The Riley Group, Inc.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

PREPARED BY:

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PREPARED FOR:

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PROJECT NO. 2008-321

PHASE I ENVIRONMENTAL SITE ASSESSMENT
SNOQUALMIE SUMMIT PROPERTIES
SR 906
SNOQUALMIE PASS, WASHINGTON
SEPTEMBER 23, 2008

EXHIBIT "B"
1 of 4

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1 Introduction

The Riley Group, Inc. (RGI) conducted a Phase I Environmental Site Assessment (ESA) of the Snoqualmie Summit Inn property consisting of two tax parcels located on SR906, Snoqualmie Pass, King and Kittitas County, Washington (hereafter referred to as the Site) (Figure 1). The Site is currently undeveloped, vacant property (Figure 2). Site photographs are included in Appendix A.

Mr. Mark Zenger, of Snoqualmie Summit Inn (Client), authorized the ESA on August 26, 2008. RGI understands that Client is considered the *user* of the report and intends to sell the Site with no plans for redevelopment. This Phase I ESA was performed in general accordance with the American Society for Testing and Materials (ASTM), Standard Practice E 1527-05.

1.1 Purpose

The purpose of the ESA was to identify any *recognized environmental conditions* (RECs) and/or *business environmental risks* (BERs) as defined by ASTM, Standard Practice E 1527-05.

The term "recognized environmental conditions" *means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with current environmental regulations. The term is not intended to include* de minimus *conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.*

The term "business environmental risks" *are risks that can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice.*

Definitions used herein, as defined by ASTM, are provided in Appendix B for reference.

1.2 Scope of Work

RGI's scope of work for this Phase I ESA included the following tasks:

- Performed a detailed inspection of the Site and a cursory inspection of the adjoining properties.
- Interviewed knowledgeable persons regarding Site and/or nearby properties.
- Described project area geology and Site location, Site vicinity characteristics and prepared a vicinity and Site map showing Site and nearby significant features.
- Commented on suspect polychlorinated biphenyls (PCBs), hazardous materials, aboveground storage tanks (ASTs), and underground storage tanks (USTs). This scope of work did not include sampling and/or analysis.
- Reviewed historical building department files, property tax records, Sanborn Fire Insurance Maps, city directories, aerial photographs and plat maps, where applicable and available.
- Reviewed State and Federal environmental regulatory databases per ASTM.
- Prepared this final report presenting our findings and conclusions.

RGI was not provided a 50-year chain of title for the subject Site and one was not reviewed as part of this Phase I ESA.

1.3 Significant Assumptions

In evaluating the property, RGI has relied upon representations and information furnished by individuals and agencies noted in the report. RGI assumes that the information provided by these third party sources is accurate, and has no reason to believe otherwise.

Based on a review of regional topography, RGI assumes groundwater beneath the Site generally flows to the northwest. Based on a review of water well logs for the site and vicinity, depth to groundwater is assumed to be approximately 65 feet below ground surface (bgs).

1.4 Limitations and Exceptions

This ESA report is based upon information obtained by RGI personnel and upon the condition of the Site and surrounding property on the dates of such visits, supplemented by readily available information and data obtained by RGI and described herein.

RGI accepts no responsibility for any deficiency, misstatements or inaccuracies contained in this report as a result of misstatements, omissions, and misrepresentations or fraudulent acts of persons interviewed. In addition, potentially important interviewees are often not available or cannot be located within a reasonable project time frame. In these instances, RGI accepts no responsibility for any environmental liability that later results from information not readily available during the assessment.

This report 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 time, and under similar conditions. This report is intended for specific application to the existing property located on SR906, Snoqualmie Pass, King and Kittitas County, Washington, for the exclusive use of the Client, Snoqualmie Summit Inn, and their authorized representative(s). No other warranty is implied or intended.

1.5 Reliance

No reports or other information regarding the Site or its setting were provided to RGI other than those resources specifically mentioned herein. Reports relied upon by RGI are listed in Section 9.0 of this report.

2 Site Description

2.1 Physical Setting Source(s), Location & Legal Description

The Site is located on the United States Geologic Survey (USGS) 1989 Snoqualmie Pass, Washington, 7.5-Minute Topographic Map (Figure 1) at an elevation of approximately 3,020 feet above mean sea level. The Site properties have no addresses; they are located in the northeast quarter of Section 4, Town 22 North, Range 11 East. The Site and vicinity are generally flat with a slight downward slope to the south.

The King County Tax Assessor identification number for the King County parcel is 0422119017, which contains approximately 8.8-acres. The King County parcel is split by SR906 with the larger parcel located between Interstate Highway I-90 and state road SR 906. The portion of the King County parcel east of SR 906 (east King County parcel) was formerly developed as the historical "Yellowstone Road". The southeast quadrant of this portion of the parcel historically contained two small buildings that were rented as overnight accommodations for skiers, which were demolished in 1989.

The Kittitas County Tax Assessor identification number for the Kittitas County parcel is 142436. This parcel contains approximately 5.5-acres and is located on the west side of SR 906. The Kittitas County parcel was formerly developed with a retail store, a gasoline service station and a single car (storage) garage. The legal description and metes and bounds of the Site are included in the current King and Kittitas County Tax Assessor documentation, available on-file at the RGI office.

2.2 Site Vicinity Characteristics

The Site is located at Snoqualmie Pass, south and east of Interstate Highway I-90. Property use in the Site vicinity consists of commercial and residential properties. In addition to four downhill ski areas with associated buildings, the predominant property development at Snoqualmie Pass are vacation homes, restaurants, a hotel, one gasoline station and two convenience stores. There are also some forest service buildings that include a visitors center and fire station.

2.3 Site Geology and Hydrogeology

The *Geologic Map of King County, Washington* mapped the Site as Holocene and Pleistocene-age alpine glacial deposits consisting of boulder till in the uplands, and sand and gravel on the broad valley floors. The upland deposits may also include bedrock, alluvial fans, colluviums (talus) deposits. The valley floor deposits may also include small (alluvial) fans, bogs and stream alluvium. The alpine glacial deposits are underlain by the older, Tertiary-age Naches Formation, which consists of interbedded volcanic and sedimentary rocks.

As discussed above, depth to groundwater is reportedly approximately 65 feet bgs and inferred groundwater flow direction is south. The Site is located just east of the drainage divide between the Puget Lowland to the west and the Yakima River basin to the east.

2.4 Description of Site Structures

The Kittitas County parcel contains the concrete foundations of former structures that included a retail store, a gasoline station, and a single car garage (Appendix A, photographs 13 -16). There are no structures on the King County parcel.

2.5 Current Uses of the Site

The Site consists of two, roughly rectangular-shaped parcels covering approximately 14.13-acres of land. The Site is currently vacant, undeveloped property. The eastern portion of the King County parcel is currently leased by a snowplowing and earthworks contractor, which stores heavy equipment on the Site. The western portion of the King County parcel is used by the ski area as employee parking during the winter ski season.

2.6 CURRENT USES OF THE ADJOINING PROPERTIES

Current uses of adjoining properties are summarized as follows:

North of Site: U.S. Forest Service Fire Station, north of the eastern King County parcel, (Appendix A, photograph 4). An access road to the ski area is north of the west King County parcel; and, single family homes are north of the Kittitas County parcel.

East of Site: East of the parcel located east of SR906 is bounded by Interstate Highway I-90. SR 906 borders the smaller portion of the King County and the Kittitas County parcels (Appendix A, photograph 9-10).

South of Site: South of the King County parcel on the east side of SR906 is a Chevron-branded gasoline and retail convenience store. South of the western portion of the King County and Kittitas County parcels are single family residential homes.

West of Site: West of the eastern portion of the King County parcel is SR906; and west of the western portion of the King County parcel is Snoqualmie Summit Ski Area. West of the Kittitas County parcel are single family residential homes.

3 User Provided Information

3.1 TITLE RECORDS

No title records were provided by the Client to RGI for the purposes of this report. The Site owner, Mr. Mark Zenger of Snoqualmie Summit Inn, was provided with an ASTM E 1527-05 User Questionnaire. Mr. Zenger did not return a completed questionnaire, however, Mr. Zenger essentially answered most of the questions (see Section 5, below).

3.2 PREVIOUS ENVIRONMENTAL REPORT

The following documents were provided by the Client, and reviewed by RGI:

- Phase I Environmental Site Assessment, Snoqualmie Pass Property Group, Forest Road & Interstate 90, Snoqualmie Pass, Washington. September 17, 2007. Earth Consulting, Inc.
- Phase II Environmental Site Assessment Report, Snoqualmie Pass Property Group, Forest Road & Interstate 90, Snoqualmie Pass, Washington. December 13, 2007. Earth Consulting Inc.
- Boundary & Topographic Survey, June 19, 1987.
- Aerial Photograph, dated 1986.
- Vicinity Map & Total Parcel Detail Map, dated February 8, 1966.
- Right-of-Way Drawing Denny Creek Road to Hyak, dated February 8, 1966.
- Survey of Summit Inn Property, dated July 20, 1962.
- East Summit Interchange, dated July 23, 1953.

- Seattle Times Photo, dated October 7, 1952.
- Plat Map, dated July 25, 1950.
- Postcards of Summit, undated.

Copies of reports and documents are kept in the RGI project file and are available upon request.

Client provided a copy of a report titled "Phase I Environmental Site Assessment, by Earth Consulting, Inc., dated September 7, 2007". RGI reviewed this previous Phase I report, which called out RECs; specifically, the potential for underground storage tanks (USTs) to be present at the former gasoline station located on the Kittitas County parcel. In addition, on the King County east parcel: oil leaks from heavy equipment storage and maintenance, the potential for release(s) from an above ground diesel-fuel storage tank (AST).

Client provided a copy of a report titled "Phase II Environmental Site Assessment Report, Snoqualmie Pass Property Group, Forest Road & Interstate 90, Snoqualmie Pass, Washington. December 13, 2007. Earth Consulting Inc." (ECI). ECI's Phase II focused on the former gasoline service station and single car garage located on the Kittitas County parcel and the King County parcel east of SR906. The scope of work included a geophysical survey that attempted to locate abandoned USTs and piping systems. USTs were not found during the geophysical survey or during the subsequent subsurface investigation, carried out via test pit explorations. Test pit explorations focused on targets identified by the geophysical survey, such as fuel system piping. Test pit pits were located at the ends of the fuel system piping, believed to represent the fuel dispensers and the former UST location(s). Fifteen test pits were excavated across the Site (twelve on the Kittitas County parcel and three on the King County parcel). Soil samples were collected and submitted for chemical analysis from each test pit.

Soil samples were tested for gasoline, diesel and oil-range total petroleum hydrocarbons (TPH), benzene, ethylbenzene, toluene and xylene (BETX), total lead, polychlorinated biphenyls (PCBs), and polynuclear aromatic hydrocarbons (PAHs). Analytical results yielded: concentrations of gasoline-range TPH from 84 mg/kg to 500 mg/kg; diesel-range TPH from less than 50 mg/kg to 13,000 mg/kg; and oil-range TPH from <250 mg/kg to 11,000 mg/kg; benzene ranging from 0.039 mg/kg to 0.54 mg/kg, xylene ranging from 0.94 mg/kg to 16 mg/kg, and total lead ranging from 4.79 to 912 mg/kg in soil; at the former gasoline service station and single car garage located on the Kittitas County parcel.

On the east King County parcel, analytical testing yielded: concentrations of diesel-range TPH from <50 mg/kg to 10,000 mg/kg; and oil-range TPH ranging from <250 mg/kg to 63,000 mg/kg; concentrations of lead ranged from 4.79 mg/kg to 7.43 mg/kg.

PCBs were not detected in any of the samples tested. PAHs were detected at concentrations that did not exceed the soil cleanup levels.

The MTCA Method A Soil Cleanup Levels for Unrestricted Land Use are: gasoline = 30 mg/kg, diesel and oil range TPH = 2,000 mg/kg, benzene = 0.03 mg/kg; xylene = 9.0 mg/kg; and lead = 250 mg/kg.

Shallow, perched groundwater was encountered approximately eight feet bgs on the Kittitas County parcel that was reportedly in contact with the petroleum contaminated soil. Ground water samples were not collected.

4 Site Reconnaissance

RGI performed a Site reconnaissance on September 4, 2008. RGI was accompanied by the owner, Mr. Mark Zenger during the reconnaissance. Appendix A presents photographs of the Site and vicinity. A summary of our findings is given below.

4.1 Observations

4.1.1 King County parcel east of SR906

- This portion of the Site is located on and adjacent to the old "Yellowstone Road" which parallels SR906.
- The southern portion of the Site is bordered by boulders and cobbles that seem to be holding an approximately four-foot thick layer of fill soil. The fill area of the Site exhibited an oil-like odor.
- De minimus amounts of black oily surficial soil were observed randomly throughout the Site (from parking of heavy equipment).
- Telephone pole-size logs were stacked on the southern portion of the Site (Appendix A Photograph 1).
- Scrap iron including what appeared to be a former UST and small AST (day tank) (Appendix A Photograph 2).
- A relatively fresh oil spill was in approximately the center of this portion of the Site, an oil-soaked rag was in the middle of this approximately two-foot diameter area. The oil appeared to be hydraulic-like oil (see Appendix A Photograph 3).
- Heavy equipment was stored on the Site that included a dump truck, diesel-powered, track-mounted dragline, forklift, crane, front end loader, snow plow, and school bus (Appendix A Photograph 1).
- An AST reportedly containing diesel-fuel was observed (see Appendix A Photograph 8). Evidence of a release to the ground surface beneath the AST was not observed.
- Several "roll-off" containers, labeled recycling were observed. According to the owner, King County is allowed to store these containers on the Site (Appendix A Photograph 6).
- West of the former road-way, most of this parcel is heavily wooded.

4.1.2 King County parcel west of SR906

- This portion of the Site is unpaved, gravel-surfaced with some vegetation. It has been used as RV parking for the volunteer Ski Patrol members (Appendix A Photographs 9 & 10).
- Electrical hookups are available from boxes located on the western property boundary. Electricity is obtained from a pole-mounted transformer on the Snoqualmie Summit Ski Area property.
- Wooden triangular-shaped structures contain fire hydrants.
- The site boundaries area characterized by vegetation such as shrubs and fir trees.

4.1.3 KITTITAS COUNTY PARCEL

- This parcel is unpaved, partially gravel-surfaced with some vegetation growing through the gravel (Appendix A Photograph 12).
- The foundation from the former Rock Chalet is located on the north central portion of the Site.
- A foundation from a former gasoline station is located on the southeast quadrant of the Site. The foundation features the remnants of a tiled-floor. (Appendix A Photographs 14, 15, 16).
- A foundation for a single car garage is located on the northeast corner of the Site and is overgrown with vegetation.

4.2 POLYCHLORINATED BIPHENYLS (PCBS) SURVEY

The Environmental Protection Agency (EPA) considers PCBs to be a possible human carcinogen. The Toxic Substance Control Act of 1976 (15 USC, s/s 2601, et seq.) prohibited any manufacturing of PCBs in the United States after January 1, 1979. Under Federal Regulation (40 CFR 761.3), the mineral oil contained in untested transformers is assumed to be "PCB-contaminated" (50-499 parts per million PCB). The continued use of this equipment is authorized by the EPA.

Neither pole nor pad-mounted electrical transformers were noted on the Site.

4.3 UNDERGROUND AND ABOVEGROUND STORAGE TANK SURVEY (UST/AST)

RGI's UST and AST survey included an inspection, review of historical and regulatory documentation, and interviews with knowledgeable persons regarding the Site.

One (reportedly) diesel-fuel AST was observed on the east portion of the King County Site, tucked into the woods, in the approximate north/south center of the Site. The AST is supported by a wood-frame structure, approximately seven feet above ground surface; there was not a concrete pad beneath it. Evidence of a release was not observed, there were no odors or stained ground in the vicinity of the AST. The AST is apparently used by the tenant for refueling equipment.

One 20,000-gallon, empty and out of service propane AST was observed on the southern property boundary of the eastern portion of the King County parcel (Appendix A Photograph 11). This AST was reportedly for emergency heating fuel for the Snoqualmie Summit Inn before it was converted to natural gas.

No visible evidence of current or former USTs (e.g. fill ports, vent pipes, asphalt patches) were observed at the Site during the inspection.

5 Interviews

RGI contacted Ms. Sally Perkins, the Public Disclosure Coordinator for the Washington Department of Ecology (Ecology), to determine whether any Emergency Response Tracking System (ERTS) listings existed for the Site. The ERTS database tracks all emergency responses and environmental complaints made to Ecology since 1990, including hazardous material responses. Ms. Perkins did not respond to our inquiry, perhaps because there are no addresses for the Site.

RGI interviewed the current Site owner, Mr. Mark Zenger, during our Site visit on September 4, 2008. Mr. Zenger stated that the King County portion of the Site that is located east of SR906 is located in part on the old "Yellowstone Road". According to Mr. Zenger, the southwest quadrant of the parcel was formerly developed with two small buildings The "Teepee Lodges" resembling "teepees" that were rented as weekend lodging for skiers had electric heat, and were demolished in 1989. Mr. Zenger pointed out that on the northern property boundary is the remnants of a foundation from a former ranger house. The foundation is not part of the King County parcel.

Mr. Zenger stated that a snowplowing and earth works contractor leases the old roadway portion of the King County parcel. Mr. Zenger added that several areas of heavy oil-stained surficial soil were present on this parcel. He also stated that in addition to many pieces of heavy equipment, there is an above ground fuel storage tank (AST) on the Site that they have asked the leasor to remove, without success.

Mr. Zenger stated that the 20,000 gallon propane AST (located on the southern property boundary of the King County parcel) has been out of service for several years. It was originally used for backup heating fuel for the Summit Inn in the event of a power failure at The Pass.

According to Mr. Zenger, the portion of the King County parcel west of SR 906 has never been developed. Mr. Zenger stated that the Kittitas County parcel was previously developed by a retail store known as the Rock Chalet, which was built in the 1940s as a single story building that had a two story addition added later. Mr. Zenger stated that the Rock Chalet building was damaged by weather and was demolished in the late 1980s. Mr. Zenger stated that, historically, a mobile hot dog stand operated on the Site during the summer months. According to Mr. Zenger, the foundation of a former gasoline service station was discovered relatively recently, during site grading activities. Mr. Zenger indicated that there was a single-bay detached garage located on the northwest corner of this parcel. Mr. Zenger had no knowledge about the history or construction dates of either the single car garage or of the former gasoline service station.

RGI contacted the Forest Service Fire Chief, Mr. Matt Towan for information about the Forest Service buildings north and adjacent to the King County parcel. According to Chief Towan, the building that houses the fire station is approximately 75 years old (therefore, dating to the 1930s). He did not have any knowledge about the former residence located south and adjacent to the Fire Station nor did he have any knowledge about other historical structures in the area.

RGI attempted to contact the current manager of the Snoqualmie Ski Area for historical information. Mr. Dan Brewster did not return our telephone call.

RGI attempted to contact Mr. Terry Lanaham of the Snoqualmie Water and Sewer District. Mr. Lanaham did not return our telephone call.

6 Environmental Regulatory Database Review

RGI's environmental regulatory records review consisted of a standard review of Federal and State record databases in a search for properties with existing and/or potential environmental liabilities. RGI and Environmental Data Resources (EDR) of Milford, Connecticut, performed the records search. All records reviewed used search radii in accordance with ASTM parameters. A copy of the EDR database report is included in Appendix C.

6.1 Site

The Site is not listed on the researched federal and state environmental databases.

6.2 ADJOINING/NEARBY PROPERTIES

Adjoining Properties

No adjoining properties were listed on the researched environmental databases.

Other Off-Site Properties

No off-Site Properties are listed on the researched environmental databases.

7 Historical Records Review

RGI's Site and adjoining properties historical records review included a review of the following:

- Historical aerial photographs dated 1958, 1962, 1974.
- Historical Site photographs undated.
- Historical Department of Transportation drawings:
  - Survey of Summit Inn Property, dated July 20, 1962.
  - East Summit Interchange, dated July 23, 1953.
- Current and historic King & Kittitas County tax assessor records.
- Interviews with knowledgeable persons.

Selected historical documentation is presented in Appendix D. RGI's historical research findings are discussed below.

7.1 SITE

7.1.1 KITTITAS COUNTY PARCEL

The earliest known Site development was a gasoline station located on the southeast corner of the Site. The date of construction is not known, the Kittitas County Assessor records make a vague reference to this property as a Humble Service Station[1]; an undated, handwritten note on the assessor record indicates that the station burned. According to the *Survey of the Summit Inn Property*, dated July 20, 1962, this portion of the Site was known as the "Enco" track. A Washington Department of Transportation (WSDOT) drawing dated July 23, 1953 labels the gasoline station as "SS", presumed to mean "Service Station", and depicts what appears to be a canopy on the east side of the building. The 1953 drawing depicts a museum and post office on the site of the Rock Chalet. The Rock Chalet occupied the central portion of the Site from the 1940s until 1989, when the building was demolished. Historical tax assessor records suggest that the Rock Chalet was heated by electrical baseboard heaters. The heat source for the former gasoline station is unknown. The 1953 drawing also shows a single car garage on the northeast corner of the Site. Date of construction and demolition of the single car garage are unknown.

[1] According to Wikipedia™ Enco is a secondary brand used by Humble Oil, (now part of ExxonMobil) in certain states from 1960 to 1973.

7.1.2 King County parcel

The portion of the King County parcel located west of SR906 has never been developed. Historical site use has been as winter parking for employees (voluntary ski patrol) of the Snoqualmie Summit Ski Area. Anecdotal information indicates that the volunteer ski patrol would live in recreational vehicles parked on the Site.

The portion of the King County parcel located on the east side of SR906 has been developed as a roadway, formerly known as the old "Yellowstone Trail" and/or the "Sunset Highway" and formerly contained two ski "lodges" rented to skiers for overnight stays. The ski lodges, known as the "Teepee Lodge" were located on the southwest quadrant of the Site, on the east side of the Yellowstone Road. The lodges were heated with electricity and were demolished in 1989.

7.2 Adjoining and Nearby Properties

7.2.1 North of King County Parcel

The parcel adjacent to the north was occupied by a historical Forest Service Ranger Station. All that remains of the ranger station is the concrete foundation. The dates of construction and demolition are unknown. North and adjacent to the former Ranger Station is a Forest Service Fire Station, which dates from the 1930s. An access road leading into the Snoqualmie Pass Ski area borders the western portion of the Site. Prior to development of the ski area, the north adjacent property was undeveloped.

7.2.2 East of King County Parcel

East and adjacent to this portion of the Site is the Right of Way for Interstate Highway I-90.

7.2.3 South of King County Parcel

The south adjoining property was historically developed (from north to south) with a restaurant, a service station (Standard Oil) and a hotel (the original Summit Inn). The original Summit Inn was built in the 1920s and was destroyed by fire at an unknown date. The Standard Oil-branded gasoline service station was constructed in 1961 and demolished in 1989; it was preceded by a Red Crown gasoline station that dated from the 1920s. West of SR 906, the south adjoining properties are occupied by 1990s vintage vacation homes. Prior development is unknown.

7.2.4 West of King County Parcel

SR 906 is located west and adjacent as well as the Snoqualmie Summit Ski Area, which was developed in the 1930s.

7.2.5 Kittitas County Parcel

Development north, south and west historically, was wooded. Development of single family, vacation, homes date from approximately 1980. East of this parcel is SR 906.

7.3 DATA GAPS

Data gaps exist for historical documentation by the King and Kittitas County tax assessor records. In addition, there are no Polk Directories, Kroll Real Estate Maps or Sanborn Maps for this rural area. However, based on the available tax assessor records and the current regulatory status of the Site and vicinity (no records), the lack of historical data was not considered significant.

8 Conclusions & Recommendations

RGI has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-05 of the Snoqualmie Summit Inn properties located at Snoqualmie Pass, Washington. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report. This assessment has revealed no evidence of RECs in connection with the subject site except for the following:

- Heavy equipment was parked on the King County parcel east of SR 906. Oil stained ground was observed. Fill soil on the southern portion of the Site may contain asphalt and/or heavy oil. An AST containing diesel fuel was used on the Site, without any secondary containment or preventative measures to protect the ground surface from spills. A recent Phase II ESA discovered concentrations of gasoline, diesel and oil-range TPH, benzene and lead in shallow soils that exceed regulatory cleanup levels on this parcel.

- The Kittitas County parcel was historically occupied by an automobile service garage. Historical handling, use, storage and/or disposal of typical automotive fuels, lubricants and/or degreasers (including the potential for abandoned USTs) at the Site are unknown. A recently completed Phase II ESA discovered concentrations of gasoline, diesel and oil-range TPH, benzene and xylene in shallow soil that exceed regulatory cleanup levels on this parcel.

Additional investigation is recommended to further evaluate the extent of soil contamination at the former gasoline station site, and on the King County parcel. In addition, RGI recommends that an Independent Cleanup Action be performed in order to bring the Site into compliance with the MTCA Cleanup Regulations for Unrestricted Land Use (WAC 173-340-740).

9 References

Booth, D.B. et al. 2002. *Geologic Map of King County, Washington.*

Environmental Data Resources (EDR). September 3, 2008. *Environmental Data Resources Radius Map Report.*

King County. Undated. *Current and historic Tax Assessor Records.*

Kittitas County. Undated. *Current and historic Tax Assessor Records.*

Porter, Yvonne. 1981. *Snoqualmie Pass: Indian Trail to Interstate.*

Snohomish-Island Libraries. Online Research Tools. No Coverage. *Sanborn Fire Insurance Maps.*

University of Washington Suzzallo Library. 1958, 1962, 1974. *Historical Aerial Photographs.*

Washington State Department of Ecology. Undated. *Washington State Well Log Viewer.*

10 Signatures of Environmental Professionals

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. We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined by §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Sincerely,
THE RILEY GROUP, INC.

Frederick H. Becker, L.G.,
Senior Geologist

Paul D. Riley, L.G.
Principal

Report Distribution: Mr. Mark Zenger, Snoqualmie Summit Inn (3 bound copies & 1 electronic PDF)

11 Qualifications of Environmental Professionals

11.1 Frederick H. Becker, LG, LHG, LEG, Senior Project Manager

Professional Registrations and Certifications

State of Washington Licensed Geologist, (LG)

State of Washington Licensed Hydrogeologist (LHG),

State of Washington Licensed Engineering Geologist (LEG),

State of Oregon Registered Geologist, (RG)

Certified Hazardous Materials Manager (CHMM)

Licensed Underground Storage Tank Site Assessor, Washington (IFCI)

EPA-Certified AHERA Building Inspector

Certified Lead-based Paint Inspector

112 Hours Hazardous Waste Operations and Emergency Response (HAZWOPER) training

Education

B.Sc. Honours, Geology, Brock University, 1976. B.Sc. thesis in fluvial geomorphology, *Characteristics of Pools and Riffles in Streams on the Niagara Peninsula, Ontario, Canada.* Graduate Studies in Geology, Engineering, and Public Policy: University of Rochester, Brock University, and Portland State University.

Professional Experience

Mr. Becker has over 25 years of professional experience in the environmental consulting industry. Mr. Becker has completed hundreds of Phase I Environmental Site Assessments most have included inspections for lead-based paint (LBP) and asbestos-containing building materials (ACM). Mr. Becker has managed scores of surface and subsurface soil and groundwater site investigations; hazardous waste site characterization; and large and small remediation projects. Mr. Becker has extensive experience with hazardous materials management planning; and consulting on compliance with environmental regulations. Mr. Becker has conducted geologic investigations for dam sites, tunneling projects, deep and shallow foundations, slope stability studies and assessment of geologic hazards.

11.2 PAUL D. RILEY, L.G., L.H.G., PRINCIPAL GEOLOGIST

Education

M.S., Geological/Geophysical Sciences, Western Washington University, 1991

B.S., Geological Sciences, Michigan State University, 1988

Licensed Well Driller, Washington State

Washington State Registered Geologist (License #1264)

Washington State Registered Hydrogeologist (License #1264)

Continuing Education

Groundwater Remediation & Design, GNAW, 1994

Risk-Based Corrective Action – AST Seminar, 1996

Wetlands Delineation Workshop-Richard Chinn, 1999

Professional Skills

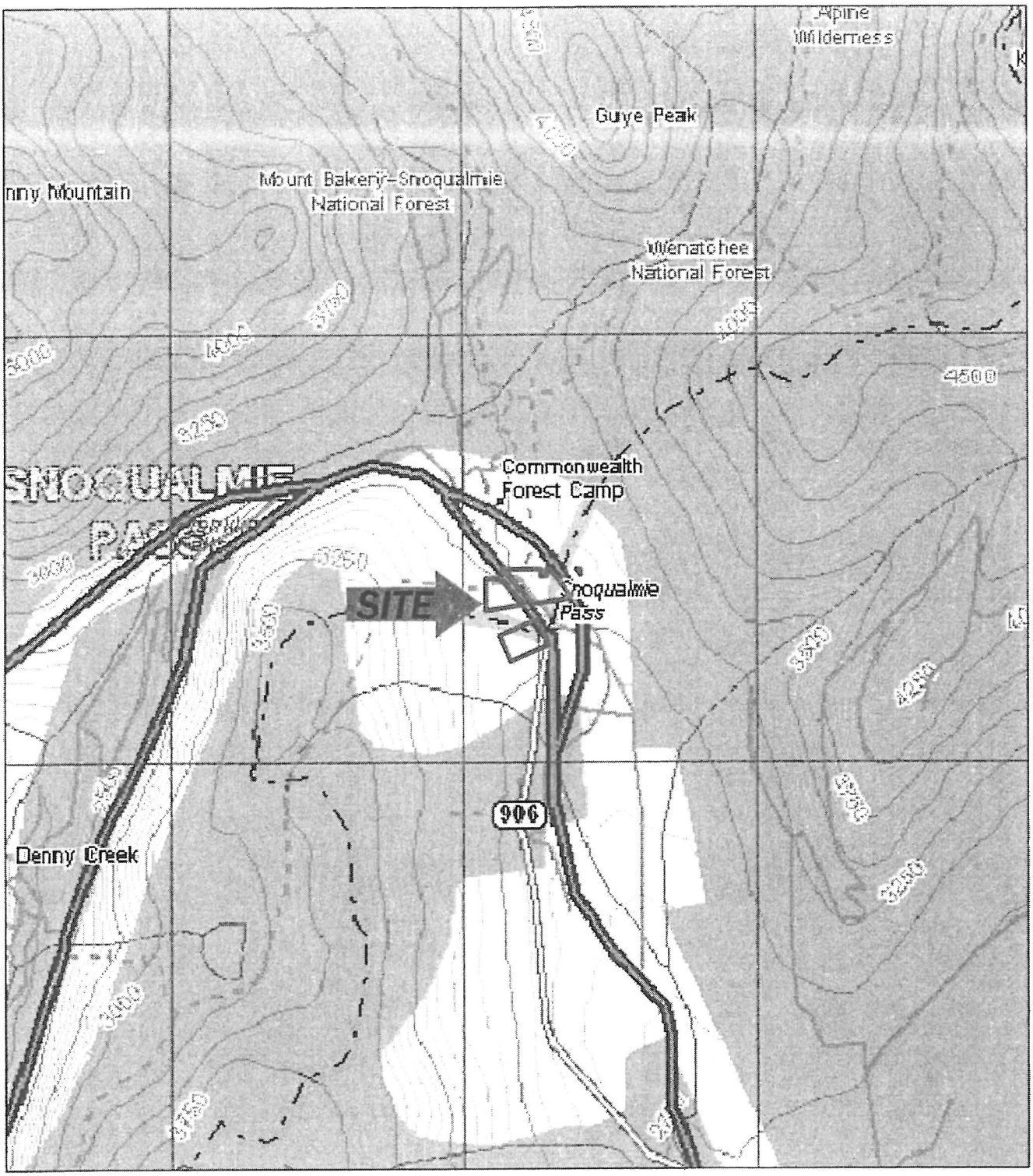
Principal, The Riley Group, Inc. (formerly Riley Environmental, LLC), Seattle, WA. 3/96 - present.

Mr. Riley, the founding principal of The Riley Group, Inc. has professionally practiced as an environmental geologist and hydrogeologist in the Pacific Northwest since 1991. Mr. Riley has performed numerous Phase I ESAs, Phase II subsurface characterization studies, risk based site closures, aquifer pump tests, in-situ remediation system pilot studies, remediation system design, and remediation system installation and operations & maintenance for over 1,000 sites located in the Pacific Northwest.

Mr. Riley is responsible for all operations of The Riley Group, Inc. Responsibilities include administrative and technical operations and business development. Mr. Riley manages Phase I ESA, Phase II investigations, risk-based closures, remediation system implementation (design, installation, and O&M), geotechnical engineering projects for commercial and mixed-use construction, and wetland delineation and mitigation projects with Riley's diverse technical staff serving a wide clientele base both locally and national.

Environmental Division Manager. Omega Environmental (formerly O'Sullivan Omega), Seattle, WA. 11/1992 to 3/1996

Mr. Riley was the environmental division manager for the Pacific Northwest for a national underground storage tank (UST) installation and removal contractor. Mr. Riley supervised a staff of geologists and environmental engineers performing UST site assessments, Phase I ESAs, Phase II subsurface soil and groundwater characterization studies, remediation projects, compliance groundwater monitoring projects, and asbestos and lead paint building surveys.



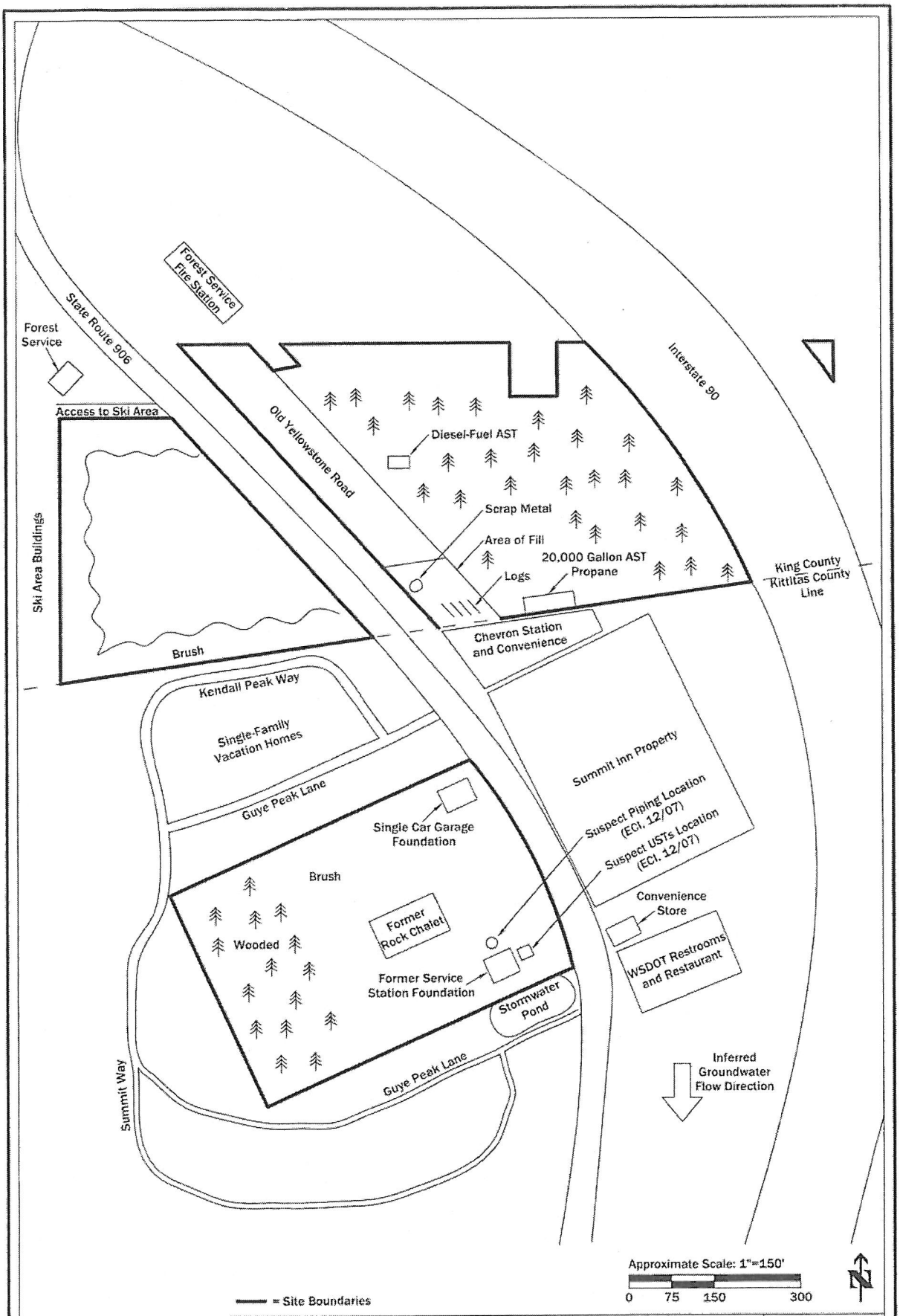
Approximate Scale: 1" = 2000 ft

0 1000 2000 4000

USGS, 1989, Snoqualmie, Washington
7.5-Minute Quadrangle

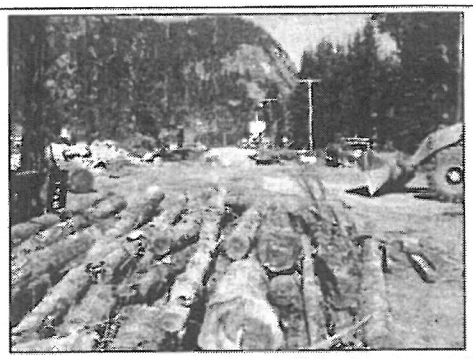
The Riley Group, Inc.
17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Snoqualmie Summit Inn		*Figure 1*
Project Number *2008-321*	*Site Vicinity Map*	*Date Drawn:* *09/10/08*
Address: State Route 906, Snoqualmie Pass, Washington		



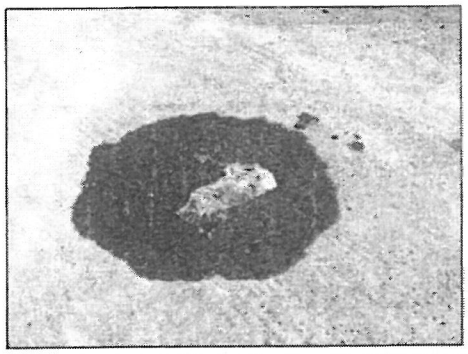
The Riley Group, Inc.
17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Snoqualmie Summit Inn		Figure 2
Project Number 2008-321	Site Sketch	Date Drawn: 09/10/08
Address: State Route 906, Snoqualmie Pass, Washington		



Photograph 1: View north from south end of King County parcel east of SR 906. Logs and machinery belong to a tenant, Mr. Pat Matner.

Photograph 2: View north along west property border of the King County parcel east of SR 906. Note scrap iron including an empty UST.

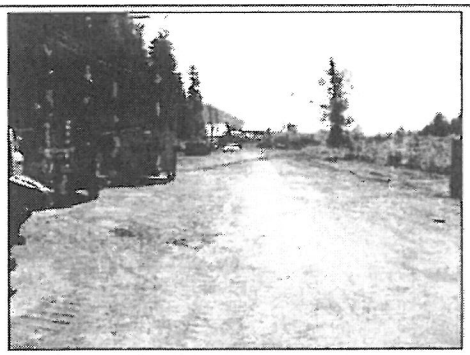


Photograph 3: Fresh release of hydraulic oil on King County parcel east of SR 906.

Photograph 4: Development north and adjacent to King County parcel east of SR 906 include the Forest Service Fire Station.

The Riley Group, Inc. 17522 BOTHELL WAY NE BOTHELL, WASHINGTON 98011	*Snoqualmie Summit Inn*	*Appendix A-1*
	Project # 2008-321	*Site Photographs*
	Address: State Route 906, Snoqualmie Pass, Washington	

Photograph 5: North and adjacent property to King County parcel east of SR 906.

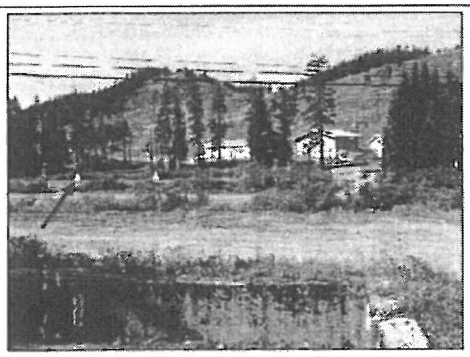


Photograph 6: View south of King County parcel east of SR 906. Owner allows King County to store recycling containers on the Site.

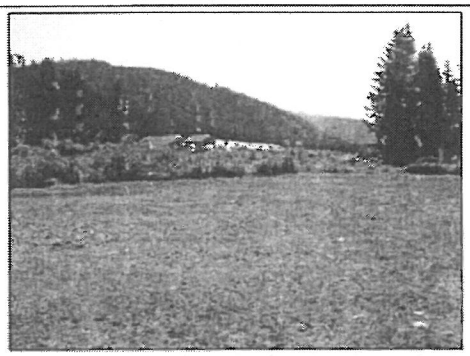
Photograph 7: View south of fill soil (indicated by arrow) on King County parcel east of SR 906.

Photograph 8: View of diesel-fuel AST on King County parcel east of SR 906. Stained soil was not observed beneath spigot, which was locked.

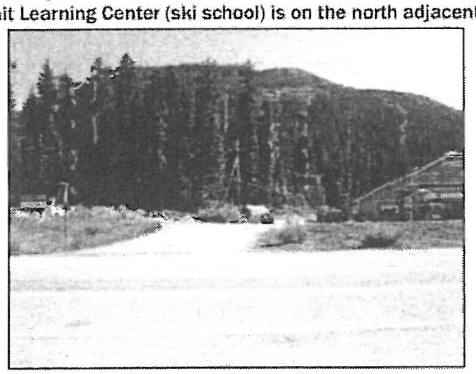
The Riley Group, Inc. 17522 BOTHELL WAY NE BOTHELL, WASHINGTON 98011	*Snoqualmie Summit Inn*	*Appendix A-2*
	Project # 2008-321	*Site Photographs*
	Address: State Route 906, Snoqualmie Pass, Washington	



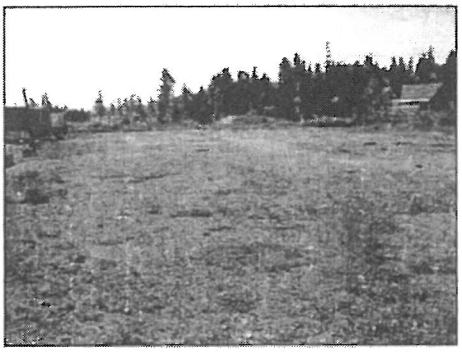
Photograph 9: View west toward King County parcel west of SR 906. Triangular structure (indicated by arrow) contains a hydrant. Power is provided to this parcel via an off-site electrical transformer. Access road to the Summit Learning Center (ski school) is on the north adjacent property.



Photograph 10: View southeast across King County parcel west of SR 906. Snoqualmie Summit Inn is visible in background.



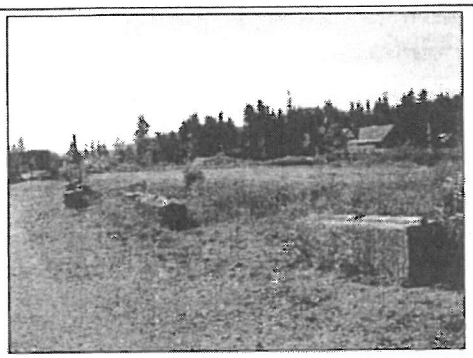
Photograph 11: View east from west side of SR 906 looking at property boundary between the King County parcel east of SR 906 and a south adjacent Chevron gasoline and convenience store. The red AST is a 20,000 gallon (empty and out of service) propane tank on the subject Site. SR 906 is in the foreground.



Photograph 12: View southwest of the Kittitas County parcel. Property west and adjacent are single-family recreational homes.

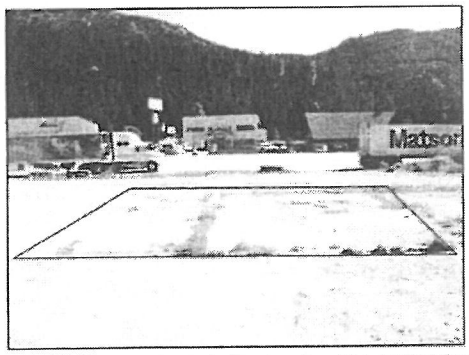
The Riley Group, Inc.
17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Snoqualmie Summit Inn	*Appendix A-3*
Project # 2008-321	*Site Photographs*
Address: State Route 906, Snoqualmie Pass, Washington	

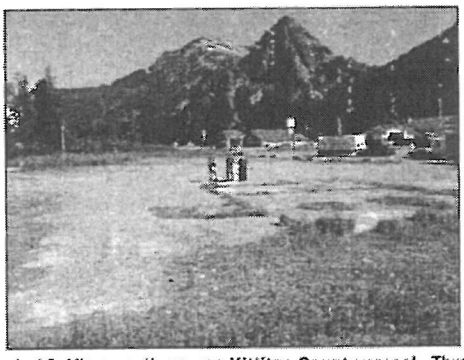


Photograph 13: View south along eastern property boundary (adjacent to SR 906) of the Kittitas County parcel.

Photograph 14: View of the former gas station foundation on the Kittitas County parcel. The remnant of a tiled floor is indicated by arrow.



Photograph 15: View east across former gasoline station foundation (outlined). Lee's Summit Grocery is in the background on east side of SR 906.



Photograph 16: View north across Kittitas County parcel. Three people are standing just north of former gasoline station foundation. Red-roofed building is the Summit Inn. Truck is parked on west shoulder of SR 906. The Rock Chalet was located on the northwest quadrant of this parcel.

The Riley Group, Inc. 17522 BOTHELL WAY NE BOTHELL, WASHINGTON 98011	*Snoqualmie Summit Inn*	*Appendix A-4*
	Project # 2008-321	*Site Photographs*
	Address: State Route 906, Snoqualmie Pass, Washington	

THE RILEY GROUP, INC.

October 21, 2008

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

Re: Supplemental Phase II Subsurface Investigation
Snoqualmie Summit Property, Kittitas and King County
SR 906, Snoqualmie Pass, Washington
RGI Project #2008-321A

Dear Mr. Zenger:

This letter report summarizes The Riley Group, Inc.'s (RGI) Supplemental Phase II Subsurface Investigation (Phase II) findings for the Snoqualmie Summit Properties, King and Kittitas County located on SR 906, Snoqualmie Pass, Washington (Figure 1).

The Supplemental Phase II investigation was performed at the request of Mr. Mark Zenger (Client). The scope of work for this project was performed in accordance with our *Supplemental Phase II Subsurface Investigation Proposal* dated and approved September 23, 2008. The purpose of the Supplemental Phase II was to further evaluate soil quality around the former gasoline station located on the Kittitas County parcel and the fill soils on the east King County parcel.

BACKGROUND

RGI Phase I Environmental Site Assessment dated September 23, 2008 revealed the following Recognized Environmental Concerns (RECs):

- Petroleum hydrocarbon-stained soil on the King County parcel.
- An aboveground diesel-fuel storage tank on the King County parcel that did not have any secondary containment or spill control.
- A former gasoline service station located on the Kittitas County parcel.
- The Kittitas County parcel had historically been developed with a gasoline service station, a retail store and a single car (storage) garage.

The King County parcel has never been developed, except as a road (known as the Yellowstone Trail or Sunset Highway) on the east King County parcel. At the time of RGI's Phase I ESA, both parcels were vacant.

Earth Consulting, Inc. (ECI) completed a subsurface investigation (*Phase II Environmental Site Assessment Report, Snoqualmie Pass Property Group, Snoqualmie Pass, Washington, dated*

December 13, 2007). ECI conducted a geophysical survey in an attempt to locate underground gasoline storage tanks (USTs) and fuel system piping associated with the former gasoline service station. USTs were not found, but fuel system piping was located on the north side of the former gasoline station foundation. Subsequent to the geophysical survey, ECI excavated 15 test pits (SP-EP1 through SP-EP12 on the Kittitas County parcel and SPN EP1 through SPN EP3 on the King County parcel) across the Site and collected soil samples for chemical analysis for total petroleum hydrocarbons (TPH), poly nuclear aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) and total lead. ECI's 2007 sampling locations and results are shown on the attached tables and figures for reference and are summarized below.

ECI's Phase II reported elevated concentrations of TPH that exceeded the Model Toxics Control Act (MTCA) Method A Cleanup Levels for Unrestricted Land Use. Elevated concentrations of diesel and oil-range TPH, which exceeded the regulatory cleanup levels, were found on the East King County parcel associated with oil spills on the ground surface. Concentrations of gasoline, diesel and oil-range TPH, which exceeded the regulatory cleanup levels, were found on the Kittitas County parcel associated with the former single-car garage (located on the northeast corner of the parcel) and former gasoline service station (southeast corner of Site). Shallow perched groundwater was encountered on the Kittitas County parcel in contact with petroleum-contaminated soil (PCS).

Carcinogenic PAH (chrysene) was found in a single soil sample from a soil stockpile on the east King County parcel at a concentration that exceeded the MTCA cleanup levels for unrestricted land use. The stockpile also contained approximately 63,000 mg/kg (6%) oil-range TPH. PCBs were not found above the analytical method reporting limits. (This stockpile was not present at the time of RGI's Phase I ESA). One soil sample from the Kittitas County parcel contained a concentration of lead at 912 mg/kg that exceeded the MTCA Method A Cleanup Level for Unrestricted Land Use (250 mg/kg). This sample containing elevated lead was collected from the northeast corner of this parcel, adjacent to the former single-car garage.

The east King County parcel is leased by a snowplow and earth works contractor who kept heavy equipment at the Site. During RGI's Phase I Environmental Site Assessment, RGI observed fresh spills of what appeared to be hydraulic oil and a heavy odor of oil emanating from the fill soil on the southern portion of the Site. At the time of this Phase II, most of the equipment had been removed.

SCOPE OF SERVICES

The Scope of Services performed for this project included the following tasks:

- Located public and private utilities.
- Advanced ten test pits, five on the Kittitas County parcel and six on the east King County parcel, to a maximum depth of 11 feet below ground surface (bgs).
- Collected soil samples for laboratory analysis of potential contaminants of concern.
- Compared analytical results to the routine Washington State Department of Ecology (Ecology) Model Toxics Control Act (MTCA) Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900 Table 740-1).

REGULATORY ANALYSIS OF SITE CONDITIONS UNDER MODEL TOXICS CONTROL ACT (MTCA)

Washington's hazardous release cleanup law, the Model Toxics Control Act (RCW 70.105D) mandates that site cleanups protect human health and the environment. The MTCA Cleanup Regulation (WAC173-340) 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, which focus on the use of "reasonable maximum exposure" assumptions based on site-specific characteristics and toxicity of the contaminants of concern.

For purposes of comparison, analytical laboratory data for this project are compared to the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use (considered protective of drinking water). The MTCA Method A Cleanup Levels are summarized in the attached Table.

SUPPLEMENTAL PHASE II SUBSURFACE INVESTIGATION

On October 6, 2008, RGI advanced a total of 11 test pits to a maximum depth of 11 feet bgs. Test pits were placed around the former gasoline station foundation on the Kittitas County parcel and on the east King County parcel (Figure 2 and Figure 3, respectively).

The test pits were advanced using a track-mounted excavator owned and operated by Kelly Excavating, Inc., under subcontract to RGI. Test pit logs will be kept in our files and are available upon request. Shallow, perched, groundwater was encountered in eight of the 11 test pits at depths ranging from 4.5 to 8.5 feet below ground surface (bgs).

Five test pits (SP EP 13 through SP EP 18) were advanced north, south and east of the former service station building footprint (Kittitas County parcel). An (unsuccessful) attempt was made to locate the suspected below grade hoists at the former service station. Shallow perched groundwater was encountered from 7.5 to 8.5 feet bgs.

Six test pits (SPN-EP4 through SPN EP-9) were advanced on the east King County parcel. The purpose of the exploration pits on this parcel was to evaluate general soil quality, including but not limited to areas of obvious surface contamination (from spilled oil). Three test pits were located on the south end of the parcel where approximately four-feet of fill has been placed to raise the surface grade. Two test pits were located based on the presence of surface staining. One test pit was placed in the former AST location.

All sampling equipment was cleaned in between sampling and test pit locations. All field sampling and decontamination procedures were performed in accordance with RGI's standard sampling and decontamination protocols.

Soil Sampling

During all test pit exploration activities, soil samples were collected, inspected, and classified by RGI's field geologist. Soil conditions encountered were described using the Unified Soil Classification System (USCS).

Fill soil placed on the southwest quadrant of the east King County parcel generally consisted of brown to gray, silty, gravelly fine to medium sand with cobbles to a depth of approximately four feet. Native soil, encountered beneath asphalt (former roadway) consists of brown fine to coarse Sand with gravel, silt and organics.

Soil encountered in the test pits on the Kittitas County parcel generally consisted of gray fine to coarse sand with silt, gravel and cobbles.

A total of 26 discrete soil samples were collected during this project. Soil samples were screened in the field for the presence of (undifferentiated) volatile organic compounds (VOCs) using a portable gas analyzer equipped with a photo-ionization detector (PID) and water sheen. PID field screening results are presented in Table 1 and Table 2. Field screening results ranged from 0.0 to 167 volumetric parts per million (Vppm). The highest PID readings were detected in test pit SP-EP-17-5.0 (167 Vppm), at a depth of approximately five feet bgs (Table 1).

Based on the field screening results and our field observations, 17 soil samples were submitted for laboratory analyses for potential contaminants of concern, listed below. Samples collected for VOC analysis were collected using the Ecology-mandated 5035 sample collection method. Samples with the highest PID readings, or corresponding to specific areas of concern (e.g., UST nest), were selected for laboratory analysis.

Groundwater

Shallow, perched, groundwater was encountered at depths ranging from approximately 4.5 to 8.5 feet bgs in eight of the 11 test pits; it was not encountered in the other three. Groundwater grab samples were not collected during this Supplemental Phase II Subsurface Investigation because water samples collected from test pits are not representative of groundwater conditions.

Analytical Laboratory Analysis

Soil samples collected during this project were submitted to Friedman Bruya, Inc. of Seattle, Washington, for one or more of the following laboratory analyses:

- Gasoline range TPH using Ecology Test Method NWTPH-Gx;
- BTEX (benzene, ethylbenzene, toluene, xylenes) using EPA Test Method 8021;
- Diesel and oil-range TPH using Ecology Test Method NWTPH-DX with silica gel cleanup[1];
- MTCA metals (arsenic, cadmium, chromium, lead, mercury), and,
- Polychlorinated biphenyls (PCBs) using EPA Test Method 8080 or substantial equivalent.

Laboratory Analytical Results

Analytical results and field screening data, summarized in the attached Tables 1 and Table 2, are discussed below. Copies of the analytical laboratory report and associated sample chain of custody forms are included in Appendix A.

Kittitas County parcel

Gasoline-range TPH was not detected in the soil samples submitted for testing, except for sample SP-EP-17-5.0 and SP-EP-17-8.5 (exploration pit 17 at 5-feet and 8.5-feet bgs), which yielded 200 mg/kg and 3 mg/kg TPH Gx, respectively. The MTCA Method A Soil Cleanup Level for Unrestricted Land Use is 30 mg/kg. Ethylbenzene, toluene and xylene were detected in sample SP-EP-17-5.0 at concentrations that did not exceed the cleanup levels for these compounds. BETX compounds were not detected in any other soil samples at concentrations exceeding the method reporting levels.

East King County parcel

Diesel-range TPH was not detected in the soil samples submitted for testing, except for sample SPN-EP-6-2.5, which yielded 140 mg/kg diesel-range TPH and 770 mg/kg oil-range TPH at 2.5 feet bgs. The MTCA Method A Soil Cleanup level for diesel and oil-range TPH is 2,000 mg/kg.

CONCLUSIONS AND RECOMMENDATIONS

Based on ECI's 2007 Phase II and our supplemental subsurface investigation findings, RGI concludes the following:

Kittitas County Parcel

- Gasoline-range and diesel-range TPH is present at concentrations that exceed the regulatory cleanup levels in the soil beneath the former gasoline service station foundation (southeast corner of the Kittitas County parcel) and beneath the former single car garage (on the northeast corner of the Kittitas County parcel). It appears that shallow perched groundwater is likely in contact with the contaminated soil.

RGI recommends that the Kittitas County parcel be entered into Ecology's Voluntary Cleanup Program and that an independent cleanup action be conducted with the goal of obtaining a

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

determination of No Further Action (NFA). The goal of cleanup actions is protection of human health and the environment. As such the cleanup standards (Ch 173-340 WAC) are established for protection of groundwater quality. Therefore, it will be necessary to construct groundwater monitoring wells to evaluate groundwater quality.

East King County Parcel

- Oil-range TPH is present in shallow soil on the east King County parcel at concentrations that exceed the regulatory cleanup levels. Shallow perched groundwater does not appear to be in contact with soil containing concentrations of TPH. Detected concentrations of TPH that exceed the soil cleanup levels for unrestricted land use on this parcel were found by ECI in shallow soils (one foot bgs) associated with spilled oil; and, in our opinion represents de minimus conditions and does not warrant a cleanup action.

LIMITATIONS

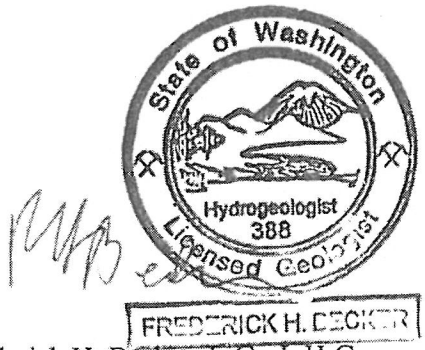
This report is the property of The Riley Group, Inc., Snoqualmie Summit Inn, and their authorized representatives or affiliates and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. This report is intended for specific application to the Kittitas and King County property located adjacent to SR 906, 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 or test borings drilled 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 changes 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, The Riley Group, Inc. should be requested to reevaluate the recommendations in this report.

We trust that this letter report meets your current project needs and appreciate the opportunity to be of service. Please contact us at (425) 415-0551, or by fax (425) 415-0311, if you have any questions or need additional information.

Sincerely,

THE RILEY GROUP, INC.



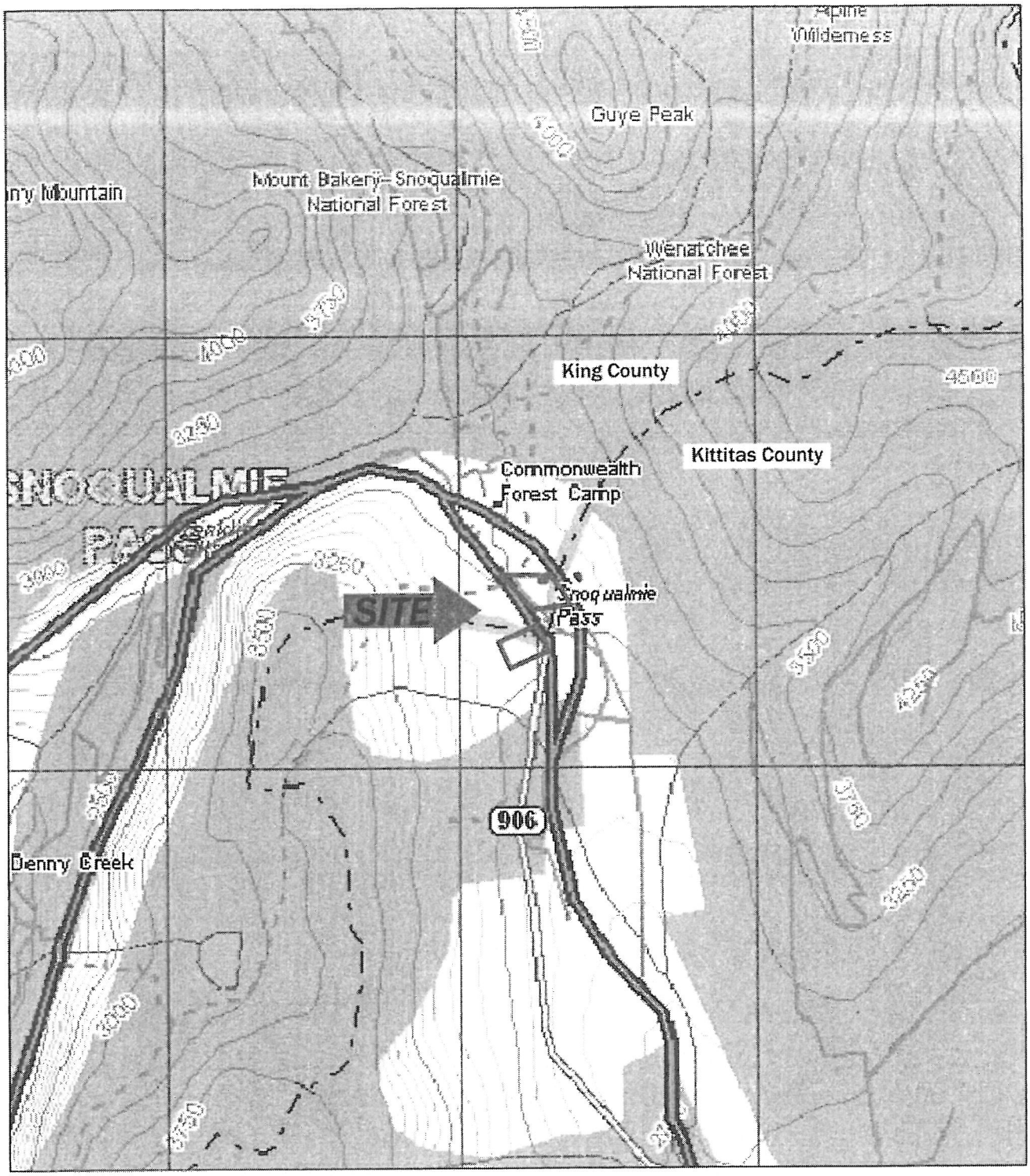
Frederick H. Becker, L.G., L.H.G.
Senior Geologist

Paul D. Riley, L.G., L.H.G.
Principal

Attachments

Figure 1 *Site Vicinity Map*
Figure 2 *Exploration Pit Location Plan Kittitas County*
Figure 3 *Exploration Pit Location Plan King County East Parcel*
Table *1* *Summary of Subsurface Soil Sample Analytical Results – Kittitas County Parcel*
Table *2* *Summary* of *Subsurface Soil Sample Analytical Results – East King County Parcel*
Appendix A *Analytical Laboratory Reports & Chain of Custody*

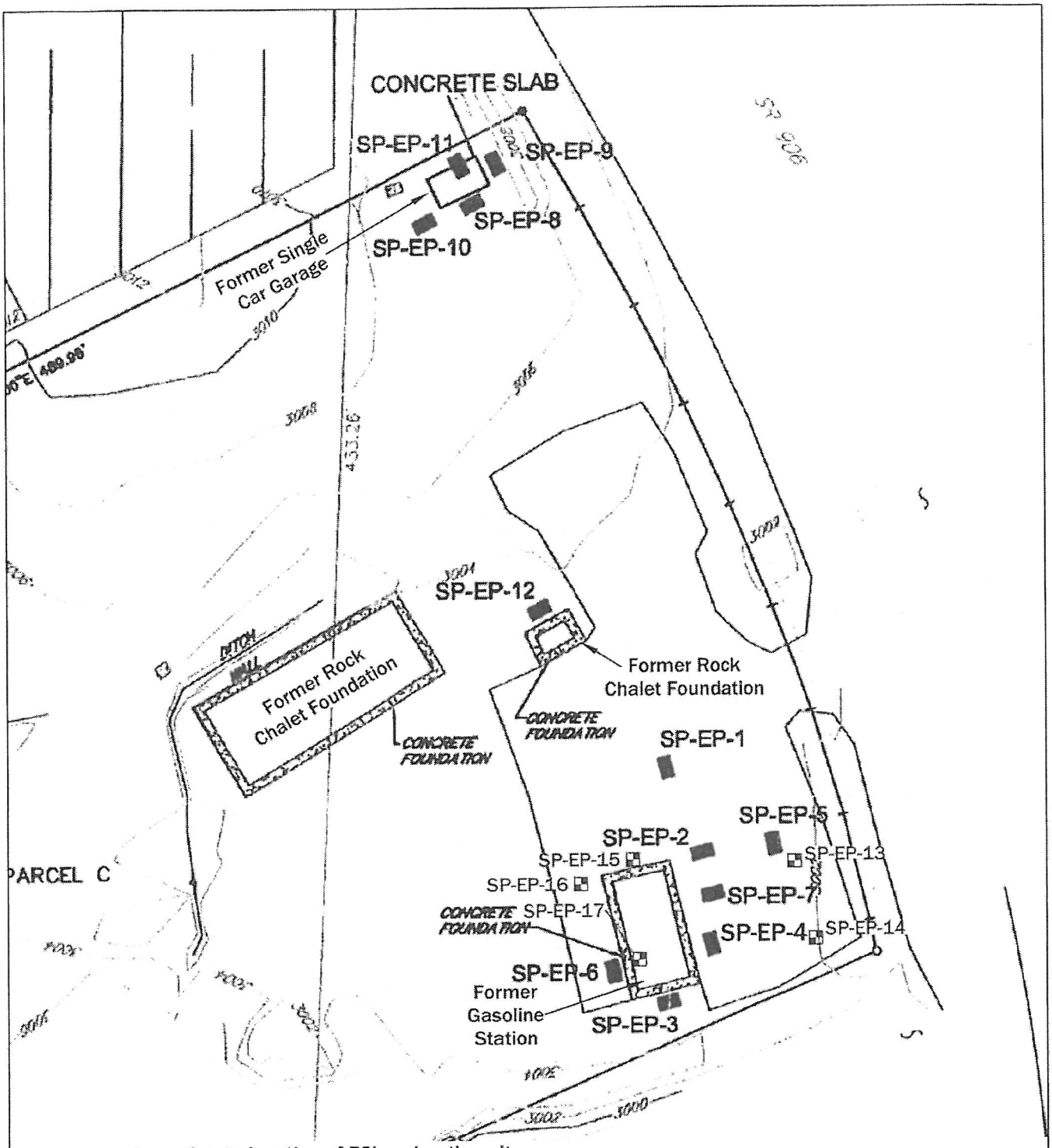
Report Distribution *Mr. Mark Zenger, Snoqualmie Summit Inn. (three bound copies and one electronic PDF)*



USGS, 1989 Snoqualmie, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=1000'
0 500 1000 2000
N

The Riley Group, Inc. 17522 BOTHELL WAY NE BOTHELL, WASHINGTON 98011	Snoqualmie Summit Supplement Phase II	Figure 1
	Project Number 2008-321A	Site Vicinity Map	Date Drawn: 10/07/08
	Address: SR 906, Snoqualmie Pass, Washington	



SPN-EP1 ■ Approximate location of ECI exploration pit, November 2007.

SP-EP-13 ■ (in red) RGI test pit location 10/06/08.

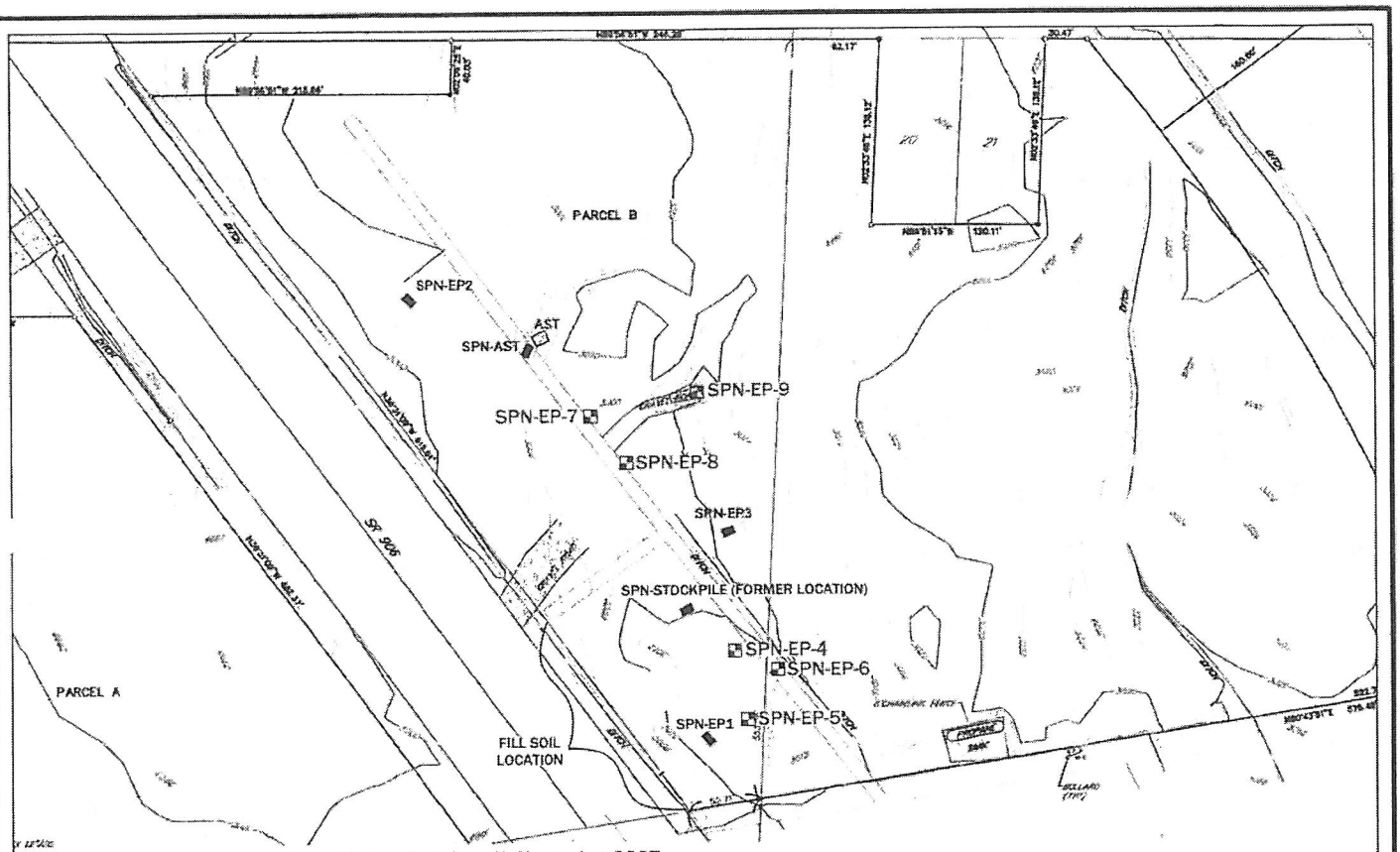
Drawing after Earth Consulting Incorporated, Exploration Pit Location Plan, November 28, 2007.

Approximate Scale: 1"=60'

0 30 60 120

N

The Riley Group, Inc. 17522 BOTHELL WAY NE BOTHELL, WASHINGTON 98011	Snoqualmie Summit Supplement Phase II	Figure 2
	Project Number 2008-321A	Exploration Pit Location Plan Kittitas County Parcel	Date Drawn: 10/07/08
	Address: SR 906, Snoqualmie Pass, Washington	



SPN-EP1 Approximate location of ECI exploration pit, November 2007.

AST Aboveground storage tank.

SPN-EP-4 (in red) RGI test pit location 10/06/08.

Approximate Scale: 1"=100'

0 50 100 200

N

Drawing after Earth Consulting Incorporated, Exploration Pit Location Plan, November 28, 2007.

The Riley Group, Inc.
17522 BOTHELL WAY NE
BOTHELL, WASHINGTON 98011

Snoqualmie Summit Supplement Phase II		Figure 3
Project Number 2008-321A	Exploration Pit Location Plan King County East Parcel	Date Drawn: 10/07/08
Address: SR 906, Snoqualmie Pass, Washington		

Table 1. Summary of Soil Sample Analytical Laboratory Results - Kittitas County Parcel
Snoqualmie Summit Inn Property, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321A

Sample Number	Date Sampled	Sample Depth	PID	Sheen	TPH Gx	Diesel-range TPH	Oil-range TPH	BTEX				PCB	PAH	Metals
								B	T	E	X			
Kittitas County Parcel - Data collected by others														
SP-EP 2-8	10/30/2007	8	---	---	<2	---	---	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP-3-7 d	10/30/2007	7	---	---	**500**	**2900** [x]	**11,000**	**0.54**	3.5	2.8	**16**	---	---	Pb = 37.9
SP-EP 3-4	10/30/2007	4	---	---	84	---	---	**0.039**	0.46	0.61	0.94	---	---	---
SP-EP 4-8	10/30/2007	8	---	---	3	---	---	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP 5-7	10/30/2007	7	---	---	<2	---	---	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP 7-8	10/30/2007	8	---	---	<2	---	---	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP 10-5	10/30/2007	5	---	---	**110**	**13,000**	870	<0.02	0.05	0.37	1.1	---	---	Pb = 67.0
SP-EP 11-3.5	10/30/2007	3.5	---	---	**200**	**2,500**	1,200	<0.02	0.46	2.4	2.2	ND <0.1	---	**Pb = 912**
Kittitas County Parcel - Data collected by RGI														
SP-EP-13-8.0	10/6/2008	8	0.4	none	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP-14-8.25	10/6/2008	8.25	0.4	none	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP-15-7.5	10/6/2008	7.5	none	none	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	---	---	---
SP EP-16-7.5	10/6/2008	7.5	none	none	<2	<50	<250	<0.02	<0.02	<0.02	<0.06	---	---	---
SP-EP-17-2.0	10/6/2008	2	43.4	yes	---	---	---	---	---	---	---	---	---	---
SP-EP-17-5.0	10/6/2008	5	167	yes	**200**	**2,600**	<250	<0.02	0.06	2.6	2.9	---	---	Pb = 4.03
SP-EP-17-8.5	10/6/2008	8.5	3.1	none	3	<50	<250	<0.02	<0.02	<0.02	<0.06	---	---	---
MTCA Method A Soil Cleanup Levels					**30/100** [1]	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**	**1**	**0.1** [2]	**analyte specific**

Samples collected 10/30/2007 by Earth Consulting, Inc
Samples collected October 6, 2008, by The Riley Group, Inc.
All results and detection limits are given in mg/kg.
Sample Depth = Groundwater sample depth is feet below ground surface (bgs).
PID = Photoionization Detector
TPH = Total Petroleum Hydrocarbons
Gasoline TPH determined using Northwest Method NWTPH Gx
[1] The higher cleanup level applies for gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture.
Diesel and Oil-range TPH determined using Northwest Method NWTPH Dx with silica gel cleanup.
[x] The pattern of peaks is not indicative of diesel according to the analytical report
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Metals determined using EPA Test Method 200.8
Pb = Total Lead
PCBs = Polychlorinated biphenyl, determined using EPA Test Method 8080.
PAH = Poly nuclear aromatic hydrocarbons, determined using EPA Test Method 8270C SIM
[2] Cleanup level for carcinogenic PAHs based on total weighted sums using the toxicity equivalency methodology in WAC 173-340-708(8)
---- = not analyzed or not applicable
ND. Not Detected at noted analytical detection limit.
MTCA Method A Cleanup Level, Ecology Model Toxics Control Act Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1).
Bold & yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A Soil Cleanup Levels.

Table 2. Summary of Soil Sample Analytical Laboratory Results - East King County Parcel
Snoqualmie Summit Inn Property, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321A

Sample Number	Date Sampled	Sample Depth	PID	Sheen	TPH Gx	Diesel-range TPH	Oil-range TPH	BTEX				PCB	PAH	Metals
								B	T	E	X			
East King County Parcel - Data Collected by Others														
SPN-EP1-4	10/30/2007	4	---	---	---	<50	<250	---	---	---	---	---	---	Pb = 5.85
SPN-EP2-1	10/30/2007	1	---	---	---	1,200 [x]	**6,300**	---	---	---	---	---	---	---
SPN-EP3-2	10/30/2007	2	---	---	---	<50	<250	---	---	---	---	---	---	Pb = 4.79
SPN-AST1	10/30/2007	1	---	---	---	1,500 [x]	**6,700**	---	---	---	---	---	---	---
SPN-Stockpile	10/30/2007	---	----	---	---	**10,000**	**63,000**	---	---	---	---	---	**0.37**	Pb = 7.43
East King County Parcel - Data Collected by RGI														
SPN-EP-4-2.5	10/6/2008	2.5	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-4-6.0	10/6/2008	6	0.4	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-4-11.0	10/6/2008	11	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-5-0.5	10/6/2008	0.5	0.4	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-5-3.0	10/6/2008	3	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-5-7.5	10/6/2008	7.5	0.4	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-5-9.0	10/6/2008	9	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-6-0.3	10/6/2008	0.3	0.4	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-6-2.5	10/6/2008	2.5	0.4	none	---	140[x]	770	---	---	---	---	---	---	---
SPN-EP-6-4.5	10/6/2008	4.5	0.4	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-6-5.0	10/6/2008	5	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-6-8.5	10/6/2008	8.5	0.4	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP 7-7.3	10/6/2008	7.3	0.9	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-8-7.0	10/6/2008	7	0.5	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-9-0.5	10/6/2008	0.5	none	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-9-2.0	10/6/2008	2.0	none	none	---	<50	<250	---	---	---	---	---	---	---
SPN-EP-9-3.5	10/6/2008	3.5	none	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-9-5.5	10/6/2008	5.5	none	none	---	---	---	---	---	---	---	---	---	---
SPN-EP-9-7.5	10/6/2008	7.5	none	none	---	<50	<250	---	---	---	---	---	---	---
MTCA Method A Soil Cleanup Levels					**30/100[1]**	**2,000**	**2,000**	**0.03**	**7**	**6**	**9**	**1**	**0.1[2]**	**analyte specific**

Samples collected 10/30/2007 by Earth Consulting, Inc.
Samples collected October 6, 2008, by The Riley Group, Inc.
All results and detection limits are given in mg/kg.
Sample Depth = Groundwater sample depth is feet below ground surface (bgs).
PID = Photoionization Detector
TPH = Total Petroleum Hydrocarbons
Gasoline TPH determined using Northwest Method NWTPH Gx
[1] The higher cleanup level applies for gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture.
Diesel and Oil-range TPH determined using Northwest Method NWTPH Dx with silica gel cleanup.
[x] The pattern of peaks is not indicative of diesel according to the analytical report
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Metals determined using EPA Test Method 200.8
Pb = Total Lead
PCBs = Polychlorinated biphenyl, determined using EPA Test Method 8080.
PAH = Poly nuclear aromatic hydrocarbons, determined using EPA Test Method 8270C SIM
[2] Cleanup level for carcinogenic PAHs based on total weighted sums using the toxicity equivalency methodology in WAC 173 340 708(8)
---- = not analyzed or not applicable.
ND, Not Detected at noted analytical detection limit.
MTCA Method A Cleanup Level, Ecology Model Toxics Control Act Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table
Bold & yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A Soil Cleanup Levels.

The Riley Group, Inc.

INDEPENDENT CLEANUP ACTION FINAL REPORT

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RGI PROJECT NO. 2008-321B

INDEPENDENT CLEANUP ACTION
FINAL REPORT

SNOQUALMIE SUMMIT INN PROPERTY
SR 906
SNOQUALMIE PASS, WASHINGTON

NOVEMBER 12, 2009

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LIST OF APPENDICES

1.0 INTRODUCTION

The Snoqualmie Summit Inn Village Center property (hereafter referred to as the Site) consists of approximately 5.5-acres located on the west side of SR 906, Snoqualmie Pass, Kittitas County, Washington (Figure 1). The Site, Kittitas County Tax identification number 142436, is vacant. RGI understands that the client intends to enroll the Site into the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program (VCP) with the goal of obtaining a determination of No Further Action (NFA).

The Riley Group, Inc. (RGI) was retained by Snoqualmie Summit Inn, Inc. (Client) to provide environmental oversight during the independent cleanup action. These activities included, but were not necessarily limited to, excavation oversight, characterizing soil quality, directing the segregation of petroleum contaminated soils (PCS), documenting removal of two underground storage tanks (USTs), coordinating and documenting the final disposition of the excavated Site soils, interim and final soil and groundwater grab sample collection; and, directing laboratory testing, conducting data review, consulting, and draft and final report preparation.

2.0 Project Background

The following Environmental Site Assessment (ESA) reports were completed prior to the independent cleanup action:

- Earth Consulting Inc. (ECI), *Phase I Environmental Site Assessment, Snoqualmie Pass Property Group, Forest Road and Interstate 90, Snoqualmie, Washington*, dated September 17, 2007;
- ECI, *Phase II Environmental Site Assessment Report, Snoqualmie Pass Property Group, Snoqualmie Pass, Washington*, dated December 13, 2007;
- RGI, *Phase I Environmental Site Assessment, Snoqualmie Summit Properties, SR 906, Snoqualmie Pass, Washington*, dated September 23, 2008; and,
- RGI, *Supplemental Phase II Subsurface Investigation, Snoqualmie Properties, Kittitas and King County, SR 906, Snoqualmie Pass, Washington*, dated October 2008.

A summary of the findings from these reports is provided below.

2.1 ECI Phase I ESA, September 2007

The Phase I ESA included two separate tax parcels. One parcel was located in King County. The second parcel was located in Kittitas County (the subject Site) and is wholly located on the west side of SR 906.

ECI's Phase I ESA concluded that a former gasoline station was located on the Kittitas County parcel. No evidence of this former facility was shown on Client's survey of existing conditions and buildings dated January 9, 1987 prepared by Group 4, Inc. The foundation had been exposed by snow plowing activities on the Site. ECI recommended a geophysical survey followed by soil testing in areas suspected of containing the former fuel system. ECI's findings associated with the King County parcel are not summarized herein.

2.2 ECI Phase II ESA, December 2007

During their Phase II ESA, ECI excavated 12 test pits, SP-EP1 through SP-EP12 on the Kittitas County parcel (subject Site) and collected soil samples for chemical analysis for total petroleum hydrocarbons (TPH), and polychlorinated biphenyl (PCB); and total lead.

ECI's Phase II ESA reported concentrations of gasoline, diesel and oil-range TPH and total lead that exceeded the MTCA Method A Soil Cleanup Levels for Unrestricted Land Use on the Kittitas County parcel. Soils surrounding the foundation of a service bay building (located on the northeast corner of the Site, and also not shown on the Client's survey of existing conditions and buildings dated January 9, 1987 and prepared by Group 4, Inc.; the foundation had been exposed by snow plowing activities on the Site) and soils surrounding the foundation of a former service station site (on the southeast corner of the Site) were found to be impacted by TPH. According to ECI, the former fuel tanks and dispensers had been removed. Shallow perched groundwater was encountered at a depth of approximately eight feet below ground surface (bgs) in contact with PCS.

2.3 RGI Phase I ESA, September 2008

RGI's Phase I ESA included two tax parcels on Snoqualmie Pass, one located in Kittitas County (the Subject Site) and the other was located in King County. The Phase I ESA found that the Subject Site parcel was vacant, although it had historically been developed with a gasoline service station on the southeast corner of the parcel, a retail store in the central portion of the parcel and a service bay building on the northeast corner of the parcel. The foundations for the former service station and the former retail store were in place; whereas the foundation for the former service bay building was not found. RGI recommended additional subsurface investigations be conducted on the Subject Site.

RGI's findings associated with the King County parcel are not summarized herein.

2.4 RGI Supplemental Phase II Subsurface Investigation, October 2008

RGI's Supplemental Phase II consisted of excavating five test pits on the Kittitas County parcel. RGI's Phase II reported elevated concentrations of gasoline-range TPH that exceeded the MTCA Method A Cleanup Levels for Unrestricted Land Use at the former gasoline service station site on the Kittitas County parcel.

RGI's findings regarding the King County parcel are not summarized herein.

3.0 SCOPE OF WORK

Saybr Contractors Inc. (Saybr) under subcontract to RGI provided earth work services for the remedial excavations, including: loading, transport, off-site disposal of PCS; importing and placing clean backfill soil. Marine Vacuum Services (Mar Vac) under subcontract to RGI, removed contaminated groundwater from the excavations, as needed, during the project.

RGI's scope of work during the cleanup effort consisted of, but was not necessarily limited to, the following tasks:

- Observing and directing Site soil excavation, soil segregation, stockpiling, and PCS exporting, placement and compaction of imported backfill soil.

- Collecting interim and final confirmation soil and groundwater grab samples for chemical analysis.
- Submitting samples for chemical analysis to a Washington-state accredited analytical laboratory for testing for the contaminants of concern (COCs).
- Comparing interim and final confirmation soil and groundwater sample concentrations of the COCs to the MTCA Method A Soil and Groundwater Cleanup Levels for Unrestricted Land Use (WAC 173-340, Tables 740-1 and 720-1).
- Preparing a draft and final independent cleanup action report discussing our field observations, findings, conclusions, and any recommendations.

This cleanup action was performed as an independent cleanup action, in accordance with the MTCA Cleanup Regulations (WAC 173-340). The cleanup action was performed in general accordance with our October 2008 Independent Cleanup Action proposal and subsequent work authorization.

4.0 GEOLOGY and GROUNDWATER

The Site geology, summarized below, is based on RGIs field observations during the independent cleanup action. During remedial excavations, PCS was encountered in two source areas at the subject Site as depicted on Figure 2, Site Plan. These two areas are discussed hereafter as the South Excavation (Snoqualmie Pass South, SPS) and North Excavation (Snoqualmie Pass North, SPN), which are depicted in Figures 3 and 4 respectively, and described below.

4.1 Soils

4.1.1 South Excavation (SPS)

Subsurface soil in SPS consisted of reddish brown gravelly silt with varying amounts of organics to approximately four feet bgs, underlain by gray bedded silt and sand to the maximum excavation depth, approximately nine feet bgs. The finer-grained materials appear consistent with an alpine glacial lake depositional environment. The bedded silt and sand was underlain by saturated, gray, sandy gravel at nine feet bgs. Shallow groundwater was encountered at approximately eight feet bgs.

Initial observations of groundwater noted prominent hydrocarbon-like (iridescent) sheen on the water surface. Subsequent to groundwater removal efforts the iridescent sheen was replaced by a monochromatic, white sheen, believed to be, in our opinion, biogenic in origin.

4.1.2 North Excavation (SPN)

The ground surface consisted of concrete and asphalt rubble with silt. From one to four feet bgs, the subsurface soil consisted of black fine sand and silt with roots and miscellaneous debris consisting of empty motor oil cans, wiring, liquor bottles, and broken pieces of metal auto parts. Field screening yielded an oily odor, heavy sheen and elevated photoionization detector (PID) readings. At four feet bgs, subsurface soil generally consisted of a laterally continuous band of black over beige, fine sand that was approximately one foot thick. This band of dark soil was noted at similar depths in the

south excavation and based on grain size and shape, relatively consistent thickness, and lateral continuity appears likely as a deposit of air-fall volcanic ash.

Strong sheen and elevated PID readings were commonly observed from this ash layer. From five feet to nine feet bgs, the subsurface soil consisted of gravel, cobbles and boulders in a coarse sand matrix which is consistent with an alpine glacial till or moraine depositional setting. Field screening frequently yielded PID readings in excess of 100 parts per million by volume (ppmv) and strong gasoline odor.

Sand content increased below nine feet bgs; and, the soil contact with the overlying material was gradational.

4.2 Petroleum Contaminated Soils

The South Excavation (SPS) (Former Gasoline Service Station) consisted of a concrete foundation and relict ceramic tile flooring. PCS was found predominantly on the west, south and southeast sides of the foundation. Figure 3 depict the limits of this remedial excavation and shows the soil sample locations.

The North Excavation (SPN) (Former Service Bay Building). The former floor slab/foundation location (identified by ECI) was not observed by RGI during this independent cleanup action. PCS was encountered predominantly west of the former foundation area. Figure 4 depicts the limits of this remedial excavation and shows the soil sample locations.

4.3 Groundwater

During the Site excavation activities, groundwater was encountered in each of the excavations at an approximate depth of eight feet bgs. Groundwater seepage into SPN was relatively slow (low), whereas seepage into SPS was relatively rapid (heavy). Petroleum (iridescent) sheen was not observed on standing water in SPN but was consistently observed on the standing water in SPS, suggesting that groundwater had been in contact with PCS.

5.0 Cleanup Regulations & PCS Designation

5.1 MTCA Cleanup Regulation

Washington's hazardous waste cleanup law, the Model Toxics Control Act (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, 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 Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-740, Table 740-1) and Groundwater Cleanup Levels (WAC 173-340-720, Table 720-1) and are summarized in Tables 1 and 2, and Table 3, respectively.

5.2 PCS Designation

During this project, PCS was segregated during excavation into clean and contaminated stockpiles. The two designations are described as follows:

1. **Clean/ Petroleum-Affected Soil (slightly contaminated soil)** - soil known to contain concentrations of contaminants of concern at concentrations below the MTCA Method A Cleanup Standards.
2. **Petroleum-contaminated Soil (PCS)**- soil known to contain concentrations of contaminants of concern exceeding those concentrations published in MTCA.

During soil excavation, RGI used one or all of the following criteria to classify the PCS:

1. **Field Screening Data.** Field screening methods included a portable gas analyzer equipped with a photoionization detector (PID), to determine total volatile organic compounds (TVOCs), and water sheen tests. Field screening data was most useful at the subject Site to determine if TVOCs were present in the soils. Water sheen tests were used to evaluate soil quality for the presence of diesel-range and oil-range TPH.
2. **Off-Site Analytical Laboratory.** An off-site analytical laboratory (Friedman Bruya, Inc. (FBI) of Seattle, Washington provided chemical analyses of soil and groundwater grab samples. Samples were generally submitted for expedited testing on a same day or 24-hour turnaround time.

6.0 Interim & Confirmation Soil Sampling

A total of 18 interim soil samples designated as removed (R) on Table 1 and Table 2. A total of 34 confirmation soil samples designated as in situ (I) on Table 1 and Table 2 were collected for chemical analysis to document soil quality during the cleanup action and at the final excavation limits. Interim soil samples generally had concentrations of the COCs at or above the MTCA Method A Soil Cleanup Levels and were subsequently excavated, transported and properly disposed of off-site as PCS. However, due to heterogeneity of the Site soils and heterogeneity of the TPH concentrations within the soil mass, some interim samples with non-detectable concentrations of the COCs may have been removed during the excavation activities. Approximate interim and confirmation soil sample locations are shown in the attached Figure 3 and Figure 4.

6.1 Sample Designation Nomenclature

Soil samples were identified by the sequential number and the depth (in feet below ground surface) as follows:

SP = Snoqualmie Pass

N or S = North or South Excavations

N, S, W, E = Directional Prefixes within each excavation

SW = Excavation Sidewall

BOT = Excavation Bottom

H2O = Groundwater (from excavation)

CLN (series #) = "Clean" Stockpile Material, Composite Sample; e.g. SPN-CLN-1

PCS (series #) = "Contaminated" Stockpile Material; Composite Sample; e.g. SPS-PCS-1

= Depth in Feet Below Ground Surface

For example, sample SPN-NSW-6 is from the north excavation, north sidewall, at six feet bgs. Excavation bottom samples were numbered in numeric series. For example SPS-BOT3-8 would be the third bottom sample from the south excavation at a depth of eight feet bgs. One exception to this sampling scheme is RGI sample SPN EP-10-5, which was an effort to duplicate a sample from ECI's 2007 exploration pit 10 (EP 10).

Stockpile samples were collected as composites and in time-series as work progressed. Example would be SPN-PCS1 for the first sample taken from the "contaminated" material at the north excavation. Samples numbered sequentially, i.e. SPN-PCS2, SPS-PCS3, etc.

Groundwater samples were labeled as either SPN or SPS with a H2O suffix. Example, sample SPN Pit H2O is for a groundwater sample from the north excavation, SPS Pit H2O 2 was the second groundwater sample from SPS.

7.0 Laboratory Analyses

All interim and final confirmation soil samples were submitted to Friedman & Bruya, Inc. of Seattle, Washington for chemical testing for the COC in accordance with Ecology's MTCA Required Testing for Petroleum Releases (WAC 173-340, Table 830-1).

Soil samples collected from the remedial areas were analyzed using one or more of the following test methods:

- Gasoline TPH by Northwest Method NWTPH-Gx;
- Diesel and heavy oil TPH by Northwest Method NWTPH-Dx with silica gel cleanup[1];
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8021B;
- Halogenated volatile organic compounds (HVOCs) using EPA Method 8260c;
- Carcinogenic PAHs (cPAHs) using EPA Method 8270/SIM; and/or,
- Total metals chromium, arsenic, cadmium, mercury and lead using EPA Methods 200.8 (soil) and 6010 and 7471 (water).

Interim and confirmation soil sample analytical results are discussed below and are summarized in Table 1 & 2. Groundwater sample analytical results are presented in Table 3. Appendix B presents copies of the laboratory certificates and chain-of-custody documentation.

[1] Silica Gel removes biogenic organic materials that can yield false positive results.

8.0 Remedial Excavations & UST Removal

Between August 31, 2009 and September 25, 2009, Saybr, under contract to and as directed by RGI, excavated a total of 1,720.75 tons (approximately 1,229 cubic yards) of PCS from the two remediation areas at the Site (north and south), see Figure 2, 3 and 4.

Following is a description of the remedial activities and findings in the two identified remedial areas.

8.1 South Excavation (SPS)

PCS was encountered predominantly on the south and west side of the former gasoline station foundation. On the southeast corner of the building foundation, PCS was found to be associated with an abandoned clay sewer pipe. RGI observed via field screening that PCS concentrated at the pipe joints.

Suspect UST piping was encountered near the southeast corner of the former foundation. Additionally, two 2-inch diameter metal pipes were exposed and removed to the west of the foundation as depicted on Figure 3 (see also Photograph 11, Appendix A-3). The two metal pipes were approximately 40 feet long and were interpreted to have been the former UST ventilation lines.

Interim soil confirmation and stockpile samples were analyzed for gasoline-, diesel- and oil-range TPH, BTEX, total lead and HVOC. One worst-case sample, SPS-ESW-6, contained gasoline TPH at 400 mg/kg, diesel-range TPH at 6,400 mg/kg and oil-range TPH at 15,000 mg/kg, which exceeded MTCA Method A Cleanup Levels for Unrestricted Land Use. Trace concentrations of toluene and ethylbenzene were detected that fell below MTCA Method A Cleanup Levels; and xylene was detected at 11 mg/kg. Carcinogenic (c) PAH were not detected in SPS above the (analytical) method reporting limits; and, total lead concentrations were detected that fell below MTCA Method A Cleanup Levels.

Concentrations of gasoline-range TPH ranged from non-detect to 400 mg/kg, diesel-range TPH ranged from non-detect to 6,400 mg/kg, and oil-range TPH ranged from none-detected to 16,000 mg/kg. Benzene was not detected above (analytical) method detection limits. Concentrations of toluene ranged from none-detected to 0.69 mg/kg; ethylbenzene ranged from non-detected to 1.7 mg/kg; and, xylene ranged from none-detected to 11 mg/kg.

A total of approximately 970.75 tons of PCS were removed from SPS. Soils were excavated based on field screening and interim sample analytical results. Confirmation soil samples at the excavation limits contained either non-detectable concentrations of the COCs identified for this area or concentrations below MTCA Method A Soil Cleanup Levels. Based on the soil confirmation sampling and analytical results, remaining soils are compliant with MTCA.

8.2 North Excavation (SPN)

PCS was encountered beneath the former service bay building area located on the northeast corner of the Site. During remedial activities, two USTs were found east of the former service bay building (north excavation (SPN)) with product lines leading towards SR 906 (see Section 8.1.1 below). The presence of abandoned USTs in this area suggests past fueling operations (see Appendix A-1, Photograph 2). Past Site use as an auto repair and servicing garage was consistent with our observations of oily debris, empty oil cans,

miscellaneous broken and rusted auto parts, pieces of tire chains, etc. within the shallow fill material. East and south of the USTs, the subsurface soil consisted of predominantly large cobble and boulders with a dry silty fine sand matrix (Appendix A-2, Photograph 5).

Interim soil confirmation and stockpile samples were analyzed for gasoline-, diesel- and oil-range TPH, BTEX, total lead and HVOC. The worst-case sample, SPN-PCS2, contained gasoline TPH at 610 mg/kg, diesel-range TPH at 90,000 mg/kg and oil TPH at 3,300 mg/kg; these concentrations exceeded MTCA Method A Cleanup Levels[2].

Concentrations of gasoline-range TPH ranged from non-detected to 610 mg/kg. Diesel-range TPH ranged from non-detected to 90,000 mg/kg, and oil-range TPH ranged from non-detected to 3,300 mg/kg. Neither benzene nor toluene was detected above the method reporting limits for any of the samples from SPN. Concentrations of ethylbenzene ranged from none detected to 0.75 mg/kg; and xylene was detected ranging from none detected to 0.43 mg/kg, which were below MTCA Method A Cleanup Levels for Unrestricted Land Use.

Trace concentrations of total lead ranged from 5.92 mg/kg to 67 mg/kg, which were below MTCA Method A Cleanup Levels. Neither HVOCs nor cPAH were detected above the method detection limits.

Approximately 750 tons of PCS were removed from SPN. Soils were excavated based on field screening and interim sample analytical results. Based on the analytical results for the confirmation soil samples, remaining soil at SPN are MTCA compliant.

Minor groundwater seepage was encountered in SPN at the maximum depth achieved of 10 feet bgs. A groundwater grab sample collected on September 14, 2009 did not yield detectable concentrations of the COC. Surface sheen was not observed on standing water in SPN.

8.2.1 Underground Storage Tanks (USTs) Decommissioning

On September 1, 2009 two single wall steel USTs were encountered approximately 12-inches bgs adjacent and east of excavation SPN. The larger UST was an approximately 1,000 gallon tank and the smaller UST was an approximately 650 gallon tank. The USTs appeared to be relatively intact, free of holes and pitting. Each UST was full of liquid, which was later determined (via analytical testing) to be gasoline-impacted water. The USTs were oriented perpendicular to each other (see Figure 4 and Photograph 3, Appendix A-1). In addition, single wall steel product piping led from each UST toward SR 906. The 12 foot long product piping was not connected at its eastern terminus, which RGI surmises may have connected with a former fuel dispenser (pump) location.

A single water sample was collected from each UST and evaluated via Ecology's NWTPH HCID with the result that the product last contained in each was identified as gasoline (see Table 3). Diesel- and/or Oil-range TPH were not identified in the HCID sample.

Prior to removing the USTs from the ground, the content of each tank was pumped by Marine Vacuum Services (Mar Vac). Once emptied of liquid, the USTs were removed from the ground by Saybr. No inspection or removal permit was required per Kittitas County. Following removal from the ground, the USTs were cut open before flattening for

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[2] The MTCA Method A Soil Cleanup Levels for Unrestricted Land Use for the contaminants of concern are presented in the attached Table 1 and Table 2.

transport to an offsite facility for recycling (by Saybr).

Following removal, RGI performed a UST site assessment in accordance with Ch 173-360 Underground Storage Tank Regulations. The site assessment consisted of collecting soil samples from beneath the bottom of each tank. Soil samples SPN-UST1-BOT-6, SPN-UST2-BOT-6-East and SPN-UST2-BOT-6 West, were submitted for chemical testing for gasoline-range and diesel-range TPH and BETX with the results that none were detected (ND) (see Table 2).

Based on our UST Site Assessment findings, the former UST system did not appear to release petroleum hydrocarbons to the subsurface environment.

9.0 PCS Volume

A total of 1,720.75 tons (approximately 1,229 cubic yards) of PCS containing TPH concentrations exceeding MTCA Method A Soil Cleanup Levels for Unrestricted Land Use was transported to Regional Disposal Company/Allied Waste transfer station in Seattle, Washington for disposal at their Washington-licensed landfill.

The off-site transportation, treatment and recycling of PCS was in accordance with applicable local, state, and federal regulations.

10.0 Site Dewatering & Groundwater Sampling

Groundwater seeped into each of the excavations from a depth of approximately eight feet bgs. Excavation dewatering was accomplished by using a vacuum truck operated by Marine Vacuum (Mar Vac) of Seattle, Washington. The collected water was transported off-site for treatment and disposal at Mar Vacs' facility in Seattle. (The water pumped from the former USTs were also transported to Mar Vacs' facility for treatment and disposal).

Excavation SPN was dewatered three times between September 8, 2009 and September 16, 2009. On September 8, 500 gallons were removed; on September 11, 300 gallons were removed; and on September 16, 2009, 300 gallons were removed. The purpose of the intermediate dewatering was to enable field screening and collection of bottom soil samples. An iridescent sheen was never observed in SPN; and, a single groundwater sample, SPN Pit H2O collected September 14, indicated none-detected for all COC. A total of approximately 1,100 gallons of non-petroleum impacted groundwater was removed from SPN between September 8, 2009 and September 16, 2009.

Excavation SPS was dewatered ten times between September 2, 2009 and October 1, 2009. The purpose of the intermediate dewatering was to determine if groundwater impacts were limited to the immediate tank cavity or were more extensive; whereby groundwater monitoring and/or more extensive groundwater remediation was warranted. Groundwater grab samples were collected after groundwater recharged into the pumped excavation. Analytical testing of groundwater grab samples was conducted to evaluate progress. Removal of PCS was completed on September 25, 2009. Subsequently, groundwater grab samples SPS Pit H20 8, SPS Pit H2O 9 and SPS Pit H2O 10 yielded analytical test results that were MTCA compliant.

Summary of Groundwater Volume Removed from SPS

Groundwater Pump Date	Gallons pumped	Subsequent Water Sample Number
September 2, 2009	3,000	SPS Pit H2O
September 8, 2009	2,000	Pit H2O 2
September 11, 2009	500	Pit H2O 3
September 16, 2009	1,000	Pit H2O 4
September 18, 2009	2,800	Pit H2O 5
September 21, 2009	1,000	Pit H2O 6
September 22, 2009	1,000	SPS Pit H2O 7
September 29, 2009	500	SPS Pit H2O 8
September 30, 2009	500	SPS Pit H2O 9
October 1, 2009	500	SPS Pit H2O 10

A total of approximately 11,300 gallons of petroleum contaminated water was removed from SPS from September 2nd through September 22nd; and 1,500 gallons of non-petroleum impacted groundwater was removed between September 29, 2009 and October 1, 2009.

As PCS was removed, groundwater quality steadily improved. The final three groundwater samples from SPS indicated that petroleum contaminated groundwater was no longer present at the Site. Based on our findings, the impacted water was limited to the tank basin's immediate area. Consequently, groundwater monitoring wells or additional groundwater monitoring were not warranted, in our opinion.

10.1 Groundwater Sampling

Groundwater grab samples were collected from both excavations and submitted for analytical testing (see Table 3). A single groundwater grab sample (SPN Pit H2O) was collected from the north excavation on September 14, 2009, which yielded none detected for all COC.

An iridescent sheen was observed on the water surface in SPS from September 3rd through September 22nd, until all suspect PCS was removed from the sidewalls and bottom of the excavation on September 25, 2009. Groundwater grab samples' SPS Pit H2O and Pit H2O 3, which contained the highest concentrations of gasoline TPH (2,000 µg/L to 2,300 µg/L) and benzene (10 µg/L to 15 µg/L) were collected directly from the standing water with a disposable bailer. These two samples also yielded toluene (6 µg/L to 8 µg/L), ethylbenzene (70 µg/L to 71 µg/L), total xylenes (180 µg/L to 270 µg/L); diesel TPH (1,100 µg/L to 2,100 µg/L), oil TPH (1,400 µg/L to 3,200 µg/L) were also detected at concentrations above their respective MTCA Method A Groundwater Cleanup Levels. Groundwater grab sample SPS Pit H2O 2 contained intermediate concentrations of the COC.

Groundwater grab samples Pit H2O 4, Pit H2O 5, Pit H2O 6 and SPS Pit H2O 7 yielded none-detected concentrations of gasoline-range TPH, benzene, ethylbenzene and toluene.

These three samples yielded concentrations of xylene from none detected to 5 µg/L, diesel-range TPH from 64 µg/L to 260 µg/L, and oil range TPH from none detected to 510 µg/L.

Groundwater grab samples, SPS Pit H2O 8, SPS Pit H2O 9 and SPS Pit H2O 10, yielded concentrations of the COC (see Table 3), compliant with MTCA Groundwater Cleanup Levels (see Table 3).

11.0 CONCLUSIONS & RECOMMENDATIONS

11.1 Soil

A total of 1,720.75 tons (approximately 1,229 cubic yards) of PCS was excavated and exported from the Site for this independent cleanup action. PCS with concentrations above the MTCA Method A Soil Cleanup Levels was removed from the following areas:

- A former service bay building (SPN) (approximately 750 tons of PCS) on the northeast corner of the Site; and,
- A former gasoline service station (SPS) (approximately 970.75 tons of PCS) on the southeast corner of the Site.

Based on the confirmation soil sampling analytical results, the independent cleanup action was successful in bringing all Site soils into compliance with the MTCA Method A Soil Cleanup Regulations.

11.2 Groundwater

A total of approximately 1,100 gallons of non-petroleum impacted groundwater was removed from the SPN between September 8, 2009 and September 16, 2009.

PCS was observed to be in contact with and affecting the shallow groundwater quality in excavation SPS. Following PCS removal, Approximately 11,300 gallons of petroleum contaminated water was removed from SPS from September 2nd through September 22nd. Approximately 1,500 gallons of non-petroleum contaminated groundwater was removed between September 29, 2009 and October 1, 2009.

Analytical testing confirmed that contaminated groundwater was limited to the immediate UST location and/or contact with elevated TPH in soil.

RGI understands that Ecology would normally recommend that groundwater monitoring wells be constructed at similar Sites; however, in our professional opinion, monitoring wells are not necessary since PCS has been removed and groundwater formerly in contact with PCS has also been removed. Analytical testing of groundwater grab samples subsequent to final Site cleanup were compliant with MTCA.

11.3 Recommendations

RGI recommends the Site be enrolled into the Ecology Voluntary Cleanup Program (VCP). Based on our findings, it is RGI's professional opinion that the completed independent cleanup action has met the substantive requirements of MTCA and warrants a No Further Action (NFA) determination under the VCP.

12.0 LIMITATIONS

This report is the property of The Riley Group, Inc., Snoqualmie Summit Inn, Inc., 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.

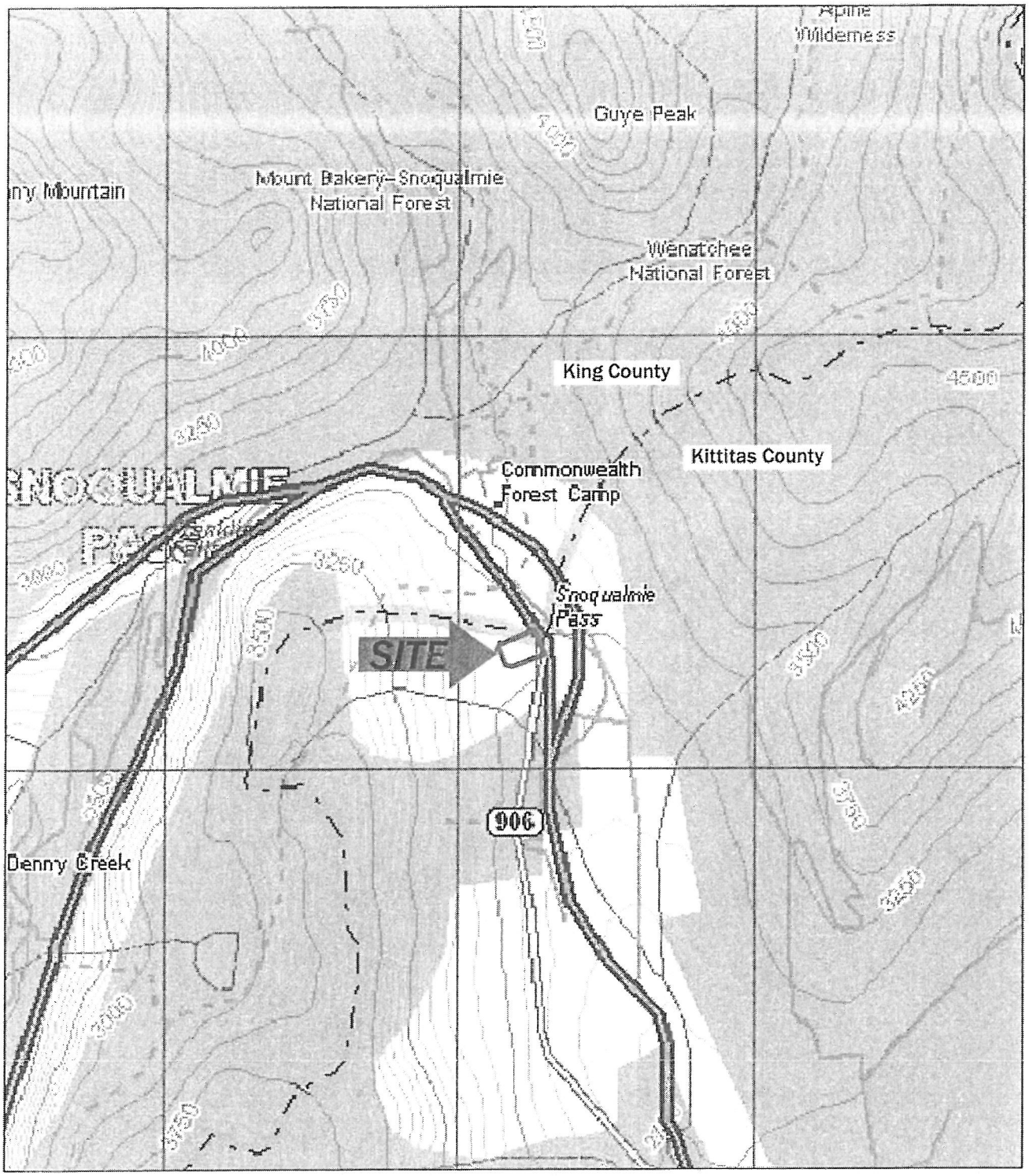
Sincerely,
THE RILEY GROUP, INC.

Jason Cass, L.G.
Project Geologist

Frederick H. Becker, LG, LHG
Senior Geologist

Paul Riley, L.G., L.H.G.
Principal

Report Distribution *Mr. Bob Johns, Johns Monroe Mitsunaga, PLLC (one bound copy and one electronic PDF)*
Mr. Mark Zenger, Snoqualmie Summit Inn, Inc (5 bound copies & electronic PDF)



USGS, 1989 Snoqualmie, Washington
7.5-Minute Quadrangle

Approximate Scale: 1"=2000'
0 100 2000 4000
N

The Riley Group, Inc.
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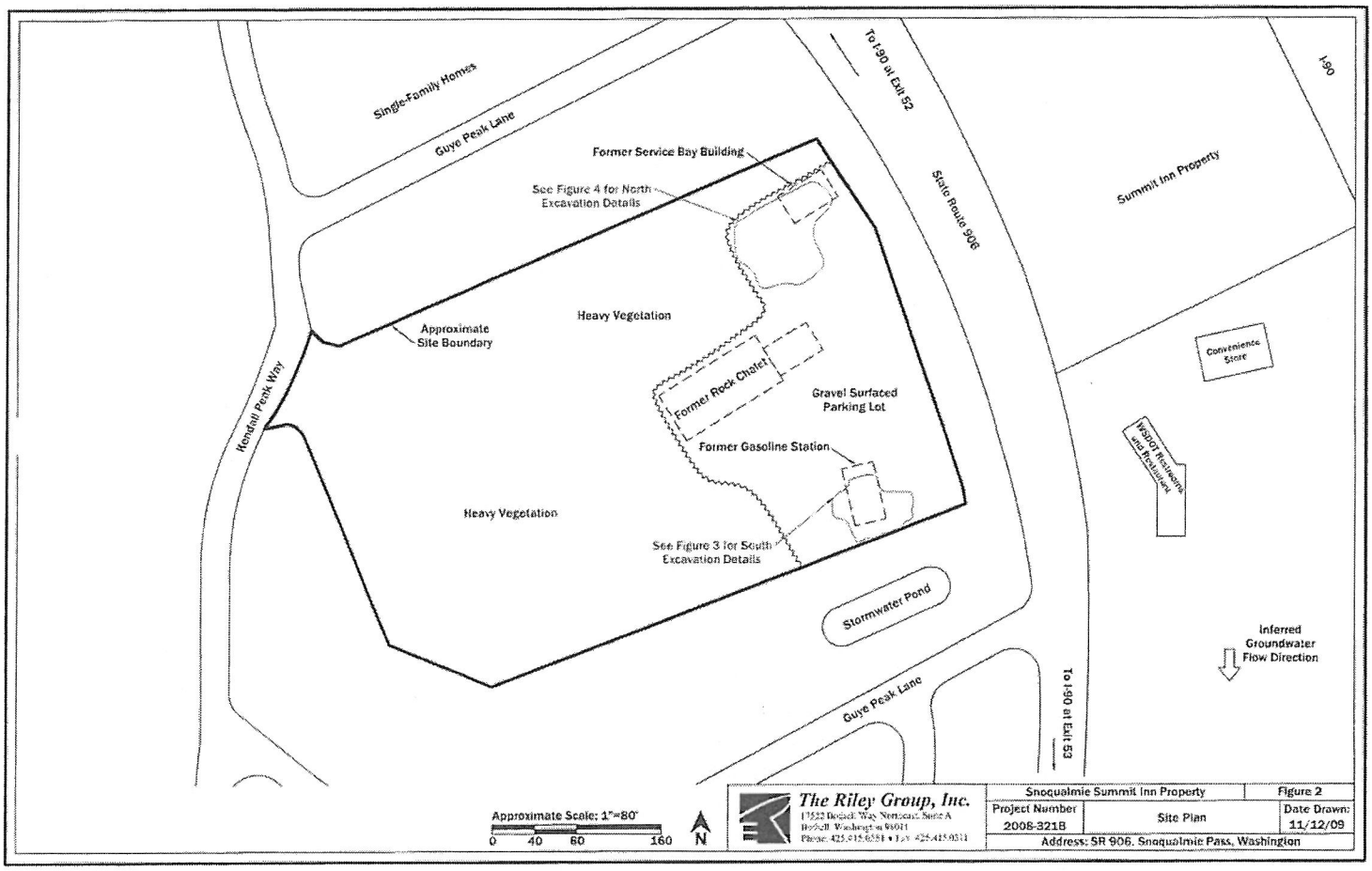
Snoqualmie Summit Inn Property		Figure 1
Project Number 2008-321B	Site Vicinity Map	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		


Single-Family Homes
Guye Peak Lane
To I-90 at Exit 52
I-90
Former Service Bay Building
See Figure 4 for North Excavation Details
State Route 906
Summit Inn Property
Heavy Vegetation
Approximate Site Boundary
Convenience Store
Former Rock Chalet
Gravel Surfaced Parking Lot
Kendall Peak Way
Former Gasoline Station
WSDOT Restrooms and Restaurant
Heavy Vegetation
See Figure 3 for South Excavation Details
Stormwater Pond
Inferred Groundwater Flow Direction
Guye Peak Lane
To I-90 at Exit 53
Approximate Scale: 1"=80'
0 40 80 160
N
The Riley Group, Inc.
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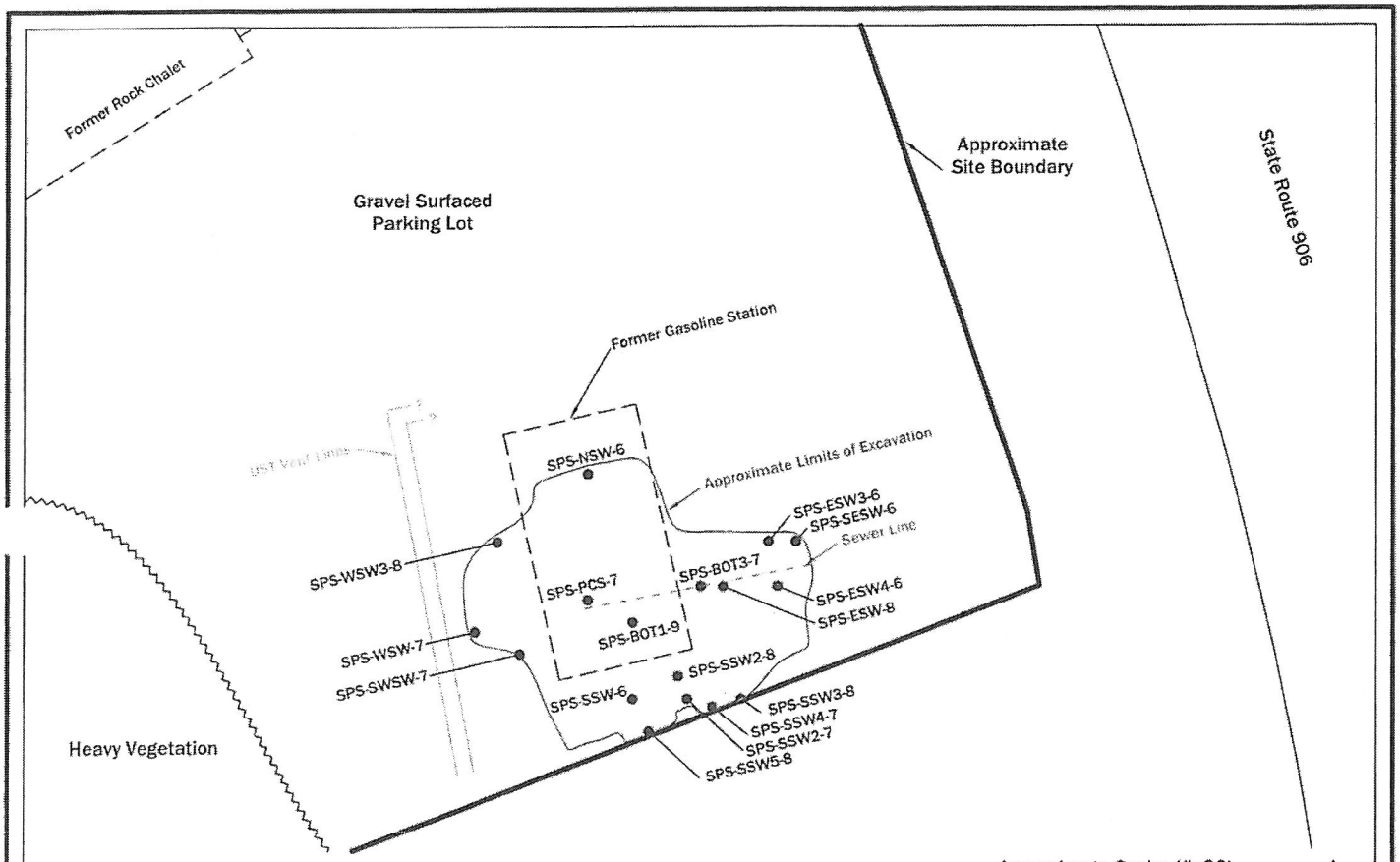
Bothell, Washington 98011
Phone: 425.415.0551 • Fax: 425.415.0311
Snoqualmie Summit Inn Property
Figure 2
Project Number
2008-3218
Site Plan
Date Drawn:
11/12/09
Address: SR 906, Snoqualmie Pass, Washington



● = Interim and Final Soil Sample Locations collected by RGI 08/31/09 to 10/01/09.

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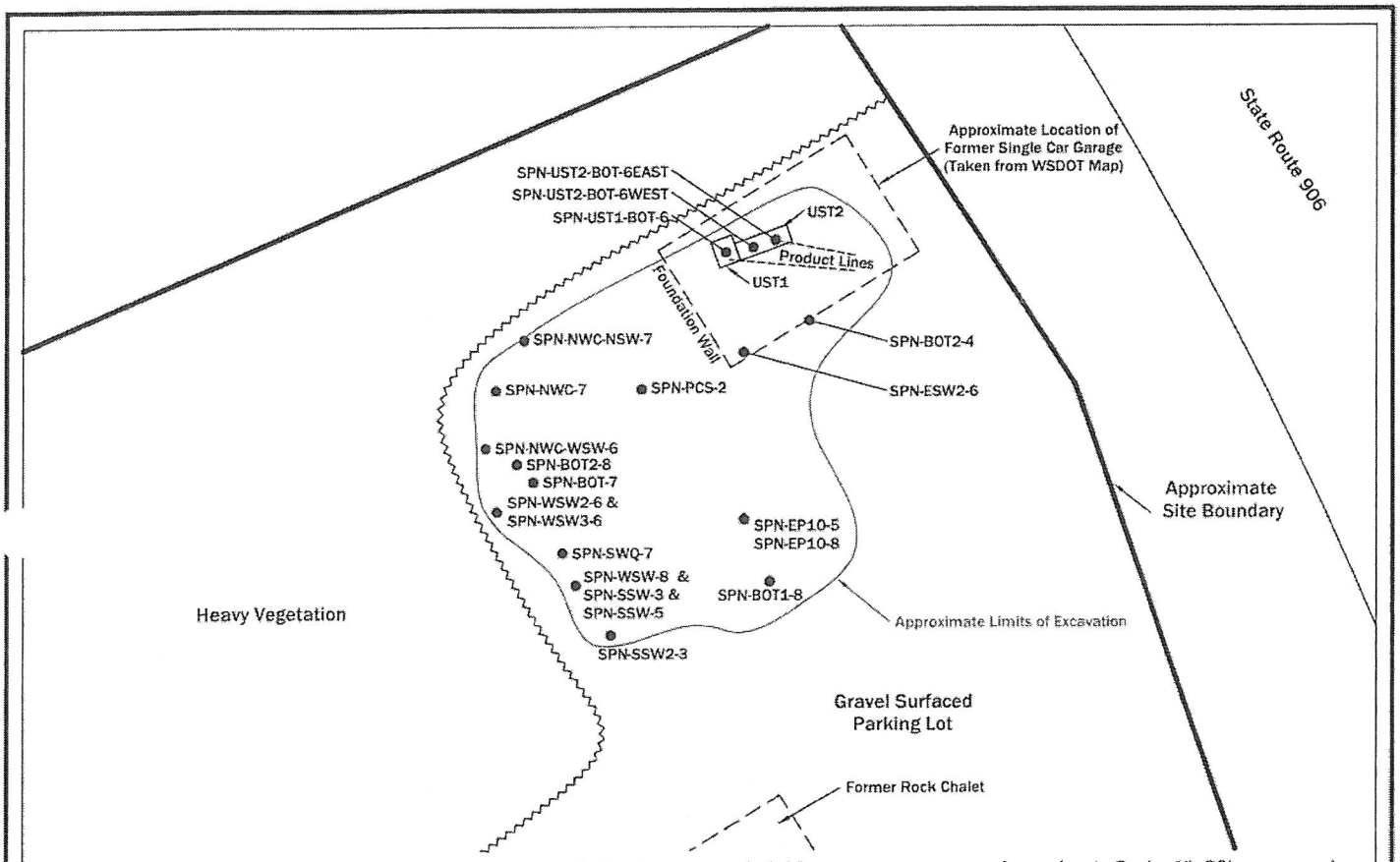
Snoqualmie Summit Inn Property		Figure 3
Project Number 2008-321B	South Excavation Detail	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		



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Snoqualmie Summit Inn Property		Figure 4
Project Number 2008-321B	North Excavation Detail	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		

Table 1. Summary of Soil Sample Analytical Laboratory Results - South Excavation
Kittitas County Property, SR 906, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321B

Sample Number	Date Sampled	Sample Depth	PID	Sheen	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	HVOC	Total Lead
						B	T	E	X				
Final Confirmation Samples													
SPS-SWSW-7	08/31/09	7	4	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-WSW-7	09/01/09	7	0	No	3	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-NSW-7	09/02/09	7	2	No	4	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-BOT1-9	09/02/09	9	0	Yes	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-SSW-6	09/02/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-BOT2-8	09/03/09	8	15	No	78	<0.02	0.03	0.15	0.11	1,200	310	---	---
SPS-CLN-5	09/03/09	NA	10	No	6	<0.02	<0.02	<0.02	<0.06	870	<250	---	---
SPS-CLN-6	09/03/09	NA	10	No	13	<0.02	<0.02	<0.02	<0.06	510	<250	---	---
SPS-CLN-7	09/03/09	NA	10	No	<2	<0.02	<0.02	<0.02	<0.06	390	<250	---	---
SPS-WSW3-8	09/08/09	8	2	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-SSW-6	09/10/09	6	4	No	<2	<0.02	<0.02	<0.02	<0.06	---	---	---	---
SPS-NSW-6	09/10/09	6	10	No	21	<0.02	0.03	<0.02	0.08	---	---	---	---
SPS-SEC-6	09/10/09	6	15	No	<2	<0.02	<0.02	<0.02	<0.06	---	---	---	---
SPS-ESW4-6	09/14/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-NEC1-6	09/14/09	6	10	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-BOT3-7	09/16/09	7	0	No	3	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-SSW2-7	09/16/09	7	0	Yes	21	<0.02	0.04	0.22	1.7	<50	<250	---	---
SPS-SSW4-7	09/25/09	7	---	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-SSW5-8	09/25/09	8	---	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	----
Interim Samples													
SPS-SESW-6	08/31/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-CLN-2	08/31/09	NA	15	No	**160**	<0.02	0.16	0.41	2.1	83	<250	---	---
SPS-PCS-3	08/31/09	NA	120	Yes	**130**	<0.02	0.14	0.86	2.0	490x	1,400	ND	---
SPS-PCS-4	08/31/09	NA	100	Yes	**300**	<0.02	0.69	1.7	**9.3**	**3,100**	**2,300**	ND	---
SPS-ESW-8	09/02/09	8	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---
SPS-WSW2-6	09/03/09	6	200	Yes	**250**	<0.2	<0.2	<0.2	<0.6	**5,100**	<250	---	---
SPS-ESW-6	09/10/09	6	150	Yes	**400**	<0.2	0.36	0.42	**11**	**6,400**	**15,000**	ND	11.9
SPS-ESW3-6	09/11/09	6	---	Yes	27	<0.02	0.02	0.06	0.07	**2,800**	<250	---	---
SPS-PCS-3	09/11/09	NA	20	Yes	4	<0.02	<0.02	<0.02	0.09	91	<250	---	---
SPS-SSW3-7	09/16/09	7	5	Yes	13	<0.02	0.05	0.09	0.59	**3,700** [x]	**16,000**	---	---
MTCA Method A Soil Cleanup Levels					**30/100**[1]	**0.03**	**7**	**6**	**9**	**2,000**	**2,000**	**Analyte Specific**	**250**

Samples collected by The Riley Group, Inc August and September 2009.
Except as noted, all results and detection limits are given in mg/kg.
Sample Depth = feet below ground surface (bgs).
PID = Photoionization Detector.
TPH = Total Petroleum Hydrocarbons.
Gasoline TPH determined using Northwest Method NWTPH Gx.
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Diesel and Oil TPH determined using Northwest Method NWTPH Dx with silica gel cleanup.
HVOCs (Halogenated Volatile Organic Compounds) determined using EPA Test Method 8260C.
Total lead determined using EPA Test Method 200.8.
[1] The higher cleanup level applies for gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture.
[2] Cleanup level for carcinogenic PAHs based on total weighted sums using the toxicity equivalency methodology in WAC 173-340-708(8).
[x] The pattern of peaks is not indicative of diesel according to the analytical report.
---- = not analyzed or not applicable.
ND = Not Detected at noted analytical detection limit.
MTCA Method A Cleanup Level, Ecology Model Toxics Control Act Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1).
Bold & yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A Soil Cleanup Levels.

Table 2. Summary of Soil Sample Analytical Laboratory Results - North Excavation
Kittitas County Property, SR 906, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321B

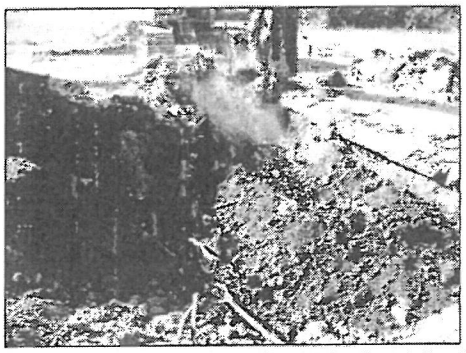
Sample Number	Date Sampled	Sample Depth	PID	Sheen	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	cPAH	HVOC	Total Lead
						B	T	E	X					
Final Confirmation Samples														
SPN-BOT1-8	09/01/09	8	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-BOT2-4	09/01/09	4	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-UST1-	09/02/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-UST2-	09/02/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-UST2-BOT-6-West	09/02/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-NWC-WSW-6	09/02/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-ESW2-6	09/08/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-BOT2-8	09/09/09	8	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	ND	---	---
SPN-WSW2-8	09/09/09	8	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-SSW-5	09/09/09	5	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-WSW3-6	09/10/09	6	0	No	<2	<0.02	<0.02	<0.02	<0.06	---	---	---	---	---
SPN-NWC-	09/10/09	6	0	No	12	<0.02	<0.02	<0.02	<0.06	---	---	---	---	---
SPN-SSW2-3	09/14/09	3	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-SSW-5	09/16/09	5	0	No	<2	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
Interim Samples														
SPN-NWC-7	09/01/09	7	250	Yes	**220**	<0.02	<0.02	0.75	0.14	290	<250	---	ND	6.29
SPN-EP10-5	09/01/09	5	5	Yes	4	<0.02	<0.02	0.04	<0.06	<50	<250	---	ND	5.92
SPN-CLN-2	09/02/09	NA	10	No	6	<0.02	<0.02	<0.02	<0.06	<50	<250	---	---	---
SPN-CLN-1	09/02/09	NA	18	No	5	<0.02	<0.02	<0.02	<0.06	71	<250	---	---	---
SPN-PCS-1	09/02/09	NA	200	Yes	**220**	<0.02	<0.02	0.11	0.13	**3,300**	<250	---	ND	67
SPN-PCS-2	09/03/09	NA	300+	Yes	**610**	<0.02	<0.02	0.16	0.43	**90,000**	**3,300**	---	---	---
SPN-SSW-3	09/10/09	3	20	Yes	**120**	<0.02	<0.02	<0.02	<0.06	850	<250	---	---	---
MTCA Method A Soil Cleanup Levels					**30/100[1]**	**0.03**	**7**	**6**	**9**	**2,000**	**2,000**	**Analyte Specific**	**Analyte Specific**	**250**

Samples collected by The Riley Group, Inc. September 2009.
Except as noted, all results and detection limits are given in mg/kg.
Sample Depth = feet below ground surface (bgs).
PID = Photoionization Detector.
TPH = Total Petroleum Hydrocarbons.
Gasoline TPH determined using Northwest Method NWTPH Gx.
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Diesel and Oil TPH determined using Northwest Method NWTPH Dx with silica gel cleanup.
cPAHs (Carcinogenic Polycyclic Aromatic Hydrocarbons) determined using EPA Test Method 8270D SIM.
HVOCs (Halogenated Volatile Organic Compounds) determined using EPA Test Method 8260C
Total lead determined using EPA Test Method 200.8
[1] The higher cleanup level applies for gasoline mixtures without benzene and the total of ethyl benzene, toluene and xylene are less than 1% of the gasoline mixture
[2] Cleanup level for carcinogenic PAHs based on total weighted sums using the toxicity equivalency methodology in WAC 173 340 708(8.
[3] The pattern of peaks is not indicative of diesel according to the analytical report
---- = not analyzed or not applicable
ND = Not Detected at noted analytical detection limit.
MTCA Method A Cleanup Level, Ecology Model Toxics Control Act Method A Soil Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 740-1).
Bold & yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A Soil Cleanup Levels.

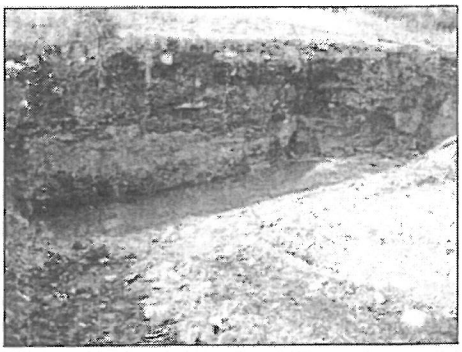
Table 3. Summary of Groundwater Grab Sample Analytical Laboratory Results
Kittitas County Property, SR 906, Snoqualmie Pass, Washington
The Riley Group, Inc. Project #2008-321B

Sample Number	Date Sampled	Sheen	Gasoline TPH	BTEX				Diesel TPH	Oil TPH	Dissolved Metals	Total Metals
				B	T	E	X				
North Excavation											
Small UST H2O*	09/02/09	Yes	**D**	---	---	---	---	ND<500	ND<500	---	---
Big UST H2O*	09/02/09	Yes	**D**	---	---	---	---	ND<500	ND<500	---	---
SPN Pit H2O	09/14/09	No	<100	<1	<1	<1	<3	<50	<250	---	---
South Excavation											
SPS-Pit H2O	09/03/09	Yes	**2,300**	**10**	8	70	180	**2,100** [x]	**3,200**	---	---
Pit H2O-2	09/09/09	Yes	730	3	3	6	76	**580** [x]	**810**	As = 2.61 Cd = ND<1 Cr = 9.01 Pb = ND<1 Hg = ND<0.2	As = 27.9 Cd = ND<1 Cr = 22.8 Pb = 95.4 Hg = ND<0.2
Pit H2O 3	09/11/09	Yes	**2,000**	**15**	6	71	270	**1,100** [x]	**1,400**	---	---
Pit H2O 4	09/16/09	Yes	<100	<1	<1	<1	5	260 [x]	**700**	---	---
Pit H2O-5	09/18/09	Yes	<100	<1	<1	1	3	64	<250	---	---
Pit H2O-6	09/21/09	Yes	<100	<1	<1	<1	<3	140 [x]	490	---	---
SPS Pit H2O 7	09/22/09	Yes	<100	<1	<1	<1	4	200 [x]	**510**	---	---
SPS Pit H2O 8	09/29/09	Yes	<100	<1	<1	<1	<3	91	320	---	---
SPS Pit H2O 9	09/30/09	Yes	<100	<1	<1	<1	<3	110	330	---	---
SPS Pit H2O 10	10/01/09	Yes	<100	<1	<1	<1	<3	<50	<250	Pb = 1.1	Pb = 1.1
MTCA Method A Groundwater Cleanup Levels			**800/1000**	**5**	**1,000**	**700**	**1,000**	**500**	**500**	**As = 5 Cr = 50**	**As = 5 Cr = 50 Pb = 15**

Samples collected by The Riley Group, Inc. September and October 2009.
All results and detection limits are given in ug/L; equivalent to parts per billion (ppb).
Sample Depth = Groundwater sample depth is feet below ground surface (bgs).
PID = Photoionization Detector.
TPH = Total Petroleum Hydrocarbons.
Gasoline TPH determined using Northwest Method NWTPH Gx.
BTEX (benzene, toluene, ethylbenzene, and xylenes) determined using EPA Test Method 8021B.
Diesel and Oil TPH determined using Northwest Method NWTPH Dx with silica gel cleanup.
Dissolved and Total Metals determined using EPA Test Method 200.8 and 1631E.
(As = Arsenic, Cd = Cadmium, Cr = Chromium, Pb = Lead, Hg = Murcury)
[1] The higher cleanup level applies for gasoline mixtures without benzene.
[2] Cleanup level for carcinogenic PAHs based on total weighted sums using the toxicity equivalency methodology in WAC 173 340 708(8
[x] The pattern of peaks is not indicative of diesel according to the analytical report.
* Analysis via Ecology's Hydrocarbon Identification (HCID) test, which yields qualitative results (Detected = D; or ND).
---- = not analyzed or not applicable.
ND = Not Detected at noted analytical detection limit.
MTCA Method A Cleanup Level, Ecology Model Toxics Control Act Method A Groundwater Cleanup Levels for Unrestricted Land Use (WAC 173-340-900, Table 720-1).
Bold & yellow highlighted results indicate concentrations (if any) that exceed MTCA Method A Groundwater Cleanup Levels.

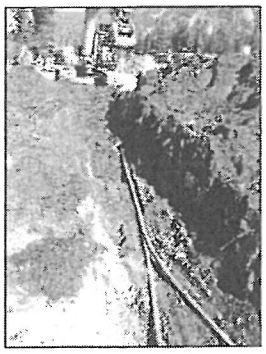


Photograph 1: Exposing former gasoline station foundation in south excavation (SPS). View looking west.



Photograph 2: SPS soil stratigraphy showing fill materials overlying glacial lacustrine sediments on south sidewall. View looking south.

Photograph 3: SPS, looking east.



Photograph 4: Single wall, steel vent lines west and adjacent to SPS. Former UST vent lines trend from the southern property margin northward and around the former service station foundation. View looking north.

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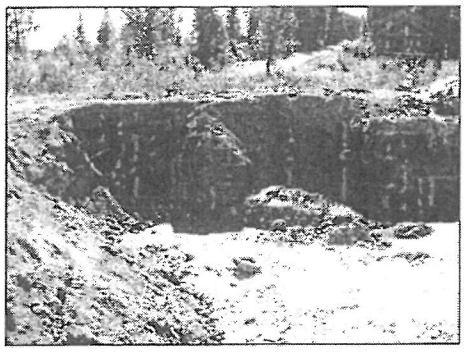
Snoqualmie Summit Inn Property		Figure A-1
Project Number 2008-321B	Site Photographs - SPS	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		

Photograph 5: View east across south end of SPS during backfilling. SR906 in background.



Photograph 6: View looking south across SPS after final excavation of PCS. Excavation has been partially backfilled.

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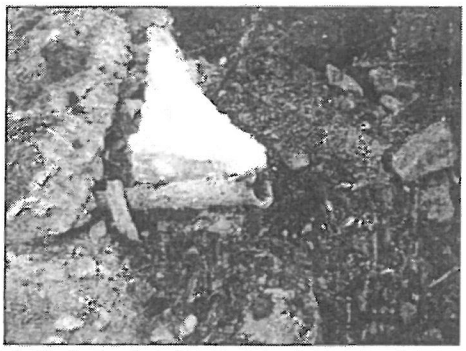
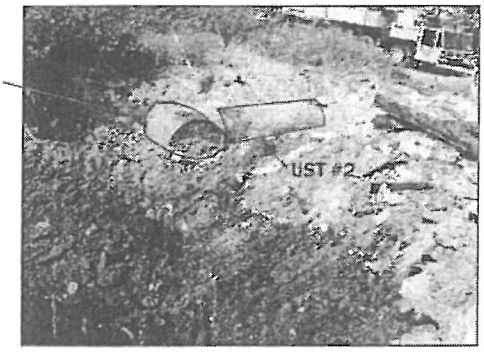
Snoqualmie Summit Inn Property		Figure A-2
Project Number 2008-321B	Site Photographs - SPS	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		

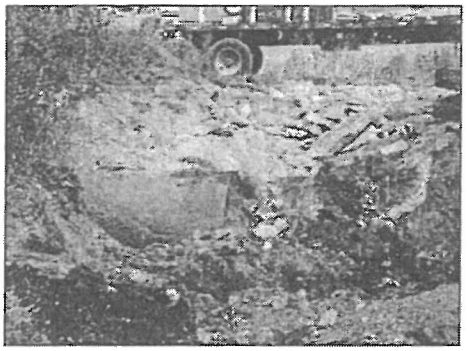
Photograph 1: Concrete debris in north excavation (SPN).



Photograph 2: Shallow soil and auto parts, piping, organic tree roots debris exposed in SPN.



Photograph 3: USTs discovered east and adjacent to SPN, looking northeast. Refer to Figure 4.



Photograph 4: Rubble and UST in SPN, looking east. UST #1 in foreground.

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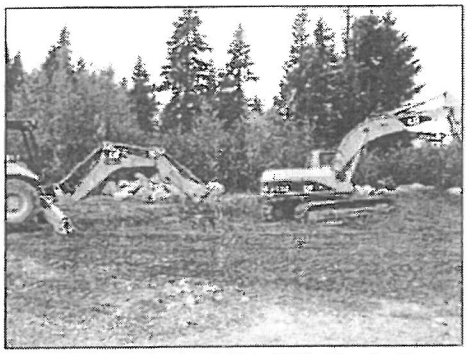
Snoqualmie Summit Inn Property		Figure A-3
Project Number 2008-3218	Site Photographs - SPN	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		

Photograph 5: Eastern end of SPN south of USTs. View looking south. Large cobbles with very little soil matrix precluded sampling but not field screening.

Photograph 6: Profile of debris-containing fill soils overlying native glacial till in SPN on September 9, 2009. View looking south.



Photograph 7: Placing backfill in SPN. View looking north.

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Phone: 425.415.0551 ♦ Fax: 425.415.0311

Snoqualmie Summit Inn Property		Figure A-4
Project Number 2008-321B	Site Photographs - SPN	Date Drawn: 11/12/09
Address: SR 906, Snoqualmie Pass, Washington		

- Document the effectiveness of the recently completed independent remedial excavation cleanup action;
- Establish the groundwater gradient and flow direction;
- Monitor groundwater quality beneath the Site.

The information obtained during this work will be used to help evaluate that the completed cleanup action at the Site has met the substantive requirements of the Model Toxics Control Act (MTCA) in order to obtain a determination of No Further Action (NFA) under the VCP.

WELL INSTALLATION

On July 30, 2010 five groundwater monitoring wells (MW-1 through MW-5) were constructed 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

Groundwater monitoring consists of the following tasks:

- Depth to groundwater was measured to the nearest hundredth of a foot using an electronic water level meter. These measurements are presented on Table 2.
- Prior to purging and sampling wells, the headspace of each well was screened for VOCs using a portable gas analyzer equipped with a PID. VOCs were not detected in any of the groundwater monitoring wells.
- 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 (4-gallons), MW-2 (2.5-gallons), MW-3 (4-gallons), MW-4 (4.5-gallons), and MW-5 (4-gallons).
- Following purging activities, each well was left to recharge to at least 80% 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-Site pending profiling and off-Site 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 project 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.
- Diesel and oil-range TPH using Ecology Test Method NWTPH-DX with silica gel cleanup[1].
- Volatile Organic Compounds (VOCs) using EPA Test Method 8260B.
- Semi-Volatile Organic Compounds using EPA Test Method 8270D SIM.
- Lead and arsenic using EPA Test Method 200.8.

CLEANUP REGULATIONS

Washington's hazardous waste cleanup law, the Model Toxics Control Act (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, 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 Groundwater Cleanup Levels (WAC 173-340-720, Table 720-1) and are summarized in Table 1.

FINDINGS AND CONCLUSIONS

Groundwater

Depth to groundwater as measured with an electronic meter, ranged from approximately one foot below top of casing (btc) to six feet btc. Groundwater gradient was calculated at 0.031 ft/ft and the flow was towards the south (Figure 2).

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

- Benzene was detected in one sample MW-5 at 0.84 µg/L (5).

---

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

- Total arsenic concentrations ranged from none detected (ND <1) to 32.6 µg/L (5) in sample MW-4.
- Dissolved arsenic concentrations ranged from ND <1 µg/L to 16.6 µg/L (5) in sample MW-3.
- Total lead concentrations ranged from ND <1) to 15.3 1 µg/L (15) in sample MW-4.
- Dissolved lead concentrations were not detected above the method detection limits (ND <1 µg/L).

The elevated concentrations of total lead and total arsenic are due to presence of sediment in the samples.

The elevated concentrations of dissolved arsenic are due to the 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 Site vicinity. 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 ranges from approximately 700 µg/L to approximately 1,300 µg/L. In order to comply with the State and Federal drinking water maximum contaminant levels (MCLs) of 10 µg/L, SPUD blends the water from these two wells with water from the other wells to bring the arsenic levels into compliance 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 subject Site are considered naturally occurring background levels.

The next groundwater sampling is scheduled for January 2011.

LIMITATIONS

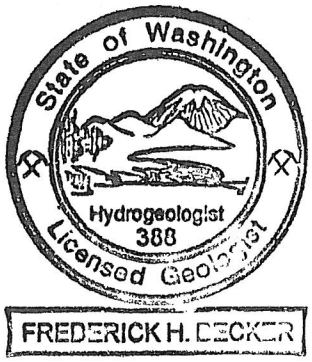
This report is the property of The Riley Group, Inc., Snoqualmie Summit Inn, and their authorized representatives and was prepared in a manner consistent with the level of skill and care ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions. 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.

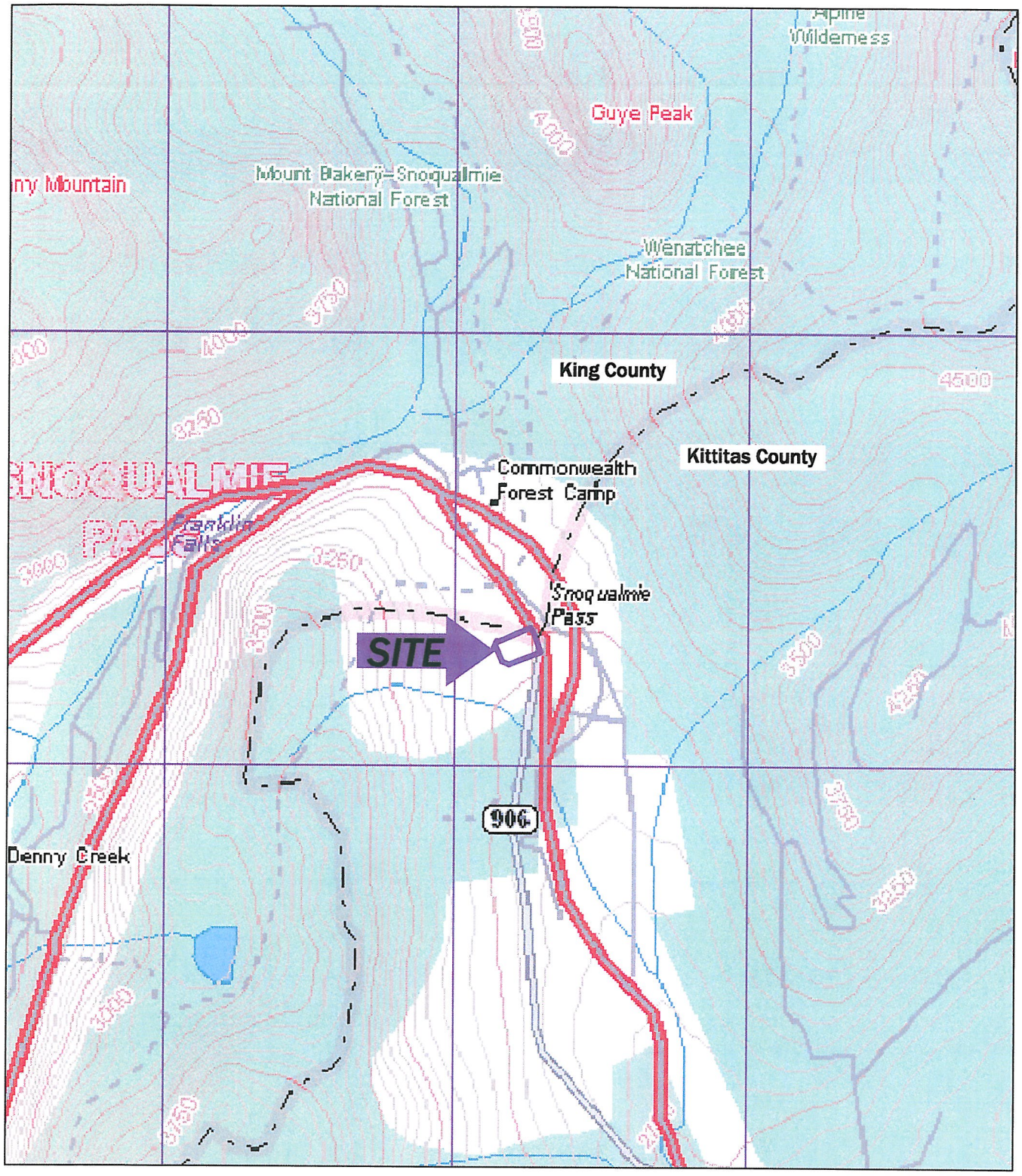
Sincerely,
THE RILEY GROUP, INC.



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

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

Attachment	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

N

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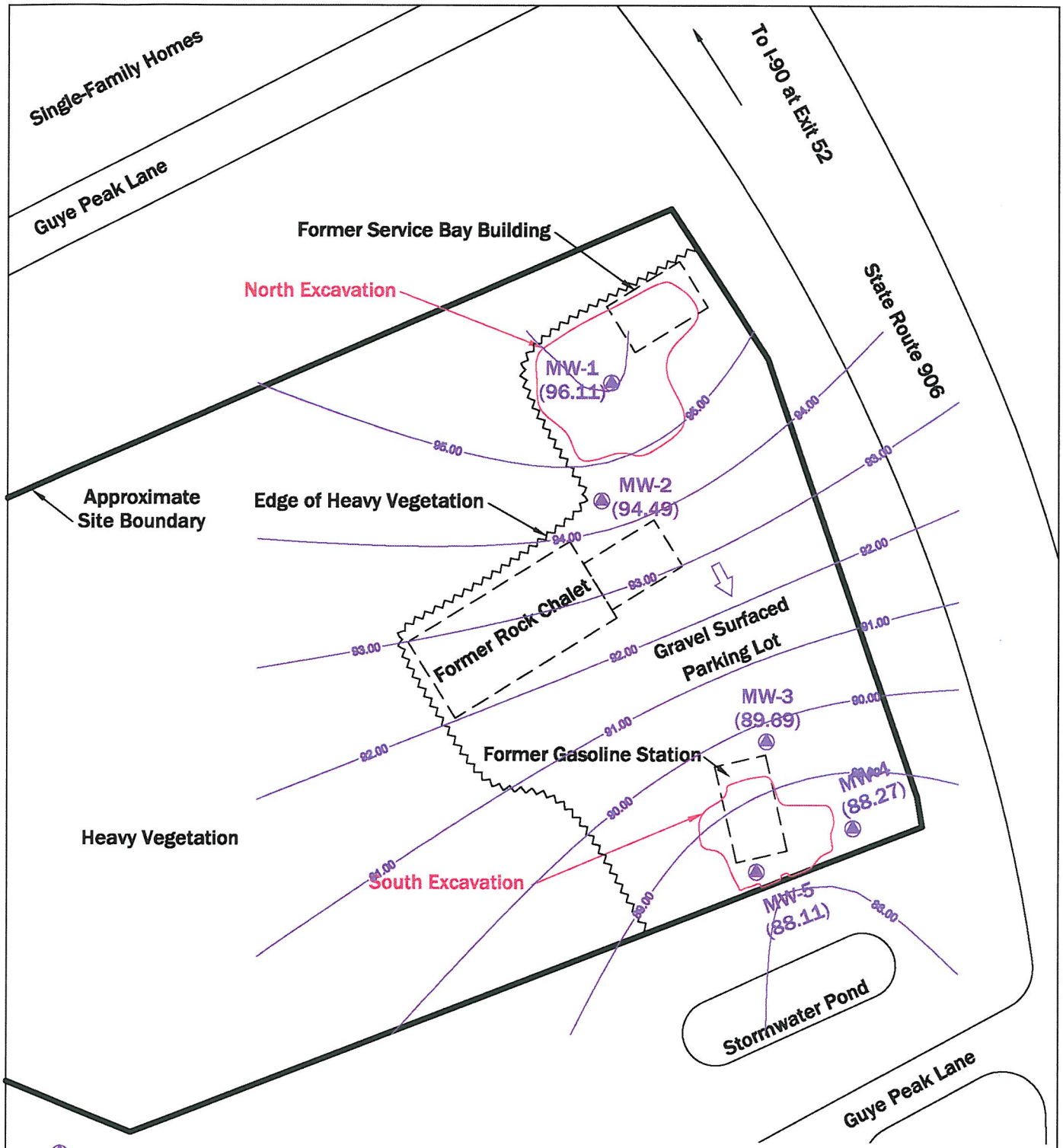
Snoqualmie Summit Inn Property		Figure 1
Project Number 2008-321C	Site Vicinity Map	Date Drawn: 09/2010
Address: SR 906, Snoqualmie Pass, Washington		



(90.59) = Groundwater Monitoring Well Location by RGI 07/29/10 & 07/30/10
Groundwater elevation measured on October 28, 2010 given in parenthesis.

– (90.00) – = Groundwater contours generated using Surfer Software (based on Kriging method). Contours based on October 28, 2010 water level measurements.

⇨ = Groundwater Flow Direction

Approximate Scale: 1"=80'

0 40 80 160

N

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Snoqualmie Summit Inn Property		Figure 2
Project Number 2008-321C	Site Plan with Groundwater Contours, October 2010	Date Drawn: 11/2010
Address: SR 906, Snoqualmie Pass, Washington		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
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Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

November 11, 2010

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 October 29, 2010 from the Snoqualmie Pass, 2008-321C, F&BI 010356 project. There are 35 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
TRG1111R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 29, 2010 by Friedman & Bruya, Inc. from the The Riley Group, Inc. Snoqualmie Pass, 2008-321C, F&BI 010356 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	The Riley Group, Inc.
010356-01	MW1
010356-02	MW2
010356-03	MW3
010356-04	MW4
010356-05	MW5

The 8270D laboratory control sample and laboratory control sample duplicate failed the relative percent difference for several compounds. The analytes were not detected therefore the data were acceptable.

Several compounds in the 8260C laboratory control sample and laboratory control sample duplicate exceeded the acceptance criteria. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356
Date Extracted: 11/01/10
Date Analyzed: 11/01/10

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

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
MW1 010356-01	<100	76
MW2 010356-02	<100	88
MW3 010356-03	<100	87
MW4 010356-04	<100	85
MW5 010356-05	<100	87
Method Blank 00-1750 MB	<100	85

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356
Date Extracted: 11/01/10
Date Analyzed: 11/08/10

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)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 50-150)
MW1 010356-01	<50	<250	105
MW2 010356-02	<50	<250	89
MW3 010356-03	<50	<250	96
MW4 010356-04	<50	<250	88
MW5 010356-05	<50	<250	105
Method Blank 00-1789 MB	<50	<250	79

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW1	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	010356-01
Date Analyzed:	11/03/10	Data File:	010356-01.052
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	87	60	125
Holmium	91	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	1.53
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW2	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	010356-02
Date Analyzed:	11/03/10	Data File:	010356-02.053
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125
Holmium	91	60	125

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

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW3	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	010356-03
Date Analyzed:	11/03/10	Data File:	010356-03.054
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Arsenic	18.4
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW4	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	010356-04
Date Analyzed:	11/03/10	Data File:	010356-04.055
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Arsenic	32.6
Lead	15.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW5	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	010356-05
Date Analyzed:	11/03/10	Data File:	010356-05.056
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

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

Analyte:	Concentration ug/L (ppb)
Arsenic	2.41
Lead	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	The Riley Group, Inc.
Date Received:	NA	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/02/10	Lab ID:	I0-626 mb
Date Analyzed:	11/03/10	Data File:	I0-626 mb.042
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125
Holmium	93	60	125

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW1	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	010356-01
Date Analyzed:	11/01/10	Data File:	010356-01.013
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125
Holmium	93	60	125

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW2	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	010356-02
Date Analyzed:	11/01/10	Data File:	010356-02.010
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	93	60	125
Holmium	95	60	125

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

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW3	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	010356-03
Date Analyzed:	11/01/10	Data File:	010356-03.014
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	16.6
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW4	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	010356-04
Date Analyzed:	11/01/10	Data File:	010356-04.015
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	91	60	125
Holmium	92	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	4.88
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW5	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	010356-05
Date Analyzed:	11/01/10	Data File:	010356-05.016
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Arsenic	1.90
Lead	<1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	The Riley Group, Inc.
Date Received:	NA	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	10/29/10	Lab ID:	I0-620 mb
Date Analyzed:	11/01/10	Data File:	I0-620 mb.008
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Indium	92	60	125
Holmium	92	60	125

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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW1	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-01
Date Analyzed:	11/01/10	Data File:	110109.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	63	127
Toluene-d8	98	65	127
4-Bromofluorobenzene	94	69	127

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-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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW2	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-02
Date Analyzed:	11/01/10	Data File:	110110.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	63	127
Toluene-d8	97	65	127
4-Bromofluorobenzene	95	69	127

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-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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW3	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-03
Date Analyzed:	11/01/10	Data File:	110111.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	63	127
Toluene-d8	99	65	127
4-Bromofluorobenzene	93	69	127

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-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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW4	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-04
Date Analyzed:	11/01/10	Data File:	110112.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	63	127
Toluene-d8	100	65	127
4-Bromofluorobenzene	94	69	127

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-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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW5	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-05
Date Analyzed:	11/01/10	Data File:	110113.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	63	127
Toluene-d8	98	65	127
4-Bromofluorobenzene	92	69	127

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	0.84	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-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

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	The Riley Group, Inc.
Date Received:	NA	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	001759 mb
Date Analyzed:	11/01/10	Data File:	110108.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	63	127
Toluene-d8	97	65	127
4-Bromofluorobenzene	92	69	127

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-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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW1	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-01
Date Analyzed:	11/03/10	Data File:	110306.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	71	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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW2	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-02
Date Analyzed:	11/03/10	Data File:	110307.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	69	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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW3	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-03
Date Analyzed:	11/03/10	Data File:	110308.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	81	50	150
Benzo(a)anthracene-d12	71	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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW4	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-04
Date Analyzed:	11/03/10	Data File:	110309.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	83	50	150
Benzo(a)anthracene-d12	70	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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	MW5	Client:	The Riley Group, Inc.
Date Received:	10/29/10	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	010356-05
Date Analyzed:	11/03/10	Data File:	110310.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	87	50	150
Benzo(a)anthracene-d12	68	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

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	The Riley Group, Inc.
Date Received:	NA	Project:	Snoqualmie Pass, 2008-321C
Date Extracted:	11/01/10	Lab ID:	00-1790 mb
Date Analyzed:	11/02/10	Data File:	110205.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	50	150
Benzo(a)anthracene-d12	79	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: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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

Laboratory Code: 010356-01 (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	98	69-134

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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 Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	96	106	58-134	10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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

Laboratory Code: 010368-01 (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	11.2	122 b	126 b	56-167	3 b
Lead	ug/L (ppb)	10	<1	109	107	76-125	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	99	55-128
Lead	ug/L (ppb)	10	106	67-135

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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

Laboratory Code: 010356-02 (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	107	107	56-167	0
Lead	ug/L (ppb)	10	<1	101	102	76-125	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	103	55-128
Lead	ug/L (ppb)	10	102	67-135

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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

Laboratory Code: 010356-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	94	28-164
Chloromethane	ug/L (ppb)	50	<10	94	26-167
Vinyl chloride	ug/L (ppb)	50	<0.2	104	37-171
Bromomethane	ug/L (ppb)	50	<1	106	24-165
Chloroethane	ug/L (ppb)	50	<1	106	10-172
Trichlorofluoromethane	ug/L (ppb)	50	<1	105	30-199
Acetone	ug/L (ppb)	250	<10	92	19-168
1,1-Dichloroethene	ug/L (ppb)	50	<1	106	35-149
Methylene chloride	ug/L (ppb)	50	<5	87	61-124
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	106	49-139
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	98	65-128
1,1-Dichloroethane	ug/L (ppb)	50	<1	96	67-127
2,2-Dichloropropane	ug/L (ppb)	50	<1	107	23-163
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	105	65-139
Chloroform	ug/L (ppb)	50	<1	100	71-127
2-Butanone (MEK)	ug/L (ppb)	250	<10	99	47-162
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	101	68-132
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	106	63-135
1,1-Dichloropropene	ug/L (ppb)	50	<1	111	65-127
Carbon tetrachloride	ug/L (ppb)	50	<1	114	55-139
Benzene	ug/L (ppb)	50	<0.35	99	62-144
Trichloroethene	ug/L (ppb)	50	<1	102	68-134
1,2-Dichloropropane	ug/L (ppb)	50	<1	100	73-130
Bromodichloromethane	ug/L (ppb)	50	<1	109	65-135
Dibromomethane	ug/L (ppb)	50	<1	102	65-135
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	105	56-143
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	110	55-146
Toluene	ug/L (ppb)	50	<1	100	68-131
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	103	63-147
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	97	63-143
2-Hexanone	ug/L (ppb)	250	<10	104	51-149
1,3-Dichloropropane	ug/L (ppb)	50	<1	101	72-126
Tetrachloroethene	ug/L (ppb)	50	<1	104	64-132
Dibromochloromethane	ug/L (ppb)	50	<1	113	65-135
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	105	77-127
Chlorobenzene	ug/L (ppb)	50	<1	97	72-118
Ethylbenzene	ug/L (ppb)	50	<1	101	51-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	107	72-129
m,p-Xylene	ug/L (ppb)	100	<2	102	72-137
o-Xylene	ug/L (ppb)	50	<1	109	67-133
Styrene	ug/L (ppb)	50	<1	106	73-126
Isopropylbenzene	ug/L (ppb)	50	<1	109	65-135
Bromoform	ug/L (ppb)	50	<1	121	60-136
n-Propylbenzene	ug/L (ppb)	50	<1	102	66-133
Bromobenzene	ug/L (ppb)	50	<1	100	70-129
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	106	72-130
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	92	65-137
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	95	66-135
2-Chlorotoluene	ug/L (ppb)	50	<1	102	62-131
4-Chlorotoluene	ug/L (ppb)	50	<1	102	62-132
tert-Butylbenzene	ug/L (ppb)	50	<1	109	64-135
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	106	69-139
sec-Butylbenzene	ug/L (ppb)	50	<1	103	64-134
p-Isopropyltoluene	ug/L (ppb)	50	<1	108	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	100	64-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	117	54-133
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	113	63-141
Hexachlorobutadiene	ug/L (ppb)	50	<1	108	53-140
Naphthalene	ug/L (ppb)	50	<1	106	40-166
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	108	55-148

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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	104	109	27-138	5
Chloromethane	ug/L (ppb)	50	96	90	49-125	6
Vinyl chloride	ug/L (ppb)	50	105	108	53-131	3
Bromomethane	ug/L (ppb)	50	122	120	62-148	2
Chloroethane	ug/L (ppb)	50	119	115	30-176	3
Trichlorofluoromethane	ug/L (ppb)	50	128	128	65-172	0
Acetone	ug/L (ppb)	250	92	91	32-177	1
1,1-Dichloroethene	ug/L (ppb)	50	117	117	68-131	0
Methylene chloride	ug/L (ppb)	50	88	88	17-177	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	108	106	54-156	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	103	101	71-128	2
1,1-Dichloroethane	ug/L (ppb)	50	102	101	74-118	1
2,2-Dichloropropane	ug/L (ppb)	50	119	120	65-150	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	108	106	74-126	2
Chloroform	ug/L (ppb)	50	108	104	76-118	4
2-Butanone (MEK)	ug/L (ppb)	250	97	96	52-152	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	110	108	77-118	2
1,1,1-Trichloroethane	ug/L (ppb)	50	115	114	77-123	1
1,1-Dichloropropene	ug/L (ppb)	50	115	113	75-122	2
Carbon tetrachloride	ug/L (ppb)	50	125	127 vo	76-126	2
Benzene	ug/L (ppb)	50	100	98	77-121	2
Trichloroethene	ug/L (ppb)	50	107	105	74-119	2
1,2-Dichloropropane	ug/L (ppb)	50	97	97	77-121	0
Bromodichloromethane	ug/L (ppb)	50	118	117	77-129	1
Dibromomethane	ug/L (ppb)	50	108	106	79-121	2
4-Methyl-2-pentanone	ug/L (ppb)	250	104	102	65-135	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	115	114	79-129	1
Toluene	ug/L (ppb)	50	98	97	81-113	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	111	108	90-128	3
1,1,2-Trichloroethane	ug/L (ppb)	50	98	95	89-113	3
2-Hexanone	ug/L (ppb)	250	104	100	58-160	4
1,3-Dichloropropane	ug/L (ppb)	50	101	99	89-113	2
Tetrachloroethene	ug/L (ppb)	50	108	104	77-126	4
Dibromochloromethane	ug/L (ppb)	50	121	119	89-128	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	107	104	88-122	3
Chlorobenzene	ug/L (ppb)	50	99	97	86-118	2
Ethylbenzene	ug/L (ppb)	50	104	102	83-116	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	111	110	86-124	1
m,p-Xylene	ug/L (ppb)	100	104	102	84-120	2
o-Xylene	ug/L (ppb)	50	112	109	83-120	3
Styrene	ug/L (ppb)	50	107	104	87-119	3
Isopropylbenzene	ug/L (ppb)	50	114	109	83-120	4
Bromoform	ug/L (ppb)	50	136 vo	130 vo	77-119	5
n-Propylbenzene	ug/L (ppb)	50	105	103	83-118	2
Bromobenzene	ug/L (ppb)	50	102	99	88-117	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	110	108	85-121	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	93	90	83-115	3
1,2,3-Trichloropropane	ug/L (ppb)	50	99	94	83-114	5
2-Chlorotoluene	ug/L (ppb)	50	103	101	81-116	2
4-Chlorotoluene	ug/L (ppb)	50	106	104	83-117	2
tert-Butylbenzene	ug/L (ppb)	50	111	109	84-118	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	108	107	86-119	1
sec-Butylbenzene	ug/L (ppb)	50	106	106	84-121	0
p-Isopropyltoluene	ug/L (ppb)	50	112	112	85-118	0
1,3-Dichlorobenzene	ug/L (ppb)	50	100	99	85-118	1
1,4-Dichlorobenzene	ug/L (ppb)	50	99	98	85-119	1
1,2-Dichlorobenzene	ug/L (ppb)	50	103	102	81-117	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	122	120	62-136	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	116	117	75-129	1
Hexachlorobutadiene	ug/L (ppb)	50	116	116	72-138	0
Naphthalene	ug/L (ppb)	50	104	105	66-135	1
1,2,3-Trichlorobenzene	ug/L (ppb)	50	110	111	70-133	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 11/11/10
Date Received: 10/29/10
Project: Snoqualmie Pass, 2008-321C, F&BI 010356

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)	5	78	80	68-101	3
Acenaphthylene	ug/L (ppb)	5	82	83	68-102	1
Acenaphthene	ug/L (ppb)	5	80	82	69-104	2
Fluorene	ug/L (ppb)	5	87	89	63-109	2
Phenanthrene	ug/L (ppb)	5	81	82	66-106	1
Anthracene	ug/L (ppb)	5	82	83	67-112	1
Fluoranthene	ug/L (ppb)	5	91	93	69-116	2
Pyrene	ug/L (ppb)	5	90	92	68-115	2
Benz(a)anthracene	ug/L (ppb)	5	72	73	65-102	1
Chrysene	ug/L (ppb)	5	79	81	66-103	2
Benzo(b)fluoranthene	ug/L (ppb)	5	76	85	66-112	11
Benzo(k)fluoranthene	ug/L (ppb)	5	76	85	64-116	11
Benzo(a)pyrene	ug/L (ppb)	5	74	84	61-108	13
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	58	86	50-120	39 vo
Dibenz(a,h)anthracene	ug/L (ppb)	5	53	80	51-115	41 vo
Benzo(g,h,i)perylene	ug/L (ppb)	5	53	81	50-113	42 vo

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.

010356

SAMPLE CHAIN OF CUSTODY

ME 10/29/10

V2/D04/AI

Page # _____ of _____

Send Report To FRED BECKER

Company THE RILEY GROUP

Address 17522 BOTHELL WAY NE

City, State, ZIP BOTHELL, WA 98011

Phone # 425-415-0551 Fax # 425-415-0311

SAMPLERS (signature)

PROJECT NAME/NO. SNOQUALMIE PASS 2008-321C

PO#

REMARKS

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☒ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	LEAD Pb	ARSENIC As					Notes
MW1	01A-I	10/28/10	13:10	H_2O	9	X	X		X	X		X	X					
MW2	02		14:20		9	X	X		X	X		X	X					
MW3	03		15:55		9	X	X		X	X		X	X					FILTER TOTAL
MW4	04		16:40		9	X	X		X	X		X	X					AND DISSOLVED
MW5	05		17:35		9	X	X		X	X		X	X					Pb AND As

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	ERIC L WOODS	RGI	10/29/10	10:00
Received by:	Nhan Phan	FeBI	10/29/10	V
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

Samples received at 1 °C

KITTITAS COUNTY PERMIT CENTER
411 N. RUBY STREET, ELLENSBURG, WA 98926

RECEIPT NO.: 00012727

COMMUNITY DEVELOPMENT SERVICES
(509) 962-7506

PUBLIC HEALTH DEPARTMENT
(509) 962-7698

DEPARTMENT OF PUBLIC WORKS
(509) 962-7523

Account name: 021414

Date: 10/24/2011

Applicant: STEWART LODGE SNOQUALMIE SUMMIT INN II

Type: check # 0784601298

Permit Number	Fee Description	Amount
SE-11-00008	CDS SEPA FEE	490.00
SE-11-00008	PW SEPA	70.00
	Total:	560.00