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August 29, 2012

SCI Properties, LLC  
601 West State Street  
Sedro-Woolley, Washington 98284

Attention: David Gaines

Subject: Results of Post-Treatment Groundwater Compliance Monitoring  
SCI Properties, LLC  
601 West State Street  
Sedro-Woolley, Washington  
VCP Number NW1719  
GeoEngineers File No. 7408-002-08

## INTRODUCTION

This report presents the results of four rounds of post-treatment groundwater compliance monitoring performed in 2011 and 2012 at the Snelson Companies site, also known as SCI Properties LLC, Voluntary Cleanup site. The Site is located at 601 West State Street in Sedro-Woolley, Washington. Site monitoring wells were installed in several phases between 1999 and 2009. Cleanup actions, consisting primarily of excavation activities, were completed at the site in the late 1990s.

In 2006, the site was entered into Ecology's Voluntary Cleanup Program (VCP) and the final component of the cleanup action for the site, air sparging, was subsequently approved by Ecology. The in-situ air sparging remediation system was installed in early 2010 and operated at the site between June 2010 and May 2011. Based on favorable groundwater sampling results during the treatment duration (Table 1 presents the groundwater monitoring results before and during treatment), the system was shut down to allow post-compliance groundwater monitoring. Post-remediation groundwater monitoring was conducted quarterly following system shut down (August and November 2011 and February and May 2012).

## GROUNDWATER MONITORING

### Depth to Groundwater and Flow Direction

- GeoEngineers conducted post-remediation treatment groundwater compliance monitoring of MW-1, MW-5, MW-6, MW-7, MW-8, MW-9, and MW-10 on August 25 and November 22, 2011 and February 29 and May 22, 2012. Field procedures are described in Appendix A. Depths to



groundwater were measured in MW-1 and MW-5 through MW-10 during the quarterly events; the data are summarized in Table 2 and generally were as follows:

- In August 2011 groundwater was measured at depths generally between approximately 4 and 5 feet below ground surface (bgs) in the wells.
- In November 2011 groundwater was measured at depths between approximately 2.25 and 3.9 feet bgs in the wells.
- In February 2012 groundwater was measured at depths between approximately 1.25 and 2.75 feet bgs in the wells.
- In May 2012 groundwater was measured at depths between approximately 1.25 and 2.75 feet bgs in the wells.

Depths to groundwater during the monitoring events were generally consistent with typical seasonal fluctuations: higher levels were observed in the winter and spring (February and May) and lower levels in the summer and fall (August and November). The depths to groundwater observed between August 2011 and May 2012 were generally similar to previous depth to groundwater measurements between 1999 and 2010.

Interpreted groundwater elevation contours from each compliance event are show in Figures 2 through 5. Based on the groundwater elevation contours for August 2011 through May 2012, the groundwater gradient is essentially flat and the flow direction is variable from northwest to southwest. Variability may be the result of seasonal conditions related to changes in the Skagit River and/or seasonal agricultural water usage practices throughout the local area.

### Groundwater Sampling

Compliance groundwater samples were obtained from monitoring wells MW-1, MW-5, MW-6, MW-7, MW-8, MW-9 and MW-10 in November and August of 2011, and May and February 2012. Groundwater samples were collected using low-flow sampling procedures with a peristaltic pump (Master Flex E/STM). Groundwater parameters were measured using a Horiba U-22 Water Quality Meter. After the groundwater parameters had stabilized, samples were collected in laboratory-supplied glassware.

Groundwater samples were submitted to ALS Environmental of Everett, Washington for chemical analysis. The groundwater samples were analyzed for BETX (benzene, ethylbenzene, toluene and xylenes) by EPA Method 8021, gasoline-range petroleum hydrocarbons by Northwest Method NWTPH-Gx, and dissolved arsenic by EPA Method 6020. The chemical analytical data for the groundwater samples are discussed below and summarized in Figure 1 and Table 2. Chemical analytical reports for the sampling events are included in Appendix B.

BETX were not detected in post-treatment compliance groundwater samples. Gasoline-range hydrocarbons were not detected in the groundwater samples from MW-1, MW-5, MW-7, MW-8, MW-9 and MW-10; gasoline-range hydrocarbons were detected in the groundwater samples from MW-6 during the August 2011 and May 2012 sampling events at concentrations less than the Model Toxics Control Act (MTCA) Method A cleanup level.

Dissolved arsenic was detected in groundwater samples from MW-1, MW-5, MW-6, MW-7, MW-9, and MW-10 during one or more events in 2011/2012. The detected concentrations of dissolved arsenic in



the groundwater samples from MW-1, MW-5, MW-6, MW-9, and MW-10 were greater than the MTCA Method A cleanup level. The discussion below presents additional information regarding arsenic in groundwater.

Groundwater chemical analytical data from the post-compliance sampling events are summarized in Table 2. Groundwater monitoring and sampling procedures are described in Appendix A. Chemical analytical data sheets, chain-of-custody records and our review of the laboratory quality control (QC) data are presented in Appendix B.

## DISCUSSION – ARSENIC IN GROUNDWATER

Dissolved arsenic was detected in the 2011/2012 groundwater samples from wells MW-1, MW-5, MW-6, MW-7, MW-9, and MW-10. Dissolved arsenic concentrations during the compliance monitoring events ranged from 3.2 micrograms per liter (ug/L) to 21 ug/L. The lowest detected arsenic concentration was the August 2011 sample from MW-7 (3.2 ug/L). The highest detected concentration was the February 2012 sample from MW-5 (21 ug/L). In general, the highest relative concentrations in arsenic were in the groundwater samples from MW-5 and MW-10.

Three possible sources for arsenic in groundwater at the site are: 1) an on-site source if a release of arsenic from prior facility operations occurred; 2) an off-site source; or 3) naturally-occurring background arsenic. We evaluated each of these potential sources. Below is a summary of our evaluation and conclusions regarding each of these possible sources of arsenic in groundwater.

1. **On-Site Source.** The approximate 6-acre site comprises 3 acres that have been occupied by Snelson since about 1946 and 3 acres that were occupied by Snelson since the 1970s. Industrial-type activities have been conducted on approximately half of the site since the 1940s. There have been no reported arsenic releases on the site. Twenty-three soil samples obtained during prior phases of site characterization were tested for arsenic (GeoEngineers, 1999). Only one of these soil samples had a detected concentration of arsenic in soil greater than the MTCA Method A cleanup level: near-surface soil sample TP-E-0.6 obtained from west of Maintenance Building 2. Four additional soil samples (S16 through S19) were obtained in May 1999 near the TP-E soil sample location. Arsenic was not detected in the four additional samples at concentrations greater than the MTCA Method A cleanup level (GeoEngineers, 1999). The approximate locations of these explorations and samples are shown in the prior report figure in Appendix C. Based on this analysis, we conclude that the possibility that arsenic in groundwater samples from the site, from an on-site source, is low.
2. **Off-Site Source.** We did not identify any documented known or suspected sources of arsenic in the vicinity of the site based on a search of Department of Ecology's Toxic Cleanup program website resources. We reviewed Ecology's on-list listings of known or suspected contaminated sites within the same zip code as the subject site (Snelson/SCI Properties). There are 22 other listed sites within this zip code. According to Ecology's ISIS reports and available electronic documents for these 22 listed sites, no arsenic data for groundwater are reported. However, one of the listed sites is "suspected" to have arsenic in groundwater (Panorama Dump site on Old Day Creek Road approximately 7 miles southeast) and two other listed sites are suspected to have priority pollutant metals in groundwater, which might include arsenic. We note that Snelson well MW-6 is located off-property. Dissolved arsenic has consistently been detected in groundwater in MW-6. Comparing "upgradient" groundwater quality data for arsenic is otherwise inconclusive because of



the highly variable groundwater flow direction. Based on available information, we cannot rule out an off-site source of arsenic in groundwater because of the variable groundwater flow direction and insufficient off-site monitoring well data for comparison. It is possible that elevated concentrations of arsenic in groundwater beneath the site are due to an undocumented off-site source.

3. **Naturally-Occurring Background.** We researched available on-line groundwater quality information in the vicinity of the site related to arsenic from Skagit County, Department of Ecology, EIM and Washington State Department of Health (DOH). DOH data for arsenic in groundwater were found for 10 active and permanent groundwater well locations ranging between approximately 2 and 13 miles from the project site. No additional data sets closer in proximity were identified, and no nearby groundwater arsenic data was found in Ecology's EIM. We analyzed the arsenic data set from the DOH using Ecology's Background Stats Spreadsheet. The calculated "background concentration" for arsenic in groundwater (four times the 50<sup>th</sup> percentile of the data set) in the project vicinity from the DOH data set was 22 ug/L. Using the site groundwater monitoring data from June 1999 to May 2012, the comparable concentration for arsenic in groundwater at the SCI Properties, LLC site is 18.73 ug/L. This finding would suggest that concentrations of arsenic in site groundwater are similar to, or less than, the background level of dissolved arsenic concentration in off-site groundwater wells monitored by the Department of Health. See Table 3 for DOH arsenic data and the background concentration determination. Based on this information we conclude it is possible that elevated concentrations of arsenic in groundwater beneath the site are due to naturally occurring background conditions.

## CONCLUSIONS

Four quarters of post-remediation groundwater sampling have been completed at the site. Except for dissolved arsenic which is interpreted to be related to either naturally occurring background conditions or related to an off-site source, contaminants of concern in groundwater either were not detected or the detected concentrations were less than MTCA Method A cleanup levels.

## REFERENCES

- GeoEngineers, 2011. Remediation Progress Report – September 2010 to July 2011 – Air Sparging System Operation and Groundwater Compliance Monitoring – August 11, 2011.
- GeoEngineers, 2010a. Remediation Progress Report – May through August 2010 – Air Sparging System Installation and Groundwater Monitoring – October 11, 2010.
- GeoEngineers, 2010b. Focused Feasibility Study and Cleanup Action Plan Addendum – February 16, 2010.
- GeoEngineers, 2009. Supplemental Site Characterization, Focused Feasibility Study and Cleanup Action Plan – August 26, 2009.
- GeoEngineers, 2006. Results of Groundwater Monitoring and Sampling January 2006 – February 22, 2006.
- GeoEngineers, 2002. Results of Groundwater Monitoring and Sampling August 2002 – September 18, 2002.



GeoEngineers, 2001. Report of Environmental Services – Soil Remedial Excavation and Supplemental Subsurface Assessment – December 3, 2001.

GeoEngineers, 1999. Report of Environmental Services - Underground Storage Tank Removal and Subsurface Assessment – July 23, 1999.

## LIMITATIONS

We have prepared this report for use by SCI Properties, LLC. This report may be reviewed by regulatory agencies. Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted environmental science practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

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We appreciate the opportunity to work with you on this project. If you have any questions regarding this document or need additional information, please call.

Sincerely,  
GeoEngineers, Inc.

Paul R. Craig, LG  
Senior Project Manager

PRC:DLC:Iw



*Dana L. Carlisle*  
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Principal

### Attachments:

- Table 1 – Summary of Groundwater Chemical Analytical Data – 1999-2010
- Table 2 – Summary of Groundwater Chemical Analytical Data – 2011-2012
- Table 3 – Summary of Arsenic Data from WA State Department of Health
- Figure 1 – Post-Treatment Compliance Monitoring Data
- Figure 2 – Groundwater Elevations (August – 2011)
- Figure 3 – Groundwater Elevations (November – 2011)
- Figure 4 – Groundwater Elevations (February – 2012)
- Figure 5 – Groundwater Elevations (May 2012 – 2011)
- Appendix A. Groundwater Sampling and Field Procedures
- Appendix B. Chemical Analytical Program and Chemical Analytical Reports
- Appendix C. Copy of Figure from Prior Report (GeoEngineers, July 23, 1999)

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**Table 1**  
**Summary of Groundwater Chemical Analytical Data - 1999-2010**  
**Monitoring Wells**  
**SCI Properties LLC**  
**Sedro-Woolley, Washington**

Monitoring Well <sup>1</sup>	Date Sampled	BETX <sup>2</sup> (µg/L)				Gasoline-range Hydrocarbons <sup>3</sup> (µg/L)	Diesel-range Hydrocarbons <sup>4</sup> (mg/L)	Heavy Oil-range Hydrocarbons <sup>4</sup> (mg/L)	Total Arsenic <sup>7</sup> (µg/L)	Dissolved Arsenic <sup>5</sup> (µg/L)	Total Lead <sup>7</sup> (µg/L)	Dissolved Lead <sup>7</sup> (µg/L)
		B	E	T	X							
MW-1	06/08/99	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	8.65	--	--
	03/01/00	<0.500	<0.500	<0.500	<1.00	<50.0	0.648	1.07	--	3.58	--	--
	07/27/00	<0.500	<0.500	<0.500	<1.00	<50.0	0.308	<0.500	--	12.2	--	--
	11/06/00	<0.500	<0.500	<0.500	<1.00	<50.0	<0.250	<0.500	--	2.38	--	--
	01/30/01	<0.500	<0.500	<0.500	<1.00	<50.0	<0.250	<0.500	--	19.0	--	--
	05/29/01	<0.500	<0.500	<0.500	<1.00	<50.0	0.304	<0.500	--	<1.00	--	--
	08/28/01	<1.00	<1.00	<1.00	<3.00	<50.0	0.570	1.40	--	22.0	--	--
	08/12/02	--	--	--	--	--	--	--	--	15.0	--	--
	01/31/06	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	8.65	--	--
	09/04/08	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	14.9	--	--
	11/04/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	19	<3.00	4.3	<1.00
	12/09/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
MW-2	06/08/99	<0.500	<0.500	<0.500	<1.00	<50	<0.236	<0.472	--	1.10	--	--
	03/01/00	<0.500	<0.500	<0.500	<1.00	<250	<0.629	<0.629	--	--	--	--
	01/31/06	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	1.10	--	--
	09/04/08	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	1.79	--	--
	08/24/09	--	--	--	--	--	--	--	--	<3.00	--	<1.00
MW-3	06/08/99	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	<1.00	--	--
	01/31/06	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	<1.00	--	--
	09/04/08	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	<1.00	--	--
MW-4	03/01/00 <sup>6</sup>	<0.500	<0.500	<0.500	<1.00	<250	<0.630	<0.630	--	--	--	--
MW-5	03/01/00	23.1	<0.500	<0.500	<1.00	<50.0	1.93	<0.750	--	--	--	--
	07/27/00	45.3	<0.500	<0.500	<1.00	89.3	2.67	0.774	--	--	--	--
	11/06/00	29.5	<0.500	<0.500	<1.00	82.2	<0.250	<0.500	--	--	--	--
	01/30/01	17.8	<0.500	<0.500	<1.00	<50.0	<0.250	<0.500	--	--	--	--
	05/29/01	16.8	<0.500	<0.500	<1.00	<50.0	0.633	1.55	--	--	--	--
	08/29/01	24	<1.00	<1.00	<3.00	<50.0	<0.130	<0.250	--	--	--	--
	08/12/02 <sup>6</sup>	13	<1.00	<1.00	<3.00	<50.0	<0.200	<0.250	--	--	--	--
	01/31/06	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	2.38	--	--
	09/04/08	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	22.4	--	--
	11/04/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	15	12	<1.1	<1.00
	12/09/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
MW-6	07/27/00	1.09	0.541	<0.500	<1.00	<50.0	1.58	0.691	--	--	--	--
	11/06/00	2.27	<0.500	<0.500	<1.00	61.5	<0.250	<0.500	--	--	--	--
	01/30/01	1.03	<0.500	<0.500	<1.00	53.5	<0.250	<0.500	--	--	--	--
	05/29/01	1.93	<0.500	0.730	<1.00	<50.0	<0.250	<0.500	--	--	--	--
	08/29/01	<1.00	<1.00	<1.00	<3.00	<50.0	<0.130	<0.250	--	--	--	--
	08/12/02 <sup>6</sup>	<1.00	<1.00	<1.00	<3.00	<50.0	<0.200	<0.250	--	--	--	--
	01/31/06	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	6.68	--	--
	09/04/08	<0.500	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	10.8	--	--

Monitoring Well <sup>1</sup>	Date Sampled	BETX <sup>2</sup> (µg/L)				Gasoline-range Hydrocarbons <sup>3</sup> (µg/L)	Diesel-range Hydrocarbons <sup>4</sup> (mg/L)	Heavy Oil-range Hydrocarbons <sup>4</sup> (mg/L)	Total Arsenic <sup>7</sup> (µg/L)	Dissolved Arsenic <sup>5</sup> (µg/L)	Total Lead <sup>7</sup> (µg/L)	Dissolved Lead <sup>7</sup> (µg/L)
		B	E	T	X							
MTCA Method A Cleanup Levels		5	700	1,000	1,000	800	0.500	0.500	5		15	
MW-7	09/04/08	2.47	<0.500	<0.500	<1.00	<50.0	<0.236	<0.472	--	20.7	--	--
	08/24/09	1.8	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
	11/03/09	9.2	<1.00	<1.00	<1.00	<100	--	--	21	12	<1.1	<1.00
	12/09/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
	07/29/10	<1.00	<1.00	<1.00	<3.00	<50.0	--	--	--	--	--	--
	10/19/10	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	4.7	--	--
	01/27/11	<1.0	<1.0	<1.0	<3.0	<50	--	--	--	--	--	--
	05/25/11	<1.0	<1.0	<1.0	<3.0	<50	--	--	--	3.5	--	--
MW-8	09/04/08	127	0.804	<0.500	6.25	436	<0.236	<0.472	--	14.8	--	--
	08/24/09	50	<1.00	<1.00	1.7	<100	--	--	--	--	--	--
	11/03/09	37	<1.00	<1.00	1.3	<100	--	--	26	21	<1.1	<1.00
	12/09/09	40	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
	07/29/10	10	<1.00	<1.00	<3.00	<50.0	--	--	--	<3.0	--	--
	10/19/10	<1.0	<1.0	<1.0	<1.0	<100	--	--	--	--	--	--
	01/27/11	<1.0	<1.0	<1.0	<3.0	<50	--	--	--	--	--	--
	05/25/11	<1.0	<1.0	<1.0	<3.0	<50	--	--	--	2.5	--	--
MW-9	08/24/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
	11/04/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	<3.3	<3.00	2.4	<1.00
	12/09/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
MW-10	08/24/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
	11/04/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	<3.3	<3.00	<1.1	<1.00
	12/09/09	<1.00	<1.00	<1.00	<1.00	<100	--	--	--	--	--	--
MP-6	05/20/10	<1.00	<1.00	<1.00	<3.00	240	--	--	--	12	--	--
MP-7	05/20/10	<1.00	<1.00	<1.00	<3.00	<50.0	--	--	--	4.4	--	--
MTCA Method A Cleanup Levels		5	700	1,000	1,000	800	0.500	0.500	5		15	

**Notes:**

<sup>1</sup> Approximate well locations shown in Figure 1.

<sup>2</sup> Analyzed by EPA Method 8021B.

<sup>3</sup> Analyzed by Northwest Method NWTPH-G or NWTPH-Gx.

<sup>4</sup> Analyzed by Northwest Method NWTPH-HCID, NWTPH-D extended or NWTPH-Dx.

<sup>5</sup> Analyzed by EPA 6000 and 7000 series methods. September 4, 2008 - Testing included the 13 priority pollutant metals; the 12 other metals listed in the laboratory reports were either not detected or not detected at concentrations greater than MTCA Method A cleanup levels.

<sup>6</sup> Sample also analyzed for methyl tert-butyl ether (MTBE). MTBE results = <3.0 µg/L.

<sup>7</sup> Analyzed by EPA Method 200.8.

MTCA = Model Toxics Control Act

µg/L = micrograms per liter; mg/L = milligrams per liter.

-- = Not Analyzed

Shading indicates a concentration exceeding the MTCA cleanup level.

**Table 2**  
**Summary of Groundwater Chemical Analytical Data - 2011-2012**  
**Monitoring Wells**  
**SCI Properties LLC**  
**Sedro-Woolley, Washington**

Monitoring Well <sup>1</sup>	Date Sampled	Depth To Groundwater (ft)	Groundwater Elevation (ft)	BETX <sup>2</sup> (µg/L)				Gasoline-Range <sup>3</sup> (µg/L)	Dissolved Arsenic <sup>4</sup> (µg/L)
				B	E	T	X		
MW-1	08/25/11	4.22	95.13	<1.0	<1.0	<1.0	<3.0	<50	13
	11/22/11	3.37	95.98	<1.0	<1.0	<1.0	<3.0	<50	8.2
	02/29/12	2.32	97.03	<1.0	<1.0	<1.0	<3.0	<50	4.7
	05/22/12	2.19	97.16	<1.0	<1.0	<1.0	<3.0	<50	4.0
MW-5	08/25/11	3.98	94.69	<1.0	<1.0	<1.0	<3.0	<50	6.6
	11/22/11	2.23	96.44	<1.0	<1.0	<1.0	<3.0	<50	13
	02/29/12	1.23	97.44	<1.0	<1.0	<1.0	<3.0	<50	21
	05/22/12	1.36	97.31	<1.0	<1.0	<1.0	<3.0	<50	20
MW-6	08/25/11	5.06	94.50	<1.0	<1.0	<1.0	<3.0	84	8.5
	11/22/11	2.36	97.20	<1.0	<1.0	<1.0	<3.0	<50	14
	02/29/12	1.71	97.85	<1.0	<1.0	<1.0	<3.0	<50	11
	05/22/12	1.80	97.76	<1.0	<1.0	<1.0	<3.0	96	7.5
MW-7	08/25/11	3.71	94.75	<1.0	<1.0	<1.0	<3.0	<50	3.2
	11/22/11	2.32	96.14	<1.0	<1.0	<1.0	<3.0	<50	3.7
	02/29/12	1.26	97.20	<1.0	<1.0	<1.0	<3.0	<50	4.1
	05/22/12	1.77	96.69	<1.0	<1.0	<1.0	<3.0	<50	4.0
MW-8	08/25/11	4.75	94.93	<1.0	<1.0	<1.0	<3.0	<50	<1.8
	11/22/11	3.49	96.19	<1.0	<1.0	<1.0	<3.0	<50	<1.8
	02/29/12	2.56	97.12	<1.0	<1.0	<1.0	<3.0	<50	<1.8
	05/22/12	2.71	96.97	<1.0	<1.0	<1.0	<3.0	<50	<1.0
MW-9	08/25/11	4.35	94.93	<1.0	<1.0	<1.0	<3.0	<50	6.0
	11/22/11	2.43	96.85	<1.0	<1.0	<1.0	<3.0	<50	2.9
	02/29/12	1.50	97.78	<1.0	<1.0	<1.0	<3.0	<50	<1.8
	05/22/12	1.21	98.07	<1.0	<1.0	<1.0	<3.0	<50	1.9
MW-10	08/25/11	4.96	95.28	<1.0	<1.0	<1.0	<3.0	<50	7.2
	11/22/11	3.89	96.35	<1.0	<1.0	<1.0	<3.0	<50	15
	02/29/12	2.71	97.53	<1.0	<1.0	<1.0	<3.0	<50	14
	05/22/12	2.69	97.55	<1.0	<1.0	<1.0	<3.0	<50	13
MTCA Method A Cleanup Levels				5	700	1,000	1,000	800	5

**Notes:**

<sup>1</sup> Approximate monitoring well locations shown in Figure 1.

<sup>2</sup> Analyzed by EPA Method 8021.

<sup>3</sup> Analyzed by Northwest Method NWTPH-Gx.

<sup>4</sup> Analyzed by EPA Method SW6020.

MTCA = Model Toxics Control Act

B = Benzene; E = Ethylbenzene; T = Toluene; X = Xylenes

µg/L = micrograms per liter.

A shaded cell indicates a concentration that exceeds the MTCA Method A cleanup level.

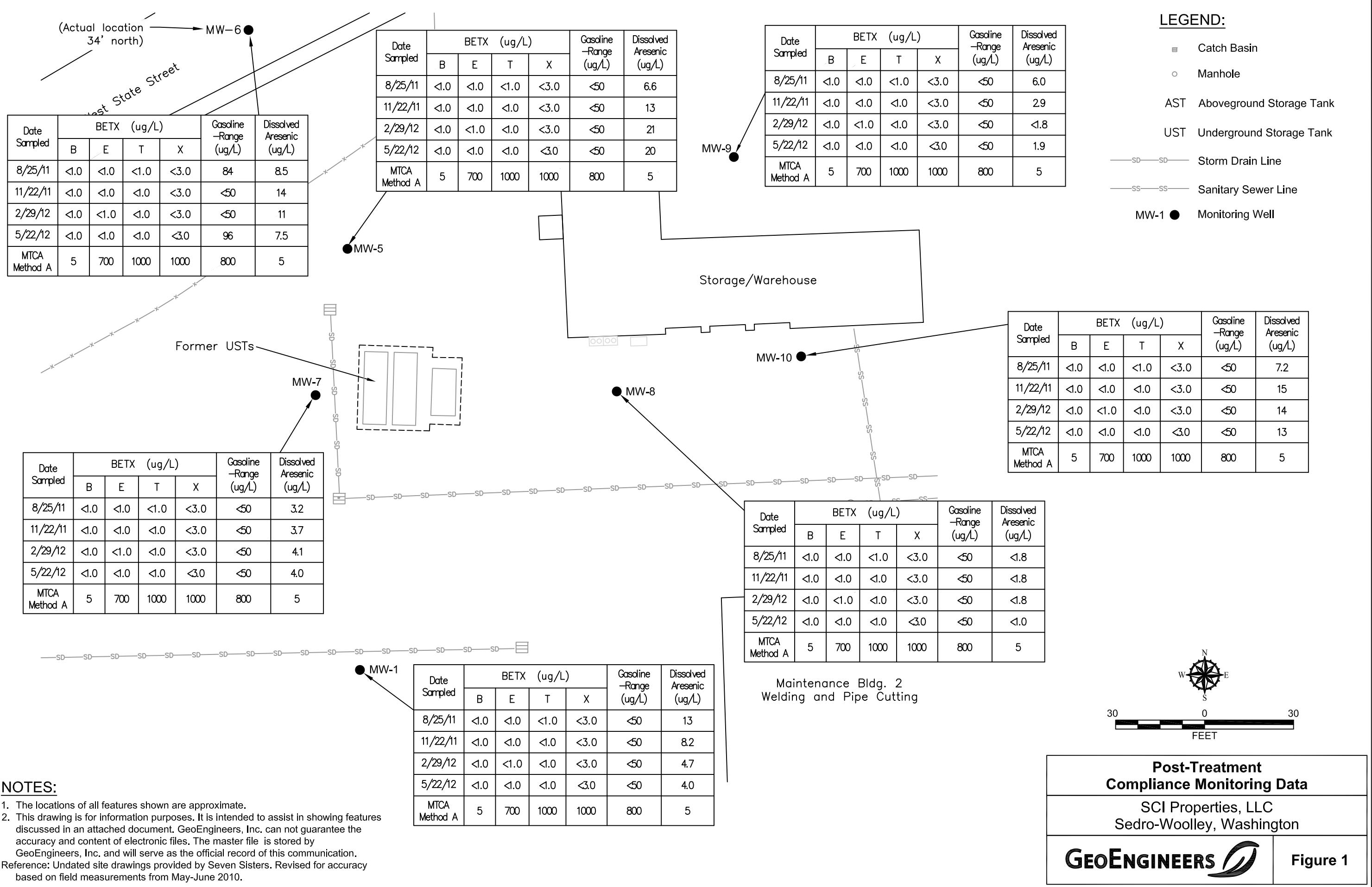
A bolded value indicates an analyte was detected at the indicated concentration.

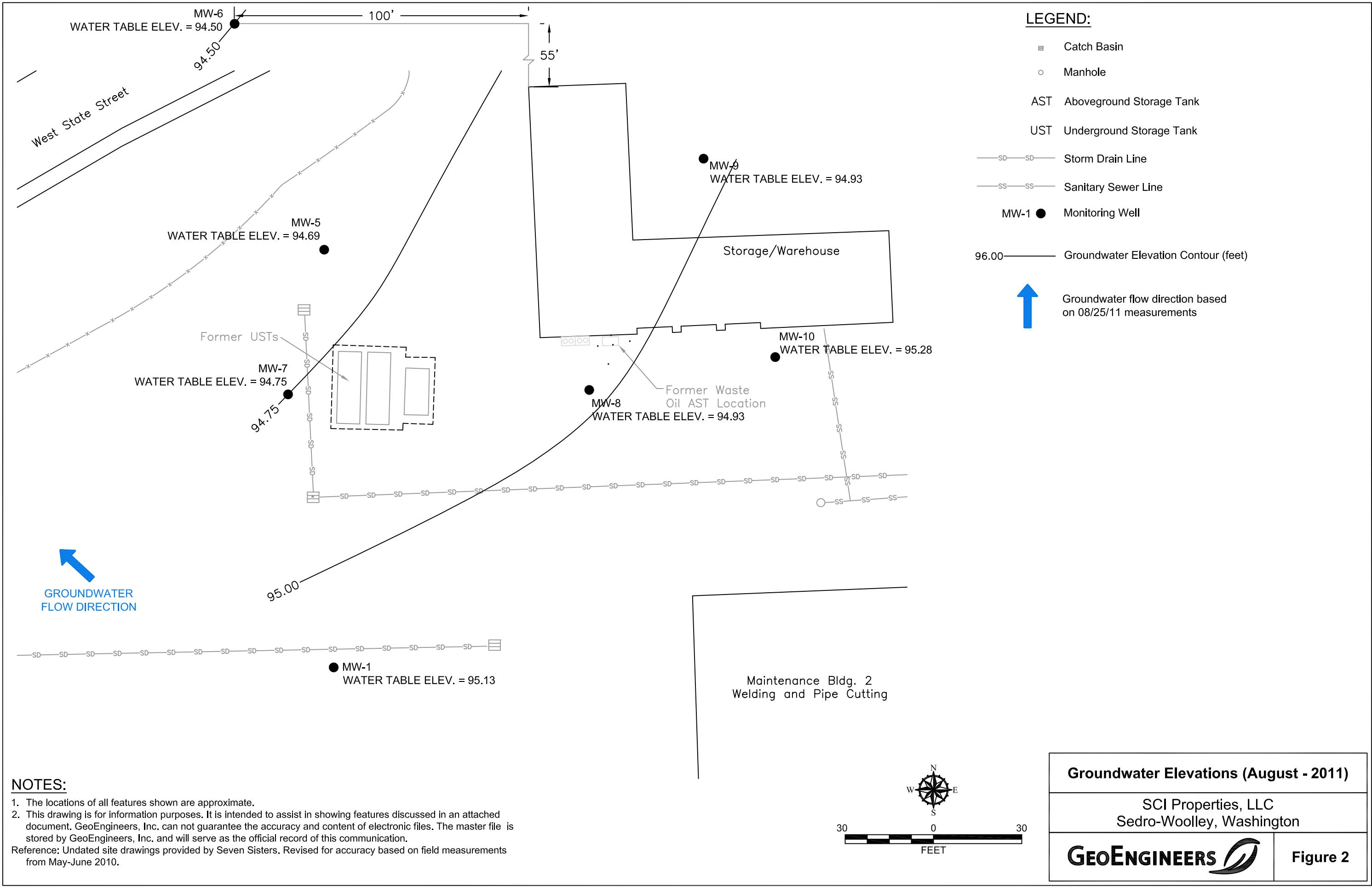
**Table 3**  
**Summary of Arsenic Data from WA State Department of Health**  
**SCI Properties LLC**  
**Sedro-Woolley, Washington**

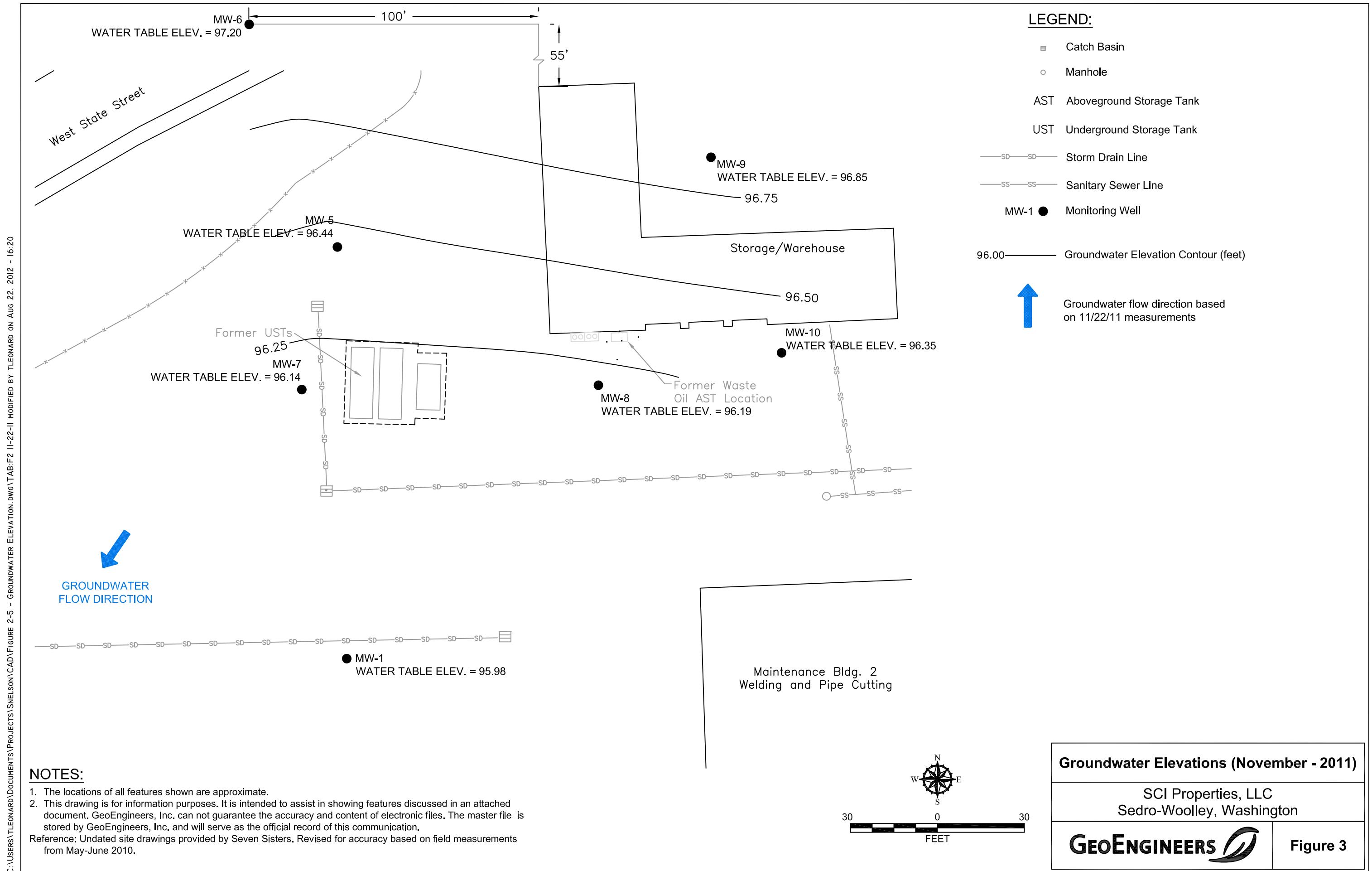
Site Name	Distance to Snelson Site (miles)	Direction from Site	Arsenic Concentration (mg/L)	Sample #	Sample Type	Date Sampled	Well Depth (ft)	DOE Well Tag No
Camp Brotherhood	13.2	S	0.002	10039	Pre-Treatment/Raw	9/27/2002	15	AET049
Samish Grade School	6.0	N	0.002	58610	Pre-Treatment/Raw	10/8/2007	118	AET041
Prairie Estates	5.3	N	0.012	10047	Pre-Treatment/Raw	3/21/2012	128	AET038
Double Creek	5.6	NW	0.037	10052	Treated	4/10/2007	140	AEI044
Delvan Hill	2.2	NW	0.040	12248	Pre-Treatment/Raw	11/22/2002	80	AEH765
Eagle Valley	4.8	NE	0.009	88273	Pre-Treatment/Raw	6/16/2003	172	AET031
Skagit Co PUD	6.5	SW	0.006	8302	Treated	7/31/2003	51	AER350
Humphrey Hill	6.0	NW	0.002	6039	Pre-Treatment/Raw	6/26/2002	325	Not Listed
Cedar Creek	2.5	N	0.002	2471	Pre-Treatment/Raw	3/10/2003	400	Not Listed
Hamilton	12.0	E	0.002	30443	Treated	10/2/2007	200	AEN137

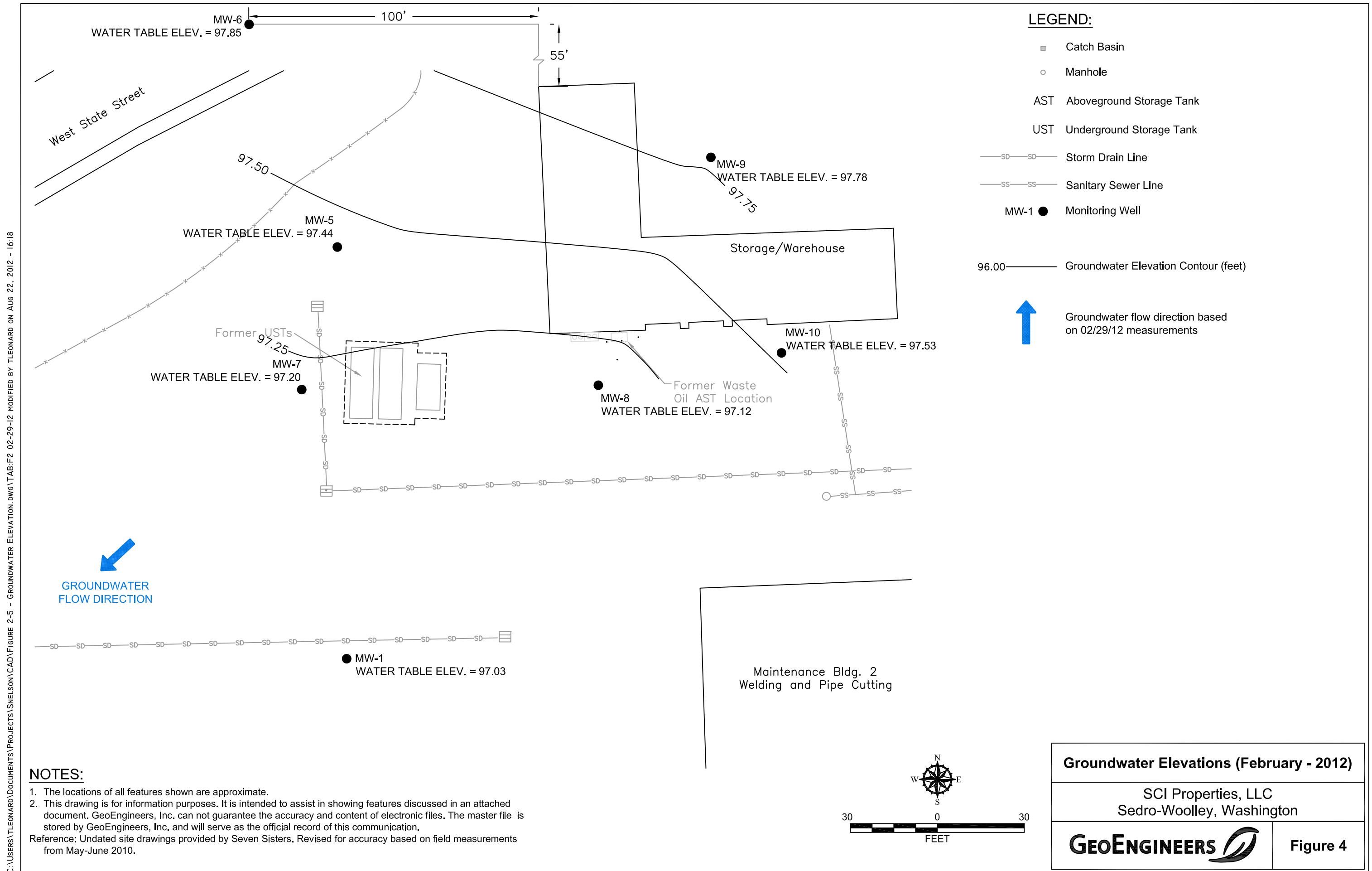
**Department of Ecology MTCA Stats Background Calculations for Department of Health Arsenic Data**

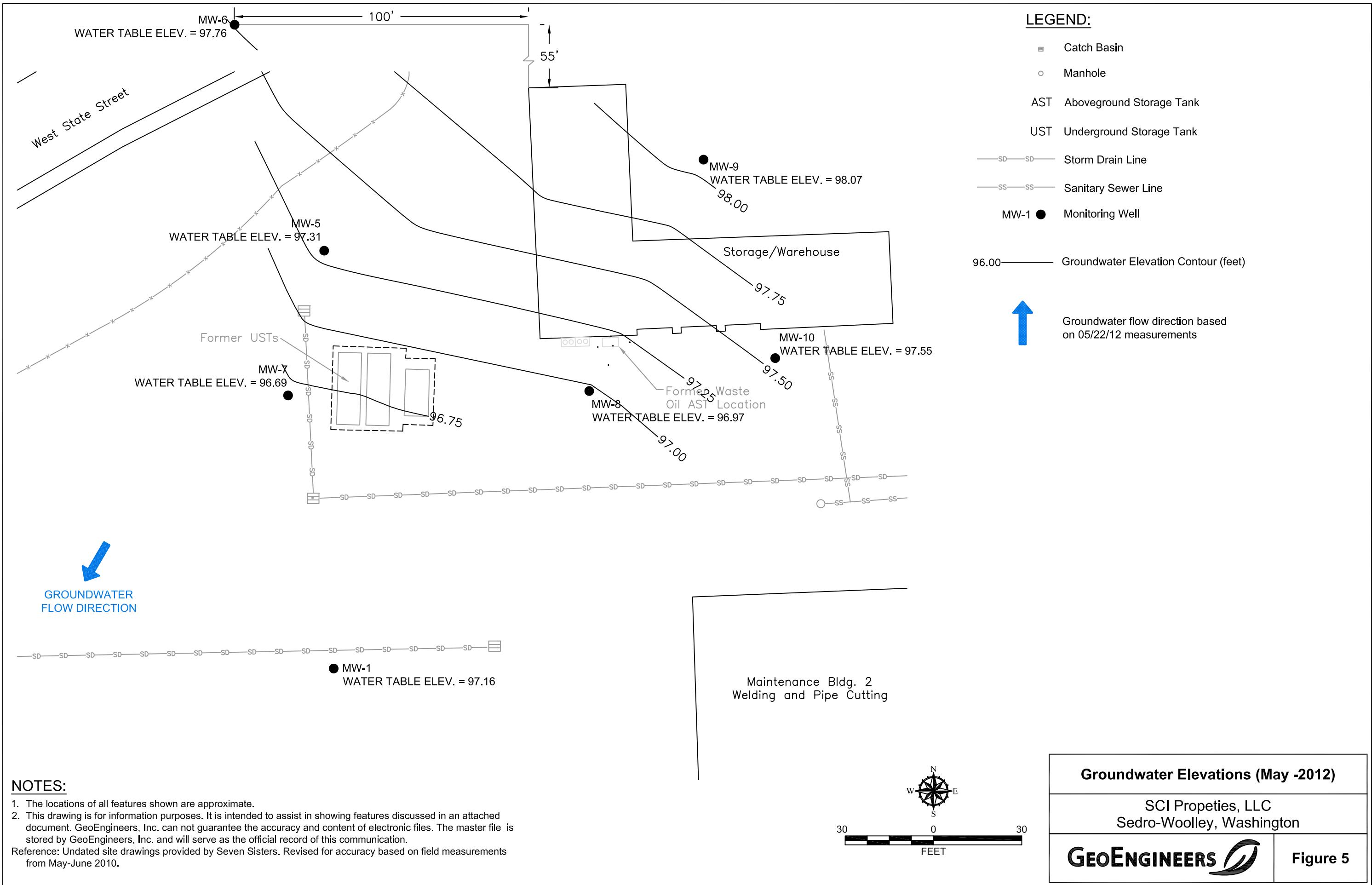
Data (mg/L)	ID	MTCAStat 3.0		
0.002	Camp Brotherhood	Number of samples	Uncensored values	
0.002	Samish Grade School	Uncensored	10	Mean 0.01
0.002	Humphrey Hill	Censored	0	Lognormal mean 0.01
0.002	Cedar Creek	TOTAL	10	Std. devn. 0.01
0.002	Hamilton			Median 0.004
0.006	Skagit Co PUD			Min. 0.002
0.009	Eagle Valley			Max. 0.04
0.012	Prairie Estates	Lognormal distribution?		
0.037	Double Creek	Normal distribution?		
0.04	Delvan Hill	r-squared is: 0.82	r-squared is: 0.69	
		Distribution selection	Value corresponding Enter percentile to that percentile is:	
		1	90	0.035
		1 = Lognormal	50th	0.006
		2 = Normal	4 X 50th	0.022
		3 = Nonparametric method	Coefficient of Variation = 2.62	











## **APPENDIX A**

### **Groundwater Sampling and Field Procedures**

## **APPENDIX A GROUNDWATER SAMPLING AND FIELD PROCEDURES**

### **Groundwater Measurements**

The depth to groundwater was measured in the monitoring wells using a down-hole electric water level indicator. The depth to groundwater was measured relative to the top of the monitoring well casing. The end of the probe was decontaminated with a Liqui-Nox® wash and distilled water rinse before being utilized in each subsequent well.

### **Groundwater Sampling**

A groundwater sample was obtained from each of the monitoring wells using low-flow sampling equipment (peristaltic pump and a Horiba U-22 water quality instrument used to measure water quality parameters). Clean polyethylene tubing was used. No other instruments or equipment were lowered into the well. The well was purged prior to sampling by either removing three well volumes or until physical parameters had stabilized within about 10 percent of previous measurement.

The water samples were transferred to clean laboratory-prepared containers provided by the analytical laboratory. Samples requiring preservative (e.g., HCl for volatile organic compound analyses) had the proper preservative in the laboratory-prepared bottles. Groundwater sample containers were completely filled to minimize headspace. The groundwater samples were kept cool during transport to the analytical laboratory. Purge water removed from the monitoring well casings was placed into a labeled 55-gallon drum and was stored in the existing purge water drums located on site.

**APPENDIX B**  
**Chemical Analytical Program and**  
**Chemical Analytical Reports**

## **APPENDIX B CHEMICAL ANALYTICAL PROGRAM AND CHEMICAL ANALYTICAL REPORTS**

### **Samples**

Chain-of-custody procedures were followed during the transport of the soil and groundwater samples to the accredited analytical laboratory. The samples were held in cold storage pending extraction and/or analysis. The analytical results and laboratory quality control (QC) records are included in this appendix. The analytical results are summarized in the text and tables of this report.

### **Analytical Data Review**

The laboratory maintains an internal quality assurance program as documented in its laboratory quality assurance manual. The laboratory uses a combination of blanks, surrogate recoveries, duplicates, matrix spike recoveries, matrix spike duplicate recoveries, blank spike recoveries and blank spike duplicate recoveries to evaluate the analytical results. The laboratory also uses data quality goals for individual chemicals or groups of chemicals based on the long-term performance of the test methods. The data quality goals were included in the laboratory reports. The laboratory compared each group of samples with the existing data quality goals and noted any exceptions in the laboratory report. Any data quality exceptions documented by the laboratory were reviewed by GeoEngineers and are addressed in the data quality exception section of this appendix.

### **Data Quality Exception Summary**

No data quality exceptions were noted in the laboratory reports during our review. Based on our data quality review, it is our opinion that the analytical data are of acceptable quality for their intended use in this report.



August 30, 2011

Mr. Paul Craig  
Snelson Companies c/o Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

Dear Mr. Craig,

On August 25th, 7 samples were received by our laboratory and assigned our laboratory project number 1108117. The project was identified as your Snelson Co., Sedro Woolley. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

A handwritten signature in black ink that reads "Rick Bagan".

Rick Bagan  
Laboratory Director



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 8/30/2011  
ALS JOB#: 1108117  
ALS SAMPLE#: -01

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 8/25/2011  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 8/25/2011 09:10  
CLIENT SAMPLE ID MW-1      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	<b>13</b>	1.8	1	UG/L	08/29/2011	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>89.3</b>				08/25/2011	GAP
TFT	EPA-8021	<b>104</b>				08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



# Environmental

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -02
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 10:30
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	<b>6.6</b>	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	93.3	08/25/2011	GAP
TFT	EPA-8021	101	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



# Environmental

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -03
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 11:28
CLIENT SAMPLE ID	MW-6	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	84	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	8.5	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	89.3	08/25/2011	GAP
TFT	EPA-8021	106	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.  
Chromatogram indicates that it is likely that sample contains extremely weathered gasoline.



# Environmental

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -04
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 09:30
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	3.2	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	79.5	08/25/2011	GAP
TFT	EPA-8021	101	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -05
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 10:08
CLIENT SAMPLE ID	MW-8	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	U	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>82.8</b>	08/25/2011	GAP
TFT	EPA-8021	<b>97.9</b>	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -06
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 10:58
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	<b>6.0</b>	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>82.2</b>	08/25/2011	GAP
TFT	EPA-8021	<b>95.9</b>	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 8/30/2011 ALS JOB#: 1108117 ALS SAMPLE#: -07
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 8/25/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 8/25/2011 09:58
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/25/2011	GAP
Benzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/25/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/25/2011	GAP
Arsenic (Dissolved)	SW6020	7.2	1.8	1	UG/L	08/29/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	80.2	08/25/2011	GAP
TFT	EPA-8021	93.0	08/25/2011	GAP

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 8/30/2011  
ALS SDG#: 1108117  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY BLANK RESULTS

### MBG-082411W - Batch 2045 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	08/24/2011	GAP

### MB-082411W - Batch 2045 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	08/24/2011	GAP
Toluene	EPA-8021	U	1.0	1	UG/L	08/24/2011	GAP
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	08/24/2011	GAP
Xylenes	EPA-8021	U	3.0	1	UG/L	08/24/2011	GAP

### MB1-082611W - Batch 2051 - Water by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	08/30/2011	RAL



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 8/30/2011  
ALS SDG#: 1108117  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY CONTROL SAMPLE RESULTS

### ALS Test Batch ID: 2045 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	86.5			08/24/2011	GAP
TPH-Volatile Range - BSD	NWTPH-GX	90.5	4		08/24/2011	GAP

### ALS Test Batch ID: 2045 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	105			08/24/2011	GAP
Benzene - BSD	EPA-8021	101	5		08/24/2011	GAP
Toluene - BS	EPA-8021	102			08/24/2011	GAP
Toluene - BSD	EPA-8021	95.9	6		08/24/2011	GAP
Ethylbenzene - BS	EPA-8021	96.4			08/24/2011	GAP
Ethylbenzene - BSD	EPA-8021	91.7	5		08/24/2011	GAP
Xylenes - BS	EPA-8021	102			08/24/2011	GAP
Xylenes - BSD	EPA-8021	96.6	6		08/24/2011	GAP

### ALS Test Batch ID: 2051 - Water by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-6020	99.4			08/30/2011	RAL
Arsenic (Dissolved) - BSD	EPA-6020	101	2		08/30/2011	RAL

APPROVED BY

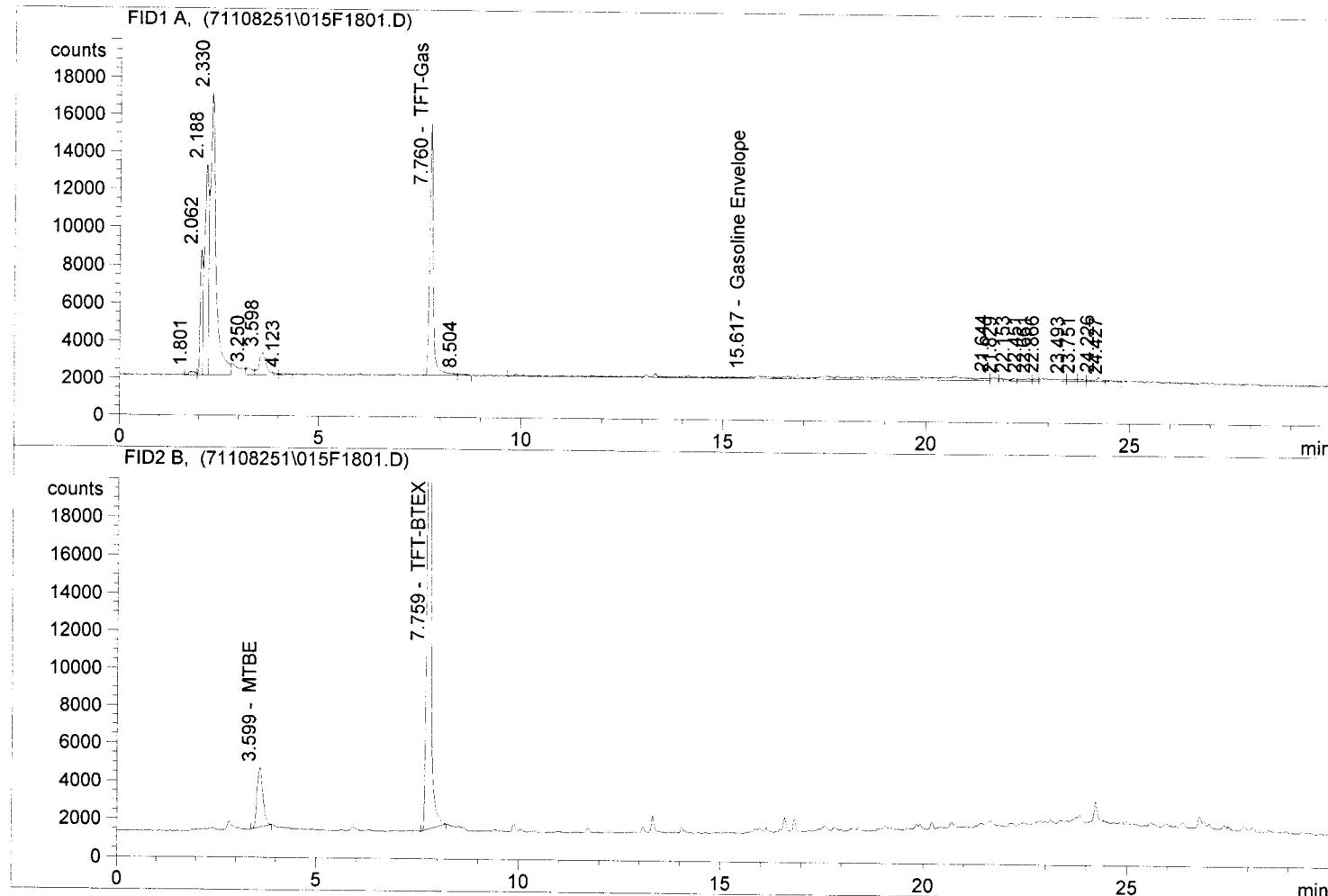
A handwritten signature in black ink, appearing to read "Bob Bayor".

Laboratory Director

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F1801.D  
 Injection Date & Time: 8/25/2011 6:03:00 PM  
 Report Created on: 8/26/2011 7:17:22 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-01A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.760	TFT-Gas	82733.969	8.928 89%
15.617	Gasoline Envelope	57004.297	12.918

Gas < 50 ug/L

Ret. Time	Compound Name	Area	Amount ug/L
3.599	MTBE	31574.578	0.994
0.000	Benzene	0.000	0.000
7.759	TFT-BTEX	257379.062	10.441 104%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

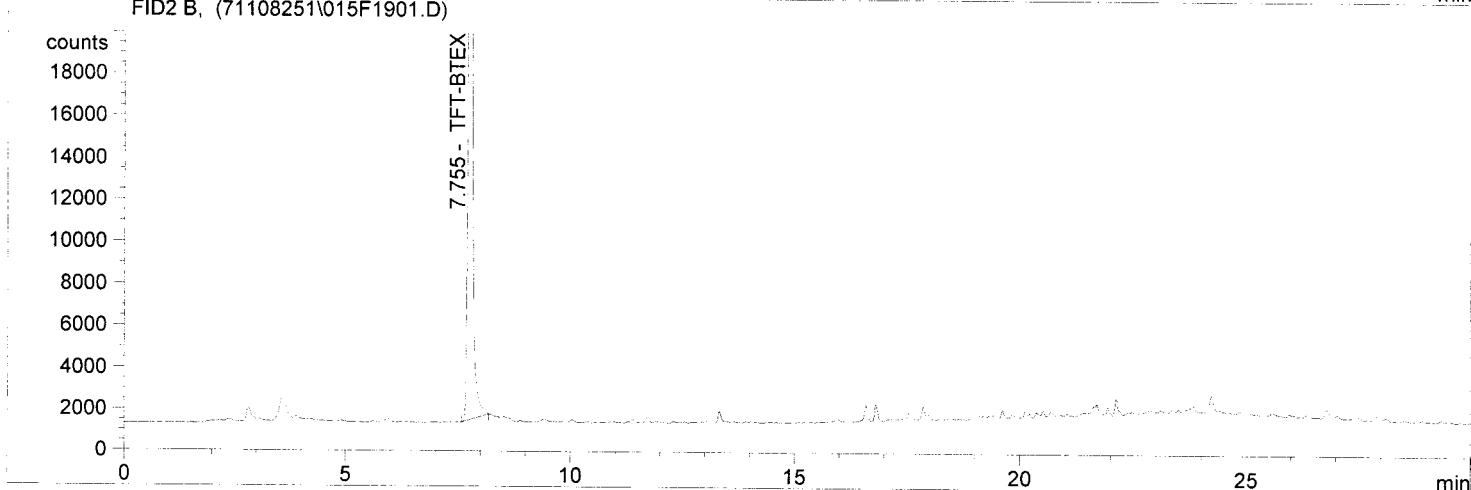
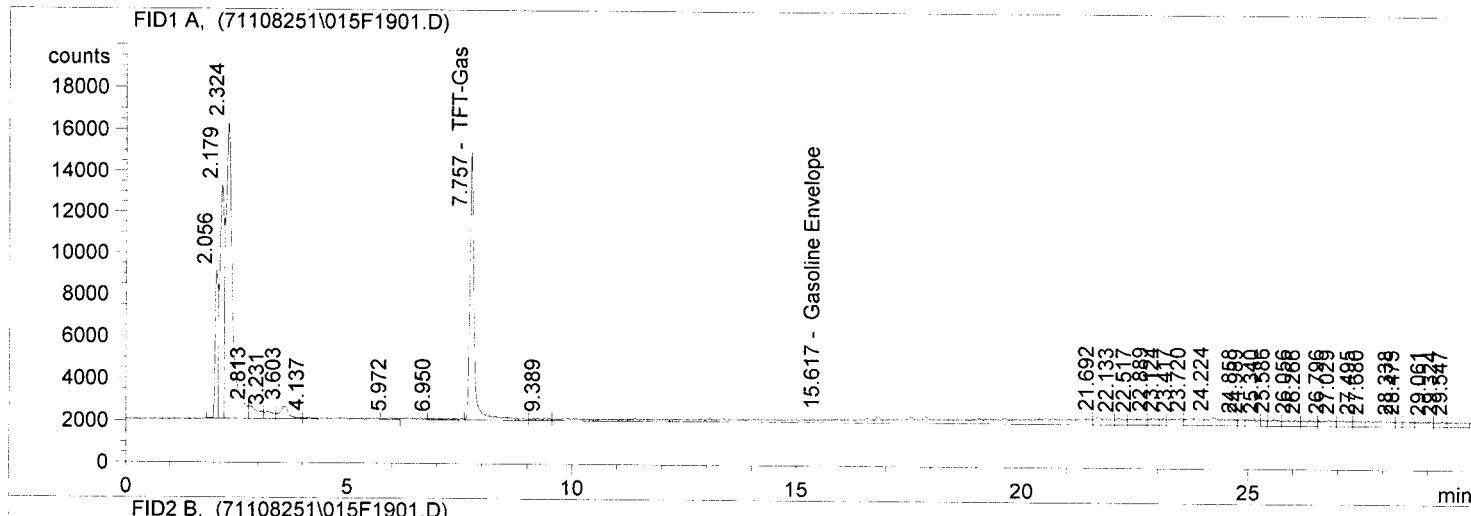
B,T,E < 1 ug/L X < 3 ug/L

MR 8/26/11

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F1901.D  
 Injection Date & Time: 8/25/2011 6:39:07 PM  
 Report Created on: 8/26/2011 7:17:36 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-02A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.757	TFT-Gas	86484.773	9.333 93%
15.617	Gasoline Envelope	109774.469	24.877

*Gas < 50 mg/L*

*103  
83%*

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
7.755	TFT-BTEX	248305.766	10.083 101%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

*BTEX < 1ug/L X < 3mg/L*

*278 8/26/11*

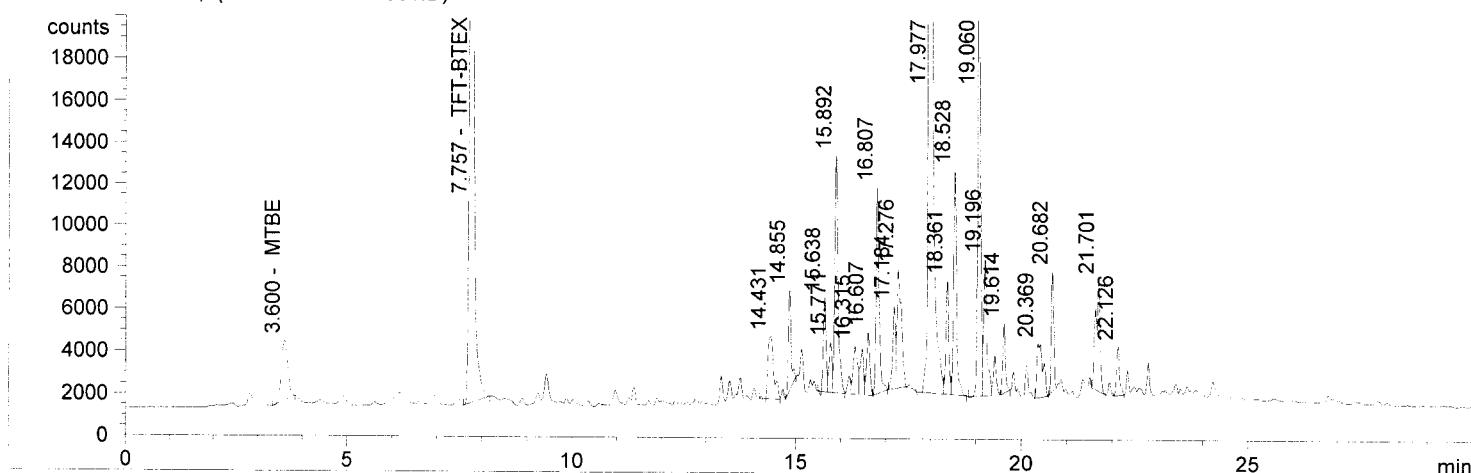
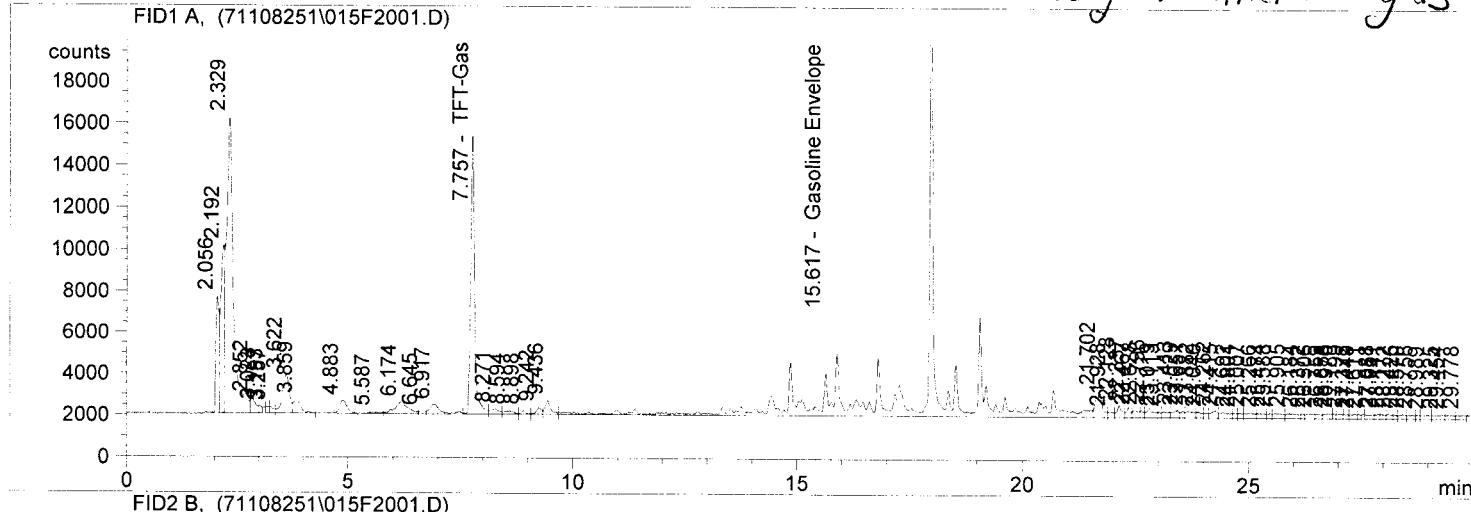
Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F2001.D  
 Injection Date & Time: 8/25/2011 7:15:13 PM  
 Report Created on: 8/26/2011 7:17:51 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-03A 5ML

Dilution: X 0.0

Extremely weathered gas



Ret. Time	Compound Name	Area	Amount ug/L
7.757	TFT-Gas	82730.414	8.928 87%
15.617	Gasoline Envelope	369822.625	83.809

Gas = 84 ug/l

Ret. Time	Compound Name	Area	Amount ug/L
3.600	MTBE	27861.902	0.877
0.000	Benzene	0.000	0.000
7.757	TFT-BTEX	260587.312	10.567 106%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

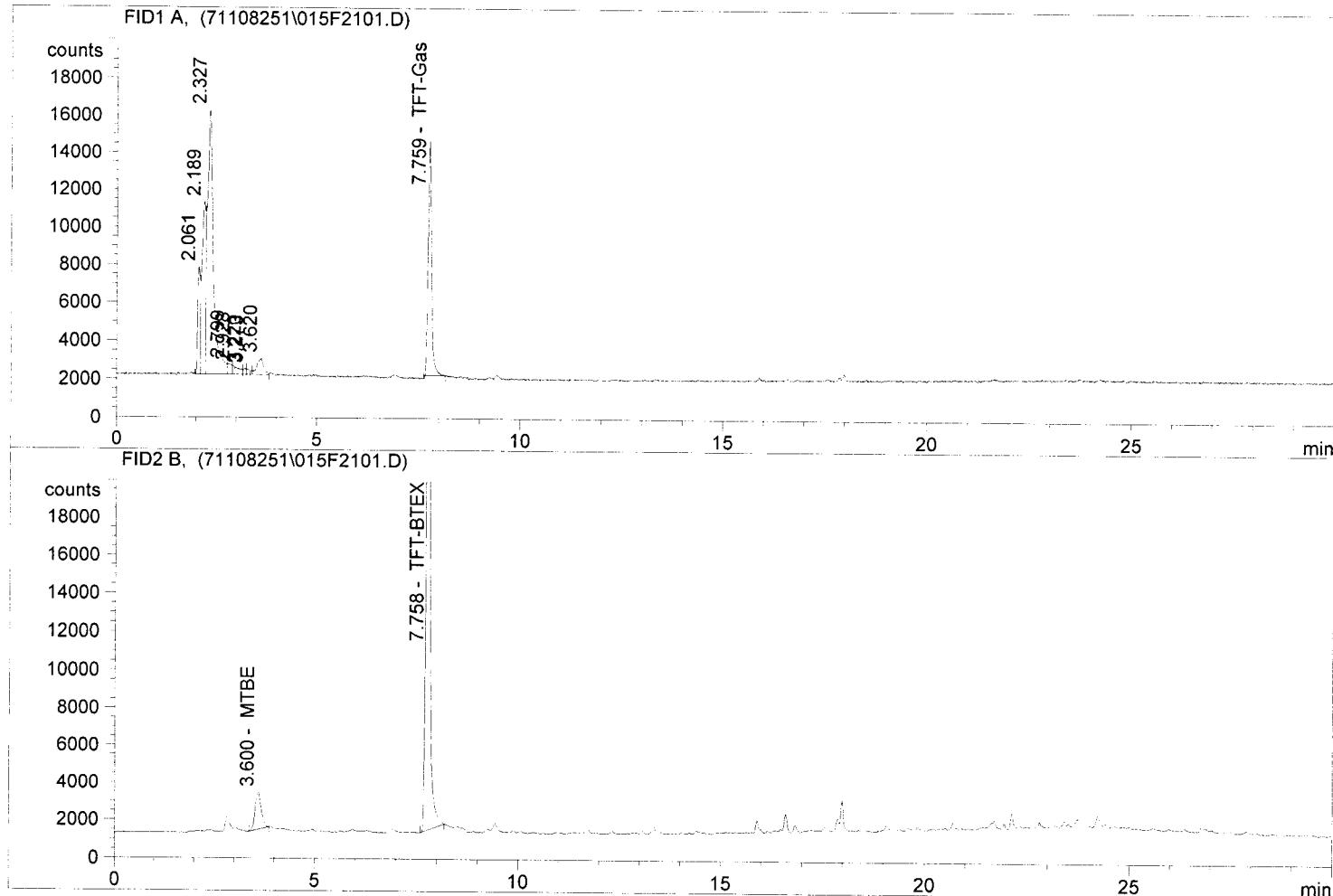
BTEX < 1 mg/l X < 3 mg/l

MAP 8/26/11

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F2101.D  
 Injection Date & Time: 8/25/2011 7:51:47 PM  
 Report Created on: 8/26/2011 7:18:10 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-04A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.759	TFT-Gas	73655.867	7.948 79%
0.000	Gasoline Envelope	0.000	0.000

Gas < 50ug/l

Ret. Time	Compound Name	Area	Amount ug/L
3.600	MTBE	20705.301	0.652
0.000	Benzene	0.000	0.000
7.758	TFT-BTEX	248387.625	10.086 101%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

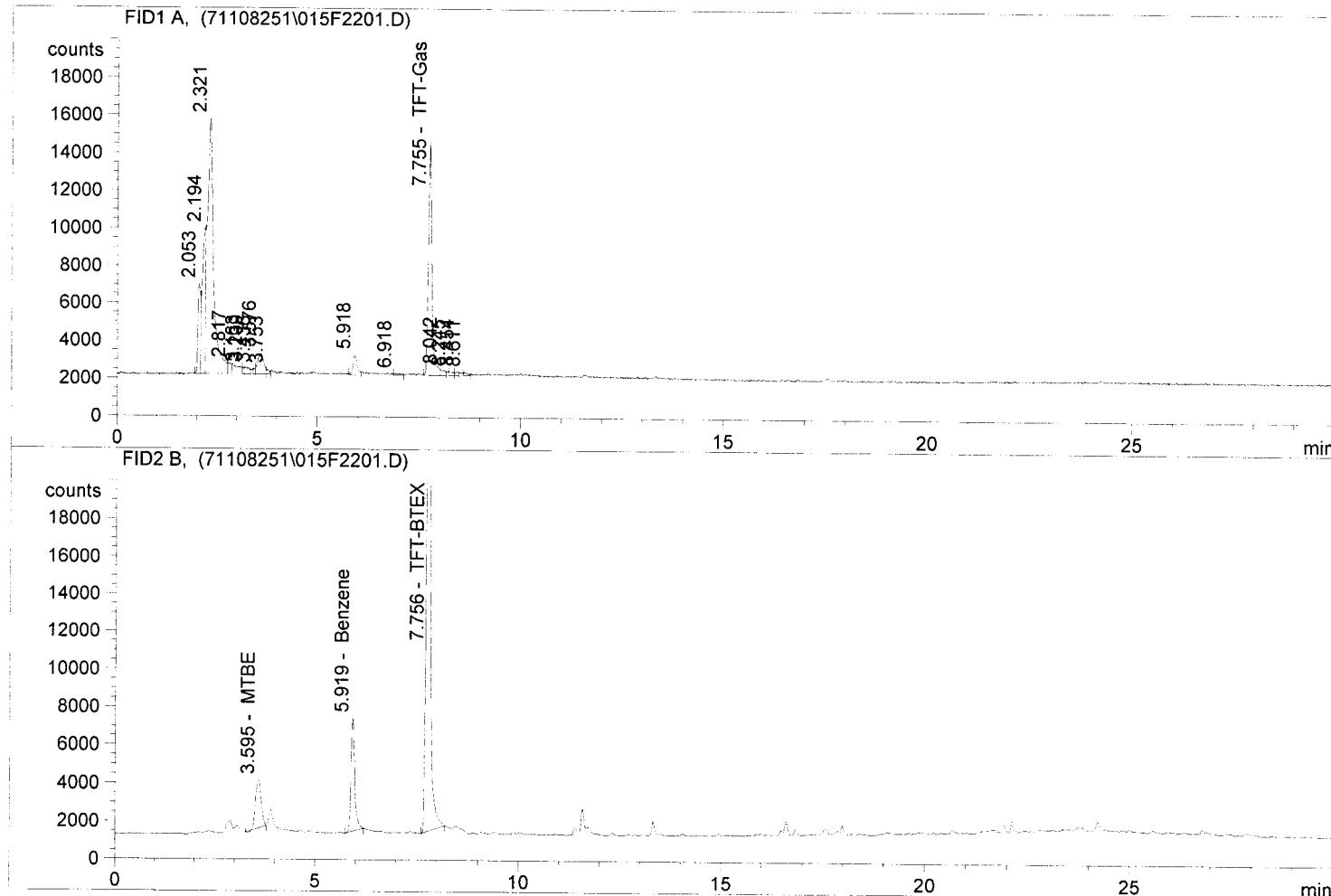
B,T,E < 1ug/l X < 3ug/l

mp 8/26/11

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F2201.D  
 Injection Date & Time: 8/25/2011 8:28:14 PM  
 Report Created on: 8/26/2011 7:18:22 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-05A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.755	TFT-Gas	76752.281	8.282 83%
0.000	Gasoline Envelope	0.000	0.000

Gas < 50ug/L

Ret. Time	Compound Name	Area	Amount ug/L
3.595	MTBE	24726.570	0.778
5.919	Benzene	37663.480	0.784
7.756	TFT-BTEX	240960.313	9.793
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

NG  
8/26/11

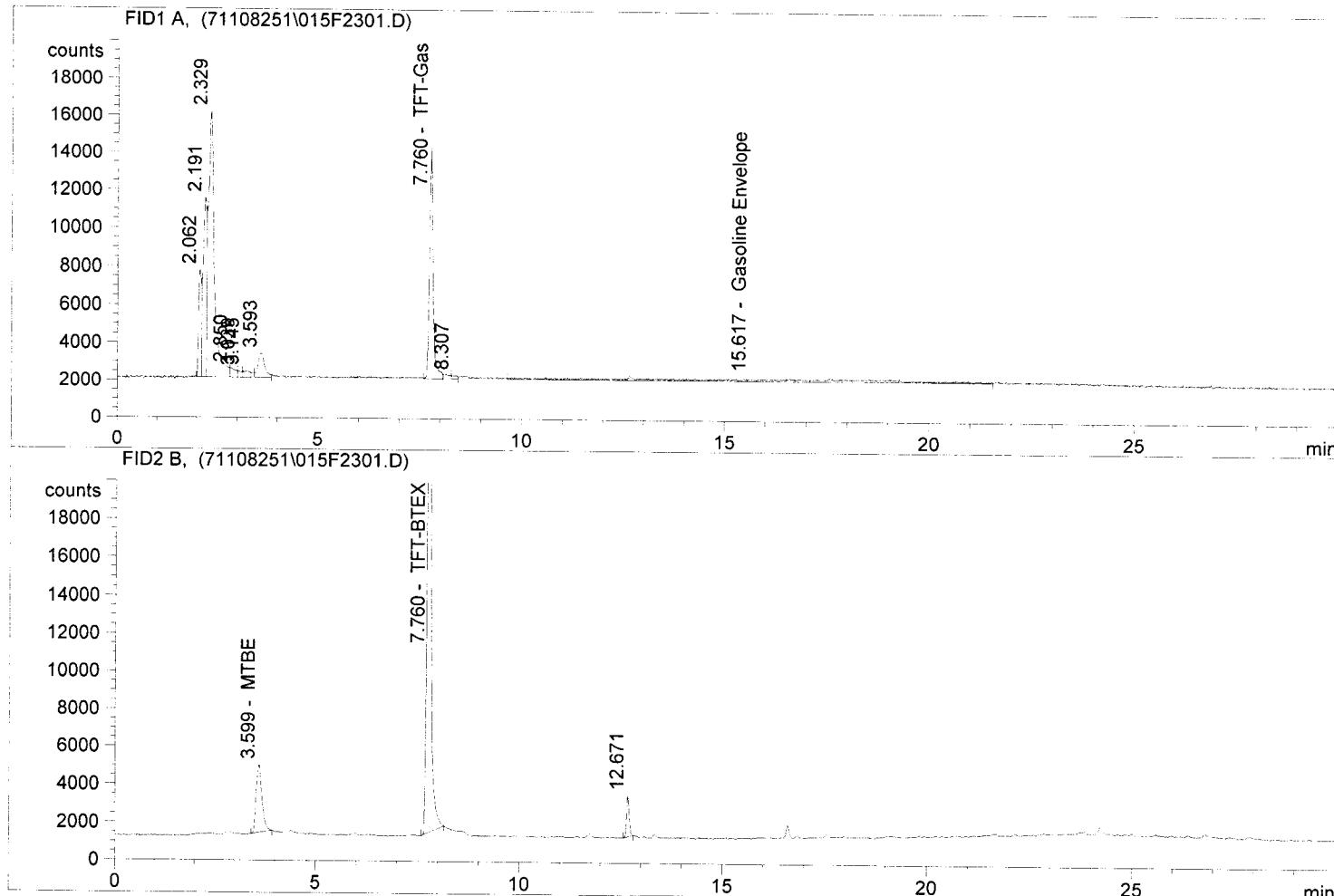
BTEX < 1ug/L X < 3ug/L

MAP 8/26/11

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F2301.D  
 Injection Date & Time: 8/25/2011 9:04:43 PM  
 Report Created on: 8/26/2011 7:18:38 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-06A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.760	TFT-Gas	76208.516	8.224 82%
15.617	Gasoline Envelope	59516.336	13.488

*Gas < 50 ug/L*

*13.488*

Ret. Time	Compound Name	Area	Amount ug/L
3.599	MTBE	35639.652	1.121
0.000	Benzene	0.000	0.000
7.760	TFT-BTEX	235733.469	9.587 T6%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

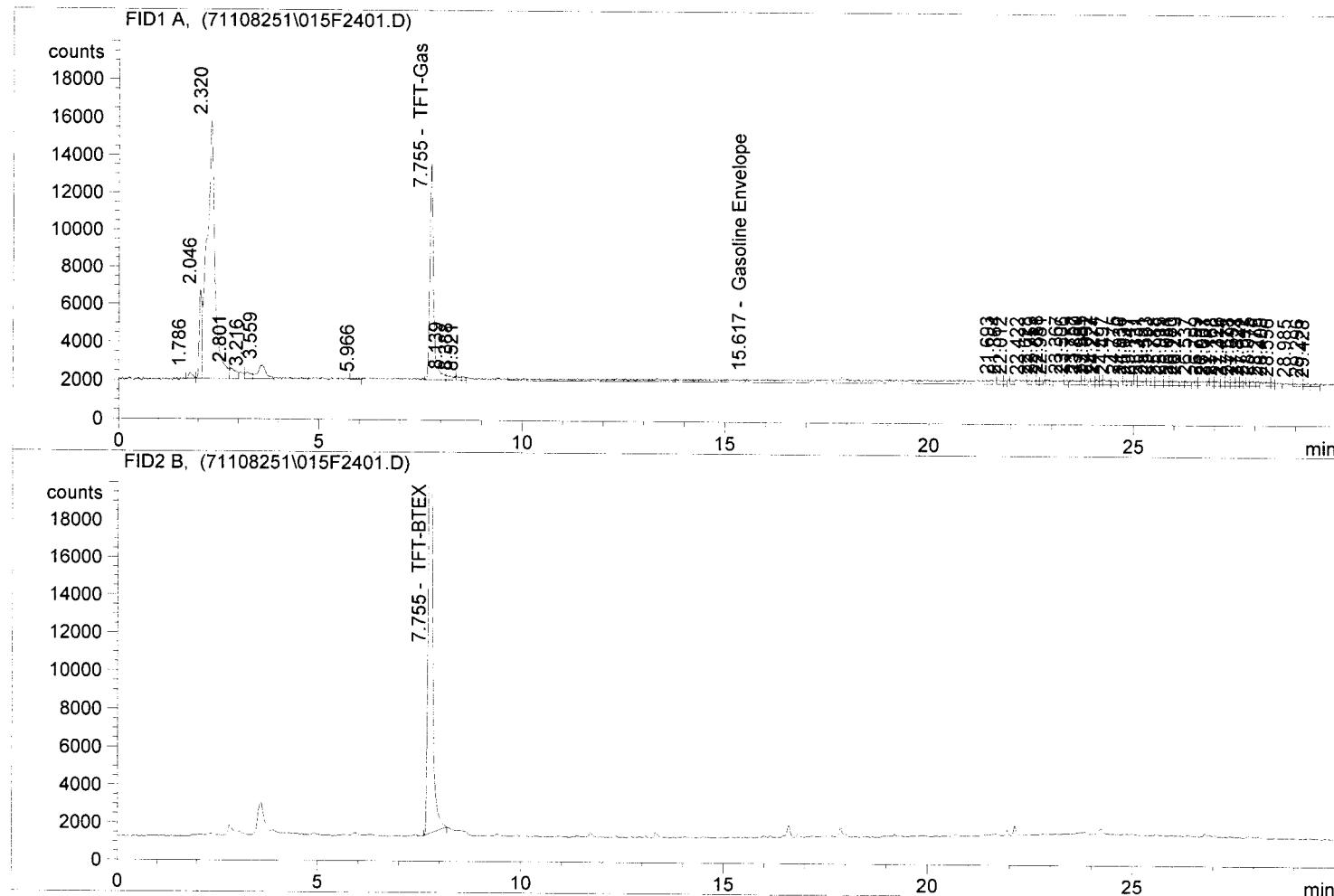
*BTEX < 1 ug/L X < 3 ug/L*

*MAP 8/26/11*

Gas/BTEX Instrument 70  
 Data File: C:\HPCHEM\1\DATA\71108251\015F2401.D  
 Injection Date & Time: 8/25/2011 9:40:53 PM  
 Report Created on: 8/26/2011 7:18:52 AM  
 Operator: DLC  
 Aquistion Method: 70GB0711.M  
 Analysis Method: C:\HPCHEM\1\METHODS\70GB0711.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1108117-07A 5ML Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
7.755	TFT-Gas	74355.117	8.024 80%
15.617	Gasoline Envelope	89643.039	20.315

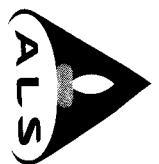
Gas < 50 mg/L

11  
8/30/11

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
7.755	TFT-BTEX	228374.141	9.296 73%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

B,TG < 1 ug/L X < 3 ug/L

11-8 8/26/11



GIS Environmental

8620 Holly Drive, Suite 100  
Everett, WA 98208  
Phone (425) 356-2600

# **Chain Of Custody/ Laboratory Analysis Request**

1108117  
ALS Job#  
(Labor)

**ALS Job#** (Laboratory Use Only)

Date 8-23

OTHER (Specify)

11

81

<p style="text-align: center;">PROJECT ID: SUELSON CO., SEDONA WOOLLEY</p> <p>REPORT TO: PAUL CRAIG / GEOSCIENISTS COMPANY: PAUL CRAIG PROJECT: PAUL CRAIG MANAGER: PAUL CRAIG</p> <p>ADDRESS: GEOSCIENISTS, REEDWOOD</p>					
<p>PHONE: 425-861-6000 FAX: 425-861-6050 PO. NUMBER: 7408-002-07 E-MAIL:</p> <p>INVOICE TO: GEOSCIENISTS. COMPANY: PAUL CRAIG ATTENTION: PAUL CRAIG</p> <p>ADDRESS:</p>					
SAMPLE I.D.	DATE	TIME	TYPE	LAB#	
1. MW-1	8-25-11	0910	W	1	NWTPH-HCID
2. MW-5		1030	W	2	NWTPH-DX
3. MW-6		1128	W	3	NWTPH-GX
4. MW-7		0930	W	4	BTEX by EPA-8021
5. MW-8		1008	W	5	MTBE by EPA-8021 EPA-8260
6. MW-9		1058	W	6	Halogenated Volatiles by EPA 8260
7. MW-10	8-25-11	0948	W	7	Volatile Organic Compounds by EPA 8260
<p><i>666 666 666</i></p> <p><i>666 666 666</i></p>					
<p><input type="checkbox"/> EDB / EDC by EPA 8260 SIM (water)</p> <p><input type="checkbox"/> EDB / EDC by EPA 8260 (soil)</p> <p><input type="checkbox"/> Semivolatile Organic Compounds by EPA 8270</p> <p><input type="checkbox"/> Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM</p> <p><input type="checkbox"/> PCB <input type="checkbox"/> Pesticides <input type="checkbox"/> by EPA 8081/8082</p> <p><input type="checkbox"/> Metals-MTCA-5 <input type="checkbox"/> RCRA-8 <input type="checkbox"/> Pri Pol <input type="checkbox"/> TAL <input type="checkbox"/></p> <p><input type="checkbox"/> Metals Other (Specify) <b>DISSOLVED ARSENIC</b></p>					
<p><input type="checkbox"/> TCLP-Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-Vol <input type="checkbox"/> Pest <input type="checkbox"/> Herbs</p>					
<p><b>NUMBER OF CONTAINERS</b></p> <p><i>3 3 3</i></p>					
<p><b>RECEIVED IN GOOD CONDITION?</b></p>					

SPECIAL INSTRUCTIONS ~~\* SAMPLES WERE FIELD FILTERED\*~~

SIGNATURES (Name, Company, Date, Time):

Organic Metals & Inorganic Analysis  
JUNARUNI

TURNAROUND REQUESTED IN BUSINESS DAYS  
OTHER:

SIGNATURES (Name, Company, Date, Time):  
1. Relinquished By: Michael GBC 8-25-11 1330

Received By: *Patricia Flis* 8-25-11 13:30

2. Relinquished By

Received By:

\* Turnaround request less than standard may incur Rush Charges



November 29, 2011

Mr. Paul Craig  
Snelson Companies c/o Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

Dear Mr. Craig,

On November 23rd, 7 samples were received by our laboratory and assigned our laboratory project number 1111134. The project was identified as your Snelson Co., Sedro Woolley. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

A handwritten signature in black ink that reads "Rick Bagan".

Rick Bagan  
Laboratory Director

Page 1

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626

ALS Laboratory Group A Campbell Brothers Limited Company

Environmental A green and white logo featuring a stylized tree or leaf design next to the text "Environmental Solutions".

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o DATE: 11/29/2011  
Geoengineers, Inc. ALS JOB#: 1111134  
8410 - 154th Ave NE ALS SAMPLE#: -01  
Redmond, WA 98052

CLIENT CONTACT: Paul Craig DATE RECEIVED: 11/23/2011  
CLIENT PROJECT: Snelson Co., Sedro Woolley COLLECTION DATE: 11/22/2011 10:00  
CLIENT SAMPLE ID MW-1 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	<b>8.2</b>	1.8	1	UG/L	11/28/2011	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>86.9</b>				11/29/2011	DLC
TFT	EPA-8021	<b>105</b>				11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE:	11/29/2011
		ALS JOB#:	1111134
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Paul Craig	DATE RECEIVED:	11/23/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE:	11/22/2011 09:28
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	13	1.8	1	UG/L	11/28/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>89.9</b>	11/29/2011	DLC
TFT	EPA-8021	<b>106</b>	11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 11/29/2011  
ALS JOB#: 1111134  
ALS SAMPLE#: -03

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 11/23/2011  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 11/22/2011 12:28  
CLIENT SAMPLE ID MW-6      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	14	1.8	1	UG/L	11/28/2011	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	83.6				11/29/2011	DLC
TFT	EPA-8021	107				11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 11/29/2011 ALS JOB#: 1111134 ALS SAMPLE#: -04
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 11/23/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 11/22/2011 10:24
CLIENT SAMPLE ID	MW-7	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING	DILUTION	UNITS	ANALYSIS	ANALYSIS
			LIMITS			DATE	BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	3.7	1.8	1	UG/L	11/28/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS	ANALYSIS
			DATE	BY
TFT	NWTPH-GX	101	11/29/2011	DLC
TFT	EPA-8021	105	11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 11/29/2011  
ALS JOB#: 1111134  
ALS SAMPLE#: -05

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 11/23/2011  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 11/22/2011 10:56  
CLIENT SAMPLE ID MW-8      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	11/28/2011	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	98.9				11/29/2011	DLC
TFT	EPA-8021	104				11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



# **Environmental**

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 11/29/2011 ALS JOB#: 1111134 ALS SAMPLE#: -06
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 11/23/2011
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE: 11/22/2011 11:58
CLIENT SAMPLE ID	MW-9	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING	DILUTION	UNITS	ANALYSIS	ANALYSIS
			LIMITS			DATE	BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	2.9	1.8	1	UG/L	11/28/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS	ANALYSIS
			DATE	BY
TFT	NWTPH-GX	100	11/29/2011	DLC
TFT	EPA-8021	104	11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 11/29/2011  
ALS JOB#: 1111134  
ALS SAMPLE#: -07

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 11/23/2011  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 11/22/2011 11:26  
CLIENT SAMPLE ID MW-10      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/29/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/29/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/29/2011	DLC
Arsenic (Dissolved)	EPA-6020	15	1.8	1	UG/L	11/28/2011	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	84.4				11/29/2011	DLC
TFT	EPA-8021	106				11/29/2011	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 11/29/2011  
ALS SDG#: 1111134  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY BLANK RESULTS

### MBG-112811W - Batch 2317 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/28/2011	DLC

### MB-112811W - Batch 2317 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	11/28/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/28/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/28/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/28/2011	DLC

### MB-112311W - Batch 2315 - Water by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	11/28/2011	RAL



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 11/29/2011  
ALS SDG#: 1111134  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY CONTROL SAMPLE RESULTS

### ALS Test Batch ID: 2317 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	76.1			11/28/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	77.8	2		11/28/2011	DLC

### ALS Test Batch ID: 2317 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	111			11/28/2011	DLC
Benzene - BSD	EPA-8021	115	3		11/28/2011	DLC
Toluene - BS	EPA-8021	108			11/28/2011	DLC
Toluene - BSD	EPA-8021	111	3		11/28/2011	DLC
Ethylbenzene - BS	EPA-8021	104			11/28/2011	DLC
Ethylbenzene - BSD	EPA-8021	107	3		11/28/2011	DLC
Xylenes - BS	EPA-8021	105			11/28/2011	DLC
Xylenes - BSD	EPA-8021	108	3		11/28/2011	DLC

### ALS Test Batch ID: 2315 - Water by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-6020	99.0			11/28/2011	RAL
Arsenic (Dissolved) - BSD	EPA-6020	96.5	2		11/28/2011	RAL

APPROVED BY

A handwritten signature in black ink, appearing to read "Bob Bayar".

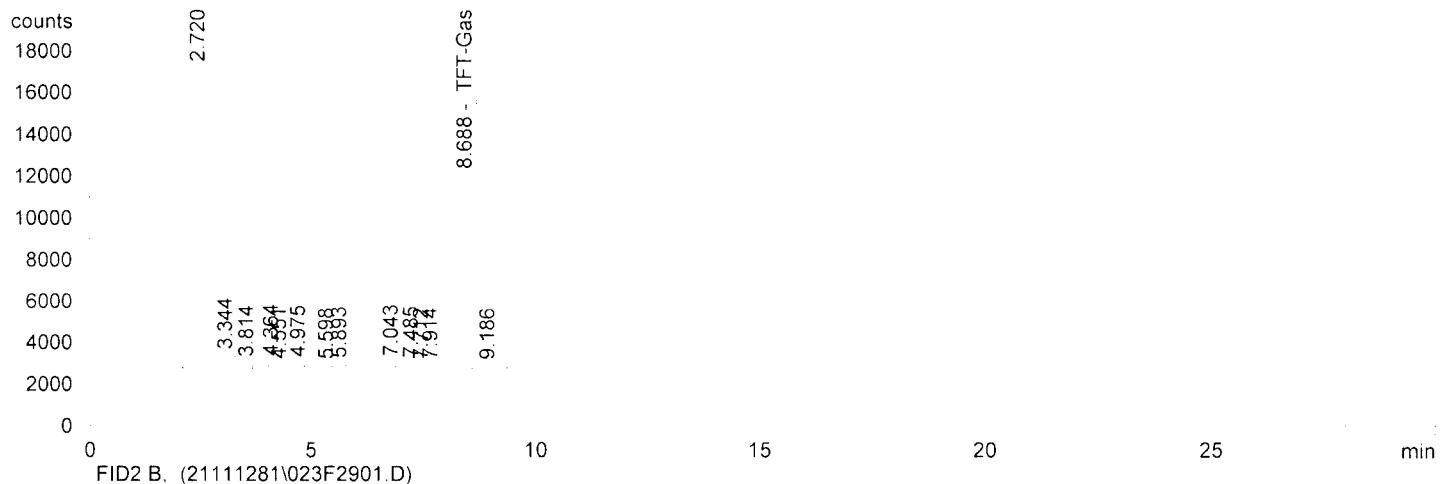
Laboratory Director

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\023F2901.D  
 Injection Date & Time: 11/29/2011 1:42:05 AM  
 Report Created on: 11/29/2011 12:35:40 PM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-01A 5ML Dilution: x 0.0

FID1 A. (21111281\023F2901.D)



FID2 B. (21111281\023F2901.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.688	TFT-Gas	78789.617	8.692
0.000	Gasoline Envelope	0.000	0.000

Gas < 50 µg/L

11/29/11

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.687	TFT-BTEX	150829.234	10.468
10.676	Toluene	13444.367	0.369
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

B.T.E < 1 µg/L x < 3 µg/L

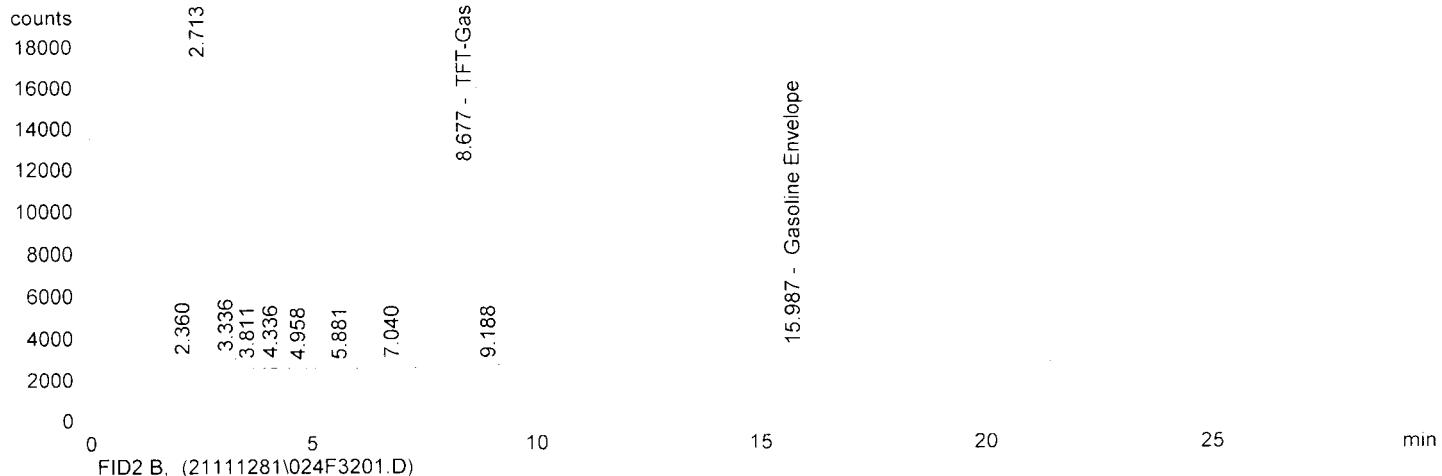
11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\024F3201.D  
 Injection Date & Time: 11/29/2011 3:29:51 AM  
 Report Created on: 11/29/2011 12:35:50 PM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

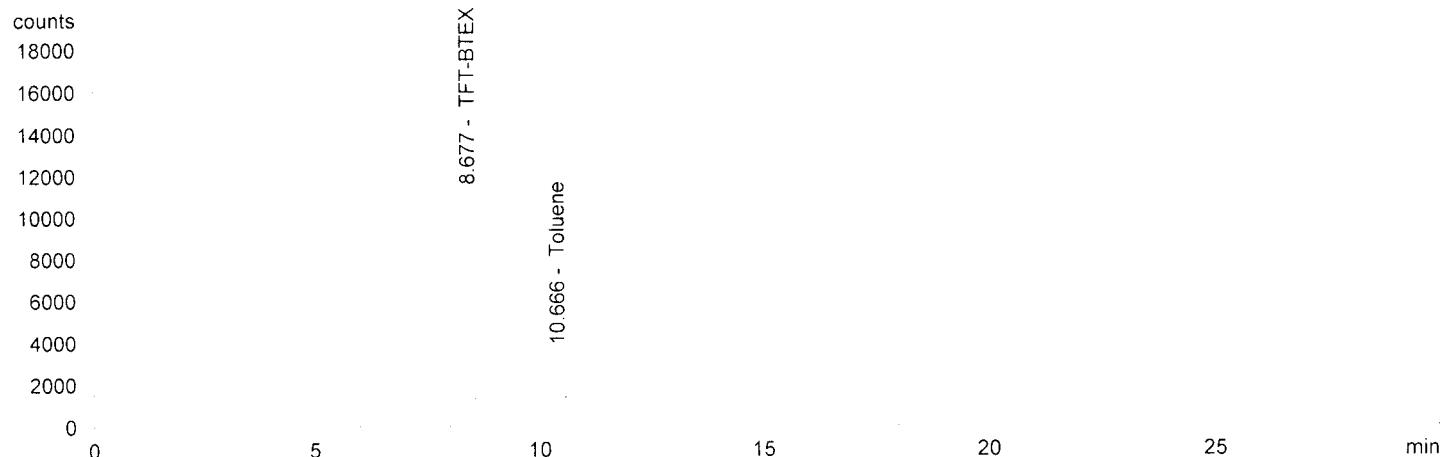
FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-02A 5ML Dilution: X 0.0

FID1 A. (21111281\024F3201.D)



FID2 B. (21111281\024F3201.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.677	TFT-Gas	81493.305	8.991 90%
15.987	Gasoline Envelope	113739.016	18.097

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.677	TFT-BTEX	152840.922	10.607 106%.
10.666	Toluene	14234.962	0.387
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

BTEX < 1 µg/l x 13 µg/l

11-29-11 DC

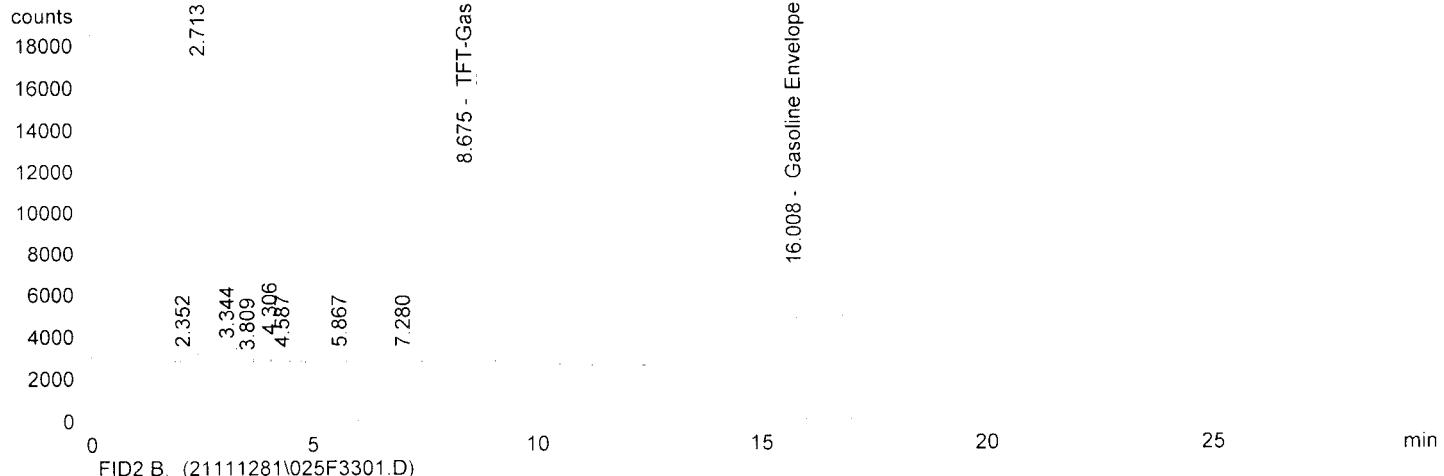
11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\025F3301.D  
 Injection Date & Time: 11/29/2011 4:05:45 AM  
 Report Created on: 11/29/2011 12:36:31 PM  
 Operator: DLC  
 Aquisition Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

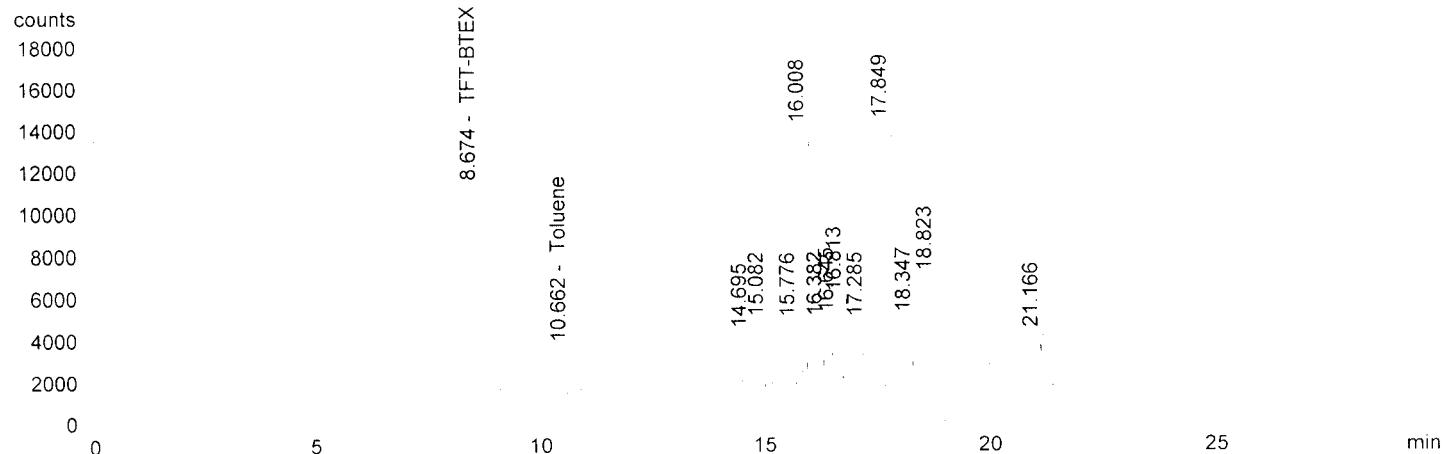
FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-03A 5ML Dilution: X 0.0

FID1 A. (21111281\025F3301.D)



FID2 B. (21111281\025F3301.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.675	TFT-Gas	75788.781	8.361 841.
16.008	Gasoline Envelope	297544.000	47.341

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.674	TFT-BTEX	154388.516	10.715 1071.
10.662	Toluene	13407.526	0.368
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

B.T.E < 1 µg/L      x < 3 µg/L

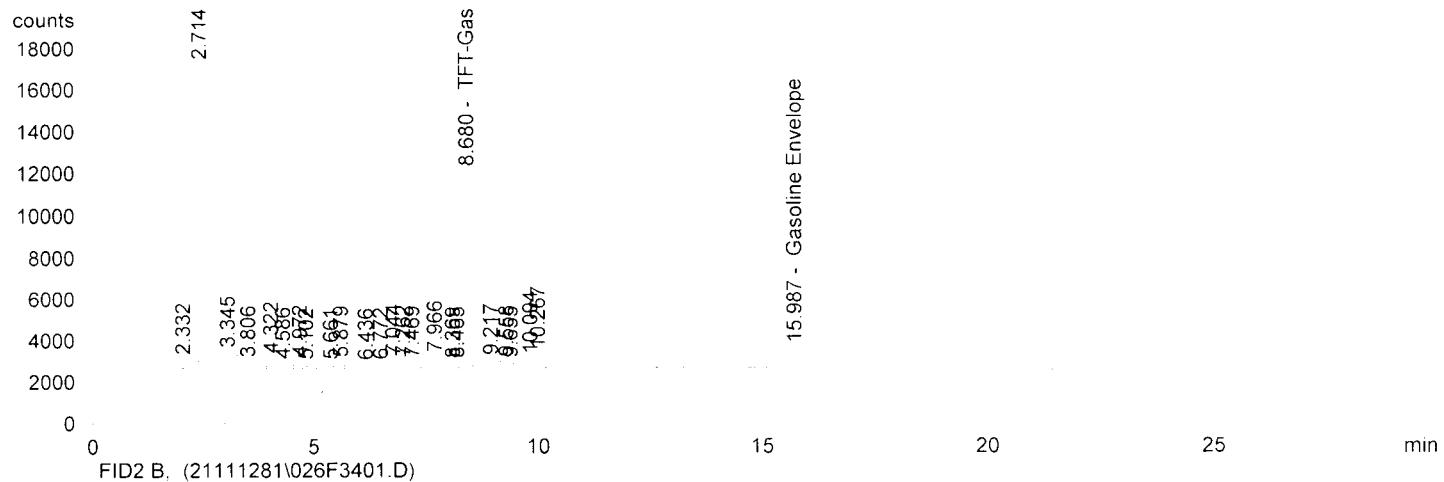
11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\026F3401.D  
 Injection Date & Time: 11/29/2011 4:41:48 AM  
 Report Created on: 11/29/2011 12:36:53 PM  
 Operator: DLC  
 Aquisition Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

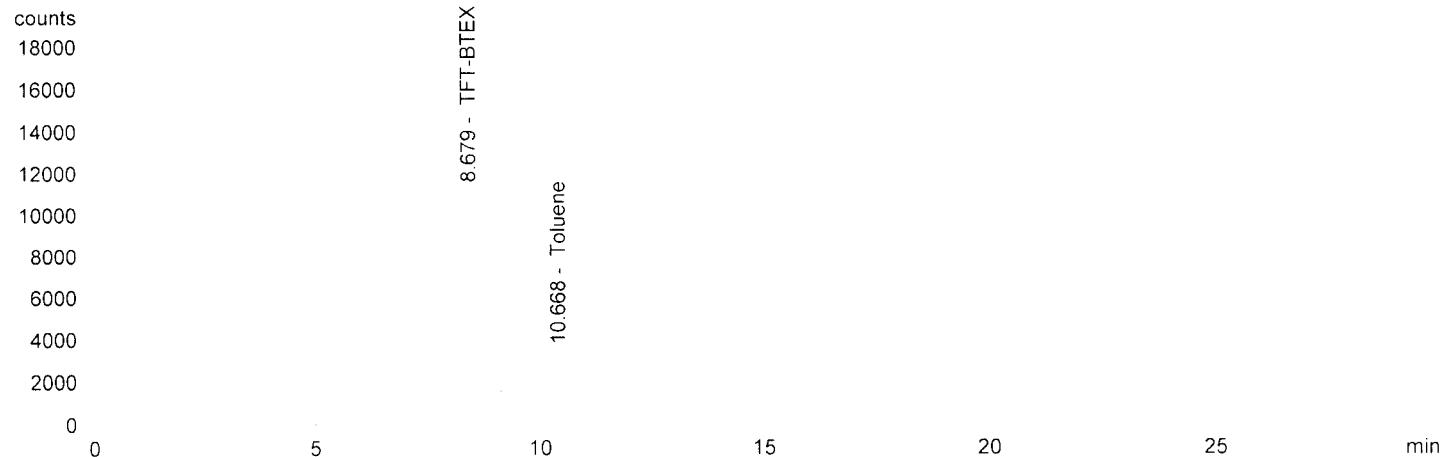
FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-04A 5ML Dilution: X 0.0

FID1 A. (21111281\026F3401.D)



FID2 B. (21111281\026F3401.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.680	TFT-Gas	91939.039	10.143 101.
15.987	Gasoline Envelope	7817.417	1.244

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.679	TFT-BTEX	151193.609	10.493 105.1.
10.668	Toluene	13375.307	0.367
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

BTEX < 1 µg/l      x < 3 µg/l

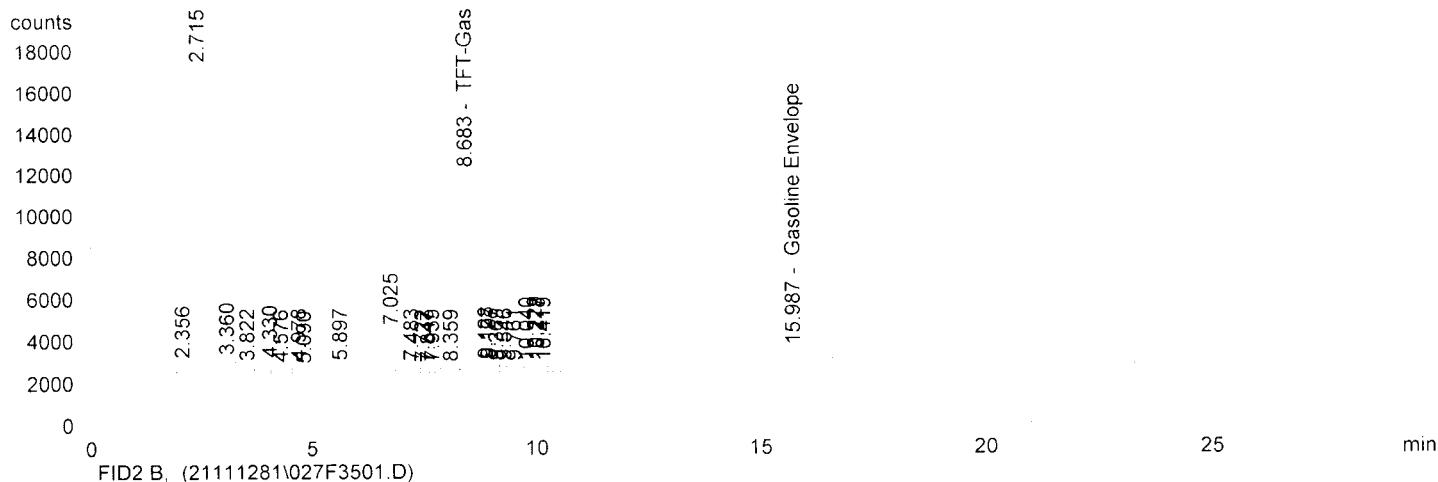
11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\027F3501.D  
 Injection Date & Time: 11/29/2011 5:17:57 AM  
 Report Created on: 11/29/2011 12:37:02 PM  
 Operator: DLC  
 Aquisition Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-05A 5ML Dilution: X 0.0

FID1 A. (21111281\027F3501.D)



FID2 B. (21111281\027F3501.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.683	TFT-Gas	89668.734	9.893 99.
15.987	Gasoline Envelope	198267.656	31.546

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
7.025	Benzene	39058.820	0.901
8.683	TFT-BTEX	150137.172	10.420 104.
10.672	Toluene	13573.422	0.372
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

B,T,E < 1 µg/l      x 13 µg/l

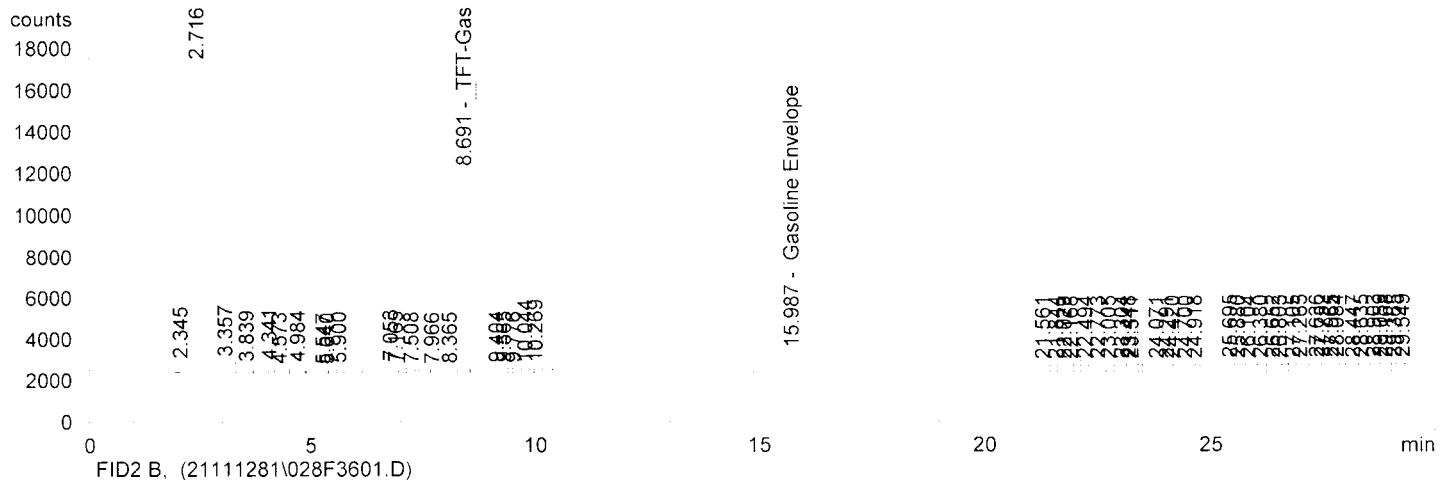
11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\028F3601.D  
 Injection Date & Time: 11/29/2011 5:54:19 AM  
 Report Created on: 11/29/2011 12:37:12 PM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

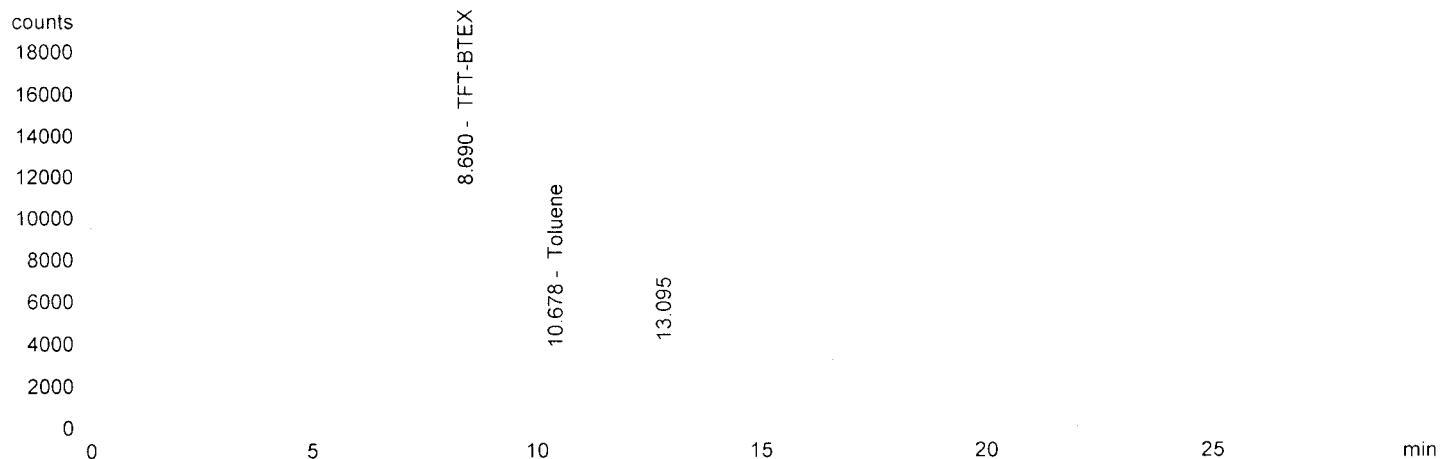
FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-06A 5ML Dilution: X 0.0

FID1 A, (21111281\028F3601.D)



FID2 B, (21111281\028F3601.D)



Ret. Time	Compound Name	Area	Amount ug/L
8.691	TFT-Gas	90643.070	10.000 100%.
15.987	Gasoline Envelope	173593.594	27.620

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.690	TFT-BTEX	149942.516	10.406 104%.
10.678	Toluene	13366.774	0.367
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

BTEX < 1 µg/l x c3 µg/l

AB/11/29/11

11-29-11 DC

Gas/BTEX Instrument 2  
 Data File: C:\HPCHEM\2\DATA\21111281\029F3701.D  
 Injection Date & Time: 11/29/2011 6:30:44 AM  
 Report Created on: 11/29/2011 12:37:22 PM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

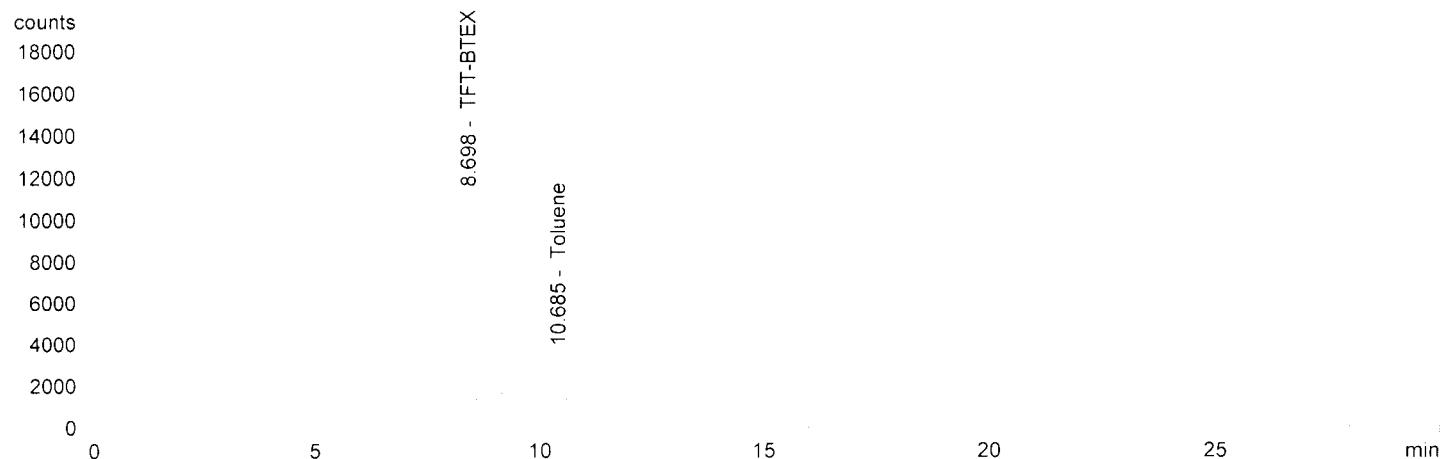
FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: 1111134-07A 5ML Dilution: X 0.0

FID1 A, (21111281\029F3701.D)



FID2 B, (21111281\029F3701.D)



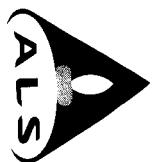
Ret. Time	Compound Name	Area	Amount ug/L
8.698	TFT-Gas	76543.148	8.444 841.
0.000	Gasoline Envelope	0.000	0.000

Gas <50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.698	TFT-BTEX	152097.516	10.556 1061.
10.685	Toluene	14260.026	0.388
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

BTEX <1 µg/l x <3 µg/l

11-29-11 DC



**ALS Environmental**  
8620 Holly Drive, Suite 100  
Everett, WA 98208  
Phone (425) 356-2600  
(425) 356-2626 Fax  
<http://www.alsglobal.com>

# Chain Of Custody/ Laboratory Analysis Request

Date 11-22-11 Page 1 or 1

1111134

## ANALYSIS REQUESTED

## OTHER (Specify)

PROJECT ID:	SUERSON CO., SENIOR WOOLLEY
REPORT TO COMPANY:	GEORGINIENNS
PROJECT MANAGER:	PAUL CRAIG
ADDRESS:	GEORGINIENNS, REDMOND
PHONE:	425-861-6000
FAX:	425-861-6050
P.O. NUMBER:	1408-002-07
E-MAIL:	
INVOICE TO COMPANY:	GEORGINIENNS
ATTENTION:	PAUL CRAIG
ADDRESS:	

NWTPH-HCID

NWTPH-DX

NWTPH-GX

BTEX by EPA-8021

MTBE by EPA-8021  EPA-8260

Halogenated Volatiles by EPA 8260

Volatile Organic Compounds by EPA 8260

EDB / EDC by EPA 8260 SIM (water)

EDB / EDC by EPA 8260 (soil)

Semivolatile Organic Compounds by EPA 8270

Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM

PCB  Pesticides  by EPA 8081/8082

Metals-MTCA-5  RCRA-8  Pri Pol  TAL

Metals Other (Specify) DISSOLVED ARSENIC

TCLP-Metals  VOA  Semi-Vol  Pest  Herbs

NUMBER OF CONTAINERS

RECEIVED IN GOOD CONDITION?

SPECIAL INSTRUCTIONS \* Samples were field FILTERED

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: Paul Craig, Georgiennes, 11-23-11  
Received By: Paul Craig, ALS 11/23/11 10:15

TURNAROUND REQUESTED in Business Days\*

OTHER:

Specify:  
STANDARD

Organic, Metals & Inorganic Analysis

Standard

Fuels & Hydrocarbon Analysis

Same Day

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. MW-1	11-22-11	1000	W	1
2. MW-5		0928	W	2
3. MW-6		1228	W	3
4. MW-7		1024	W	4
5. MW-8		1056	W	5
6. MW-9		1158	W	6
7. MW-10	11-22-11	1126	W	7
8.				
9.				
10.				

Received By:



March 8, 2012

Mr. Paul Craig  
Snelson Companies c/o Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

Dear Mr. Craig,

On February 29th, 7 samples were received by our laboratory and assigned our laboratory project number 1202152. The project was identified as your Snelson Co., Sedro Woolley. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

A handwritten signature in black ink that reads "Rick Bagan".

Rick Bagan  
Laboratory Director



## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE:	3/8/2012
		ALS JOB#:	1202152
		ALS SAMPLE#:	-01
CLIENT CONTACT:	Paul Craig	DATE RECEIVED:	2/29/2012
CLIENT PROJECT:	Snelson Co., Sedro Woolley	COLLECTION DATE:	2/29/2012 9:00:00 AM
CLIENT SAMPLE ID	MW-1	WDOE ACCREDITATION:	C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS	ANALYSIS
						DATE	BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	<b>4.7</b>	1.8	1	UG/L	03/05/2012	RAL

SURROGATE	METHOD	%REC	ANALYSIS	ANALYSIS
			DATE	BY
TFT	NWTPH-GX	<b>104</b>	03/07/2012	DLC
TFT	EPA-8021	<b>114</b>	03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 3/8/2012  
ALS JOB#: 1202152  
ALS SAMPLE#: -02

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 2/29/2012 9:26:00 AM  
CLIENT SAMPLE ID MW-5      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	21	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	93.9				03/07/2012	DLC
TFT	EPA-8021	108				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o DATE: 3/8/2012  
Geoengineers, Inc. ALS JOB#: 1202152  
8410 - 154th Ave NE ALS SAMPLE#: -03  
Redmond, WA 98052

CLIENT CONTACT: Paul Craig DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley COLLECTION DATE: 2/29/2012 11:18:00 AM  
CLIENT SAMPLE ID MW-6 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	11	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	102				03/07/2012	DLC
TFT	EPA-8021	100				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 3/8/2012  
ALS JOB#: 1202152  
ALS SAMPLE#: -04

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 2/29/2012 9:50:00 AM  
CLIENT SAMPLE ID MW-7      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	<b>4.1</b>	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	<b>106</b>				03/07/2012	DLC
TFT	EPA-8021	<b>107</b>				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o DATE: 3/8/2012  
Geoengineers, Inc. ALS JOB#: 1202152  
8410 - 154th Ave NE ALS SAMPLE#: -05  
Redmond, WA 98052

CLIENT CONTACT: Paul Craig DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley COLLECTION DATE: 2/29/2012 10:14:00 AM  
CLIENT SAMPLE ID MW-8 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	101				03/07/2012	DLC
TFT	EPA-8021	108				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 3/8/2012  
ALS JOB#: 1202152  
ALS SAMPLE#: -06

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 2/29/2012 10:54:00 AM  
CLIENT SAMPLE ID MW-9      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	88.4				03/07/2012	DLC
TFT	EPA-8021	109				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052      DATE: 3/8/2012  
ALS JOB#: 1202152  
ALS SAMPLE#: -07

CLIENT CONTACT: Paul Craig      DATE RECEIVED: 2/29/2012  
CLIENT PROJECT: Snelson Co., Sedro Woolley      COLLECTION DATE: 2/29/2012 10:36:00 AM  
CLIENT SAMPLE ID MW-10      WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/07/2012	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/07/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/07/2012	DLC
Arsenic (Dissolved)	EPA-6020	14	1.8	1	UG/L	03/05/2012	RAL
SURROGATE	METHOD	%REC				ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	109				03/07/2012	DLC
TFT	EPA-8021	109				03/07/2012	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 3/8/2012  
ALS SDG#: 1202152  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY BLANK RESULTS

### MBG-030112W - Batch 2549 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	03/01/2012	DLC

### MB-030112W - Batch 2549 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	03/01/2012	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	03/01/2012	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	03/01/2012	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	03/01/2012	DLC

### MB-030212W - Batch 2551 - Water by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved)	EPA-6020	U	1.8	1	UG/L	03/05/2012	RAL



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 3/8/2012  
ALS SDG#: 1202152  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Woolley

## LABORATORY CONTROL SAMPLE RESULTS

### ALS Test Batch ID: 2549 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	100			03/01/2012	DLC
TPH-Volatile Range - BSD	NWTPH-GX	94.2	0		03/01/2012	DLC

### ALS Test Batch ID: 2549 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	98.7			03/01/2012	DLC
Benzene - BSD	EPA-8021	103	5		03/01/2012	DLC
Toluene - BS	EPA-8021	94.7			03/01/2012	DLC
Toluene - BSD	EPA-8021	99.1	4		03/01/2012	DLC
Ethylbenzene - BS	EPA-8021	92.3			03/01/2012	DLC
Ethylbenzene - BSD	EPA-8021	96.5	4		03/01/2012	DLC
Xylenes - BS	EPA-8021	92.4			03/01/2012	DLC
Xylenes - BSD	EPA-8021	96.7	4		03/01/2012	DLC

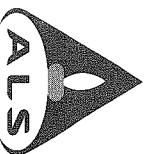
### ALS Test Batch ID: 2551 - Water by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	EPA-6020	100			03/05/2012	RAL
Arsenic (Dissolved) - BSD	EPA-6020	102	2		03/05/2012	RAL

APPROVED BY

A handwritten signature in black ink, appearing to read "Bob Bayar".

Laboratory Director



ALS Environmental  
8620 Holly Drive, Suite 100  
Everett, WA 98208  
Phone (425) 356-2600  
(425) 356-2626 Fax  
<http://www.alsglobal.com>

# Chain Of Custody/ Laboratory Analysis Request

Date **02-27-12** Page \_\_\_\_\_ Of \_\_\_\_\_

ALS Job# **1202152**

(laboratory Use Only)

PROJECT ID:	<b>SNELSON CO., SENNO WOOLLEY</b>	ANALYSIS REQUESTED	OTHER (Specify)
REPORT TO COMPANY:	<b>GEOENGINEERS</b>		
PROJECT MANAGER:	<b>PAUL CRAIG</b>		
ADDRESS:	<b>GEOENGINEERS, REDMOND</b>		
PHONE:	<b>425-861-6000 FAX: 425-861-6050</b>		
PO. NUMBER:	<b>7408-002-07 E-MAIL:</b>		
INVOICE TO COMPANY:	<b>GEOENGINEERS</b>		
ATTENTION:	<b>PAUL CRAIG</b>		
ADDRESS:			
SAMPLE I.D.	DATE	TIME	TYPE
1. MW-1	2-29-12	0900	W
2. MW-5		0926	W
3. MW-6		1118	W
4. MW-7		0950	W
5. MW-8		1014	W
6. MW-9		1054	W
7. MW-10		1036	W
8.			
9.			
10.			

SPECIAL INSTRUCTIONS \* **SAMPLES WERE FIELD FILTERED.**

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: **Greg Cholewa, Geotechnicians, 2-24-12**

Organic, Metals & Inorganic Analysis

Turnaround

Specified

5 3 2 1 SAME DAY

Fuels & Hydrocarbon Analysis

Same Day

3 1 SAME DAY

Surfactants

Specified

STANDARD

RECEIVED IN GOOD CONDITION?

NUMBER OF CONTAINERS

W W W W W W

\* Turnaround request less than standard may incur Rush Charges

2. Received By: **Paul Craig ALS 2-29-12 MSS**

Received By: \_\_\_\_\_



May 30, 2012

Mr. Paul Craig  
Snelson Companies c/o Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

Dear Mr. Craig,

On May 22nd, 7 samples were received by our laboratory and assigned our laboratory project number EV12050134. The project was identified as your Snelson Co., Sedro Wooley. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

A handwritten signature in black ink that reads "Rick Bagan".

Rick Bagan  
Laboratory Director

Page 1

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626

ALS Laboratory Group A Campbell Brothers Limited Company

Environmental

[www.alsglobal.com](http://www.alsglobal.com)

RIGHT SOLUTIONS RIGHT PARTNER



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052 DATE: 5/30/2012  
ALS JOB#: EV12050134  
ALS SAMPLE#: -01

CLIENT CONTACT: Paul Craig DATE RECEIVED: 05/22/12  
CLIENT PROJECT: Snelson Co., Sedro Wooley COLLECTION DATE: 5/22/2012 9:08:00 AM  
CLIENT SAMPLE ID MW-1 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUAL	UNITS	ANALYSIS	ANALYSIS
			RL	MDL	PQL	FACTOR			DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	4.0	1.0	0.32	0.95	1		UG/L	05/29/12	RAL
SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUAL	%REC	ANALYSIS	ANALYSIS
			MIN	MAX	RPD	ADDED			DATE	BY
TFT	NWTPH-GX	95.3	60	140		10.0		95.3	05/23/12	DLC
TFT	SW8021	100	60	140		10.0		100	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



# Environmental

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE:	5/30/2012
		ALS JOB#:	EV12050134
		ALS SAMPLE#:	-02
CLIENT CONTACT:	Paul Craig	DATE RECEIVED:	05/22/12
CLIENT PROJECT:	Snelson Co., Sedro Wooley	COLLECTION DATE:	5/22/2012 9:48:00 AM
CLIENT SAMPLE ID	MW-5	WDOE ACCREDITATION:	C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		ANALYSIS		ANALYSIS	
			RL	MDL	PQL		QUAL	UNITS	DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	20	1.0	0.32	0.95	1		UG/L	05/29/12	RAL

SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		ANALYSIS		ANALYSIS	
			MIN	MAX	RPD		QUAL	%REC	DATE	BY
TFT	NWTPH-GX	107	60	140		10.0		107	05/23/12	DLC
TFT	SW8021	103	60	140		10.0		103	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052 DATE: 5/30/2012  
ALS JOB#: EV12050134  
ALS SAMPLE#: -03

CLIENT CONTACT: Paul Craig DATE RECEIVED: 05/22/12  
CLIENT PROJECT: Snelson Co., Sedro Wooley COLLECTION DATE: 5/22/2012 11:06:00 AM  
CLIENT SAMPLE ID MW-6 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUAL	UNITS	ANALYSIS	ANALYSIS
			RL	MDL	PQL	FACTOR			DATE	BY
Gasoline	NWTPH-GX	96	50	4.6	14	1		UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	7.5	1.0	0.32	0.95	1		UG/L	05/29/12	RAL
SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUAL	%REC	ANALYSIS	ANALYSIS
			MIN	MAX	RPD	ADDED			DATE	BY
TFT	NWTPH-GX	101	60	140		10.0		101	05/23/12	DLC
TFT	SW8021	109	60	140		10.0		109	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.

Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o DATE: 5/30/2012  
Geoengineers, Inc. ALS JOB#: EV12050134  
8410 - 154th Ave NE ALS SAMPLE#: -04  
Redmond, WA 98052

CLIENT CONTACT: Paul Craig DATE RECEIVED: 05/22/12  
CLIENT PROJECT: Snelson Co., Sedro Wooley COLLECTION DATE: 5/22/2012 9:33:00 AM  
CLIENT SAMPLE ID MW-7 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUAL	UNITS	ANALYSIS	ANALYSIS
			RL	MDL	PQL	FACTOR			DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	4.0	1.0	0.15	0.45	1		UG/L	05/29/12	RAL
SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUAL	%REC	ANALYSIS	ANALYSIS
			MIN	MAX	RPD	ADDED			DATE	BY
TFT	NWTPH-GX	86.4	60	140		10.0		86.4	05/23/12	DLC
TFT	SW8021	99.1	60	140		10.0		99.1	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052 DATE: 5/30/2012  
ALS JOB#: EV12050134  
ALS SAMPLE#: -05

CLIENT CONTACT: Paul Craig DATE RECEIVED: 05/22/12  
CLIENT PROJECT: Snelson Co., Sedro Wooley COLLECTION DATE: 5/22/2012 10:03:00 AM  
CLIENT SAMPLE ID MW-8 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUAL	UNITS	ANALYSIS	ANALYSIS
			RL	MDL	PQL	FACTOR			DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	ND	1.0	0.15	0.45	1	U	UG/L	05/29/12	RAL
SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUAL	%REC	ANALYSIS	ANALYSIS
			MIN	MAX	RPD	ADDED			DATE	BY
TFT	NWTPH-GX	103	60	140		10.0		103	05/23/12	DLC
TFT	SW8021	98.2	60	140		10.0		98.2	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052 DATE: 5/30/2012  
ALS JOB#: EV12050134  
ALS SAMPLE#: -06

CLIENT CONTACT: Paul Craig DATE RECEIVED: 05/22/12  
CLIENT PROJECT: Snelson Co., Sedro Wooley COLLECTION DATE: 5/22/2012 10:42:00 AM  
CLIENT SAMPLE ID MW-9 WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUAL	UNITS	ANALYSIS	ANALYSIS
			RL	MDL	PQL	FACTOR			DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC
Arsenic (Dissolved)	EPA-6020	1.9	1.0	0.32	0.95	1		UG/L	05/29/12	RAL
SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUAL	%REC	ANALYSIS	ANALYSIS
			MIN	MAX	RPD	ADDED			DATE	BY
TFT	NWTPH-GX	104	60	140		10.0		104	05/23/12	DLC
TFT	SW8021	95.5	60	140		10.0		95.5	05/23/12	DLC

U - Analyte analyzed for but not detected at level above reporting limit.



# Environmental

## CERTIFICATE OF ANALYSIS

CLIENT:	Snelson Companies c/o Geoengineers, Inc. 8410 - 154th Ave NE Redmond, WA 98052	DATE: 5/30/2012 ALS JOB#: EV12050134 ALS SAMPLE#: -07
CLIENT CONTACT:	Paul Craig	DATE RECEIVED: 05/22/12
CLIENT PROJECT:	Snelson Co., Sedro Wooley	COLLECTION DATE: 5/22/2012 10:20:00 AM
CLIENT SAMPLE ID	MW-10	WDOE ACCREDITATION: C601

## DATA RESULTS

ANALYTE	METHOD	RESULTS	LIMITS		DILUTION FACTOR		QUALITY		ANALYSIS DATE		ANALYSIS BY	
			RL	MDL	PQL		UNITS		DATE	BY		
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC		
Benzene	SW8021	ND	1.0	0.12	1.0	1	U	UG/L	05/23/12	DLC		
Toluene	SW8021	ND	1.0	0.20	1.0	1	U	UG/L	05/23/12	DLC		
Ethylbenzene	SW8021	ND	1.0	0.10	1.0	1	U	UG/L	05/23/12	DLC		
Total Xylenes	SW8021	ND	3.0	0.91	3.0	1	U	UG/L	05/23/12	DLC		
Arsenic (Dissolved)	EPA-6020	13	1.0	0.32	0.95	1		UG/L	05/29/12	RAL		

SURROGATE	METHOD	RESULTS	LIMITS		SPIKE ADDED		QUALITY		ANALYSIS DATE		ANALYSIS BY	
			MIN	MAX	RPD		%REC		DATE	BY		
TFT	NWTPH-GX	100	60	140		10.0		100	05/23/12	DLC		
TFT	SW8021	93.7	60	140		10.0		93.7	05/23/12	DLC		

U - Analyte analyzed for but not detected at level above reporting limit.



### CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o  
Geoengineers, Inc.  
8410 - 154th Ave NE  
Redmond, WA 98052

DATE: 5/30/2012  
ALS SDG#: EV12050134  
WDOE ACCREDITATION: C601

CLIENT CONTACT: Paul Craig  
CLIENT PROJECT: Snelson Co., Sedro Wooley

### LABORATORY BLANK RESULTS

#### MBG-052312W - Batch 2799 - Water by NWTPH-GX Prepared 05/23/12 00:00

ANALYTE	METHOD	RESULTS	RL	LIMITS		DILUTION FACTOR	QUAL	UNITS	ANALYSIS	
				MDL	PQL				DATE	BY
Gasoline	NWTPH-GX	ND	50	4.6	14	1	U	UG/L	05/23/12	DLC
SURROGATE	METHOD	RESULTS	MIN	LIMITS MAX	RPD	SPIKE ADDED	QUAL	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	89.8	60	140		10		89.8	05/23/12	DLC

#### MB-052312W - Batch 2799 - Water by SW8021 Prepared 05/23/12 00:00

ANALYTE	METHOD	RESULTS	RL	LIMITS		DILUTION FACTOR	QUAL	UNITS	ANALYSIS	
				MDL	PQL				DATE	BY
Benzene	SW8021	ND	1.0	0.12	0.35	1	U	UG/L	05/23/12	DLC
Toluene	SW8021	ND	1.0	0.20	0.60	1	U	UG/L	05/23/12	DLC
Ethylbenzene	SW8021	ND	1.0	0.10	0.32	1	U	UG/L	05/23/12	DLC
Total Xylenes	SW8021	ND	3.0	0.91	2.7	1	U	UG/L	05/23/12	DLC
SURROGATE	METHOD	RESULTS	MIN	LIMITS MAX	RPD	SPIKE ADDED	QUAL	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	SW8021	95.9	60	140		10		95.9	05/23/12	DLC

#### MB-052512W - Batch 2803 - Water by SW6020 Prepared 05/25/12 14:52

ANALYTE	METHOD	RESULTS	RL	LIMITS		DILUTION FACTOR	QUAL	UNITS	ANALYSIS	
				MDL	PQL				DATE	BY
Arsenic (Dissolved)	SW6020	ND	1.0	0.15	0.45	1	U	UG/L	05/25/12	RAL



## CERTIFICATE OF ANALYSIS

CLIENT: Snelson Companies c/o DATE: 5/30/2012  
Geoengineers, Inc. ALS SDG#: EV12050134  
8410 - 154th Ave NE WDOE ACCREDITATION: C601  
Redmond, WA 98052

CLIENT CONTACT: Paul Craig

CLIENT PROJECT: Snelson Co., Sedro Wooley

## LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2799 - Water by NWTPH-GX Prepared 05/23/12 00:00

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	SPIKE ADDED	MIN	MAX	RPD	ANALYSIS DATE	ANALYSIS BY
Gasoline - BS	NWTPH-GX	74.4			500	59	116		05/23/12	DLC
Gasoline - BSD	NWTPH-GX	67.0	10		500	59	116	13.4	05/23/12	DLC

SURROGATE	METHOD	%REC	RPD	QUAL	SPIKE ADDED	MIN	MAX	RPD	ANALYSIS DATE	ANALYSIS BY
TFT - BS	NWTPH-GX	102			10	60	140		05/23/12	DLC
TFT - BSD	NWTPH-GX	101			10	60	140		05/23/12	DLC

ALS Test Batch ID: 2799 - Water by SW8021 Prepared 05/23/12 00:00

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	SPIKE ADDED	MIN	MAX	RPD	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	SW8021	117			20	83	120		05/23/12	DLC
Benzene - BSD	SW8021	120	3	SQ1	20	83	120	6.91	05/23/12	DLC
Toluene - BS	SW8021	111			20	85	115		05/23/12	DLC
Toluene - BSD	SW8021	114	3		20	85	115	10	05/23/12	DLC
Ethylbenzene - BS	SW8021	107			20	85	113		05/23/12	DLC
Ethylbenzene - BSD	SW8021	110	2		20	85	113	9.4	05/23/12	DLC
Total Xylenes - BS	SW8021	107			60	85	116		05/23/12	DLC
Total Xylenes - BSD	SW8021	110	3		60	85	116	10	05/23/12	DLC

SURROGATE	METHOD	%REC	RPD	QUAL	SPIKE ADDED	MIN	MAX	RPD	DATE	ANALYSIS BY
TFT - BS	SW8021	105			10	60	140		05/23/12	DLC
TFT - BSD	SW8021	101			10	60	140		05/23/12	DLC

SQ1 - Spike outside of control limits with a high bias. Associated compounds non-detect. No corrective action taken.

ALS Test Batch ID: 2803 - Water by SW6020 Prepared 05/25/12 14:52

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	SPIKE ADDED	MIN	MAX	RPD	ANALYSIS DATE	ANALYSIS BY
Arsenic (Dissolved) - BS	SW6020	94.7			100	89.1	110		05/25/12	RAL
Arsenic (Dissolved) - BSD	SW6020	97.8	199		100	89.1	110	3.36	05/25/12	RAL

APPROVED BY

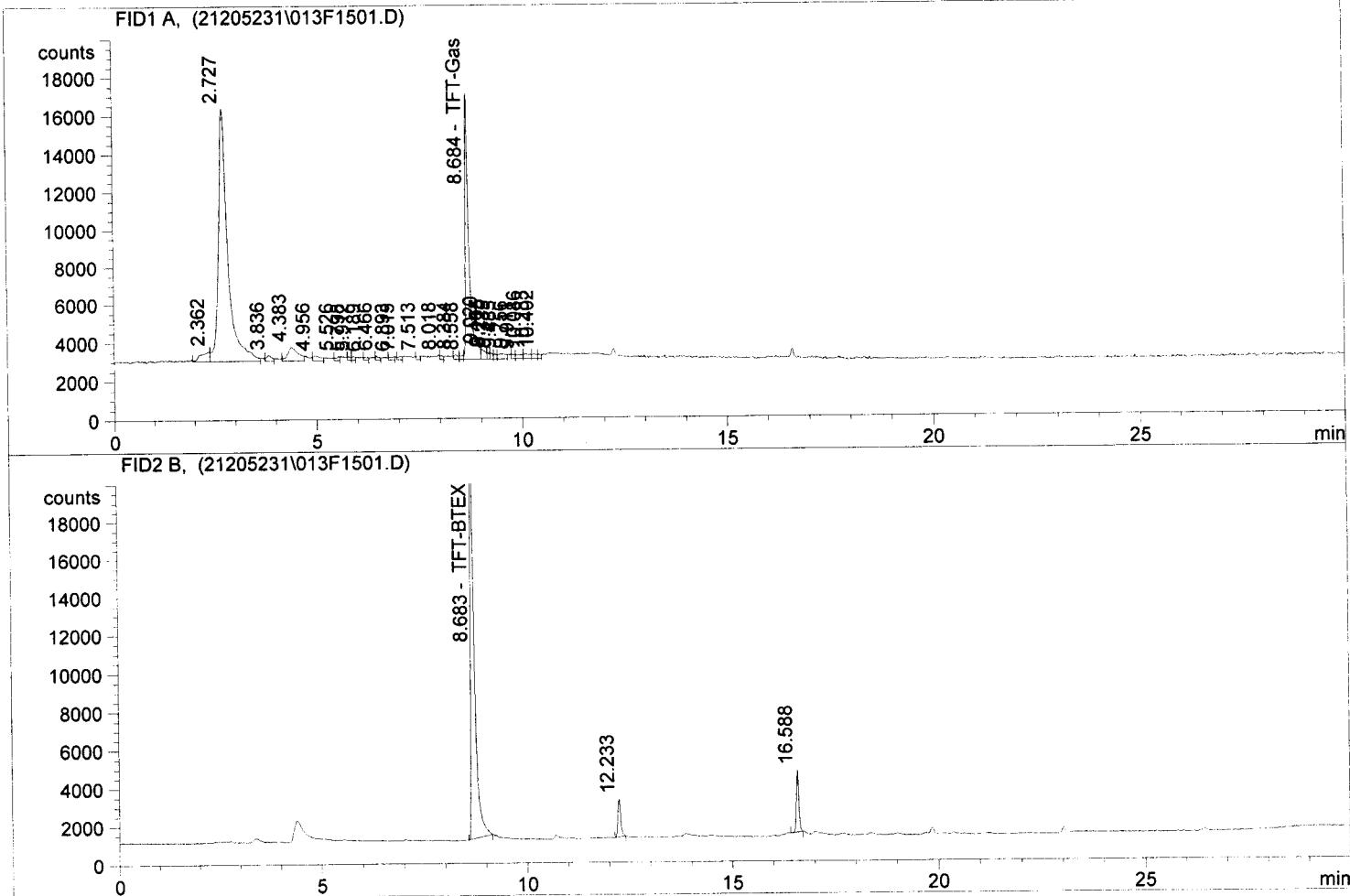
*Ruth Bagman*

## Laboratory Director

Gas/BTEX Instrument 2  
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 Report Created on: 5/24/2012 8:23:43 AM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name:EV12050134-01 Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.684	TFT-Gas	86354.180	9.527 95%
0.000	Gasoline Envelope	0.000	0.000

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.683	TFT-BTEX	144799.172	10.049 100%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY *MB*  
& DATE *5/30/12*

BTEX < 1 µg/L x < 3 µg/L

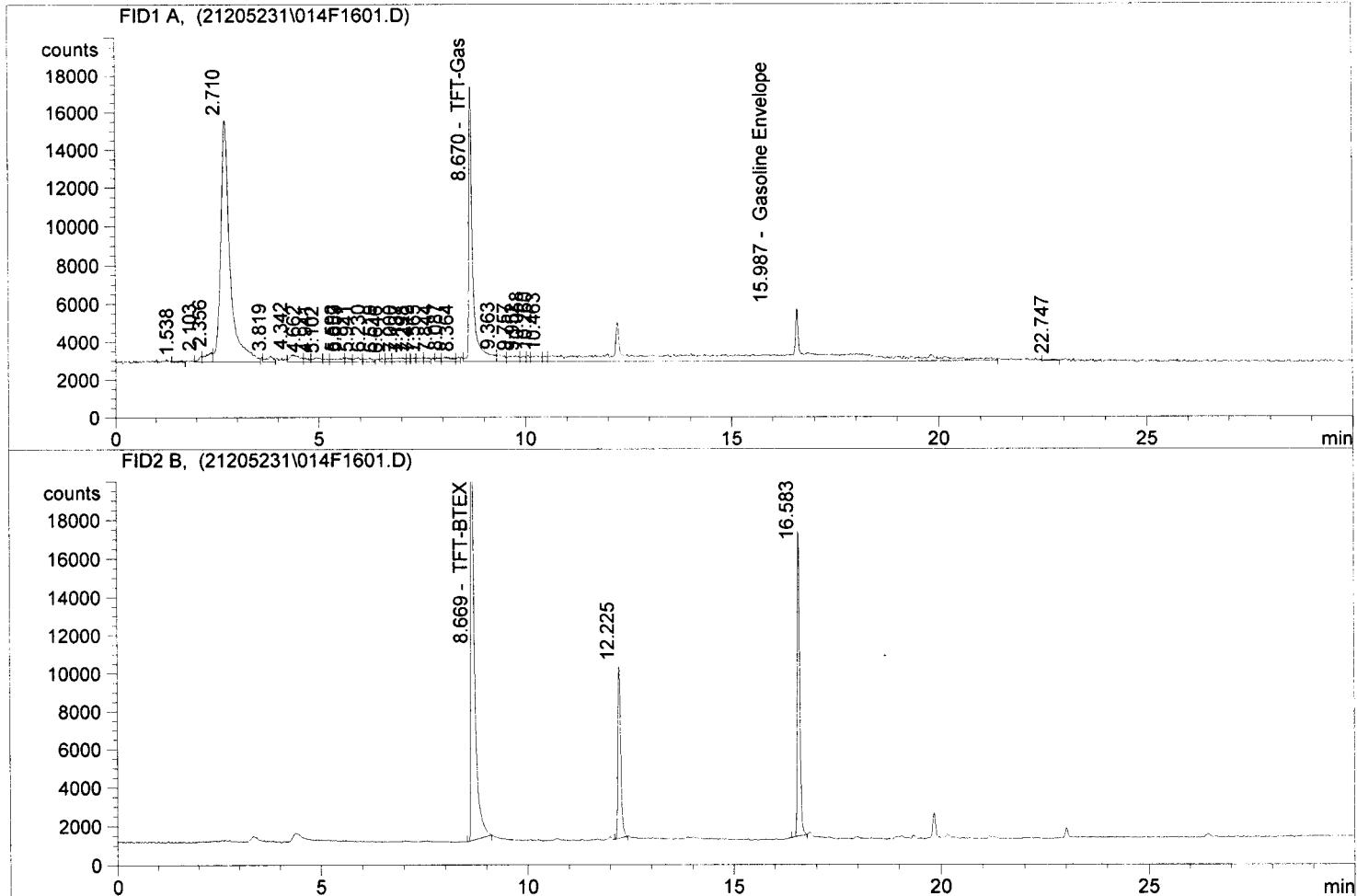
5-24-12 DC

Gas/BTEX      Instrument 2  
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Injection Date & Time: 5/23/2012 5:41:05 PM  
Report Created on: 5/24/2012 8:23:54 AM  
Operator: DLC  
Aquistion Method: GXBT1011.M  
Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis  
FID2 B equivalent to PID analysis

Sample Name:EV12050134-02

Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.670	TFT-Gas	96720.734	10.671 1071
15.987	Gasoline Envelope	186934.594	29.743

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.669	TFT-BTEX	149083.937	10.346 103
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

**REVIEWED BY** MB /   
**& DATE** 5/30/12

B<sub>1</sub>T<sub>1</sub>E < 1 μg/L

$x < 3 \text{ } \mu\text{g/l}$

5-24-12 DC

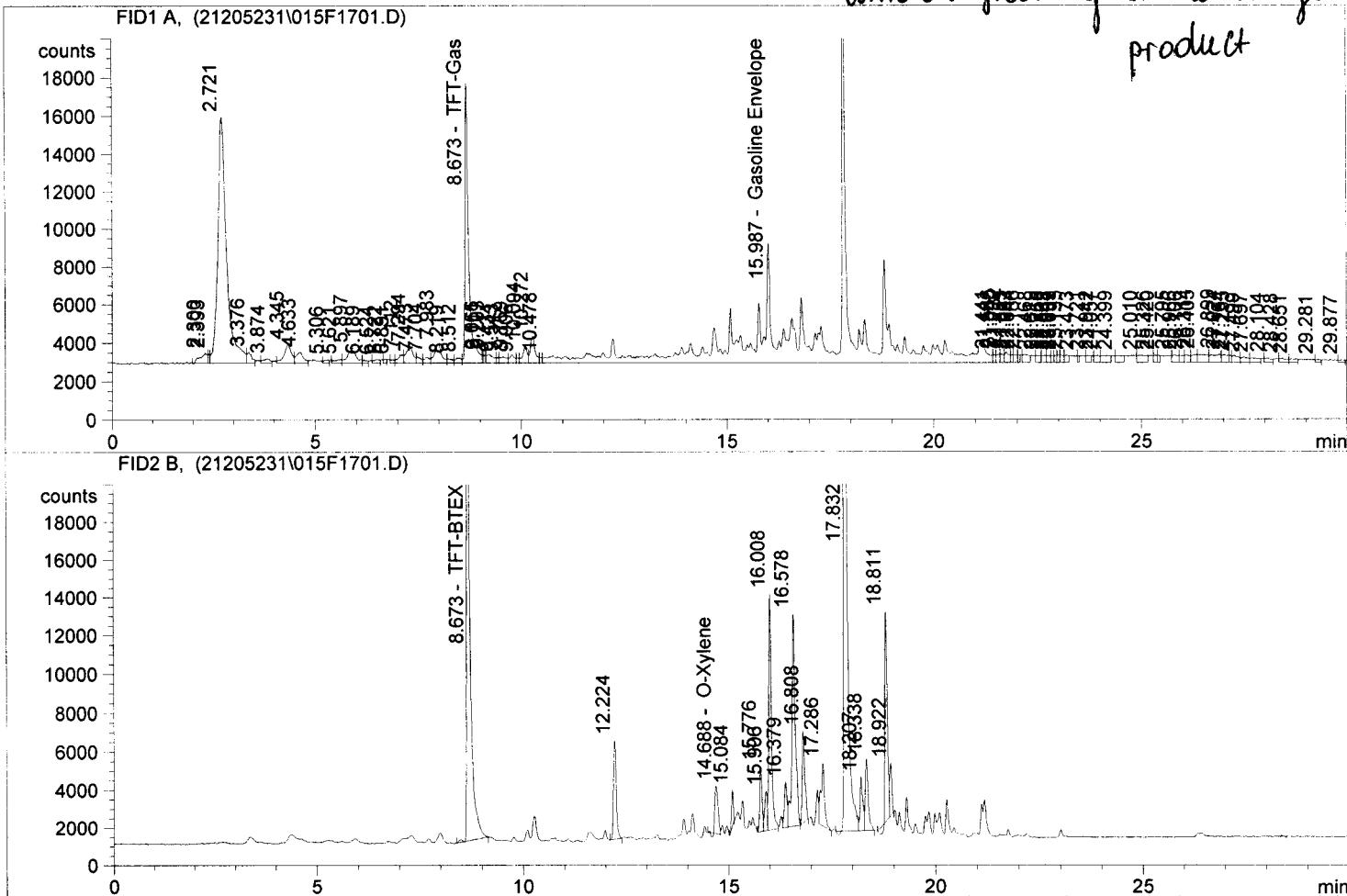
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 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: EV12050134-03

Dilution: X 0.0

unidentified gasoline range product



Ret. Time	Compound Name	Area	Amount ug/L
8.673	TFT-Gas	91167.906	10.058
15.987	Gasoline Envelope	601771.375	95.746

Gas = 96ug/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.673	TFT-BTEX	157423.875	10.926
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
14.688	O-Xylene	13291.904	0.346

REVIEWED BY *MS*  
 & DATE *5/30/12*

BTEX < 1µg/l      x < 3 µg/l

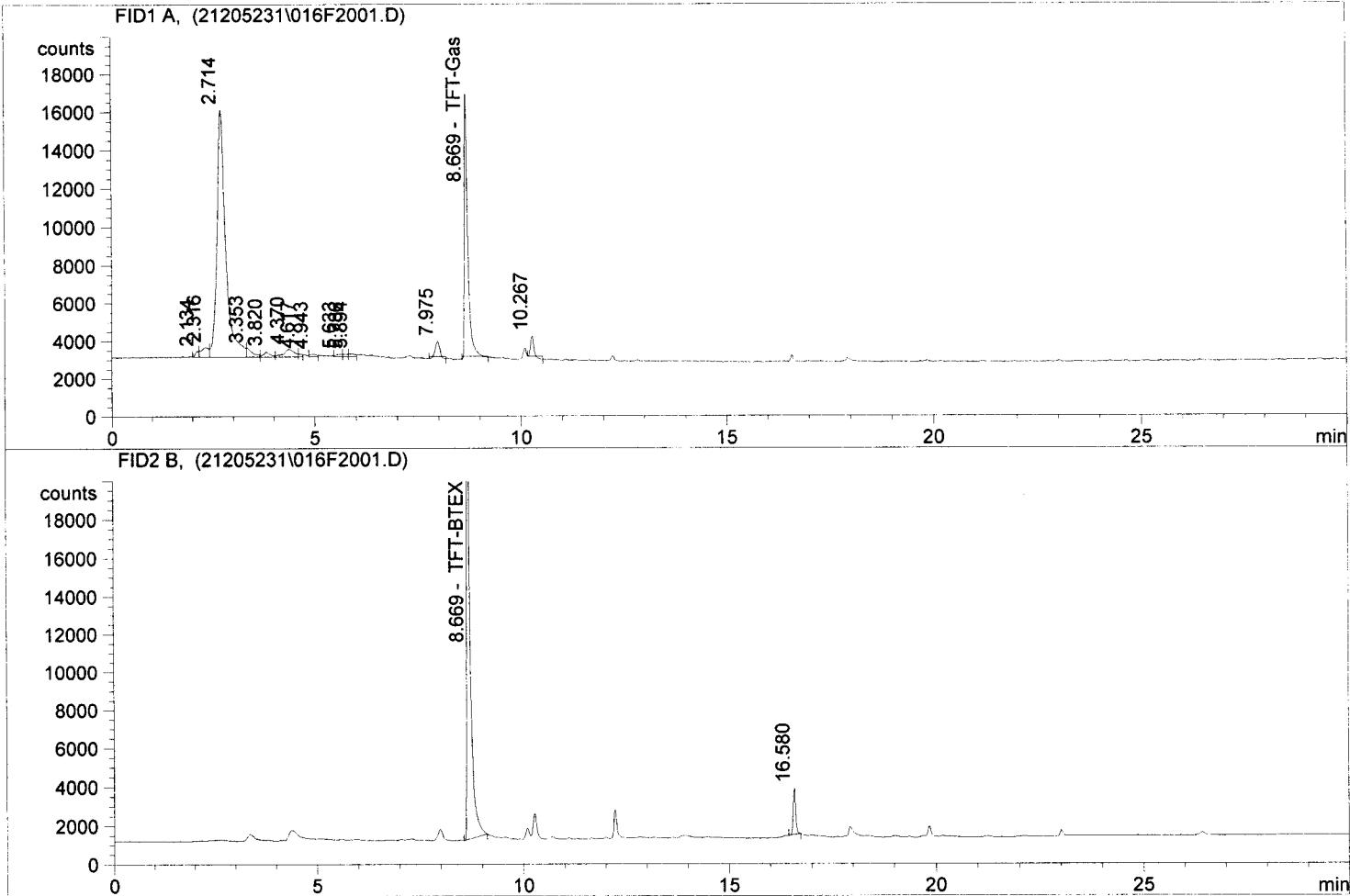
5-24-12 DC

Gas/BTEX Instrument 2  
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 Injection Date & Time: 5/23/2012 8:07:29 PM  
 Report Created on: 5/24/2012 8:29:25 AM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name: EV12050134-04

Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.669	TFT-Gas	78294.422	8.638 86. /
0.000	Gasoline Envelope	0.000	0.000

Gas <50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.669	TFT-BTEX	142762.375	9.907 99. /
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY  
& DATE

BS  
5/24/12

BTEX <1 µg/l      <3 µg/l

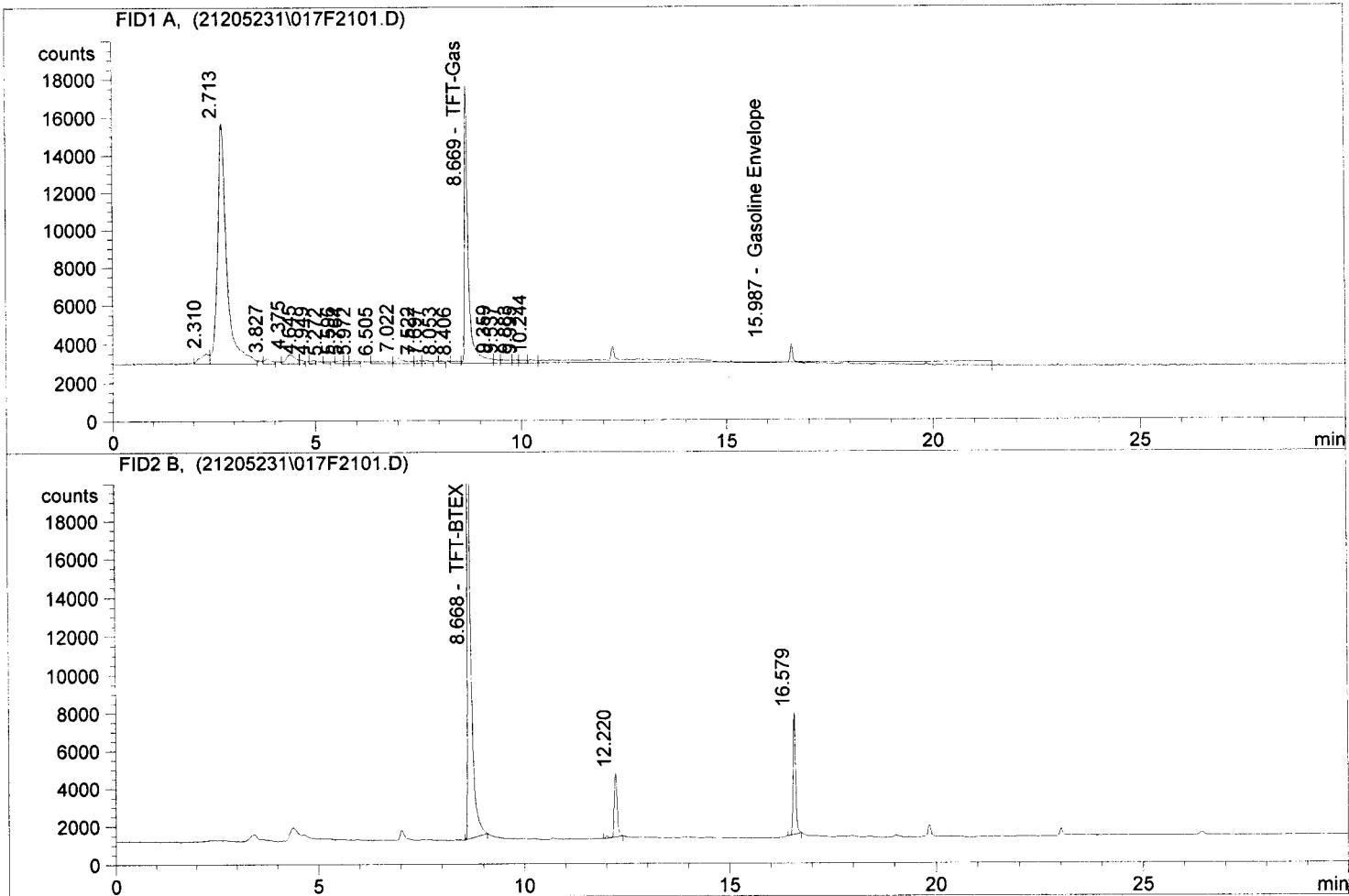
5-24-12 DC

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 Injection Date & Time: 5/23/2012 8:44:06 PM  
 Report Created on: 5/24/2012 8:29:37 AM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name:EV12050134-05

Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.669	TFT-Gas	93602.547	10.327 103/
15.987	Gasoline Envelope	9715.909	1.546

Gas < 50 µg/L

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.668	TFT-BTEX	141496.891	9.819 98/
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY  
& DATE

B  
5/24/12

BTEX < 1 µg/L

x < 3 µg/L

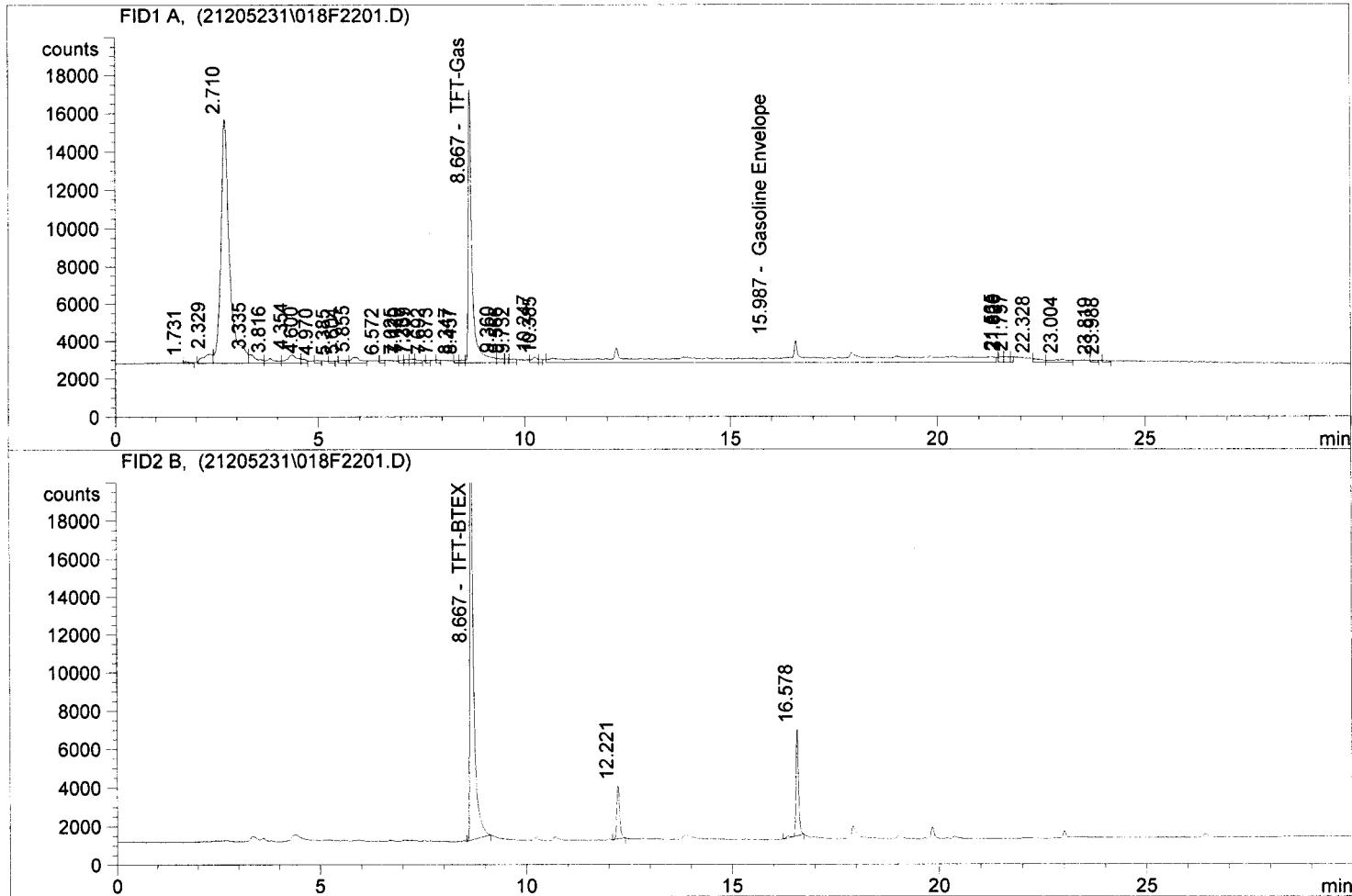
5-24-12 DC

Gas/BTEX Instrument 2  
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 Report Created on: 5/24/2012 8:29:48 AM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name:EV12050134-06

Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.667	TFT-Gas	94613.727	10.438 104.1
15.987	Gasoline Envelope	167409.000	26.636

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.667	TFT-BTEX	137636.188	9.551 96.1
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY	<i>BS</i>
& DATE	<i>5/30/12</i>

BTEX < 1 µg/l      x < 3 µg/l

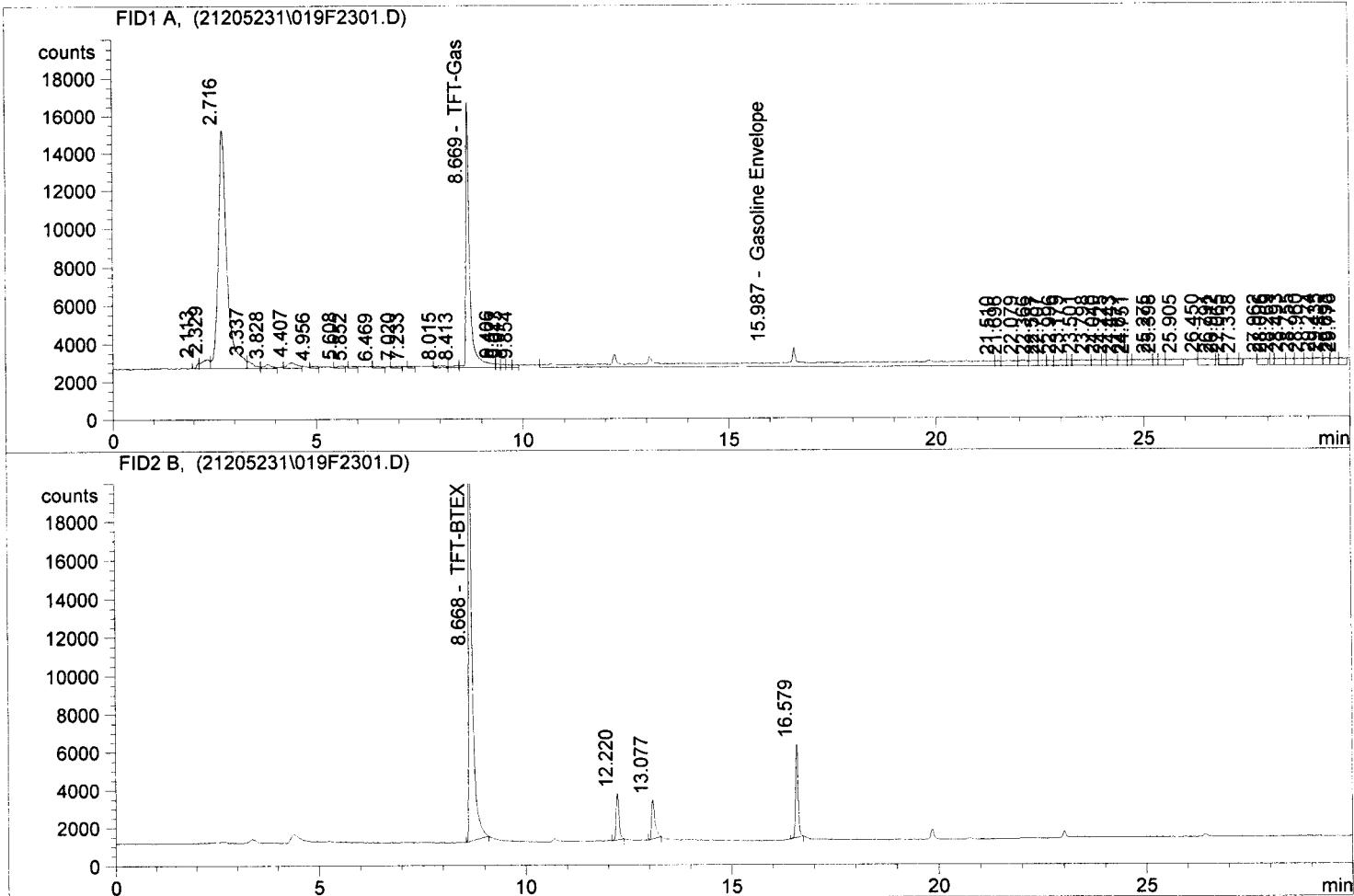
5-24-12 DC

Gas/BTEX Instrument 2  
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 Injection Date & Time: 5/23/2012 9:57:12 PM  
 Report Created on: 5/24/2012 8:30:00 AM  
 Operator: DLC  
 Aquistion Method: GXBT1011.M  
 Analysis Method: C:\HPCHEM\2\METHODS\GXBT1011.M

FID1 A equivalent to FID analysis.  
 FID2 B equivalent to PID analysis.

Sample Name:EV12050134-07

Dilution: X 0.0



Ret. Time	Compound Name	Area	Amount ug/L
8.669	TFT-Gas	90670.602	10.003 100%
15.987	Gasoline Envelope	144651.531	23.015

Gas < 50 µg/l

Ret. Time	Compound Name	Area	Amount ug/L
0.000	MTBE	0.000	0.000
0.000	Benzene	0.000	0.000
8.668	TFT-BTEX	135066.484	9.372 94%
0.000	Toluene	0.000	0.000
0.000	Ethylbenzene	0.000	0.000
0.000	M & P- Xylenes	0.000	0.000
0.000	O-Xylene	0.000	0.000

REVIEWED BY *MJ*  
 & DATE *5/30/12*

BTEX < 1 µg/l x < 3 µg/l

5-24-12 DC



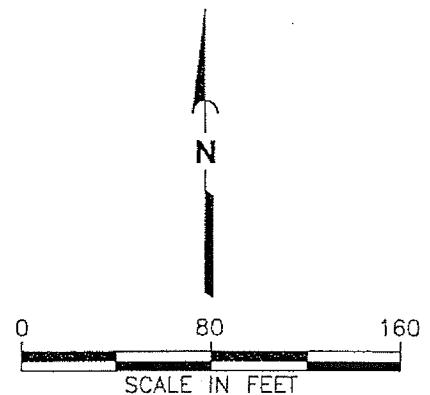
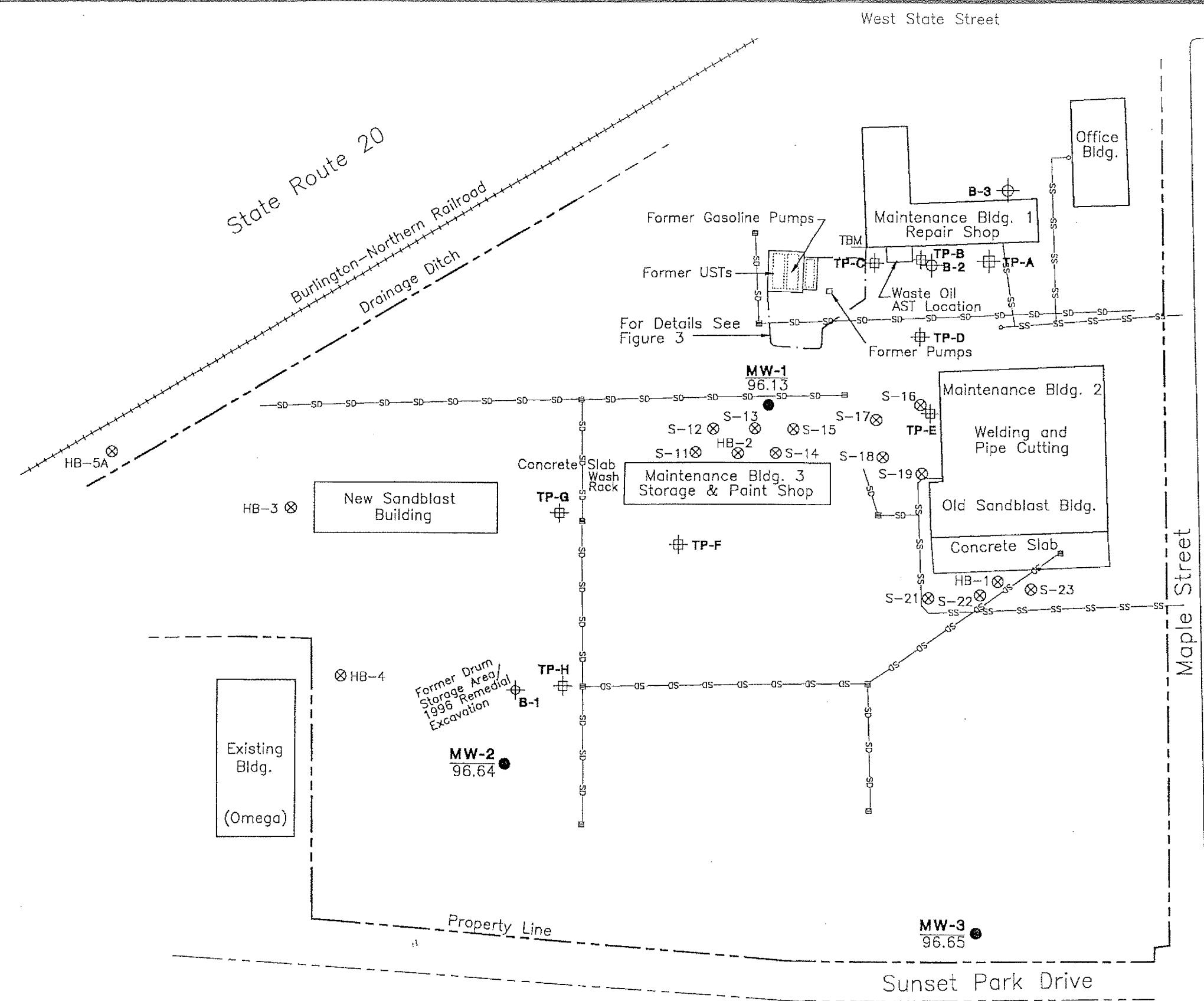
## **APPENDIX C**

**Copy of Figure from Prior Report (GeoEngineers, July 1999)**

07/13/99

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LUB:HLA



#### EXPLANATION:

- CATCH BASIN
- MANHOLE
- AST ABOVEGROUND STORAGE TANK
- UST UNDERGROUND STORAGE TANK
- SD— STORM DRAIN LINE
- SS— SANITARY SEWER LINE
- TP-A+ TEST PIT COMPLETED IN FEBRUARY 1999
- HB-1 ⊗ S-21 ⊗ NEAR SURFACE SAMPLE OBTAINED IN FEBRUARY 1999 OR MAY 1999
- B-1+ BORING COMPLETED IN JUNE 1999
- MW-1+ 96.13 MONITORING WELL INSTALLED IN JUNE 1999 GROUND WATER ELEVATION BASED ON 06/18/99 MEASUREMENT
- TBM+ TEMPORARY BENCH MARK AT SOUTHWEST CORNER OF MAINTENANCE BLDG. 1 WITH ASSUMED ELEVATION OF 100.00 FEET

Note: 1. The locations of all features shown are approximate.  
2. Only those explorations from which samples were obtained for chemical analysis are shown.  
Reference: Undated site drawings provided by Seven Sisters.