



THE RILEY GROUP, INC.

June 24, 2011

Mr. Mark O. Zenger
Snoqualmie Summit Inn
PO Box 1449
Edmonds, Washington 98020

RE: Groundwater Monitoring Report, 2nd Quarter 2011
Snoqualmie Summit Inn Property
SR 906, Kittitas County
Snoqualmie Pass, Washington
Ecology VCP CE0319
RGI Project No. 2008-321C

Dear Mr. Zenger:

The Riley Group, Inc. (RGI) has prepared this *Groundwater Monitoring Report, 2nd Quarter 2011* for the Snoqualmie Summit Inn (hereafter referred to as the Site, Figure 1) located at Snoqualmie Pass, Kittitas County, Washington. Authorization to implement the scope of work outlined in this report was provided by the Client on July 12, 2010.

On July 30, 2010 five groundwater monitoring wells (MW-1 through MW-5) were completed on the Site (Figure 2). The well locations were selected to characterize groundwater quality in the formerly contaminated areas of the Site and to evaluate the Site specific groundwater flow direction and gradient. The top of well casing elevations were measured by RGI using an arbitrary datum.

GROUNDWATER MONITORING

This second quarter 2011 is the fourth consecutive quarterly groundwater sampling event. The following scope of work was performed.

- Depth to groundwater was measured to the nearest hundredth of a foot using an electronic water level meter. These measurements are presented on Table 1.
- All wells were purged using a peristaltic, and/or submersible pump. At least three well casing volumes will be removed from each well prior to sampling or until the field-measure parameters (temperature, pH and specific conductivity) have stabilized. Approximate volumes of water purged from each well prior to sampling are as follows: MW-1 (8 gallons), MW-2 (7 gallons, pumped dry), MW-3 (5 gallons), MW-4 (5 gallons), and MW-5 (5.5 gallons).

SERVING THE PACIFIC NORTHWEST

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- Following purging activities, each well was left to recharge to at least 80 percent of its original water level prior to sampling. All wells were sampled under low-flow conditions using a submersible or peristaltic pump with disposable tubing.
- Purge water was placed in labeled 55-gallon drums and left on the Site, pending profiling and offsite disposal.
- Sampling start time, groundwater recovery time, field parameters, duration of purging, PID readings and water level measurements were recorded for each sampling event on field data sheets. These data are kept on file in RGI project file.
- Groundwater samples were collected in laboratory-supplied one half-liter amber, 500-milliliter polypropylene bottles and 40-milliliter vials with Teflon caps (no headspace). Sample containers were placed in an ice-chilled cooler and transported to the analytical laboratory under proper chain-of-custody documentation.

ANALYTICAL TESTING

Groundwater samples collected during this quarterly groundwater monitoring cycle were submitted to Friedman & Bruya, Inc. (FBI), for laboratory testing as outlined below. A total of five groundwater samples were submitted for the following analyses:

- Gasoline-range total petroleum hydrocarbons (TPH) using Ecology Test Method NWTPH-Gx.
- Benzene, ethylbenzene, toluene, xylenes (BTEX) using EPA Test Method 8021.
- Diesel- and oil-range TPH using Ecology Test Method NWTPH-DX with silica gel cleanup¹.
- Volatile organic compounds (VOCs) using EPA Test Method 8260B.
- Low level Carcinogenic Polynuclear Aromatic Hydrocarbons (cPAH) using EPA Test Method 8270SIM.
- Lead and arsenic using EPA Test Method 200.8 (soil) and EPA Test Method 6000/7000 (water).

CLEANUP REGULATIONS

Washington's hazardous waste cleanup law the MTCA (RCW 70.105D) mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (Ch 173-340 WAC) defines the approach for establishing cleanup requirements for individual sites, including the establishment of cleanup standards and selection of cleanup actions.

The MTCA regulation provides three options for establishing generic and site-specific cleanup levels for soil and groundwater. Method A cleanup levels have been adopted for specific purposes and are intended to provide conservative cleanup levels for sites undergoing routine site characterization or cleanup actions or those sites with relatively few hazardous substances. Method B and C cleanup levels are set using a site risk assessment,

¹ Silica gel cleanup removes naturally occurring organics, which can give falsely elevated diesel/oil TPH readings.

which focus on the use of “reasonable maximum exposure” assumptions based on site-specific characteristics and toxicity of the contaminants of concern.

The analytical data for this project are compared to the MTCA Method A Cleanup Levels for Ground Water (WAC 173-340-720, Table 720-1) and are summarized in Tables 1.

FINDINGS AND CONCLUSIONS

Groundwater

Depth to groundwater as measured with an electronic meter, ranged from 0.19 to 5.65 feet below the top of casing (btc). Groundwater gradient was calculated at 0.029 ft/ft and the flow is towards the south (Figure 2). These measurements are consistent with the previous findings.

The groundwater samples did not yield any of the contaminants of concern except for lead, and arsenic. The MTCA Method A Cleanup Levels for Ground Water are presented in parentheses.

- Total (unfiltered) arsenic concentrations ranged from none detected to 23.8 µg/L.
- Dissolved (filtered) arsenic concentrations ranged from none detected to 15.1 µg/L (5 µg/L).
- Total (unfiltered) lead concentrations ranged from none detected to 21.9 µg/L.
- Dissolved (filtered) lead concentrations were not detected to 1.43 µg/L (15 µg/L).

The elevated concentrations of total lead and arsenic detected in the unfiltered water samples are due to presence of sediment in the samples. The elevated concentrations of dissolved arsenic are due to naturally occurring arsenic in the local bedrock and weathered bedrock (soil).

Discussion

RGI contacted the Snoqualmie Pass Utility District (SPUD) for information on the chemistry of the groundwater produced for public consumption in the vicinity of the Site. According to SPUD, water is produced from five deep wells located near Alpental. The wells are screened from approximately 100 feet to 460 feet bgs. The analytical data from SPUD indicates that two of the wells have yielded concentrations of dissolved arsenic that ranged from approximately 700 µg/L to approximately 1,300 µg/L. In order to comply with the state and federal drinking water maximum contaminant level (MCL) of 10 µg/L, SPUD blends the water from these two wells with water from the other wells prior to distribution. SPUD does not otherwise treat the water prior to distribution.

Given the natural background concentrations of arsenic in the SPUD water supply wells, the concentrations detected at the Site are considered naturally occurring and background.

Conclusion and Recommendation

This letter report completes four consecutive quarters of groundwater monitoring at the Snoqualmie Summit Inn Property, SR 906, Kittitas County, Snoqualmie Pass, Washington. Petroleum-contaminated soils were removed from the Site per RGI's *Independent Cleanup Action Report* dated November 19, 2009. Groundwater samples from the five on-Site monitoring wells have been collected and tested for four consecutive quarterly sampling events, starting July 2010. None of the contaminants of concern have been detected at the Site in concentrations that exceed the MTCA Method A Groundwater Cleanup Levels; except for arsenic that has been measured at elevated concentrations that are a natural occurrence due to the arsenic found in the local bedrock.

Based upon our findings, RGI recommends that the Site be granted a determination of No Further Action.

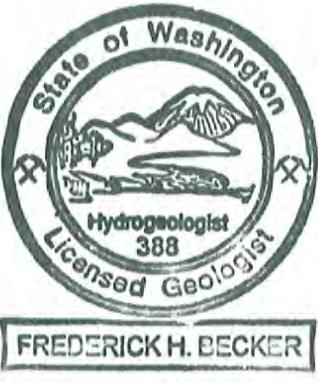
LIMITATIONS

This report is the property of The Riley Group, Inc., Snoqualmie Summit Inn, and their authorized representatives and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report intends for specific application to the Snoqualmie Summit Inn Village Center property, Kittitas County, Snoqualmie Pass, Washington. No other warranty, expressed or implied, is made.

The analyses and recommendations presented in this report are based upon data obtained from our review of available information at the time of preparing this report, our test pits excavated on-site, or other noted data sources. Conditional changes may occur through time by natural or man-made process on this or adjacent properties. Additional change may occur in legislative standards, which may or may not be applicable to this report. These changes, beyond RGI's control, may render this report invalid, partially or wholly. If variations appear evident, RGI should be requested to reevaluate the recommendations in this report prior to proceeding with construction.

Any questions regarding the work within this report, the presentation of the information, or the interpretation of the data are welcome and should be referred to the undersigned.

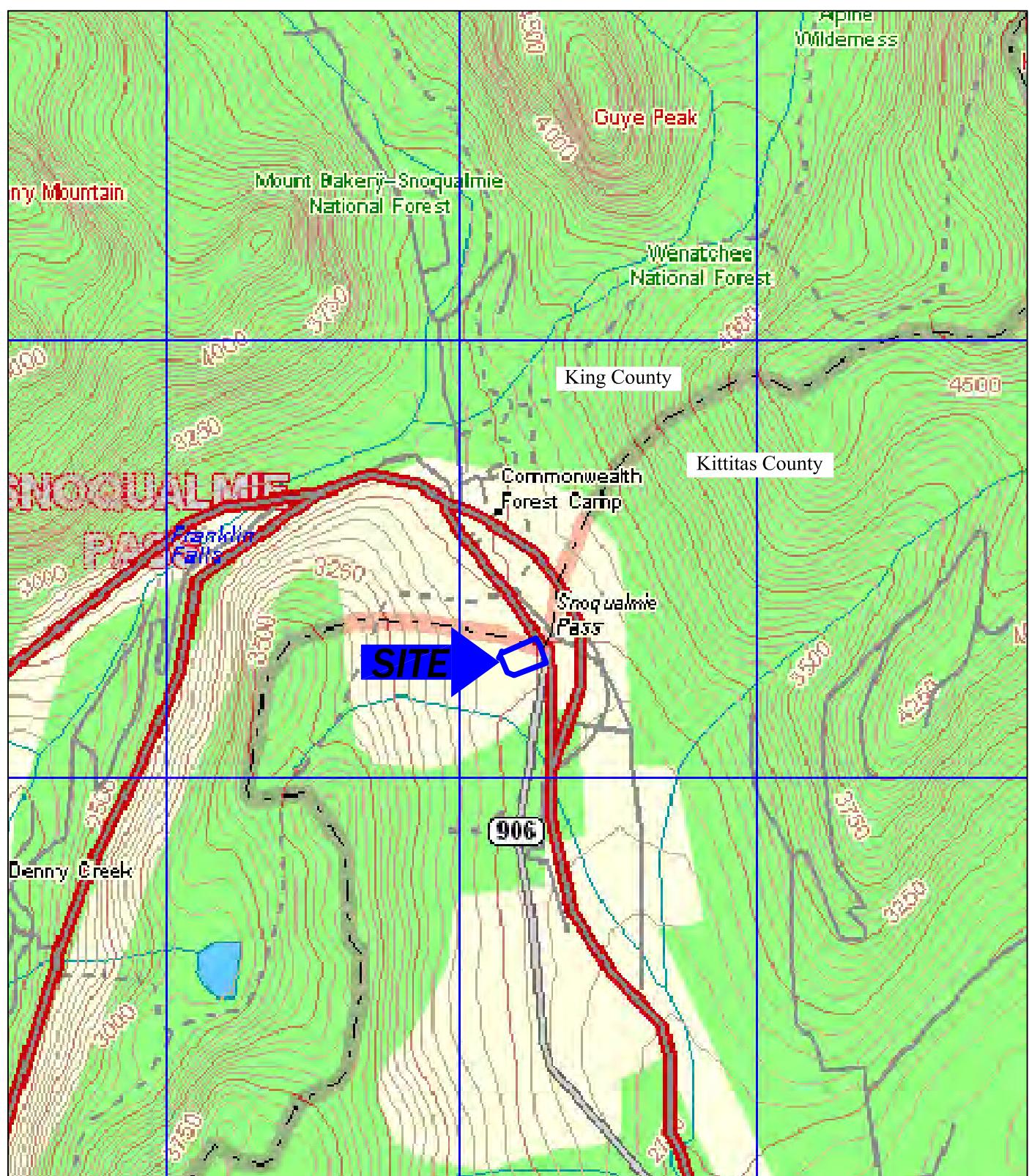
Sincerely,
THE RILEY GROUP, INC.




Frederick H. Becker, L.G., L.H.G.
Senior Project Manager

cc: Mr. Bob Johns; Johns Monroe Mitsunaga & Koloušková
Mr. Norm Hepner, Washington Department of Ecology – Central Region

Attachments	Figure 1	Site and Vicinity Map
	Figure 2	Site Plan and Monitoring Well Locations
	Table 1	Analytical Summary – Groundwater
	Appendix A	Analytical Laboratory Certificates



USGS, 1989 Snoqualmie, Washington
7.5-Minute Quadrangle

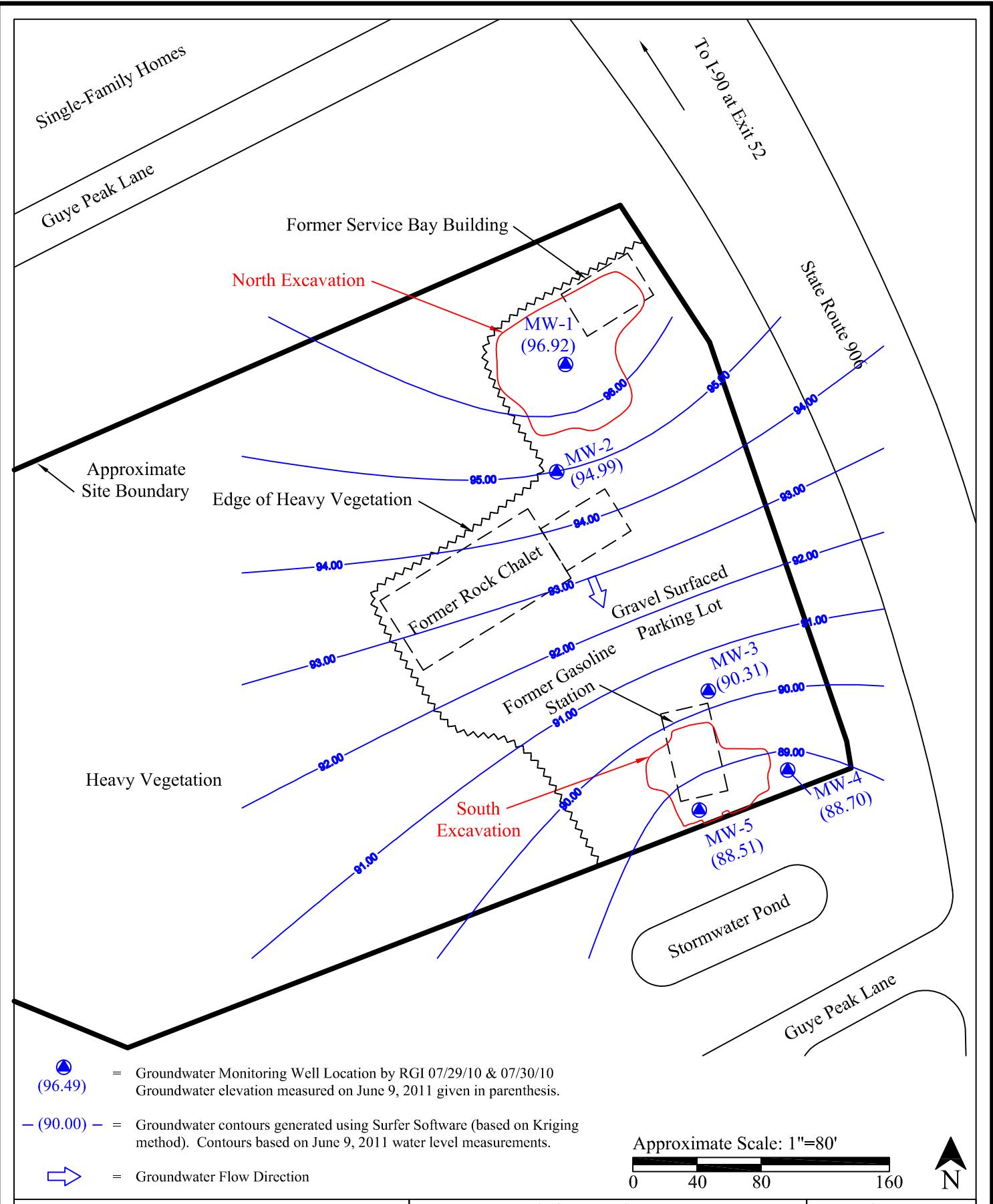
Approximate Scale: 1"=2000'

0 100 2000 4000



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Phone: 425.415.0551 • Fax: 425.415.0311

Snoqualmie Summit Inn Property		Figure 1
Project Number	Site Vicinity Map	Date Drawn:
2008-321C		06/2011
Address: SR 906, Snoqualmie Pass, Washington		



The Riley Group, Inc.
 17522 Bothell Way Northeast, Suite A
 Bothell, Washington 98011
 Phone: 425.415.0551 ♦ Fax: 425.415.0311

Snoqualmie Summit Inn Property		Figure 2
Project Number	Site Plan with Groundwater Contours, June 2011	Date Drawn: 06/2011
2008-321C		Address: SR 906, Snoqualmie Pass, Washington

Table 1 Summary of Groundwater Grab Sample Result

**Snoqualmie Summit Inn Property, SR 906, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321C**

THE RILEY GROUP, INC.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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June 17, 2011

Fred Becker, Project Manager
The Riley Group, Inc.
17522 Bothell Way NE
Bothell, WA 98011

Dear Mr. Becker:

Included are the results from the testing of material submitted on June 9, 2011 from the Snoqualmie Summit 2008-321C, F&BI 106135 project. There are 38 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
TRG0617R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 9, 2011 by Friedman & Bruya, Inc. from the The Riley Group Snoqualmie Summit 2008-321C, F&BI 106135 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>The Riley Group</u>
106135-01	MW1
106135-02	MW2
106135-03	MW3
106135-04	MW4
106135-05	MW5

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/17/11

Date Received: 06/09/11

Project: Snoqualmie Summit 2008-321C, F&BI 106135

Date Extracted: 06/10/11

Date Analyzed: 06/10/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 51-134)
MW1 106135-01	<100	84
MW2 106135-02	<100	86
MW3 106135-03	<100	84
MW4 106135-04	<100	83
MW5 106135-05	<100	81
Method Blank 01-1072 MB	<100	80

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/17/11

Date Received: 06/09/11

Project: Snoqualmie Summit 2008-321C, F&BI 106135

Date Extracted: 06/10/11

Date Analyzed: 06/13/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
**Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	Surrogate (% Recovery) (Limit 51-134)
MW1 106135-01	<50	<250	85
MW2 106135-02	<50	<250	79
MW3 106135-03	<50	<250	69
MW4 106135-04	<50	<250	67
MW5 106135-05	<50	<250	74
Method Blank 01-1067 MB	<50	<250	78

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW1	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-01
Date Analyzed:	06/10/11	Data File:	106135-01.031
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	89	60	125
Holmium	87	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.32
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW2	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-02
Date Analyzed:	06/10/11	Data File:	106135-02.051
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Lead	1.43

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW3	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-03
Date Analyzed:	06/10/11	Data File:	106135-03.052
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	15.1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW4	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-04
Date Analyzed:	06/10/11	Data File:	106135-04.053
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	6.57
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW5	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-05
Date Analyzed:	06/10/11	Data File:	106135-05.054
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125
Holmium	80	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	1.46
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	I1-397 mb
Date Analyzed:	06/10/11	Data File:	I1-397 mb.029
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	90	60	125
Holmium	86	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW1	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-01
Date Analyzed:	06/10/11	Data File:	106135-01.056
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125
Holmium	82	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.62
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW2	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-02
Date Analyzed:	06/10/11	Data File:	106135-02.060
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	81	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	<1
Lead	2.60

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW3	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-03
Date Analyzed:	06/10/11	Data File:	106135-03.061
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125
Holmium	82	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	13.8
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW4	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-04
Date Analyzed:	06/10/11	Data File:	106135-04.062
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	81	60	125
Holmium	82	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	23.8
Lead	21.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW5	Client:	The Riley Group
Date Received:	06/09/11	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	106135-05
Date Analyzed:	06/10/11	Data File:	106135-05.063
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	85	60	125
Holmium	78	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	1.29
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	The Riley Group
Date Received:	NA	Project:	Snoqualmie Summit 2008-321C, F&BI 106135
Date Extracted:	06/10/11	Lab ID:	I1-394 mb
Date Analyzed:	06/10/11	Data File:	I1-394 mb.043
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	84	60	125
Holmium	80	60	125

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
Lead	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW1
 Date Received: 06/09/11
 Date Extracted: 06/15/11
 Date Analyzed: 06/15/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 106135-01
 Data File: 061518.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	93	63	127
Toluene-d8	93	65	127
4-Bromofluorobenzene	92	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW2
 Date Received: 06/09/11
 Date Extracted: 06/14/11
 Date Analyzed: 06/14/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 106135-02
 Data File: 061412.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	63	127
Toluene-d8	106	65	127
4-Bromofluorobenzene	106	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW3
 Date Received: 06/09/11
 Date Extracted: 06/15/11
 Date Analyzed: 06/15/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 106135-03
 Data File: 061519.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	88	63	127
Toluene-d8	93	65	127
4-Bromofluorobenzene	89	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW4
 Date Received: 06/09/11
 Date Extracted: 06/15/11
 Date Analyzed: 06/15/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 106135-04
 Data File: 061520.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	87	63	127
Toluene-d8	88	65	127
4-Bromofluorobenzene	88	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: MW5
 Date Received: 06/09/11
 Date Extracted: 06/15/11
 Date Analyzed: 06/15/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 106135-05
 Data File: 061521.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	63	127
Toluene-d8	96	65	127
4-Bromofluorobenzene	98	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank
 Date Received: NA
 Date Extracted: 06/14/11
 Date Analyzed: 06/14/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 01-1006 mb
 Data File: 061406.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	63	127
Toluene-d8	99	65	127
4-Bromofluorobenzene	95	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID: Method Blank
 Date Received: NA
 Date Extracted: 06/15/11
 Date Analyzed: 06/15/11
 Matrix: Water
 Units: ug/L (ppb)

Client: The Riley Group
 Project: Snoqualmie Summit 2008-321C, F&BI 106135
 Lab ID: 01-1007 mb
 Data File: 061514.D
 Instrument: GCMS5
 Operator: JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	63	127
Toluene-d8	96	65	127
4-Bromofluorobenzene	94	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW1
Date Received: 06/09/11
Date Extracted: 06/10/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 106135-01
Data File: 061013.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	90	50	150
Benzo(a)anthracene-d12	93	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW2
Date Received: 06/09/11
Date Extracted: 06/10/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 106135-02
Data File: 061014.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benzo(a)anthracene-d12	99	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW3
Date Received: 06/09/11
Date Extracted: 06/10/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 106135-03
Data File: 061015.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benzo(a)anthracene-d12	96	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW4
Date Received: 06/09/11
Date Extracted: 06/10/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 106135-04
Data File: 061016.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	50	150
Benzo(a)anthracene-d12	76	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: MW5
Date Received: 06/09/11
Date Extracted: 06/10/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 106135-05
Data File: 061017.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	93	50	150
Benzo(a)anthracene-d12	93	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID: Method Blank
Date Received: NA
Date Extracted: 06/09/11
Date Analyzed: 06/10/11
Matrix: Water
Units: ug/L (ppb)

Client: The Riley Group
Project: Snoqualmie Summit 2008-321C, F&BI 106135
Lab ID: 01-1066 mb2
Data File: 061012.D
Instrument: GCMS6
Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benzo(a)anthracene-d12	94	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.1
Acenaphthylene	<0.1
Acenaphthene	<0.1
Fluorene	<0.1
Phenanthrene	<0.1
Anthracene	<0.1
Fluoranthene	<0.1
Pyrene	<0.1
Benz(a)anthracene	<0.1
Chrysene	<0.1
Benzo(a)pyrene	<0.1
Benzo(b)fluoranthene	<0.1
Benzo(k)fluoranthene	<0.1
Indeno(1,2,3-cd)pyrene	<0.1
Dibenz(a,h)anthracene	<0.1
Benzo(g,h,i)perylene	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/17/11

Date Received: 06/09/11

Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: 106135-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	94	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Diesel Extended	ug/L (ppb)	2,500	117	132	63-142	12

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR DISSOLVED METALS USING EPA METHOD 200.8**

Laboratory Code: 106135-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.32	121	124	56-167	2
Lead	ug/L (ppb)	10	<1	108	106	76-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	101	55-128
Lead	ug/L (ppb)	10	104	67-135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL METALS USING EPA METHOD 200.8**

Laboratory Code: 106135-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	1.62	109	108	56-167	1
Lead	ug/L (ppb)	10	<1	120	122	76-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	78	55-128
Lead	ug/L (ppb)	10	91	67-135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 106135-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	115	10-185
Chloromethane	ug/L (ppb)	50	<10	102	26-167
Vinyl chloride	ug/L (ppb)	50	<0.2	111	10-185
Bromomethane	ug/L (ppb)	50	<1	115	24-165
Chloroethane	ug/L (ppb)	50	<1	128	10-172
Trichlorofluoromethane	ug/L (ppb)	50	<1	132	30-199
Acetone	ug/L (ppb)	250	<10	108	19-168
1,1-Dichloroethene	ug/L (ppb)	50	<1	121	35-149
Methylene chloride	ug/L (ppb)	50	<5	103	61-138
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	115	49-139
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	109	65-128
1,1-Dichloroethane	ug/L (ppb)	50	<1	111	67-127
2,2-Dichloropropane	ug/L (ppb)	50	<1	121	23-163
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	65-139
Chloroform	ug/L (ppb)	50	<1	114	71-127
2-Butanone (MEK)	ug/L (ppb)	250	<10	107	47-162
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	129	68-132
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	126	63-135
1,1-Dichloropropene	ug/L (ppb)	50	<1	115	65-127
Carbon tetrachloride	ug/L (ppb)	50	<1	121	55-139
Benzene	ug/L (ppb)	50	<0.35	102	62-144
Trichloroethene	ug/L (ppb)	50	<1	113	66-121
1,2-Dichloropropane	ug/L (ppb)	50	<1	103	73-130
Bromodichloromethane	ug/L (ppb)	50	<1	120	65-135
Dibromomethane	ug/L (ppb)	50	<1	113	65-135
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	105	56-143
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	111	55-146
Toluene	ug/L (ppb)	50	<1	98	68-131
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	114	63-147
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	100	63-143
2-Hexanone	ug/L (ppb)	250	<10	109	51-149
1,3-Dichloropropane	ug/L (ppb)	50	<1	104	72-126
Tetrachloroethene	ug/L (ppb)	50	<1	101	64-132
Dibromochloromethane	ug/L (ppb)	50	<1	111	65-135
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	106	77-127
Chlorobenzene	ug/L (ppb)	50	<1	100	72-118
Ethylbenzene	ug/L (ppb)	50	<1	104	51-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	111	72-129
m,p-Xylene	ug/L (ppb)	100	<2	102	72-137
o-Xylene	ug/L (ppb)	50	<1	105	67-133
Styrene	ug/L (ppb)	50	<1	104	73-126
Isopropylbenzene	ug/L (ppb)	50	<1	108	65-135
Bromoform	ug/L (ppb)	50	<1	114	60-136
n-Propylbenzene	ug/L (ppb)	50	<1	99	66-133
Bromobenzene	ug/L (ppb)	50	<1	98	70-129
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	101	72-130
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	94	65-137
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	99	66-135
2-Chlorotoluene	ug/L (ppb)	50	<1	100	62-131
4-Chlorotoluene	ug/L (ppb)	50	<1	102	62-132
tert-Butylbenzene	ug/L (ppb)	50	<1	100	64-135
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	101	69-139
sec-Butylbenzene	ug/L (ppb)	50	<1	98	64-134
p-Isopropyltoluene	ug/L (ppb)	50	<1	101	69-134
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	97	65-126
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	98	65-121
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	101	64-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	117	54-133
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	106	63-141
Hexachlorobutadiene	ug/L (ppb)	50	<1	97	53-140
Naphthalene	ug/L (ppb)	50	<1	102	40-166
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	108	55-148

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	100	111	27-138	10
Chloromethane	ug/L (ppb)	50	93	101	49-125	8
Vinyl chloride	ug/L (ppb)	50	102	108	53-131	6
Bromomethane	ug/L (ppb)	50	104	111	62-148	7
Chloroethane	ug/L (ppb)	50	113	120	30-176	6
Trichlorodifluoromethane	ug/L (ppb)	50	109	123	65-172	12
Acetone	ug/L (ppb)	250	100	107	32-177	7
1,1-Dichloroethene	ug/L (ppb)	50	106	114	65-157	7
Methylene chloride	ug/L (ppb)	50	94	101	17-177	7
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	103	113	54-156	9
trans-1,2-Dichloroethene	ug/L (ppb)	50	99	104	71-128	5
1,1-Dichloroethane	ug/L (ppb)	50	100	110	74-118	10
2,2-Dichloropropane	ug/L (ppb)	50	110	123	65-150	11
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	104	74-126	7
Chloroform	ug/L (ppb)	50	105	114	76-118	8
2-Butanone (MEK)	ug/L (ppb)	250	104	107	52-152	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	113	126	71-135	11
1,1,1-Trichloroethane	ug/L (ppb)	50	110	121	77-123	10
1,1-Dichloropropene	ug/L (ppb)	50	107	117	75-122	9
Carbon tetrachloride	ug/L (ppb)	50	109	120	73-126	10
Benzene	ug/L (ppb)	50	98	104	77-121	6
Trichloroethene	ug/L (ppb)	50	108	116	74-119	7
1,2-Dichloropropane	ug/L (ppb)	50	100	107	77-121	7
Bromodichloromethane	ug/L (ppb)	50	111	119	77-129	7
Dibromomethane	ug/L (ppb)	50	106	112	79-121	6
4-Methyl-2-pentanone	ug/L (ppb)	250	100	104	65-135	4
cis-1,3-Dichloropropene	ug/L (ppb)	50	111	114	79-129	3
Toluene	ug/L (ppb)	50	97	100	81-113	3
trans-1,3-Dichloropropene	ug/L (ppb)	50	111	115	90-128	4
1,1,2-Trichloroethane	ug/L (ppb)	50	99	103	85-116	4
2-Hexanone	ug/L (ppb)	250	104	109	58-160	5
1,3-Dichloropropene	ug/L (ppb)	50	101	106	88-115	5
Tetrachloroethene	ug/L (ppb)	50	103	105	83-113	2
Dibromochloromethane	ug/L (ppb)	50	109	113	89-128	4
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	102	106	88-122	4
Chlorobenzene	ug/L (ppb)	50	97	101	84-116	4
Ethylbenzene	ug/L (ppb)	50	99	106	83-116	7
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	102	110	86-124	8
m,p-Xylene	ug/L (ppb)	100	97	103	84-120	6
o-Xylene	ug/L (ppb)	50	98	105	83-120	7
Styrene	ug/L (ppb)	50	102	106	87-119	4
Isopropylbenzene	ug/L (ppb)	50	101	107	83-120	6
Bromoform	ug/L (ppb)	50	110	113	77-119	3
n-Propylbenzene	ug/L (ppb)	50	95	100	83-118	5
Bromobenzene	ug/L (ppb)	50	97	100	88-117	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	94	99	85-121	5
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	92	95	81-120	3
1,2,3-Trichloropropane	ug/L (ppb)	50	94	99	77-123	5
2-Chlorotoluene	ug/L (ppb)	50	97	100	81-116	3
4-Chlorotoluene	ug/L (ppb)	50	98	103	83-117	5
tert-Butylbenzene	ug/L (ppb)	50	97	100	84-118	3
1,2,4-Trimethylbenzene	ug/L (ppb)	50	95	101	86-119	6
sec-Butylbenzene	ug/L (ppb)	50	94	97	84-121	3
p-Isopropyltoluene	ug/L (ppb)	50	96	101	85-118	5
1,3-Dichlorobenzene	ug/L (ppb)	50	96	99	85-118	3
1,4-Dichlorobenzene	ug/L (ppb)	50	94	99	85-119	5
1,2-Dichlorobenzene	ug/L (ppb)	50	95	101	81-117	6
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	106	113	62-136	6
1,2,4-Trichlorobenzene	ug/L (ppb)	50	98	104	75-129	6
Hexachlorobutadiene	ug/L (ppb)	50	92	92	72-138	0
Naphthalene	ug/L (ppb)	50	94	99	66-135	5
1,2,3-Trichlorobenzene	ug/L (ppb)	50	99	106	70-133	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 106135-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	108	10-185
Chloromethane	ug/L (ppb)	50	<10	101	26-167
Vinyl chloride	ug/L (ppb)	50	<0.2	110	10-185
Bromomethane	ug/L (ppb)	50	<1	113	24-165
Chloroethane	ug/L (ppb)	50	<1	121	10-172
Trichlorofluoromethane	ug/L (ppb)	50	<1	127	30-199
Acetone	ug/L (ppb)	250	<10	83	19-168
1,1-Dichloroethene	ug/L (ppb)	50	<1	118	35-149
Methylene chloride	ug/L (ppb)	50	<5	100	61-138
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	113	49-139
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	108	65-128
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	67-127
2,2-Dichloropropane	ug/L (ppb)	50	<1	109	23-163
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	98	65-139
Chloroform	ug/L (ppb)	50	<1	110	71-127
2-Butanone (MEK)	ug/L (ppb)	250	<10	94	47-162
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	120	68-132
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	122	63-135
1,1-Dichloropropene	ug/L (ppb)	50	<1	99	65-127
Carbon tetrachloride	ug/L (ppb)	50	<1	123	55-139
Benzene	ug/L (ppb)	50	<0.35	92	62-144
Trichloroethene	ug/L (ppb)	50	<1	101	66-121
1,2-Dichloropropane	ug/L (ppb)	50	<1	96	73-130
Bromodichloromethane	ug/L (ppb)	50	<1	115	65-135
Dibromomethane	ug/L (ppb)	50	<1	104	65-135
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	100	56-143
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	98	55-146
Toluene	ug/L (ppb)	50	<1	84	68-131
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	99	63-147
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	90	63-143
2-Hexanone	ug/L (ppb)	250	<10	101	51-149
1,3-Dichloropropane	ug/L (ppb)	50	<1	91	72-126
Tetrachloroethene	ug/L (ppb)	50	<1	85	64-132
Dibromochloromethane	ug/L (ppb)	50	<1	103	65-135
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	92	77-127
Chlorobenzene	ug/L (ppb)	50	<1	87	72-118
Ethylbenzene	ug/L (ppb)	50	<1	92	51-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	105	72-129
m,p-Xylene	ug/L (ppb)	100	<2	89	72-137
o-Xylene	ug/L (ppb)	50	<1	93	67-133
Styrene	ug/L (ppb)	50	<1	91	73-126
Isopropylbenzene	ug/L (ppb)	50	<1	98	65-135
Bromoform	ug/L (ppb)	50	<1	106	60-136
n-Propylbenzene	ug/L (ppb)	50	<1	87	66-133
Bromobenzene	ug/L (ppb)	50	<1	87	70-129
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	92	72-130
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	87	65-137
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	93	66-135
2-Chlorotoluene	ug/L (ppb)	50	<1	90	62-131
4-Chlorotoluene	ug/L (ppb)	50	<1	91	62-132
tert-Butylbenzene	ug/L (ppb)	50	<1	92	64-135
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	92	69-139
sec-Butylbenzene	ug/L (ppb)	50	<1	89	64-134
p-Isopropyltoluene	ug/L (ppb)	50	<1	91	69-134
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	87	65-126
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	85	65-121
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	92	64-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	118	54-133
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	97	63-141
Hexachlorobutadiene	ug/L (ppb)	50	<1	84	53-140
Naphthalene	ug/L (ppb)	50	<1	98	40-166
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	100	55-148

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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Project: Snoqualmie Summit 2008-321C, F&BI 106135

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	102	92	27-138	10
Chloromethane	ug/L (ppb)	50	102	96	49-125	6
Vinyl chloride	ug/L (ppb)	50	111	102	53-131	8
Bromomethane	ug/L (ppb)	50	113	105	62-148	7
Chloroethane	ug/L (ppb)	50	118	109	30-176	8
Trichlorodifluoromethane	ug/L (ppb)	50	113	104	65-172	8
Acetone	ug/L (ppb)	250	104	100	32-177	4
1,1-Dichloroethene	ug/L (ppb)	50	113	104	65-157	8
Methylene chloride	ug/L (ppb)	50	100	92	17-177	8
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	111	104	54-156	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	102	96	71-128	6
1,1-Dichloroethane	ug/L (ppb)	50	104	101	74-118	3
2,2-Dichloropropane	ug/L (ppb)	50	110	107	65-150	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	100	100	74-126	0
Chloroform	ug/L (ppb)	50	106	103	76-118	3
2-Butanone (MEK)	ug/L (ppb)	250	104	106	52-152	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	110	110	71-135	0
1,1,1-Trichloroethane	ug/L (ppb)	50	112	106	77-123	6
1,1-Dichloropropene	ug/L (ppb)	50	104	102	75-122	2
Carbon tetrachloride	ug/L (ppb)	50	110	107	73-126	3
Benzene	ug/L (ppb)	50	95	97	77-121	2
Trichloroethene	ug/L (ppb)	50	105	106	74-119	1
1,2-Dichloropropane	ug/L (ppb)	50	99	102	77-121	3
Bromodichloromethane	ug/L (ppb)	50	107	109	77-129	2
Dibromomethane	ug/L (ppb)	50	104	103	79-121	1
4-Methyl-2-pentanone	ug/L (ppb)	250	101	102	65-135	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	102	106	79-129	4
Toluene	ug/L (ppb)	50	91	94	81-113	3
trans-1,3-Dichloropropene	ug/L (ppb)	50	101	105	90-128	4
1,1,2-Trichloroethane	ug/L (ppb)	50	96	96	85-116	0
2-Hexanone	ug/L (ppb)	250	101	104	58-160	3
1,3-Dichloropropene	ug/L (ppb)	50	93	96	88-115	3
Tetrachloroethene	ug/L (ppb)	50	95	97	83-113	2
Dibromochloromethane	ug/L (ppb)	50	101	104	89-128	3
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	97	99	88-122	2
Chlorobenzene	ug/L (ppb)	50	92	94	84-116	2
Ethylbenzene	ug/L (ppb)	50	94	97	83-116	3
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	100	100	86-124	0
m,p-Xylene	ug/L (ppb)	100	92	94	84-120	2
o-Xylene	ug/L (ppb)	50	95	96	83-120	1
Styrene	ug/L (ppb)	50	96	97	87-119	1
Isopropylbenzene	ug/L (ppb)	50	98	97	83-120	1
Bromoform	ug/L (ppb)	50	103	106	77-119	3
n-Propylbenzene	ug/L (ppb)	50	91	94	83-118	3
Bromobenzene	ug/L (ppb)	50	90	95	88-117	5
1,3,5-Trimethylbenzene	ug/L (ppb)	50	93	95	85-121	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	89	93	81-120	4
1,2,3-Trichloropropane	ug/L (ppb)	50	91	95	77-123	4
2-Chlorotoluene	ug/L (ppb)	50	92	94	81-116	2
4-Chlorotoluene	ug/L (ppb)	50	92	96	83-117	4
tert-Butylbenzene	ug/L (ppb)	50	93	95	84-118	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	92	94	86-119	2
sec-Butylbenzene	ug/L (ppb)	50	90	93	84-121	3
p-Isopropyltoluene	ug/L (ppb)	50	93	96	85-118	3
1,3-Dichlorobenzene	ug/L (ppb)	50	89	94	85-118	5
1,4-Dichlorobenzene	ug/L (ppb)	50	90	92	85-119	2
1,2-Dichlorobenzene	ug/L (ppb)	50	93	95	81-117	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	103	108	62-136	5
1,2,4-Trichlorobenzene	ug/L (ppb)	50	101	99	75-129	2
Hexachlorobutadiene	ug/L (ppb)	50	88	87	72-138	1
Naphthalene	ug/L (ppb)	50	97	96	66-135	1
1,2,3-Trichlorobenzene	ug/L (ppb)	50	102	99	70-133	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	1	81	85	64-100	5
Acenaphthylene	ug/L (ppb)	1	82	85	67-104	4
Acenaphthene	ug/L (ppb)	1	81	85	65-103	5
Fluorene	ug/L (ppb)	1	88	93	64-106	6
Phenanthrene	ug/L (ppb)	1	81	86	66-106	6
Anthracene	ug/L (ppb)	1	78	83	67-112	6
Fluoranthene	ug/L (ppb)	1	83	88	69-116	6
Pyrene	ug/L (ppb)	1	88	91	68-115	3
Benz(a)anthracene	ug/L (ppb)	1	81	84	59-100	4
Chrysene	ug/L (ppb)	1	83	87	66-103	5
Benzo(b)fluoranthene	ug/L (ppb)	1	88	94	59-114	7
Benzo(k)fluoranthene	ug/L (ppb)	1	82	88	55-111	7
Benzo(a)pyrene	ug/L (ppb)	1	85	88	54-111	3
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	1	95	99	35-124	4
Dibenz(a,h)anthracene	ug/L (ppb)	1	87	88	35-116	1
Benzo(g,h,i)perylene	ug/L (ppb)	1	87	88	39-114	1

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

