-00-4	

Sample: G-5 **Lab ID: 10245652004** Collected: 10/10/13 13:15 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	ND	ug/L	0.0098	1	10/17/13 01:22	10/19/13 01:15	106-93-4	
Surrogates								
4-Bromofluorobenzene (S)	96	%	70-130	1	10/17/13 01:22	10/19/13 01:15	460-00-4	
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	**11.0**	mg/L	0.43	1	10/21/13 07:13	10/21/13 18:59		N2
DRO by AK 102 Silica Gel Clean	**6.9**	mg/L	0.43	1	10/21/13 07:13	10/25/13 15:59		L2,N2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: G-5 **Lab ID: 10245652004** Collected: 10/10/13 13:15 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
Residual Range Organics AK103	ND	mg/L	0.43	1	10/21/13 07:13	10/21/13 18:59		N2
Surrogates								
o-Terphenyl (S) SG	63	%	50-150	1	10/21/13 07:13	10/25/13 15:59	84-15-1	
n-Triacontane (S) SG	66	%	50-150	1	10/21/13 07:13	10/25/13 15:59		
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	**44300**	ug/L	2000	20		10/18/13 12:59		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	97	%	60-120	20		10/18/13 12:59	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	20.0	20		10/19/13 15:06	71-43-2	
Ethylbenzene	**1730**	ug/L	20.0	20		10/19/13 15:06	100-41-4	
Toluene	ND	ug/L	20.0	20		10/19/13 15:06	108-88-3	
Xylene (Total)	**11600**	ug/L	60.0	20		10/19/13 15:06	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%	75-125	20		10/19/13 15:06	17060-07-0	
Toluene-d8 (S)	101	%	75-125	20		10/19/13 15:06	2037-26-5	
4-Bromofluorobenzene (S)	104	%	75-125	20		10/19/13 15:06	460-00-4	

Sample: G-7 **Lab ID: 10245652005** Collected: 10/10/13 18:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	ND	ug/L	0.0097	1	10/17/13 01:22	10/22/13 18:43	106-93-4	
Surrogates								
4-Bromofluorobenzene (S)	71	%	70-130	1	10/17/13 01:22	10/22/13 18:43	460-00-4	
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	**1.5**	mg/L	0.43	1	10/21/13 07:13	10/21/13 21:34		N2
DRO by AK 102 Silica Gel Clean	**0.78**	mg/L	0.43	1	10/21/13 07:13	10/25/13 16:21		L2,N2
Residual Range Organics AK103	ND	mg/L	0.43	1	10/21/13 07:13	10/21/13 21:34		N2
Surrogates								
o-Terphenyl (S) SG	66	%	50-150	1	10/21/13 07:13	10/25/13 16:21	84-15-1	
n-Triacontane (S) SG	72	%	50-150	1	10/21/13 07:13	10/25/13 16:21		
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	**2290**	ug/L	100	1		10/24/13 17:16		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	107	%	60-120	1		10/24/13 17:16	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**46.0**	ug/L	2.0	2		10/19/13 15:21	71-43-2	
Ethylbenzene	**167**	ug/L	2.0	2		10/19/13 15:21	100-41-4	
Toluene	ND	ug/L	2.0	2		10/19/13 15:21	108-88-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: G-7 **Lab ID: 10245652005** Collected: 10/10/13 18:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Xylene (Total)	**114**	ug/L	6.0	2		10/19/13 15:21	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	110	%	75-125	2		10/19/13 15:21	17060-07-0	
Toluene-d8 (S)	102	%	75-125	2		10/19/13 15:21	2037-26-5	
4-Bromofluorobenzene (S)	103	%	75-125	2		10/19/13 15:21	460-00-4	

Sample: G-8 **Lab ID: 10245652006** Collected: 10/10/13 17:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011							
1,2-Dibromoethane (EDB)	ND	ug/L	0.0098	1	10/17/13 01:22	10/19/13 04:18	106-93-4	
Surrogates								
4-Bromofluorobenzene (S)	75	%	70-130	1	10/17/13 01:22	10/19/13 04:18	460-00-4	
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	**0.58**	mg/L	0.43	1	10/21/13 07:13	10/21/13 21:57		N2
DRO by AK 102 Silica Gel Clean	ND	mg/L	0.43	1	10/21/13 07:13	10/25/13 16:43		L2,N2
Residual Range Organics AK103	**0.44**	mg/L	0.43	1	10/21/13 07:13	10/21/13 21:57		N2
Surrogates								
o-Terphenyl (S) SG	66	%	50-150	1	10/21/13 07:13	10/25/13 16:43	84-15-1	
n-Triacontane (S) SG	74	%	50-150	1	10/21/13 07:13	10/25/13 16:43		
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	ND	ug/L	500	5		10/18/13 17:40		N2,P2
Surrogates								
a,a,a-Trifluorotoluene (S)	98	%	60-120	5		10/18/13 17:40	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**12.0**	ug/L	1.0	1		10/19/13 15:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/19/13 15:51	100-41-4	
Toluene	ND	ug/L	1.0	1		10/19/13 15:51	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/19/13 15:51	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	75-125	1		10/19/13 15:51	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/19/13 15:51	2037-26-5	
4-Bromofluorobenzene (S)	104	%	75-125	1		10/19/13 15:51	460-00-4	

Sample: MW-301D **Lab ID: 10245652007** Collected: 10/10/13 12:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/17/13 14:07	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/17/13 14:07	100-41-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: MW-301D **Lab ID: 10245652007** Collected: 10/10/13 12:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Toluene	ND	ug/L	1.0	1		10/17/13 14:07	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/17/13 14:07	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	94	%	75-125	1		10/17/13 14:07	17060-07-0	
Toluene-d8 (S)	98	%	75-125	1		10/17/13 14:07	2037-26-5	
4-Bromofluorobenzene (S)	98	%	75-125	1		10/17/13 14:07	460-00-4	

Sample: MW-304D **Lab ID: 10245652008** Collected: 10/10/13 12:15 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	**4.2**	ug/L	1.0	1		10/17/13 08:44	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/17/13 08:44	100-41-4	
Toluene	ND	ug/L	1.0	1		10/17/13 08:44	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/17/13 08:44	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	109	%	75-125	1		10/17/13 08:44	17060-07-0	
Toluene-d8 (S)	102	%	75-125	1		10/17/13 08:44	2037-26-5	
4-Bromofluorobenzene (S)	103	%	75-125	1		10/17/13 08:44	460-00-4	

Sample: Trip Blank **Lab ID: 10245652009** Collected: 10/10/13 00:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	ND	ug/L	100	1		10/18/13 16:00		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	94	%	60-120	1		10/18/13 16:00	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/17/13 05:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/17/13 05:56	100-41-4	
Toluene	ND	ug/L	1.0	1		10/17/13 05:56	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/17/13 05:56	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	75-125	1		10/17/13 05:56	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		10/17/13 05:56	2037-26-5	
4-Bromofluorobenzene (S)	104	%	75-125	1		10/17/13 05:56	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: 211081 Geist
Pace Project No.: 10245652

Sample: BD-1 **Lab ID: 10245652010** Collected: 10/10/13 00:00 Received: 10/12/13 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
DRO and RRO by AK102/103	Analytical Method: Alaska 102/103 Preparation Method: EPA 3510							
DRO by AK 102	ND	mg/L	0.43	1	10/21/13 07:13	10/21/13 22:19		N2
Residual Range Organics AK103	ND	mg/L	0.43	1	10/21/13 07:13	10/21/13 22:19		N2
Surrogates								
o-Terphenyl (S)	62	%	50-150	1	10/21/13 07:13	10/21/13 22:19	84-15-1	
n-Triacontane (S)	68	%	50-150	1	10/21/13 07:13	10/21/13 22:19	638-68-6	
AK101 GCV	Analytical Method: Alaska 101							
AK101 Gasoline Range Organics	ND	ug/L	100	1		10/18/13 18:21		N2
Surrogates								
a,a,a-Trifluorotoluene (S)	95	%	60-120	1		10/18/13 18:21	98-08-8	
8260 MSV UST	Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		10/17/13 08:59	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		10/17/13 08:59	100-41-4	
Toluene	ND	ug/L	1.0	1		10/17/13 08:59	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		10/17/13 08:59	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	111	%	75-125	1		10/17/13 08:59	17060-07-0	
Toluene-d8 (S)	101	%	75-125	1		10/17/13 08:59	2037-26-5	
4-Bromofluorobenzene (S)	103	%	75-125	1		10/17/13 08:59	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: GCV/11398 Analysis Method: Alaska 101
QC Batch Method: Alaska 101 Analysis Description: AK101W GCV Water
Associated Lab Samples: 10245652001, 10245652002, 10245652003, 10245652004, 10245652006, 10245652009, 10245652010

METHOD BLANK: 1555830 Matrix: Water
Associated Lab Samples: 10245652001, 10245652002, 10245652003, 10245652004, 10245652006, 10245652009, 10245652010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
AK101 Gasoline Range Organics	ug/L	ND	100	10/18/13 11:59	N2
a,a,a-Trifluorotoluene (S)	%	95	60-120	10/18/13 11:59	

LABORATORY CONTROL SAMPLE & LCSD: 1555831 1555832

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
AK101 Gasoline Range Organics	ug/L	1000	1050	1010	105	101	60-120	4	20	N2
a,a,a-Trifluorotoluene (S)	%				103	100	60-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1555833 1555834

Parameter	Units	10245652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
AK101 Gasoline Range Organics	ug/L	10400	5000	5000	16900	17900	130	150	70-142	6	30	M1,N2
a,a,a-Trifluorotoluene (S)	%						107	109	60-120			1M

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: GCV/11404 — Analysis Method: Alaska 101
QC Batch Method: Alaska 101 — Analysis Description: AK101W GCV Water
Associated Lab Samples: 10245652005

METHOD BLANK: 1557654 — Matrix: Water
Associated Lab Samples: 10245652005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
AK101 Gasoline Range Organics	ug/L	ND	100	10/24/13 16:36	N2
a,a,a-Trifluorotoluene (S)	%	108	60-120	10/24/13 16:36	

LABORATORY CONTROL SAMPLE & LCSD: 1557655 1557656

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
AK101 Gasoline Range Organics	ug/L	1000	1140	1190	114	119	60-120	4	20	N2
a,a,a-Trifluorotoluene (S)	%				108	102	60-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1557657 1557658

Parameter	Units	10246316002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
AK101 Gasoline Range Organics	ug/L	ND	1000	1000	1510	1350	150	134	70-142	11	30	M1,N2
a,a,a-Trifluorotoluene (S)	%						133	117	60-120			S0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: MSV/25323 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10245652008, 10245652009, 10245652010

METHOD BLANK: 1554227 Matrix: Water
Associated Lab Samples: 10245652008, 10245652009, 10245652010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/17/13 04:55	
Ethylbenzene	ug/L	ND	1.0	10/17/13 04:55	
Toluene	ug/L	ND	1.0	10/17/13 04:55	
Xylene (Total)	ug/L	ND	3.0	10/17/13 04:55	
1,2-Dichloroethane-d4 (S)	%	109	75-125	10/17/13 04:55	
4-Bromofluorobenzene (S)	%	104	75-125	10/17/13 04:55	
Toluene-d8 (S)	%	102	75-125	10/17/13 04:55	

LABORATORY CONTROL SAMPLE: 1554228

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.4	92	75-125	
Ethylbenzene	ug/L	20	18.9	95	75-125	
Toluene	ug/L	20	17.6	88	75-125	
Xylene (Total)	ug/L	60	56.2	94	75-125	
1,2-Dichloroethane-d4 (S)	%			109	75-125	
4-Bromofluorobenzene (S)	%			104	75-125	
Toluene-d8 (S)	%			103	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1554229 1554230

Parameter	Units	10245307003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	16.3	14.9	81	75	70-135	9	30	
Ethylbenzene	ug/L	ND	20	20	17.6	16.1	88	80	75-125	9	30	
Toluene	ug/L	ND	20	20	15.9	14.3	79	72	75-125	10	30	M1
Xylene (Total)	ug/L	ND	60	60	53.7	49.0	90	82	75-125	9	30	
1,2-Dichloroethane-d4 (S)	%						109	109	75-125			
4-Bromofluorobenzene (S)	%						105	104	75-125			
Toluene-d8 (S)	%						104	103	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: MSV/25330 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10245652002, 10245652007

METHOD BLANK: 1554743 Matrix: Water
Associated Lab Samples: 10245652002, 10245652007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/17/13 11:14	
Ethylbenzene	ug/L	ND	1.0	10/17/13 11:14	
Toluene	ug/L	ND	1.0	10/17/13 11:14	
Xylene (Total)	ug/L	ND	3.0	10/17/13 11:14	
1,2-Dichloroethane-d4 (S)	%	94	75-125	10/17/13 11:14	
4-Bromofluorobenzene (S)	%	98	75-125	10/17/13 11:14	
Toluene-d8 (S)	%	97	75-125	10/17/13 11:14	

LABORATORY CONTROL SAMPLE: 1554744

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	75-125	
Ethylbenzene	ug/L	20	18.9	95	75-125	
Toluene	ug/L	20	19.7	99	75-125	
Xylene (Total)	ug/L	60	59.3	99	75-125	
1,2-Dichloroethane-d4 (S)	%			94	75-125	
4-Bromofluorobenzene (S)	%			100	75-125	
Toluene-d8 (S)	%			99	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1554745 1554746

Parameter	Units	10245652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	20.8	20.3	100	97	70-135	2	30	
Ethylbenzene	ug/L	33.5	20	20	100	51.4	333	89	75-125	64	30	M1,R1
Toluene	ug/L	11.9	20	20	31.9	30.0	100	91	75-125	6	30	
Xylene (Total)	ug/L	3210	60	60	1660	1710	-2580	-2490	75-125	3	30	ES,MS
1,2-Dichloroethane-d4 (S)	%						97	96	75-125			
4-Bromofluorobenzene (S)	%						97	99	75-125			
Toluene-d8 (S)	%						96	96	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: MSV/25355 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 10245652001, 10245652003, 10245652004, 10245652005, 10245652006

METHOD BLANK: 1556986 Matrix: Water
Associated Lab Samples: 10245652001, 10245652003, 10245652004, 10245652005, 10245652006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	10/19/13 13:49	
Ethylbenzene	ug/L	ND	1.0	10/19/13 13:49	
Toluene	ug/L	ND	1.0	10/19/13 13:49	
Xylene (Total)	ug/L	ND	3.0	10/19/13 13:49	
1,2-Dichloroethane-d4 (S)	%	109	75-125	10/19/13 13:49	
4-Bromofluorobenzene (S)	%	104	75-125	10/19/13 13:49	
Toluene-d8 (S)	%	102	75-125	10/19/13 13:49	

LABORATORY CONTROL SAMPLE: 1556987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.2	96	75-125	
Ethylbenzene	ug/L	20	19.4	97	75-125	
Toluene	ug/L	20	18.2	91	75-125	
Xylene (Total)	ug/L	60	58.7	98	75-125	
1,2-Dichloroethane-d4 (S)	%			110	75-125	
4-Bromofluorobenzene (S)	%			105	75-125	
Toluene-d8 (S)	%			103	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1556988 1556989

Parameter	Units	10246316002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	ND	20	20	24.0	22.4	120	112	70-135	7	30	
Ethylbenzene	ug/L	ND	20	20	23.4	22.6	117	113	75-125	4	30	
Toluene	ug/L	ND	20	20	22.4	21.3	112	107	75-125	5	30	
Xylene (Total)	ug/L	ND	60	60	70.6	66.9	118	112	75-125	5	30	
1,2-Dichloroethane-d4 (S)	%						112	112	75-125			
4-Bromofluorobenzene (S)	%						107	104	75-125			
Toluene-d8 (S)	%						103	103	75-125			

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: OEXT/23362 Analysis Method: EPA 8011
QC Batch Method: EPA 8011 Analysis Description: GCS 8011 EDB DBCP
Associated Lab Samples: 10245652002, 10245652004, 10245652005, 10245652006

METHOD BLANK: 1554984 Matrix: Water
Associated Lab Samples: 10245652002, 10245652004, 10245652005, 10245652006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.010	10/18/13 21:18	
4-Bromofluorobenzene (S)	%	100	70-130	10/18/13 21:18	

LABORATORY CONTROL SAMPLE: 1554985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	.11	0.089	83	60-140	
4-Bromofluorobenzene (S)	%			96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1554986 1554987

Parameter	Units	10245652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	6.0	.1	.11	6.8	6.1	755	107	60-140	10	20	M6
4-Bromofluorobenzene (S)	%						0	0	70-130			S4

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: OEXT/23387 Analysis Method: Alaska 102/103
QC Batch Method: EPA 3510 Analysis Description: AK1023 GCS
Associated Lab Samples: 10245652001, 10245652002, 10245652003, 10245652004, 10245652005, 10245652006, 10245652010

METHOD BLANK: 1557387 Matrix: Water
Associated Lab Samples: 10245652001, 10245652002, 10245652003, 10245652004, 10245652005, 10245652006, 10245652010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
DRO by AK 102	mg/L	ND	0.40	10/21/13 17:52	N2
Residual Range Organics AK103	mg/L	ND	0.40	10/21/13 17:52	N2
n-Triacontane (S)	%	79	60-120	10/21/13 17:52	
o-Terphenyl (S)	%	78	60-120	10/21/13 17:52	

LABORATORY CONTROL SAMPLE & LCSD: 1557388 1557442

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
DRO by AK 102	mg/L	2	1.7	1.6	84	82	75-125	3	20	N2
Residual Range Organics AK103	mg/L	2	1.9	1.9	95	96	60-120	.9	20	N2
n-Triacontane (S)	%				85	83	60-120			
o-Terphenyl (S)	%				86	86	60-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1557389 1557390

Parameter	Units	10245652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
DRO by AK 102	mg/L	3.1	2.2	2.1	4.4	4.7	63	79	50-150	6	20	N2
Residual Range Organics AK103	mg/L	1.1	2.2	2.1	3.1	3.3	94	105	50-150	5	20	N2
n-Triacontane (S)	%						75	80	50-150			
o-Terphenyl (S)	%						76	81	50-150			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1557391 1557392

Parameter	Units	10245747003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
DRO by AK 102	mg/L	ND	2.1	2.1	1.8	1.8	77	78	50-150	2	20	N2
Residual Range Organics AK103	mg/L	ND	2.1	2.1	2.0	2.1	95	102	50-150	6	20	N2
n-Triacontane (S)	%						84	88	50-150			
o-Terphenyl (S)	%						86	88	50-150			

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 211081 Geist
Pace Project No.: 10245652

QC Batch: OEXT/23445 Analysis Method: Alaska 102/103
QC Batch Method: EPA 3510 Analysis Description: AK1023 GCS
Associated Lab Samples: 10245652002, 10245652003, 10245652004, 10245652005, 10245652006

METHOD BLANK: 1561468 Matrix: Water
Associated Lab Samples: 10245652002, 10245652003, 10245652004, 10245652005, 10245652006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
DRO by AK 102 Silica Gel Clean	mg/L	ND	0.40	10/25/13 13:22	N2
n-Triacontane (S) SG	%	77	60-120	10/25/13 13:22	
o-Terphenyl (S) SG	%	71	60-120	10/25/13 13:22	

LABORATORY CONTROL SAMPLE & LCSD: 1561469 1561470

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
DRO by AK 102 Silica Gel Clean	mg/L	2	1.5	1.4	75	70	75-125	6	20	L0,N2
n-Triacontane (S) SG	%				75	70	60-120			
o-Terphenyl (S) SG	%				77	74	60-120			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1561471 1561472

Parameter	Units	10245652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
DRO by AK 102 Silica Gel Clean	mg/L	1.8	2.2	2.1	3.2	3.2	62	63	50-150	.8	20	N2
n-Triacontane (S) SG	%						64	68	50-150			
o-Terphenyl (S) SG	%						69	73	50-150			

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 211081 Geist
Pace Project No.: 10245652

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

1M	Surrogate recovery outside laboratory control limits due to matrix interferences.
ES	The reported result is estimated because one or more of the constituent results are qualified as such.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold TNI accreditation for this parameter.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
R1	RPD value was outside control limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 211081 Geist
Pace Project No.: 10245652

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10245652002	**G-3**	EPA 8011	OEXT/23362	EPA 8011	GCSV/12275
10245652004	**G-5**	EPA 8011	OEXT/23362	EPA 8011	GCSV/12275
10245652005	**G-7**	EPA 8011	OEXT/23362	EPA 8011	GCSV/12275
10245652006	**G-8**	EPA 8011	OEXT/23362	EPA 8011	GCSV/12275
10245652001	**G-1R**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652002	**G-3**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652002	**G-3**	EPA 3510	OEXT/23445	Alaska 102/103	GCSV/12301
10245652003	**G-4**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652003	**G-4**	EPA 3510	OEXT/23445	Alaska 102/103	GCSV/12301
10245652004	**G-5**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652004	**G-5**	EPA 3510	OEXT/23445	Alaska 102/103	GCSV/12301
10245652005	**G-7**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652005	**G-7**	EPA 3510	OEXT/23445	Alaska 102/103	GCSV/12301
10245652006	**G-8**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652006	**G-8**	EPA 3510	OEXT/23445	Alaska 102/103	GCSV/12301
10245652010	**BD-1**	EPA 3510	OEXT/23387	Alaska 102/103	GCSV/12274
10245652001	**G-1R**	Alaska 101	GCV/11398		
10245652002	**G-3**	Alaska 101	GCV/11398		
10245652003	**G-4**	Alaska 101	GCV/11398		
10245652004	**G-5**	Alaska 101	GCV/11398		
10245652005	**G-7**	Alaska 101	GCV/11404		
10245652006	**G-8**	Alaska 101	GCV/11398		
10245652009	**Trip Blank**	Alaska 101	GCV/11398		
10245652010	**BD-1**	Alaska 101	GCV/11398		
10245652001	**G-1R**	EPA 8260	MSV/25355		
10245652002	**G-3**	EPA 8260	MSV/25330		
10245652003	**G-4**	EPA 8260	MSV/25355		
10245652004	**G-5**	EPA 8260	MSV/25355		
10245652005	**G-7**	EPA 8260	MSV/25355		
10245652006	**G-8**	EPA 8260	MSV/25355		
10245652007	**MW-301D**	EPA 8260	MSV/25330		
10245652008	**MW-304D**	EPA 8260	MSV/25323		
10245652009	**Trip Blank**	EPA 8260	MSV/25323		
10245652010	**BD-1**	EPA 8260	MSV/25323		

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1124, 1125

10245652

Page: 1 of 1

1630765

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ARCADIS U.S.	Report To: Greg Montgomery	Attention:
Address: 1100 Olive Way Suite 800 Seattle, WA 98101	Copy To: Dave Beardain, Tammy Perisse	Company Name:
Email To: Gregory.Montgomery@	Purchase Order No.: B0045498.0006	Address:
Phone: 206.726.4742 Fax: arcadis-us.com	Project Name: Geist	Pace Quote Reference:
Requested Due Date/TAT: 10 day STAT	Project Number: 21108i	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: BTEX USEPA 8260	Gro AK 101	Dro AK 102	D&O w/SGC AK102	Gro AK 103	EDB USEPA 8011	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	G-1R	WT	G	10.10.13	1515				9				X					N	N	N	N	N	N	N	001
2	G-3	WT	G	10.10.13	1545				9				X					N	N	N	N	N	N	N	002
3	G-4	WT	G	10.10.13	1730				9				X					N	N	N	N	N	N	N	003
4	G-5	WT	G	10.10.13	1315				9				X					N	N	N	N	N	N	N	004
5	G-7	WT	G	10.10.13	1800				9				X					N	N	N	N	N	N	N	005
6	G-8	WT	G	10.10.13	1700				9				X					N	N	N	N	N	N	N	006
7	MW-301D	WT	G	10.10.13	1200				6				X					N	N	N				N	007
8	MW-304D	WT	G	10.10.13	1215				6				X					N	N	N				N	008
9	BD-1	WT	G	10.10.13	—				9				X					N	N	N		N		N	~~008~~ 011
10	MS	WT	G	10.10.13	1545				8				X					N	N	N		N		N	~~009~~ 010
11	MSD	WT	G	10.10.13	1545				8				X					N	N	N		N		N	~~010~~ 011
12	Trip Blank	WT	—	—	—				4				X					N	N					3	~~011~~ 009

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Any Q's call Dave 307.200.1290	/ARCADIS	10.11.13	10.15	AA/pace	10/12/13	8:30

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y	Y	Y

SAMPLER NAME AND SIGNATURE: David G Beardain

PRINT Name of SAMPLER: David G Beardain

SIGNATURE of SAMPLER: DGB

DATE Signed (MM/DD/YY): 10/11/13

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 19Sep2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.07	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: ARCADIS Project #: WO#: 10245652

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 7958 5063 5956, 8020 4472 9208.

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No Seals Intact? ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☑ Other: 2 PLC Temp Blank? ☑ Yes ☐ No

Thermom. Used: ☑ 80512447 ☐ 72337080 ☐ B88A912167504 ☐ B88A9132521491 Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 4.4, 1.0 Cooler Temp Corrected (°C): 4.3, 0.9 Biological Tissue Frozen? ☐ Yes ☐ No

Temp should be above freezing to 6°C Correction Factor: -0.1 Date and Initials of Person Examining Contents: 10/12/13 MM

				Comments:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☑ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☑ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	7.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☑ N/A	11.
Sample Labels Match COC? 10/12/13 MM	~~☐ Yes~~	☑ No	☐ N/A	12. MW-301D, MW-304D Both have 3 Missing Vials
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☑ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☐ Yes	☐ No	CW 10-14	Initial when completed: CW Lot # of added preservative:
Headspace in VOA Vials (>6mm)? CW 10-14	☑ Yes	☑ No	☐ N/A	14. 8/13 Have Headspace
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	15. 13 Trip Blanks.
Trip Blank Custody Seals Present?	☑ Yes	☐ No	☐ N/A	
Pace Trip Blank Lot # (if purchased): 090513-01, 061113-1,				

CLIENT NOTIFICATION/RESOLUTION Field Data Required? ☐ Yes ☐ No

Person Contacted: Tammy Parise Date/Time: 10/15/13 12:05

Comments/Resolution:

MW301D / MW304D only analyze for BTEX. CW

Project Manager Review: JENN GROSS Date: 10/16/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, ~~out of~~ temp, incorrect containers)

ANALYTICA
Environmental Laboratories

Analytica Group, LLC-Fairbanks
475 Hall St.
Fairbanks, AK 99701
Phone: 907-456-3116
Fax: 907-456-3125

8/30/2013

Arcadis
2300 E. Lake Ave. E.
Suite 200
Seattle, WA 98102
Attn: Greg Montgomery

Work Order #: F1308144
Date: 8/30/2013
Work ID: UAF Quarterly Sampling 2013
Date Received: 8/15/2013
Proj #: none

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
F1308144-01	Effluent	F1308144-02	Influent
F1308144-03	GW-1B	F1308144-04	GW-2
F1308144-05	Travel Blank	F1308144-06	Travel Blank

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Carissa Seltrecht
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Group, LLC - Fairbanks

Work Order: F1308144

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Method AK101 For the Determination of Gasoline Range Organics, Revision 3.0, 01/31/96.

Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA 600/4-82-057, July 1982.

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December 1996.

SAMPLE RECEIPT:
Six (6) samples were received on 8/15/2013 12:40:00 PM at a temperature of 4.5°C at Analytica International - Fairbanks. The samples were received in good condition and in order per chain of custody.

The samples were transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where they were received at a temperature of 1.2°C, in good condition and in order per chain of custody.

Samples were received at a temperature of REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN
A summary of our review is shown below.

All analytical results contained in this report have been reviewed under Analytica's internal quality assurance and quality control program. Any deviations in quality control parameters for specific analyses are noted in the following text. A complete quality assurance report, including laboratory control, matrix spike, and sample duplicate recoveries, is kept on file in our office and is available upon request.

All method specifications were met for the following tests, unless otherwise noted:

Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes - Aqueous
Test Method: ADEC AK101 - GRO - Aqueous
Test Method: Aromatic VOCs by GC/PID via method 8021B - BTEX - Aqueous

Detailed Analytical Report

Analytica Group, LLC - Fairbanks

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **Effluent**

Matrix: Aqueous

Collection Date: 8/15/2013 11:40:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-01A

Prep Date: 8/20/2013

Analytical Method ID: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes

Prep Method ID:

Prep Batch Number: T130821004

Report Basis: As Received

Sample prep wt./vol: 5.00 ml

Analysis Date: 8/20/2013 5:21:00PM

Instrument: GC_B

File Name: 13082009.D

Dilution Factor: 1

Analyst Initials: CK

Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
1,2-Dichlorobenzene	95-50-1	**ND**		ug/L	3.0	0.54	1
1,3-Dichlorobenzene	541-73-1	**ND**		ug/L	3.0	0.73	
1,4-Dichlorobenzene	106-46-7	**ND**		ug/L	3.0	0.89	
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	
Chlorobenzene	108-90-7	**ND**		ug/L	1.0	0.30	
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**26**		ug/L	0.50	0.12	27	**95.7**	80	120	1

Detailed Analytical Report

Analytica Group, LLC - Fairbanks

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **Influent**

Matrix: Aqueous Collection Date: 8/15/2013 11:50:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-02A
Prep Date: 8/20/2013
Analytical Method ID: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Prep Method ID:
Prep Batch Number: T130821004
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/20/2013 5:55:00PM
Instrument: GC_B
File Name: 13082010.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
1,2-Dichlorobenzene	95-50-1	**ND**		ug/L	3.0	0.54	1
1,3-Dichlorobenzene	541-73-1	**ND**		ug/L	3.0	0.73	
1,4-Dichlorobenzene	106-46-7	**ND**		ug/L	3.0	0.89	
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	
Chlorobenzene	108-90-7	**ND**		ug/L	1.0	0.30	
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**27**		ug/L	0.50	0.12	27	**100**	80	120	1

Detailed Analytical Report

Analytica Group, LLC - Fairbanks

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **GW-1B**

Matrix: Aqueous Collection Date: 8/15/2013 12:00:00PM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-03A
Prep Date: 8/23/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130827009
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/23/2013 2:38:00PM
Instrument: GC_B
File Name: 13082308.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Gasoline Range Organics	n/a	**ND**		ug/L	100	21	3

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**27**		ug/L	1.5	0.50	27	**101**	50	150	3

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-03A
Prep Date: 8/23/2013
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: 5030B
Prep Batch Number: T130827008
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/23/2013 2:38:00PM
Instrument: GC_B
File Name: 13082308.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	2
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**28**		ug/L	0.50	0.12	27	**105**	80	120	2

Detailed Analytical Report

Analytica Group, LLC - Fairbanks

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **GW-2**

Matrix: Aqueous Collection Date: 8/15/2013 12:10:00PM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-04A
Prep Date: 8/21/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130822023
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/22/2013 12:14:00AM
Instrument: GC_B
File Name: 13082115.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Gasoline Range Organics	n/a	**ND**		ug/L	100	21	2

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**25**		ug/L	1.5	0.50	27	**92.5**	50	150	2

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-04A
Prep Date: 8/21/2013
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: 5030B
Prep Batch Number: T130822021
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/22/2013 12:14:00AM
Instrument: GC_B
File Name: 13082115.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	2
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**26**		ug/L	0.50	0.12	27	**97.1**	80	120	2

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **Travel Blank**

Matrix: Aqueous Collection Date: 8/15/2013 12:00:00PM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-05A
Prep Date: 8/21/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130822023
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/21/2013 8:23:00PM
Instrument: GC_B
File Name: 13082108.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Gasoline Range Organics	n/a	**ND**		ug/L	100	21	2

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**26**		ug/L	1.5	0.50	27	**96.6**	50	150	2

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-05A
Prep Date: 8/21/2013
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: 5030B
Prep Batch Number: T130822021
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/21/2013 8:23:00PM
Instrument: GC_B
File Name: 13082108.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	1
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**27**		ug/L	0.50	0.12	27	**100**	80	120	1

Detailed Analytical Report

Analytica Group, LLC - Fairbanks

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Client Sample Report

Client Sample Name: **Travel Blank**

Matrix: Aqueous Collection Date: 8/15/2013 11:40:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: F1308144-06A
Prep Date: 8/20/2013
Analytical Method ID: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Prep Method ID:
Prep Batch Number: T130821004
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/20/2013 4:47:00PM
Instrument: GC_B
File Name: 13082008.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
1,2-Dichlorobenzene	95-50-1	**ND**		ug/L	3.0	0.54	1
1,3-Dichlorobenzene	541-73-1	**ND**		ug/L	3.0	0.73	
1,4-Dichlorobenzene	106-46-7	**ND**		ug/L	3.0	0.89	
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	
Chlorobenzene	108-90-7	**ND**		ug/L	1.0	0.30	
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**28**		ug/L	0.50	0.12	27	**102**	80	120	1

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Method Blank Report

Client Sample Name: **MB**

Matrix: Aqueous Collection Date: 8/20/2013 1:25:00PM

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T130821004-MB
Prep Date: 8/20/2013
Analytical Method ID: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes
Prep Method ID:
Prep Batch Number: T130821004
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/20/2013 1:58:00PM
Instrument: GC_B
File Name: 13082003.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
1,2-Dichlorobenzene	95-50-1	**ND**		ug/L	3.0	0.54	1
1,3-Dichlorobenzene	541-73-1	**ND**		ug/L	3.0	0.73	
1,4-Dichlorobenzene	106-46-7	**ND**		ug/L	3.0	0.89	
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	
Chlorobenzene	108-90-7	**ND**		ug/L	1.0	0.30	
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**30**		ug/L	0.50	0.12	27	**111**	80	120	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T130822023-MB
Prep Date: 8/21/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130822023
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/21/2013 6:12:00PM
Instrument: GC_B
File Name: 13082104.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Gasoline Range Organics	n/a	**ND**		ug/L	100	21	2

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**25**		ug/L	1.5	0.50	27	**93.6**	50	150	2

Lab Sample Number: T130827009-MB
Prep Date: 8/23/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130827009
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/23/2013 12:24:00PM
Instrument: GC_B
File Name: 13082304.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Gasoline Range Organics	n/a	**ND**		ug/L	100	21	1

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Report Section: Method Blank Report

Client Sample Name: **MB**

Matrix: Aqueous Collection Date: 8/23/2013 11:51:00AM

Lab Sample Number: T130827009-MB
Prep Date: 8/23/2013
Analytical Method ID: ADEC AK101 - GRO
Prep Method ID: 5030B
Prep Batch Number: T130827009
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/23/2013 12:24:00PM
Instrument: GC_B
File Name: 13082304.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

p-Bromofluorobenzene	460-00-4	**25**		ug/L	1.5	0.50	27	**94.2**	50	150	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T130822021-MB
Prep Date: 8/21/2013
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: 5030B
Prep Batch Number: T130822021
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/21/2013 6:12:00PM
Instrument: GC_B
File Name: 13082104.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	2
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**27**		ug/L	0.50	0.12	27	**102**	80	120	2

Lab Sample Number: T130827008-MB
Prep Date: 8/23/2013
Analytical Method ID: Aromatic VOCs by GC/PID via method 8021B - BTEX
Prep Method ID: 5030B
Prep Batch Number: T130827008
Report Basis: As Received
Sample prep wt./vol: 5.00 ml

Analysis Date: 8/23/2013 12:24:00PM
Instrument: GC_B
File Name: 13082304.D
Dilution Factor: 1
Analyst Initials: CK
Prep Extract Vol: 5.00 ml

Analyte	CASNo	Result	Flags	Units	PQL	MDL	run #:
Benzene	71-43-2	**ND**		ug/L	1.0	0.33	1
Ethylbenzene	100-41-4	**ND**		ug/L	1.5	0.46	
Toluene	108-88-3	**ND**		ug/L	1.2	0.35	
Xylenes, Total	1330-20-7	**ND**		ug/L	3.0	0.82	

Surrogate	CASNo	Result	Flags	Units	PQL	MDL	Spike	% Recov	LCL	UCL	run #:
p-Bromofluorobenzene	460-00-4	**27**		ug/L	0.50	0.12	27	**99.8**	80	120	1

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

Tests Run at:
Workorder (SDG):
Project:
Project Number:
Prep Batch:

QUALITY CONTROL REPORT

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little signifcance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **152,318** **Lab Project Number:** **F1308144**

Prep Date: 8/20/2013

Lab Method Blank Id: T130821004-MB
Prep Batch ID: T130821004
Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T130821004-LCS	LCS	13082004.D	8/20/2013 2:31:00PM
F1308144-06A	Travel Blank	13082008.D	8/20/2013 4:47:00PM
F1308144-01A	Effluent	13082009.D	8/20/2013 5:21:00PM
F1308144-02A	Influent	13082010.D	8/20/2013 5:55:00PM
A1308338-01A	Batch QC	13082013.D	8/20/2013 7:35:00PM
A1308338-01A-MS	MS	13082014.D	8/20/2013 8:08:00PM
A1308338-01A-MSD	MSD	13082015.D	8/20/2013 8:42:00PM

Prep Date: 8/21/2013

Lab Method Blank Id: T130822021-MB
Prep Batch ID: T130822021
Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T130822021-LCS	LCS	13082105.D	8/21/2013 6:45:00PM
F1308144-05A	Travel Blank	13082108.D	8/21/2013 8:23:00PM
F1308144-03A-MS	MS	13082112.D	8/21/2013 10:35:00PM
F1308144-03A-MSD	MSD	13082113.D	8/21/2013 11:08:00PM
F1308144-04A	GW-2	13082115.D	8/22/2013 12:14:00AM

Prep Date: 8/21/2013

Lab Method Blank Id: T130822023-MB
Prep Batch ID: T130822023
Method: ADEC AK101 - GRO

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T130822023-LCS	LCS	13082106.D	8/21/2013 7:18:00PM
F1308144-05A	Travel Blank	13082108.D	8/21/2013 8:23:00PM
F1308144-04A	GW-2	13082115.D	8/22/2013 12:14:00AM
F1308144-04A-MS	MS	13082116.D	8/22/2013 12:47:00AM
F1308144-04A-MSD	MSD	13082117.D	8/22/2013 1:20:00AM

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: **152,318** **Lab Project Number:** **F1308144**

Prep Date: 8/23/2013

Lab Method Blank Id: T130827008-MB
Prep Batch ID: T130827008
Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T130827008-LCS	LCS	13082305.D	8/23/2013 12:57:00PM
F1308144-03A	GW-1B	13082308.D	8/23/2013 2:38:00PM
F1308144-03A-MS	MS	13082309.D	8/23/2013 3:11:00PM
F1308144-03A-MSD	MSD	13082310.D	8/23/2013 3:45:00PM

Prep Date: 8/23/2013

Lab Method Blank Id: T130827009-MB
Prep Batch ID: T130827009
Method: ADEC AK101 - GRO

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

SampleNum	ClientSampleName	DataFile	AnalysisDate
T130827009-LCS	LCS	13082306.D	8/23/2013 1:31:00PM
F1308144-03A	GW-1B	13082308.D	8/23/2013 2:38:00PM

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.
Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit
NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit
HIGH = Recovery , RPD, or other parameter is above Upper Control Limit
E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank
J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)
W = Post digestion spike did not meet criteria
S = Reported value determined by the Method of Standard Additions (MSA)

Several ways of defining the limit of detection and quantitation are prevalent in the laboratory industry and may appear in Analytica reports. These include the following:

MRL = "minimum reporting level", from the EPA Safe Drinking Water program (SDW)
PQL = "practical quantitation limit", from SW-846
EQL = "estimated quantitation limit", from SW-846
LOQ = "limit of quantitation", from a number of authoritative sources

In Analytica's work, all of these terms have the same meaning, equivalent to the EPA definition of the MRL. This reporting level is supported by a satisfactory calibration data point which is at that level or lower, and also is supported by a method detection limit (MDL) determined by the procedure in 40CFR. The MDL is lower than the MRL and represents an estimate of the level where positive detections have a 99% probability of being real, but where quantitation accuracy is unknown.

The MRL as defined by Analytica is the lowest demonstrated point of known quantitation accuracy.
The MRL should not be confused with the MCL, which is the EPA-defined "maximum contaminant level" allowed for certain regulated targets under specific regulations, such as the National Primary Drinking Water Regulations. Normally, the MRL is set at a level which is much lower than the MCL in order to ensure that levels are well below those limits. Not all target analytes have MCL levels established.

Other Flags may be applied. See Case Narrative for Description

Workorder (SDG): F1308144

Project: **UAF Quarterly Sampling 2013**

Client: **Arcadis**

Client Project Number: **none**

REPORTING CONVENTIONS FOR THIS REPORT

TestPkgName	Basis	# Sig Figs	Reporting Limit

Analytica Chain of Custody Form

ANALYTICA GROUP®

12189 Pennsylvania St.
Thornton, CO 80241
(303) 469-8868
(303) 469-5254 fax

4307 Arctic Boulevard
Anchorage, AK 99503
(907) 258-2155
(907) 258-6634 fax

475 Hall St.
Fairbanks, AK 99701
(907) 456-3116
(907) 456 3125 fax

701 E. Parks Hwy., Suite 203
Wasilla, AK 99654
(907) 373-5440

Chain of Custody No: 087775

Client Name & Address:
ARCADIS US, Inc.
1100 olive Way
Seattle, WA, 98102

Public Water System (PWS) ID#:

Project Name: UAI Water Treatment Plant and Production Wells. associated w/ CEM Facility #21089

Section to be Completed by Analytica
Quote ID: LGN:
Account #:

2 or 6 TB
x3 analysis

Report to: Greg Montgomery
Phone No: (206) 726-4742
Fax No:
E-mail: gregory.montgomery@arcadis-us.com

Turnaround Time for Results (TAT)
✓ Standard ___ Expedited (< 10 days, prior authorization required)
X Routine ___ Non-Routine (please specify due date below; add'tl charges may apply)

Requested Due Date for Results:

Invoice to Name &

Special Instructions/Comments:

P.O. or Contract No:

Requested Analysis/Method

Kit Prep/Shipping Charge: $

Client Sample Identification / Location	Date Sampled	Time Sampled	Matrix (S-DW-WW-Other)	No. of Containers	BTEX 602 Chlorobenzene	Lot #: Pres: HCl	BTEX 8021B	Lot #: Pres: HCl	GRO (AK101)	Lot #: Pres: HCl		Lot #: Pres:		Lot #: Pres:		Lot #: Pres:		Lot #: Pres:	Field Preserved	Field Filtered	MS/MSD ?
Effluent	8-15-13	11:40	water	4	✓																
Influent	8-15-13	11:50	Water	4	✓																
GW-1B	8-15-13	12:00	Water	4			✓		✓												
GW-2	8-15-13	12:10	Water	4			✓		✓												
Trip Blank																					

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	8-15-13	12:40	[signature]	8/15/13	1240
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Name of Sampler: (printed)	David Beaudoin				

Section to be completed by Analytica

	THO	ANC	FBKS	WAS
Condition of Custody Seal?			✓	
Initialed by:				
Temp/Loc:			4.5°C *	
Thermo ID#:			B	
Shipped Via:			hand	

Version 2.0

* Samples received on a cooler w/ frozen ice.

Analytica Group, LLC-Fairbanks
475 Hall St.
Fairbanks, AK 99701
907-456-3116
Fax: 907-456-3125

11/19/2013

Arcadis
2300 E. Lake Ave. E.
Suite 200
Seattle, WA 98102
Attn: Greg Montgomery

Work Order #: F1311060
Date: 11/19/2013
Work ID: UAF Quarterly Sampling 2013
Date Received: 11/6/2013

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
F1311060-01	Effluent-W-110613	F1311060-02	Influent-W-110613
F1311060-03	Travel Blank		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

Jenny Lang
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Group, LLC - Fairbanks

Work Order: F1311060

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, EPA 600/4-82-057, July 1982.

SAMPLE RECEIPT:
Three (3) samples were received on 11/6/2013 3:00:00 PM at Analytica International - Fairbanks. The samples were received at a temperature of 4.5°C in good condition and in order per chain of custody.

Comments:
The samples were transferred for analysis to Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241, where they were received at a temperature of 1.4°C, in good condition and in order per chain of custody

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN
A summary of our review is shown below.

All analytical results contained in this report have been reviewed under Analytica's internal quality assurance and quality control program. Any deviations in quality control parameters for specific analyses are noted in the following text. A complete quality assurance report, including laboratory control, matrix spike, and sample duplicate recoveries is kept on file in our office and is available upon request.

All method specifications were met for the following tests, unless otherwise noted:

Test Method: 602 - Purgeable Aromatics by GC/PID - BTEX & Chlorobenzenes - Aqueous

Analytica Group, LLC-Fairbanks
475 Hall St.
Fairbanks, AK 99701
Phone: 907-456-3116
Fax: 907-456-3125

Arcadis
Attn: Mr. Greg Montgomery
2300 E. Lake Ave. E.
Suite 200
Seattle, WA 98102
206-726-4742
Fax: 206-325-8218

Report Date: 11/19/2013
Receipt Date: 11/6/2013
Sample Date: 11/6/2013
Sample Time: 2:30:00PM
Collected By: DB

Client Sample ID: Effluent-W-110613
Sampling Location:
Client Project: UAF Quarterly Sampling 2013
Sample Matrix: Aqueous
COC #: 087911
PWS#:
Residual Chlorine:
Comments:

Flag Definitions:
MRL = Method Reporting Limit
MCL = Maximum Contaminant Limit
B = Present also in Method Blank
H = Exceeds Regulatory Limit
M = Matrix Interference
J = Estimated Value
D = Lost to Dilution
** = RL higher than MCL; target not detected
TNC = Too Numerous to Count - result rejected
CF = Confluent Growth - result rejected
TCNG = Turbid Culture No Growth - rejected

Lab#: F1311060-01A

Analysis Method Parameter	Result	Units	Flags	MRL	Prep Method	Prep Date	Analysis Date	Analyst
602 (Aqueous) - BTEX & Chlorobenzenes					*Test was conducted by: Analytica - Thornton*			
1,2-Dichlorobenzene	<MRL	ug/L		3.0	***600***	11/11/2013	11/11/2013	CK
1,3-Dichlorobenzene	<MRL	ug/L		3.0		11/11/2013	11/11/2013	CK
1,4-Dichlorobenzene	<MRL	ug/L		3.0	***75***	11/11/2013	11/11/2013	CK
Benzene	<MRL	ug/L		1.0	***5.0***	11/11/2013	11/11/2013	CK
Chlorobenzene	<MRL	ug/L		1.0	***100***	11/11/2013	11/11/2013	CK
Ethylbenzene	<MRL	ug/L		1.5	***700***	11/11/2013	11/11/2013	CK
Toluene	<MRL	ug/L		1.2	***1000***	11/11/2013	11/11/2013	CK
Xylenes, Total	<MRL	ug/L		3.0	***10000***	11/11/2013	11/11/2013	CK
Surrogate Recoveries	**% Rec**	**Limits**						
p-Bromofluorobenzene	**111**	(80-120)		0.50		11/11/2013	11/11/2013	CK

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Arcadis
Attn: Mr. Greg Montgomery
2300 E. Lake Ave. E.
Suite 200
Seattle, WA 98102
206-726-4742
Fax: 206-325-8218

Report Date: 11/19/2013
Receipt Date: 11/6/2013
Sample Date: 11/6/2013
Sample Time: 2:40:00PM
Collected By: DB

Client Sample ID: Influent-W-110613
Sampling Location:
Client Project: UAF Quarterly Sampling 2013
Sample Matrix: Aqueous
COC #: 087911
PWS#:
Residual Chlorine:
Comments:

Flag Definitions:
MRL = Method Reporting Limit
MCL = Maximum Contaminant Limit
B = Present also in Method Blank
H = Exceeds Regulatory Limit
M = Matrix Interference
J = Estimated Value
D = Lost to Dilution
** = RL higher than MCL; target not detected
TNC = Too Numerous to Count - result rejected
CF = Confluent Growth - result rejected
TCNG = Turbid Culture No Growth - rejected

Lab#: F1311060-02A

Analysis Method Parameter	Result	Units	Flags	MRL	Prep Method	Prep Date	Analysis Date	Analyst
602 (Aqueous) - BTEX & Chlorobenzenes					*Test was conducted by: Analytica - Thornton*			
1,2-Dichlorobenzene	<MRL	ug/L		3.0	***600***	11/11/2013	11/11/2013	CK
1,3-Dichlorobenzene	<MRL	ug/L		3.0		11/11/2013	11/11/2013	CK
1,4-Dichlorobenzene	<MRL	ug/L		3.0	***75***	11/11/2013	11/11/2013	CK
Benzene	<MRL	ug/L		1.0	***5.0***	11/11/2013	11/11/2013	CK
Chlorobenzene	<MRL	ug/L		1.0	***100***	11/11/2013	11/11/2013	CK
Ethylbenzene	<MRL	ug/L		1.5	***700***	11/11/2013	11/11/2013	CK
Toluene	<MRL	ug/L		1.2	***1000***	11/11/2013	11/11/2013	CK
Xylenes, Total	<MRL	ug/L		3.0	***10000***	11/11/2013	11/11/2013	CK
Surrogate Recoveries	**% Rec**	**Limits**						
p-Bromofluorobenzene	**104**	(80-120)		0.50		11/11/2013	11/11/2013	CK

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Arcadis
Attn: Mr. Greg Montgomery
2300 E. Lake Ave. E.
Suite 200
Seattle, WA 98102
206-726-4742
Fax: 206-325-8218

Report Date: 11/19/2013
Receipt Date: 11/6/2013
Sample Date: 11/6/2013
Sample Time: 2:40:00PM
Collected By: Lab

Client Sample ID: Travel Blank
Sampling Location:
Client Project: UAF Quarterly Sampling 2013
Sample Matrix: Aqueous
COC #: 087911
PWS#:
Residual Chlorine:
Comments:

Flag Definitions:
MRL = Method Reporting Limit
MCL = Maximum Contaminant Limit
B = Present also in Method Blank
H = Exceeds Regulatory Limit
M = Matrix Interference
J = Estimated Value
D = Lost to Dilution
** = RL higher than MCL; target not detected
TNC = Too Numerous to Count - result rejected
CF = Confluent Growth - result rejected
TCNG = Turbid Culture No Growth - rejected

Lab#: F1311060-03A

Analysis Method / Parameter	Result	Units	Flags	MRL	Prep Method	Prep Date	Analysis Date	Analyst
602 (Aqueous) - BTEX & Chlorobenzenes					*Test was conducted by: Analytica - Thornton*			
1,2-Dichlorobenzene	<MRL	ug/L		3.0	***600***	11/11/2013	11/11/2013	CK
1,3-Dichlorobenzene	<MRL	ug/L		3.0		11/11/2013	11/11/2013	CK
1,4-Dichlorobenzene	<MRL	ug/L		3.0	***75***	11/11/2013	11/11/2013	CK
Benzene	<MRL	ug/L		1.0	***5.0***	11/11/2013	11/11/2013	CK
Chlorobenzene	<MRL	ug/L		1.0	***100***	11/11/2013	11/11/2013	CK
Ethylbenzene	<MRL	ug/L		1.5	***700***	11/11/2013	11/11/2013	CK
Toluene	<MRL	ug/L		1.2	***1000***	11/11/2013	11/11/2013	CK
Xylenes, Total	<MRL	ug/L		3.0	***10000***	11/11/2013	11/11/2013	CK
Surrogate Recoveries	**% Rec**	**Limits**						
p-Bromofluorobenzene	**110**	(80-120)		0.50		11/11/2013	11/11/2013	CK

Analytica Chain of Custody Form

F1311060

Page 1 of 1

Chain of Custody No: 087911

ANALYTICA GROUP®

12189 Pennsylvania St.
Thornton, CO 80241
(303) 469-8868
(303) 469-5254 fax

4307 Arctic Boulevard
Anchorage, AK 99503
(907) 258-2155
(907) 258-6634 fax

475 Hall St.
Fairbanks, AK 99701
(907) 456-3116
(907) 456 3125 fax

701 E. Parks Hwy., Suite 203
Wasilla, AK 99654
(907) 373-5440

Client Name & Address:
ARCADIS US, Inc
1100 Olive Way, Suite 800
Seattle, WA 98102

Public Water System (PWS) ID#:

Project Name: Geist 211081

Section to be Completed by Analytica
Quote ID: LGN:
Account #: Check Credit Card

Report to: Gregory Montgomery
Phone No: (206) 726-4742
Fax No:
E-mail: Gregory.Montgomery@arcadis-us.com
Special Instructions/Comments:

Turnaround Time for Results (TAT)
[X] Standard [ ] Expedited (< 10 days, prior authorization required)
[ ] Routine [ ] Non-Routine (please specify due date below; add'tl charges may apply)
Requested Due Date for Results:

Invoice to Name & Address:

P.O. or Contract No:

Requested Analysis/Method

Kit Prep/Shipping Charge: $

Client Sample Identification / Location	Date Sampled	Time Sampled	Matrix (S-DW-WW-Other)	No. of Containers	BTEX 602 Lot #: Pres:	BTEX 602B Lot #: Pres:	Lot #: Pres:	Lot #: Pres:	Lot #: Pres:	Lot #: Pres:	Lot #: Pres:	Field Preserved	Field Filtered	MS/MSD ?
Effluent-W-110613	11.06.13	14:30	DW	4	X									
Influent-W-110613	11.06.13	14:40	DW	4	X									
Trip Blank			DW	4	X									

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	11-06-13	15:00	[signature] - Roberts	11-6-13	15:00
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Name of Sampler: (printed) David Beaudoin

Section to be completed by Analytica

	THO	ANC	FBKS	WAS
Condition of Custody Seal?			/	
Initialed by:				
Temp/Loc:			4.5°C	
Thermo ID#:			B	
Shipped Via:			hand	

Version 2.0

ARCADIS

Appendix C

ADEC Data Review Checklists

Laboratory Data Review Checklist

Completed by: David Beaudoin

Title: Scientist Date: December 9, 2013

CS Report Name: Second Semi-Annual 2013 Groundwater Monitoring Report Site #211081 Report Date: October 28, 2013

Consultant Firm: ARCADIS

Laboratory Name: Pace Analytical Services Laboratory Report Number: 10245652

ADEC File Number: 100.26.023 ADEC RecKey Number: 19893100002504

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

      Yes

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
      □Yes □ No □NA (Please explain.) Comments:

      N/A

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

      Yes

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

      Yes

3. Laboratory Sample Receipt Documentation
   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?
      □Yes □ No □NA (Please explain.) Comments:

      Yes

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

      Yes

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

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

Data quality or usability does not appear to be affected.

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:

Yes

c. Were all corrective actions documented?
□Yes □ No □NA (Please explain.) Comments:

Yes

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

No effect on the data usability

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

□Yes □ No □NA (Please explain.) Comments:

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

N/A

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:

Yes

e. Data quality or usability affected?
Comments:

Data quality or usability does not appear to be affected as benzene was detected above the PQL.

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:

N/A

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

N/A

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

Data quality or usability not expected to be affected.

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

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

Yes

□Yes □ No □NA (Please explain.) Comments:

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

□Yes □ No □NA (Please explain.) Comments:

NA

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:

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
G-3 (Lab ID: 10245652002), G-4 (Lab ID: 10245652003), G-5 (Lab ID: 10245652004), G-7 (Lab ID: 10245652005), • G-8 (Lab ID: 10245652006)□

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:

No, the RPD of Ethylbenzene for MS & MSD 1554745 was 64 and is above the max RPD of 30.

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

Comments:

The RPD is understood to be due to sample dilution and this is not anticipated to affect the usability of the data.

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

□Yes □ No □NA (Please explain.) Comments:

Yes

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

Comments:

Data quality or usability not expected to be affected

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:

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
G-3 (Lab ID: 10245652002) 4-Bromofluorobenzene (S), MS (Lab ID: 1554986) 4-Bromofluorobenzene (S), MSD (Lab ID: 1554987) 4-Bromofluorobenzene (S)

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:

Yes

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

Data quality or usability not expected 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:

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:

Data quality or usability is not 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)

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

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration
□Yes □ No □NA (Please explain.) Comments:

Yes

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

Comments:

Data quality or usability not expected to be affected

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

□Yes □ No □NA (Please explain.) Comments:

N/A. Equipment blank not collected due to the sampling method used in groundwater collection.

i. All results less than PQL?

□Yes □ No □NA (Please explain.) Comments:

N/A

ii. If above PQL, what samples are affected?

Comments:

N/A

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

Comments:

N/A

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)
    a. Defined and appropriate?
        □Yes □ No □NA (Please explain.) Comments:

N/A

Laboratory Data Review Checklist

Completed by: David Beaudoin

Title: Scientist Date: December 9, 2013

CS Report Name: Fourth Quarter 2013 UAF Sampling Report Site #211081 Report Date: August 30, 2013

Consultant Firm: ARCADIS

Laboratory Name: Pace Analytical Services Laboratory Report Number: F1311060

ADEC File Number: 100.26.023 ADEC RecKey Number: 19893100002504

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

      Yes

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
      Yes □ No □NA (Please explain.) Comments:

      Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241,□& yes.

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

      Yes

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

      Yes

3. Laboratory Sample Receipt Documentation
   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?
      □Yes □ No □NA (Please explain.) Comments:

      Yes

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

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:

NA – there were no discrepancies to document

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

Data quality or usability are not affected.

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:

NA - there were no discrepancies to document

   c. Were all corrective actions documented?
   □Yes □ No □NA (Please explain.) Comments:

NA – no corrective actions were required.

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

No effect on the data usability

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

   □Yes □ No □NA (Please explain.) Comments:

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

N/A – all water 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:

Yes

e. Data quality or usability affected?
Comments:

Data quality or usability are not affected.

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:

N/A

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

N/A

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

Data quality or usability not expected to be affected.

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

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

Yes

      □Yes □ No □NA (Please explain.) Comments:

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

□Yes □ No □NA (Please explain.) Comments:

NA

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

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

Comments:

Data quality or usability not affected

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 – there are no samples with failed surrogate recoveries and therefore, there are no flags.

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

Comments:

Data quality or usability not 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:

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:

Data quality or usability not 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)

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

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

□Yes □ No □NA (Please explain.) Comments:

Yes

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

Comments:

Data quality or usability not affected

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

□Yes □ No □NA (Please explain.) Comments:

N/A. Equipment blank not collected due to the sampling method used in groundwater collection.

i. All results less than PQL?

□Yes □ No □NA (Please explain.) Comments:

N/A

ii. If above PQL, what samples are affected?

Comments:

N/A

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

Comments:

N/A

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

a. Defined and appropriate?

□Yes □ No □NA (Please explain.) Comments:

N/A

Laboratory Data Review Checklist

Completed by: David Beaudoin

Title: Scientist Date: December 9, 2013

CS Report Name: Third Quarter 2013 UAF Sampling Report Site #211081 Report Date: August 30, 2013

Consultant Firm: ARCADIS

Laboratory Name: Pace Analytical Services Laboratory Report Number: F1308144

ADEC File Number: 100.26.023 ADEC RecKey Number: 19893100002504

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

      Yes

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
      Yes □ No □NA (Please explain.) Comments:

      Analytica Environmental Laboratories (AEL), 12189 Pennsylvania St., Thornton, Colorado 80241,□& yes.

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

      Yes

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

      Yes

3. Laboratory Sample Receipt Documentation
   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?
      □Yes □ No □NA (Please explain.) Comments:

      Yes

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

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:

NA – there were no discrepancies to document

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

Data quality or usability are not affected.

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:

NA - there were no discrepancies to document

   c. Were all corrective actions documented?
   □Yes □ No □NA (Please explain.) Comments:

NA – no corrective actions were required.

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

No effect on the data usability

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

   □Yes □ No □NA (Please explain.) Comments:

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

N/A – all water 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:

Yes

e. Data quality or usability affected?
Comments:

Data quality or usability are not affected.

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:

N/A

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

N/A

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

Data quality or usability not expected to be affected.

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

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

Yes

      □Yes □ No □NA (Please explain.) Comments:

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

□Yes □ No □NA (Please explain.) Comments:

NA

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

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

Comments:

Data quality or usability not affected

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 – there are no samples with failed surrogate recoveries and therefore, there are no flags.

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

Comments:

Data quality or usability not 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:

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:

Data quality or usability not 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)

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

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

□Yes □ No □NA (Please explain.) Comments:

Yes

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

Comments:

Data quality or usability not affected

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

□Yes □ No □NA (Please explain.) Comments:

N/A. Equipment blank not collected due to the sampling method used in groundwater collection.

i. All results less than PQL?

□Yes □ No □NA (Please explain.) Comments:

N/A

ii. If above PQL, what samples are affected?

Comments:

N/A

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

Comments:

N/A

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

a. Defined and appropriate?

□Yes □ No □NA (Please explain.) Comments:

N/A